# MULTNOMAH COUNTY OREGON

OFFICE OF THE BOARD CLERK
SUITE 1510, PORTLAND BUILDING
1120 S.W. FIFTH AVENUE
PORTLAND, OREGON 97204

BOARD OF COUNTY COMMISSIONERS

| | | |
|---|---|---|
| GLADYS McCOY • | CHAIR | • 248-3308 |
| DAN SALTZMAN • | DISTRICT 1 | • 248-5220 |
| GARY HANSEN • | DISTRICT 2 | • 248-5219 |
| TANYA COLLIER • | DISTRICT 3 | • 248-5217 |
| SHARRON KELLEY • | DISTRICT 4 | • 248-5213 |
| CLERK'S OFFICE • | 248-3277 | • 248-5222 |


*AGENDA*

*MEETINGS OF THE MULTNOMAH COUNTY BOARD OF COMMISSIONERS*

*FOR THE WEEK OF*

***June 21 - 25, 1993***

*Tuesday, June 22, 1993 - 9:00 AM - Board Briefings. . . . .Page 2*

*Tuesday, June 22, 1993 - 10:30 AM - Budget Work Session . .Page 2*

*Tuesday, June 22, 1993 - 1:30 PM - Planning Items . . . . .Page 2*

*Wednesday, June 23, 1993 - 9:30 AM - Budget Work Session. .Page 2*

*Wednesday, June 23, 1993 - 1:30 PM - Board Briefing . . . .Page 3*

*Thursday, June 24, 1993 - 9:30 AM - Regular Meeting . . . .Page 3*

*Thursday, June 24, 1993 - 1:30 PM - Budget Public Hearing .Page 6*

*Thursday Meetings of the Multnomah County Board of Commissioners are taped and can be seen at the following times:*

*Thursday, 10:00 PM, Channel 11 for East and West side subscribers*
*Thursday, 10:00 PM, Channel 49 for Columbia Cable (Vancouver) subscribers*
*Friday, 6:00 PM, Channel 22 for Paragon Cable (Multnomah East) subscribers*
*Saturday 12:00 PM, Channel 21 for East Portland and East County subscribers*

***INDIVIDUALS WITH DISABILITIES MAY CALL THE OFFICE OF THE BOARD CLERK AT 248-3277 OR 248-5222 OR MULTNOMAH COUNTY TDD PHONE 248-5040 FOR INFORMATION ON AVAILABLE SERVICES AND ACCESSIBILITY.***


AN EQUAL OPPORTUNITY EMPLOYER

*Tuesday, June 22, 1993 - 9:00 AM*

*Multnomah County Courthouse, Room 602*

***BOARD BRIEFINGS***

B-1 *Update on the 1993 Legislative Session.* ***Presented by Fred Neal.*** *9:00 AM TIME CERTAIN, 30 MINUTES REQUESTED.*

B-2 *Presentation and Discussion of the Library Entrepreneurial Initiatives Team Report.* ***Presented by Marcia Pry and Michael Powell, Co-Chairs and Members of the Team.*** *9:30 AM TIME CERTAIN, 1 HOUR REQUESTED.*

---

*Tuesday, June 22, 1993 - 10:30 AM*

*Multnomah County Courthouse, Room 602*

***BUDGET WORK SESSION***

WS-1 *Discussions on the General Fund Revenue Status and the Preliminary Overview of the Proposed Amendments.* ***Presented by Dave Warren.*** *1-1/2 HOURS REQUESTED.*

---

*Tuesday, June 22, 1993 - 1:30 PM*

*Multnomah County Courthouse, Room 602*

***PLANNING ITEMS***

*The Following June 10, 1993 Decisions of the Planning and Zoning Hearings Officer are Reported to the Board for Review:*

P-1 *CS 2-93*
*WRG 2-93* *DENY Request for a Change in Zone Designation from MUA-20, WRG, FH to MUA-20, WRG, FH, C-S, Community Service for Property Located at* ***19495 NW ST. HELENS ROAD***

P-2 *DR 2-93a* *SUSTAIN the Appellant's Challenge to the Administrative APPROVAL of the Final Development Review, with Respect to the Applicant's Failure to Conduct a Soil Compaction Test for the Northeastern Portion Site. This Portion of the Decision is REVERSED and the Matter Remanded to the Planning Department, for Property Located at 13303* ***SE RAMONA STREET***

---

*Wednesday, June 23, 1993 - 9:30 AM*

*Multnomah County Courthouse, Room 602*

***BUDGET WORK SESSION***

WS-2 *Policy Discussions and Review of the Proposed Amendments and Programs Suggested by the Board.* ***Presented by Dave Warren.*** *1-1/2 HOURS REQUESTED.*

*Wednesday, June 23, 1993 - 1:30 PM*

*Multnomah County Courthouse, Room 602*

***BOARD BRIEFING***

*B-3 Briefing and Presentation of the Proposed Ambulance Service Area Plans. Presentation will Include Recommendations of the Emergency Medical Services (EMS) Staff, EMS Medical Advisory Board, EMS Provider Board, Portland Area Paramedic Alliance, and Any Other Parties Wishing to Present a Plan for Consideration. **Presented by Bill Collins.** 2 to 2 1/2 HOURS REQUESTED.*

---

*Thursday, June 24, 1993 - 9:30 AM*

*Multnomah County Courthouse, Room 602*

***REGULAR MEETING***

*CONSENT CALENDAR*

*NON-DEPARTMENTAL*

*MANAGEMENT SUPPORT*

*C-1 Ratification of an Intergovernmental Agreement, Contract #500083, between Multnomah County and the State of Oregon, Travel Management Services to Provide Travel Management Services to the County through Department Contract, for the Period July 1, 1993 through June 30, 1994*

*DEPARTMENT OF ENVIRONMENTAL SERVICES*

*C-2 ORDER in the Matter of the Execution of Quitclaim Deed D930862 to Correct an Historical Error in Title Precipitated by Tax Foreclosure*

*DEPARTMENT OF SOCIAL SERVICES*

*C-3 Ratification of Amendment No. 1 to Intergovernmental Agreement, Contract #101653, between the Oregon Health Sciences University/Alcohol Treatment & Training Program and Multnomah County, Mental Health, Youth, and Family Services Division, Alcohol and Drug Program Office to Add Gambling Treatment Services and $5,878 in Start-Up Funds, for the Period November 1, 1992 through June 30, 1993*

*C-4 Ratification of an Intergovernmental Agreement, Contract #102304, between the State Children's Services Division and Multnomah County, Juvenile Justice Division, to Continue Funding for Services in the Assessment Intervention Transition Program, Gang Resource and Intervention Team, and Community Based Programs for Gang Impacted Youth, for the Period July 1, 1993 through December 31, 1993*

*C-5 Ratification of an Intergovernmental Revenue Agreement, Contract #10234, between the State Housing and Community*

*Services Department and Multnomah County Housing and Community Services Division, for Community Action Programs, for the Period July 1, 1993 through June 30, 1995*

C-6 *Ratification of an Intergovernmental Revenue Agreement, Contract #102324, between the City of Portland and Multnomah County, Juvenile Justice Division Providing Continued Support for the Youth Employment and Empowerment Project (YEEP), for the Period July 1, 1993 through June 30, 1994*

C-7 *Ratification of Amendment No. 2 to Intergovernmental Revenue Agreement, Contract #102993, between the Oregon Mental Health & Developmental Disabilities Services Division (MHDDSD) and Multnomah County Mental Health, Youth & Family Services Division to Pay Oregon MHDDSD $75,878.56 to Meet Unanticipated Funding Pool Revenue Shortfalls in the Partner's Project Funding Pool Due to Delays in Enrollment of Medicaid Eligible Clients, for the Period Upon Execution through June 30, 1993*

C-8 *Ratification of Amendment No. 1 to Intergovernmental Agreement, Contract #103323, between Multnomah County, Mental Health, Youth and Family Services Division, Office of Child and Adolescent Mental Health and the Portland Public School District to Add Educational Services for the Partners Project Clients up to a Maximum of $10,790.00, for the Period September 1, 1992 through June 30, 1993*

C-9 *Ratification of an Intergovernmental Revenue Agreement, Contract #104703, between Multnomah County Mental Health, Youth and Family Services Division's Adult Mental Health Program and Portland Community College to Provide 45 Copies of a 1-Hour Mental Health Training Tape for a Fee of $1,750 Upon Completion, for the Period March 31, 1993 through June 30, 1993*

C-10 *Ratification of an Intergovernmental Agreement, Contract #104713, between Multnomah County, Mental Health, Youth and Family Services Division, Mental and Emotional Disabilities Program and the Housing Authority of Portland (HAP) to Provide Conditions and a Means for the State to Convey Funds Directly to HAP, for the Period July 1, 1992 through June 30, 1993*

*REGULAR AGENDA*

*DEPARTMENT OF HEALTH*

R-1 *NOTICE OF INTENT to Respond to a Request for Applications from the Center for Substance Abuse Treatment: Linking Community-Based Primary Care, Substance Abuse, HIV/AIDS and Mental Health Treatment Services: Demonstration Program*

*NON-DEPARTMENTAL*

R-2 *RESOLUTION in the Matter of Accepting the Report of the Library Entrepreneurial Initiatives Team*

R-3 *RESOLUTION in the Matter of Setting Multnomah County Board Policy to Ensure All Service Delivery Contracts and Intergovernmental Agreements be Performance Based Contracts with Goals and Objectives that Include Performance Measurements for FY 94-95*

R-4 *Budget Modification NOND #37 to Increase the Pass-Through Appropriation for Business Income Tax Transferred to East County Cities by $516,529*

R-5 *RESOLUTION in the Matter of Implementing Recommendations for Improvement of Tax Title Policies (Continued from June 17, 1993)*

*MANAGEMENT SUPPORT*

R-6 *Second Reading and Possible Adoption of an ORDINANCE Amending Multnomah County Code Chapter 5.70, Business Income Tax; Creating Multnomah County Code Chapter 5.60, Multnomah County Business Income Tax Law; Providing for Administration and Collection and All Related Matters*

R-7 *RESOLUTION in the Matter of Consolidating Administration of the Multnomah County Business Income Tax and the Portland Business License Fee (Continued from June 17, 1993)*

R-8 *Budget Modification NOND #36 to Record $60,980 of Service Reimbursements for Employees Budgeted in the 1992-93 Insurance Fund to Comply with the Auditor's Recommendation that their Benefits be Shown as Expenditures in the Insurance Fund*

*SHERIFF'S OFFICE*

R-9 *Budget Modification MCSO #15 Requesting Authorization to Reclassify a MCSO Personnel Analyst Position to an Administrative Analyst Position Effective 9/12/93*

R-10 *Budget Modification MCSO #16 Requesting Authorization to Cut Funding for Columbia Villa Deputy and Sergeant Positions, and Transferring this Funding to Two Community Services Officers Positions*

R-11 *Budget Modification MCSO #17 Requesting Authorization to Transfer $623,882 from General Fund Contingency to Provide for Costs Associated with Corrections Officers Wage Settlement*

R-12 *Budget Modification MCSO #18 Requesting Authorization to Transfer $31,063 from General Fund Contingency to Provide for Costs Associated with Columbia Villa Safety Action Team*

R-13 *Ratification of an Intergovernmental Agreement, Contract #800693, between Multnomah County, Sheriff's Office and the City of Portland to Provide Fingerprint and Photographs of Individuals Arrested for Crimes, for the Period July 1, 1992 through June 30, 1994*

*COMMUNITY CORRECTIONS*

*R-14 Budget Modification DCC #33 Requesting Authorization to Reduce Materials & Services Budget and Increase Personal Services Budget by $25,118*

*R-15 Budget Modification DCC #34 Requesting Authorization to Reduce Personal Services Budget and Increase Capital Budget by $14,165*

*DEPARTMENT OF ENVIRONMENTAL SERVICES*

*R-16 Ratification of an Intergovernmental Agreement between the City of Portland, Mid-County Sewer Project and Multnomah County, Parks Division to Reimburse the City for Sewer System Development Charges for the Glendoveer Golf Course, for the Period June 30, 1993 through June 30, 2013*

*R-17 Request for Policy Direction in the Matter of a Request by Albina Ministerial Alliance to Repurchase Certain Tax Foreclosed Property Deeded to Multnomah County Commonly Known as 73 NE STANTON STREET (Continued from June 17, 1993)*

*R-18 Request for Policy Direction in the Matter of a Request by Richard A. Hopman to Repurchase Certain Tax Foreclosed Property Deeded to Multnomah County Located at 2031 NE 59TH AVENUE (Continued from June 17, 1993)*

*R-19 Request for Policy Direction in the Matter of a Request by Teen Challenge of Oregon to Repurchase Certain Tax Foreclosed Property Deeded to Multnomah County Located at 125 SE 11TH AVENUE (Continued from June 17, 1993)*

*R-20 Request for Policy Direction in the Matter of a Request by Michael James McCoun to Repurchase Certain Tax Foreclosed Property Deeded to Multnomah County Located at 4837 NE 33RD AVENUE (Continued from June 17, 1993)*

*R-21 Request for Policy Direction in the Matter of a Request by Janet Lee Maxwell to Repurchase Certain Tax Foreclosed Property Deeded to Multnomah County Located at 5812 NE 14TH AVENUE (Continued from June 17, 1993)*

*PUBLIC COMMENT*

*R-22 Opportunity for Public Comment on Non-Agenda Matters. Testimony Limited to Three Minutes Per Person.*

---

*Thursday, June 24, 1993 - 1:30 PM*

*Multnomah County Courthouse, Room 602*

*PUBLIC HEARING*

*PH-1 The Multnomah County Board of Commissioners, Sitting as the Multnomah County Budget Committee, Will Convene for the Purpose of Receiving Public Testimony Regarding Allocations on the 1993-94 Budget.*

# MULTNOMAH COUNTY OREGON

OFFICE OF THE BOARD CLERK
SUITE 1510, PORTLAND BUILDING
1120 S.W. FIFTH AVENUE
PORTLAND, OREGON 97204

BOARD OF COUNTY COMMISSIONERS

| | | |
|---|---|---|
| GLADYS McCOY • | CHAIR | • 248-3308 |
| DAN SALTZMAN • | DISTRICT 1 | • 248-5220 |
| GARY HANSEN • | DISTRICT 2 | • 248-5219 |
| TANYA COLLIER • | DISTRICT 3 | • 248-5217 |
| SHARRON KELLEY • | DISTRICT 4 | • 248-5213 |
| CLERK'S OFFICE • | 248-3277 | • 248-5222 |


## *SUPPLEMENTAL AGENDA*

*Tuesday, June 22, 1993 *1:30 PM*

**IMMEDIATELY FOLLOWING PLANNING ITEMS*

*Multnomah County Courthouse, Room 602*

## *BOARD BRIEFING*

B-2a *Update and Discussion Regarding Columbia Park/Edgefield. Presented by Bob Oberst and Will Werner. 30 MINUTES REQUESTED.*

*0265C/84*
*cap*


AN EQUAL OPPORTUNITY EMPLOYER

Meeting Date: JUN 2 3 1993

Agenda No.: B-3

(Above space for Clerk's Office Use)

. . . . . .

AGENDA PLACEMENT FORM
(For Non-Budgetary Items)

SUBJECT: PROPOSED AMBULANCE SERVICE AREA PLANS

BCC Informal JUNE 23, 1993 BEGINNING TIME 1:30 PM
(date)

DEPARTMENT: HEALTH DIVISION: REGULATORY HEALTH

CONTACT: BILL COLLINS TELEPHONE: 248-3220

PERSON(S) MAKING PRESENTATION BILL COLLINS AND INVITED GUESTS

ACTION REQUESTED:

[X] INFORMATION ONLY [ ] POLICY DIRECTION [ ] APPROVAL

ESTIMATED TIME NEEDED ON BOARD AGENDA: 2 TO 2 1/2 HOURS

CHECK IF YOU REQUIRE OFFICIAL WRITTEN NOTICE OF ACTION TAKEN:

BRIEF SUMMARY (Include statement of rationale for action requested, as well as personnel and fiscal /budgetary impacts, if applicable):

Briefing and presentation of proposed ambulance service area plans by invited guests. There will be no public testimony at this presentation.

The briefing and presentation will include recommendations of the Emergency Medical Services (EMS) staff, EMS Medical Advisory Board, EMS Provider Board, Portland Area Paramedic Alliance, and any other parties wishing to present a plan for consideration.

(If space is inadequate, please use other side)

1993 JUN 15 PM 12:16
MULTNOMAH COUNTY
OREGON
BOARD OF
COUNTY COMMISSIONERS

SIGNATURES:

ELECTED OFFICIAL _____

Or

DEPARTMENT MANAGER Bill Odegaard

(All accompanying documents must have required signatures)

EMS Briefing
6-23-93
Handout #1

CITY OF
PORTLAND, OREGON
DEPARTMENT OF PUBLIC UTILITIES

Gretchen Kafoury, Commissioner
1220 S.W. 5th Avenue
Portland, Oregon 97204
Telephone: (503) 823-4151

M E M O R A N D U M

**DATE:** June 21, 1993

**TO:** Mayor Vera Katz
Commissioner Earl Blumenauer
Commissioner Charlie Hales
Commissioner Mike Lindberg

**FROM:** Gretchen Kafoury

**SUBJECT:** EMS and Fire Bureau Role

- - - - - - - - - - - - - - - - - - - - -

After eight years of local "ambulance wars", it is heartening and exciting to think the City and County are poised to potentially resolve this thorny issue, and finally to have an approved Ambulance Service Area plan to send to the State.

Since my election to the City Council, I have consistently urged the Council to include emergency medical/ambulance services in all of our discussions concerning the Fire Bureau. This week we have an opportunity to set a clear policy direction for Fire and Emergency Services.

I am aware that many conversations are taking place between all the private ambulance companies (a first) and the Fire Bureau. I hope the paramedic association (PAPA) is involved as well. The potential of an agreement - acceptable to all parties - may emerge.

Politically, it will be a major leap forward, and no doubt services will be better and less expensive.

However, before we leap to the politically acceptable compromise, I want to remind Council of the goals for any emergency services system:

- maintain available, timely, quality emergency services

- offer citizens ambulance services at a reasonable price by maximizing available resources and making the system financially stable

I continue to believe after eight years of debate and haggling that a single ambulance service - either public (fire) or private (one company) is the long range best solution.

I understand that Council members and County Board members may settle for less - and feel good about the outcome. I hope before we settle for less than the best that we authorize the Fire Bureau to bid on the entire system and ask the County to pursue a single provider bid option. Only through the rigor of a bid and subsequent negotiations can we test the assumption that a single system would be the most cost effective answer.

The Fire Bureau is reaching a crossroads. If they become the single emergency services provider, we will be faced with an enormous new challenge - hiring and training a diverse workforce, maintaining quality care, insuring long term financial viability for the service, maximizing our current investment.

If the Fire Bureau does not expand its emergency services role or if the County selects a single private provider, we will be faced with a different challenge - examining the basic assumptions of the Fire Bureau - their stations, their staffing, their public safety role.

Either way, the role of the Fire Bureau represents our greatest opportunity and challenge as a Council. We should measure our vote and our message to the County accordingly.

EMS Briefing
6-23-93
Handout #2

SUBSTITUTE

# RESOLUTION No. 35159

Instruct the Bureau of Fire, Rescue and Emergency Services to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or an all 9-1-1 emergency transport system. (Resolution)

WHEREAS, Multnomah County is currently in the process of developing an ASA Plan for submittal to the State of Oregon, as directed by State statute; and

WHEREAS, the Multnomah County Emergency Medical Services Office released a proposed ASA Plan on March 19, 1993 and other plans have also been submitted; and

WHEREAS, transport rates to consumers in Multnomah County are high compared to other jurisdictions; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services submitted a Transport Proposal to the City Council at an informal meeting on June 10, 1993, identifying two transport option, both of which identify a role for the Bureau as a tranport provider in 9-1-1 emergency situations; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services has been involved in providing emergency medical services since 1909 as first responder; and

WHEREAS, provision of transport services is a logical extension of currently provided services; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services can reallocate existing resources to the transport function and thereby lower transport rates to consumers;

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Portland, Oregon that the Bureau of Fire, Rescue and Emergency Services is hereby instructed and directed to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or all 9-1-1 emergency transport system.

**Adopted by the Council,** JUN 23 1993

**BARBARA CLARK**
**Auditor of the City of Portland**
**Byp** N. Becerra **Deputy**

**Commissioner Hales**
**LCD:TF:KS**
**June 22, 1993**

EMS Briefing
6-23-93
Handout #3

# AMBULANCE SERVICE PLAN
## SUMMARY

The Multnomah County Board of County Commissioners, based on the findings, conclusions, and system design options and recommendations identified in the Health Department EMS planning report, have approved the following plan:

1. Multnomah County will comprise a single Ambulance Service Area.

2. First response to 9-1-1 medical calls will be provided by fire districts at the service level goal of defibrillator trained EMT-Basic or EMT-Paramedics.

3. Ground ambulance transport for 9-1-1 emergency calls will be by fire EMT-Paramedic units (fire medic units) for critical patients and by private emergency ambulances for non-critical emergency patients.

4. All other ambulance service will be provided by private, non-emergency ambulances.

5. Air ambulance services will be provided by private helicopter and airplane providers.

6. Fire medic ambulances will be staffed by two EMT-Paramedics. Contract ambulances will be staffed by one EMT-Paramedic and one EMT-Basic.

7. Dispatch for all 9-1-1 calls and ambulance move-ups will be provided by the City of Portland, Bureau of Emergency Communications (BOEC).

8. Primary radio communications will be on the 800Mhz system. Mobile Data Terminals (MDT) will be used for dispatch and communications with the BOEC dispatch computer.

9. Medical direction and supervision will be provided by an EMS Medical Director employed by the county.

10. The EMS Program Office in the Health Department will administer the ASA and the EMS system in Multnomah County.

11. EMS will maintain a pre-hospital patient care, dispatch, and hospital disposition data base for the use in monitoring performance.

12. The EMS system will use the Continuous Quality Improvement process to ensure the quality and improvement of patient care.

13. The cost of transport by fire services, contract ambulances, and the EMS Medical Director and EMS Program Office will be financed by fees charged to people receiving care through the 9-1-1 medical response system.

14. Multnomah County will work with other jurisdictions to move toward a regional approach to EMS.

EMS Briefing
6-23-93
Handout #4

# AMBULANCE TRANSPORT DECISION

## 9-1-1 MEDICAL CALL

| CRITICAL? | NON-CRITICAL? |
|---|---|
| 1ST RESPONSE & FIREMEDIC | 1ST RESPONSE & PRIVATE AMBULANCE |

## ARRIVAL - 1ST RESPONSE

| CRITICAL? | NON-CRITICAL? |
|---|---|
| TRANSPORT FIREMEDIC | TRANSPORT PRIVATE AMBULANCE |

EMS Briefing
6-23-93
Handout #5

**City of Portland**
**Vera Katz**
**Mayor**

June 23, 1993

Hank Miggins, County Chair
Tanya Collier, County Commissioner
Gary Hansen, County Commissioner
Sharron Kelley, County Commissioner
Dan Saltzman, County Commissioner

Re: Multnomah County Ambulance Service Area Planning Process

Dear Chair and Commissioners:

This morning the City Council of the City of Portland adopted a resolution directing the City's Bureau of Fire, Rescue and Emergency Services "to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or all 9-1-1 emergency transport system." In doing so, we have paved the way for the City to compete to provide these services, whether the County adopts a single-provider system or a tiered system.

We want to express clearly that the City believes that, in adopting a system, the County's foremost priority should be to meet the medical needs of its citizens. It is the strong conviction of a majority of the members of the City Council, namely Mayor Katz, Commissioner Blumenauer and Commissioner Kafoury, that a single-provider system would be best for the people of Portland and of Multnomah County.

While we believe that the Fire Bureau should participate in the process, even if the County selects the tiered system, we wanted to share with you and make sure you understand that, in our judgment, the single-provider system is clearly the better alternative in order to meet the medical needs of the public.

We urge you to adopt the single-provider system. Thank you for your consideration.

With warm regards,

Vera Katz
Mayor

Earl Blumenauer
Commissioner

Gretchen Kafoury
Commissioner

Office of the Mayor
1220 S.W. 5th Avenue, Room 303 • Portland, Oregon 97204-1995
(503) 823-4120 • FAX (503) 823-3588 • TDD (503) 823-6868

SUBSTITUTE

# RESOLUTION No. 35159

Instruct the Bureau of Fire, Rescue and Emergency Services to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or an all 9-1-1 emergency transport system. (Resolution)

WHEREAS, Multnomah County is currently in the process of developing an ASA Plan for submittal to the State of Oregon, as directed by State statute; and

WHEREAS, the Multnomah County Emergency Medical Services Office released a proposed ASA Plan on March 19, 1993 and other plans have also been submitted; and

WHEREAS, transport rates to consumers in Multnomah County are high compared to other jurisdictions; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services submitted a Transport Proposal to the City Council at an informal meeting on June 10, 1993, identifying two transport option, both of which identify a role for the Bureau as a tranport provider in 9-1-1 emergency situations; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services has been involved in providing emergency medical services since 1909 as first responder; and

WHEREAS, provision of transport services is a logical extension of currently provided services; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services can reallocate existing resources to the transport function and thereby lower transport rates to consumers;

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Portland, Oregon that the Bureau of Fire, Rescue and Emergency Services is hereby instructed and directed to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or all 9-1-1 emergency transport system.

**Adopted by the Council,** JUN 23 1993

**BARBARA CLARK**
**Auditor of the City of Portland**
**Byp** N. Becerra **Deputy**

**Commissioner Hales**
**LCD:TF:KS**
**June 22, 1993**

SUBSTITUTE

# RESOLUTION No. 35159

Instruct the Bureau of Fire, Rescue and Emergency Services to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or an all 9-1-1 emergency transport system. (Resolution)

WHEREAS, Multnomah County is currently in the process of developing an ASA Plan for submittal to the State of Oregon, as directed by State statute; and

WHEREAS, the Multnomah County Emergency Medical Services Office released a proposed ASA Plan on March 19, 1993 and other plans have also been submitted; and

WHEREAS, transport rates to consumers in Multnomah County are high compared to other jurisdictions; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services submitted a Transport Proposal to the City Council at an informal meeting on June 10, 1993, identifying two transport option, both of which identify a role for the Bureau as a tranport provider in 9-1-1 emergency situations; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services has been involved in providing emergency medical services since 1909 as first responder; and

WHEREAS, provision of transport services is a logical extension of currently provided services; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services can reallocate existing resources to the transport function and thereby lower transport rates to consumers;

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Portland, Oregon that the Bureau of Fire, Rescue and Emergency Services is hereby instructed and directed to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or all 9-1-1 emergency transport system.

**Adopted by the Council,** JUN 23 1993

**BARBARA CLARK**
**Auditor of the City of Portland**
**Byp** Deputy

**Commissioner Hales**
**LCD:TF:KS**
**June 22, 1993**

SUBSTITUTE

# RESOLUTION No. 35159

Instruct the Bureau of Fire, Rescue and Emergency Services to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or an all 9-1-1 emergency transport system. (Resolution)

WHEREAS, Multnomah County is currently in the process of developing an ASA Plan for submittal to the State of Oregon, as directed by State statute; and

WHEREAS, the Multnomah County Emergency Medical Services Office released a proposed ASA Plan on March 19, 1993 and other plans have also been submitted; and

WHEREAS, transport rates to consumers in Multnomah County are high compared to other jurisdictions; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services submitted a Transport Proposal to the City Council at an informal meeting on June 10, 1993, identifying two transport option, both of which identify a role for the Bureau as a tranport provider in 9-1-1 emergency situations; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services has been involved in providing emergency medical services since 1909 as first responder; and

WHEREAS, provision of transport services is a logical extension of currently provided services; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services can reallocate existing resources to the transport function and thereby lower transport rates to consumers;

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Portland, Oregon that the Bureau of Fire, Rescue and Emergency Services is hereby instructed and directed to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or all 9-1-1 emergency transport system.

**Adopted by the Council,** JUN 23 1993

**BARBARA CLARK**
**Auditor of the City of Portland**
**Byp** _____ **Deputy**

**Commissioner Hales**
**LCD:TF:KS**
**June 22, 1993**

SUBSTITUTE

# RESOLUTION No. 35159

Instruct the Bureau of Fire, Rescue and Emergency Services to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or an all 9-1-1 emergency transport system. (Resolution)

WHEREAS, Multnomah County is currently in the process of developing an ASA Plan for submittal to the State of Oregon, as directed by State statute; and

WHEREAS, the Multnomah County Emergency Medical Services Office released a proposed ASA Plan on March 19, 1993 and other plans have also been submitted; and

WHEREAS, transport rates to consumers in Multnomah County are high compared to other jurisdictions; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services submitted a Transport Proposal to the City Council at an informal meeting on June 10, 1993, identifying two transport option, both of which identify a role for the Bureau as a tranport provider in 9-1-1 emergency situations; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services has been involved in providing emergency medical services since 1909 as first responder; and

WHEREAS, provision of transport services is a logical extension of currently provided services; and

WHEREAS, the Bureau of Fire, Rescue and Emergency Services can reallocate existing resources to the transport function and thereby lower transport rates to consumers;

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Portland, Oregon that the Bureau of Fire, Rescue and Emergency Services is hereby instructed and directed to participate in the Multnomah County Ambulance Service Area (ASA) planning process and to advocate for a role as a transport provider in either a public/private partnership or all 9-1-1 emergency transport system.

**Adopted by the Council,** JUN 23 1993

**BARBARA CLARK**
**Auditor of the City of Portland**
**Byp** _____ **Deputy**

**Commissioner Hales**
**LCD:TF:KS**
**June 22, 1993**

BUCK
MEDICAL SERVICES
1240 S.E. 12th Avenue
P.O. Box 15339
Portland, Oregon 97215-0339

June 23, 1993

To: Multnomah County Board of Commissioners

An extensive hearing was held by the Portland City Commission to hear testimony on the viability and feasibility of an Ambulance Service Area plan that calls for an expanded role of the Portland Fire Bureau. To say that the issues became increasingly clouded during the four hour hearing is perhaps an understatement.

We believe that the positions put forth by our organization over the past few months have been driven by quality and a consistent approach to the delivery of prehospital care. We believe our position not only supports good patient care but also presents win-win situations to all of the interested parties in this process.

The recommendations you see on the attached ASA Proposal allow for the following:

1. Reduction in the number of ambulance providers in Multnomah County from four to two. The current and future merging of ambulance companies is a natural response to the multiple provider issue. The reduction can be accomplished without a fear of litigation as in the past.

2. A defined role for the Fire Bureau that allows a number of opportunities to generate revenue and control cost.

    a. A $15 per transport fee paid by the Ambulance Provider to the First Response Agency would amount to about $250,000 per year. A $30 fee would amount to $500,000 per year and so forth. We recommend the fee be set as an offset once Option B is consistently in place and the Ambulance Rates can be reduced.

b. Ambulance rates should allow the ambulance provider to exchange disposable equipment used by the First Response Agency which should result in the deletion of another $150,000 to $200,000 per year in Portland Fire Bureau Costs as a first responder.

c. Portland Fire Bureau transport capable rescue units may be included in the System Status Plan by agreement during periods of peak demand, low demand, and/or system overload. Revenue generated from such transports to be credited to Portland Fire Bureau accordingly.

3. This plan calls for the greatest contribution to patient care that can be identified in the County system today. The ability to provide rapid defibrillation within four minutes is the one indisputable component of any EMS system...it simply is not consistently being provided in Multnomah County today.

4. The integration of the ambulance system across multiple levels of medical transportation demands allows the system to retain the economies of scale that are currently enjoyed. The managed care concept is supportive of this plan.

5. The natural competitiveness that exists between private and public agencies will continue to cause an elevation of the level of care. There will be no room or opportunity for lethargy or complacency of status quo under this plan.

6. While any rate decreases will be dependent upon the fee paid to the first responder agencies, the public will benefit by a decreased tax load on services that are being extended to health care related activity via the first responder agencies. The greatest opportunity for decreased ambulance rates comes from the implementation of Option B.

The plan components that have been slightly modified from the County EMS office recommendation can be developed into an ASA plan that promotes the improvement and integrity of a quality EMS system without sacrificing the gains we have made over the past twenty years.

- Dispatch triage will ensure that all 9-1-1 requests receive the same level of service.
- The closest ambulance will be dispatched to a 9-1-1 request.
- Training and medical direction will become more defined and consistent.
- A process will be used to evaluate "enhancements" on a cost/benefit basis.
- The integration of ambulance transportation allows the application of economy of scale.
- The elimination of a "hand-off" to a lesser trained person.
- Rates can eventually be decreased or an investment can be made back into the system with cost-savings allocated toward rural development.
- A true public/private partnership that offsets public sector cost while providing an opportunity for private business retention.
- Ultimate accountability that emphasizes performance rather than effort.

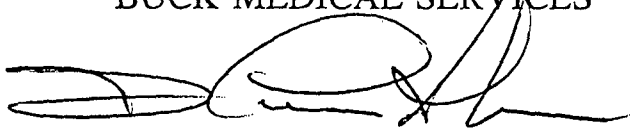
Testimony presented at the City Council hearing clearly acknowledged that rates within Multnomah County are not inconsistent with other areas of the state by comparison. In fact, the overall average charge for all levels of medical transportation in Multnomah County are significantly less than other urban areas in the state of Oregon.

We also believe that first response is a necessary component of any high-quality EMS system and that possibilities do exist to offset some of the associated costs through the rates charged by the ambulance provider. This process allows participating agencies to recover some portion of costs while providing a return to the tax payer at the same time.

Please consider these issues in the development of our Multnomah County ASA plan.

Sincerely,

BUCK MEDICAL SERVICES



D. Trace Skeen
President/CEO

DTS/kp

Attachment

# RECOMMENDATIONS FOR
# MULTNOMAH COUNTY ASA PLAN

Multnomah County Commissioners should adopt an ASA plan that maintains the integrity of the high quality ambulance system that is currently in place while at the same time providing enhancements and fine tuning based on sufficient data that justifies improved patient outcomes.

1. Multnomah County should comprise a single ASA that specifies the performance criteria for various providers of EMS within that ASA.

2. Multnomah County should incorporate an EMS system that meets the current high performance standards of the industry including a First Response to 9-1-1 requests within four (4) minutes with 90% reliability within urban growth boundaries. The level of care of First Response within the urban growth boundaries should be a minimum of EMT with Rapid Defibrillation capabilities.

3. Ground ambulance transport service for 9-1-1 requests should be provided by contracted private ambulances of no more than two providers throughout the County within specified primary geographical response areas that operate within a fluid deployment system status plan.

4. Ground ambulance transport service for non-emergent requests should be provided by private ambulances throughout the County.

5. Air ambulance services should be provided by private helicopter and fixed wing providers.

6. Ambulance staffing shall be at a level determined by one of the following options:

    a. Private ambulances responding to 9-1-1 requests should be staffed by two EMT-Paramedics so long as the First Response system within the urban growth boundary is provided at the EMT-D level on a consistent basis.

    b. Private ambulances responding to 9-1-1 requests should be staffed by one EMT-Paramedic and one EMT-Basic should the First Response system within the urban growth boundary be upgraded to the ALS level on a consistent basis.

7. Dispatch for all 9-1-1 calls and ambulance move-up should be provided by the Bureau of Emergency Communications (BOEC).

8. Primary radio communications will be phased in to the 800 Mhz system with Mobile Data Terminals (MDTs) to be used for dispatch and CAD communications. The ambulance transport units and transport capable rescue vehicles shall be equipped with automatic vehicle locator devices (AVL) that allow for the dispatch of the closest ambulance.

9. Medical direction, supervision, training and quality assurance must be provided through a single EMS Medical Director or Medical Director agency employed by the County.

10. The County Health Department EMS Program Office should continue to administer the EMS system.

11. The County Health Department EMS Program Office will maintain a pre-hospital database that will evaluate system components and make recommendations to improve patient outcomes based on validated data.

12. The cost of EMS First Response shall be funded primarily with Fire Bureau budget allocations from tax base. Ambulance rates shall also be set in an amount that provides a "First Responder" off-set fee for all transports in which contracted ALS First Responder agencies arrive and assist on scene. Ambulance rates shall also be set in an amount that provides a "disposable medical equipment" supply exchange with contracted First Responder agencies.

13. Multnomah County shall establish uniform rates for ambulance providers and shall regulate rates based on full cost recovery for services rendered with reasonable reserves for future investment. Rate adjustments shall be tied to a regional consumer price index that considers medical, transportation and all component computations.

14. All requests for pre-hospital, non-interfacility emergencies shall be accessed through the 9-1-1 system. Non-emergency requests for service shall be accessed through individual provider seven digit telephone numbers. The County shall approve a triage guide for agencies utilizing seven digit telephone access that will cause them to channel emergency requests into the 9-1-1 system.

15. Emergency Medical Dispatchers at the 9-1-1 center will triage emergency medical requests utilizing medical director authorized dispatch protocols into life-threatening, non-life threatening and non-emergency classifications.

16. Response times shall be as follows within urban growth boundaries:

**OPTION A**

| PROVIDER | LIFE-THREATENING | | NON-LIFE THREATENING | |
|---|---|---|---|---|
| 1st Response EMT-D | 4 minutes | 90% | 4 minutes | 90% |
| Ambulance | 8 minutes | 90% | 12 minutes | 90% |

**OPTION B**

| PROVIDER | LIFE-THREATENING | | NON-LIFE THREATENING | |
|---|---|---|---|---|
| 1st Response EMT-Paramedic | 4 minutes | 90% | 4 minutes | 90% |
| Ambulance | 10 minutes | 90% | 12 minutes | 90% |

Response time zones for suburban and rural areas shall be defined.

17. Multnomah County should establish a Financial Oversight Board that will be responsible for establishing rates, conducting cost/benefit analysis for system upgrades and reviewing proposals that impact the cost of providing service.

18. Multnomah County should impose contractual obligations that include fines for non-performance, conditions of default, reassignment of the ASA and performance securities that inure to the benefit of citizens of Multnomah County in the event of default.

"The Existing System Delivers Good and Reliable Service To The Citizens of Portland In The Majority of Cases."

- Tri-Data Study
1993

# HIGH PERFORMANCE SYSTEMS

| NATIONAL STANDARD OF EXCELLENCE | | MULTNOMAH'S CURRENT SYSTEM |
|---|---|---|
| 4:00 min - 90%<br>8:00 min - 90%<br>12:00 min (Rural) | **RESPONSE TIMES**<br>1°R<br>ALS Ambulance | 5:00 min - 76%<br>8:00 Min - 90%<br>All County |
| 2 Paramedics | **AMBULANCE STAFFING** | 2 Paramedics |
| EMT-D | **1°R STAFFING**<br>"100 Lives Per Year" | ? (ALS/BLS) |
| Oversight Agency | **EXTERNAL MONITORING** | Multnomah Co. |
| Single Source<br>(Non-Payroll) | **MEDICAL DIRECTION** | Single Source<br>Defacto |
| Less than $3.00<br>Per Capita | **TAX DOLLARS**<br>To<br>Transport Agencies | -0- |

ACCREDITED
1993 - 1998

# AMBULANCE COMPANIES ACCREDITED ON WEST COAST:

| | |
|---|---|
| WASHINGTON: | -0- |
| CALIFORNIA: | -0- |
| OREGON: | AA<br>BUCK > MERGED<br>CARE |

"THE COMMISSION WAS ESTABLISHED IN 1990 TO ENCOURAGE AND PROMOTE IMPROVED QUALITY PATIENT CARE IN AMERICA'S MEDICAL TRANSPORTATION SYSTEM."

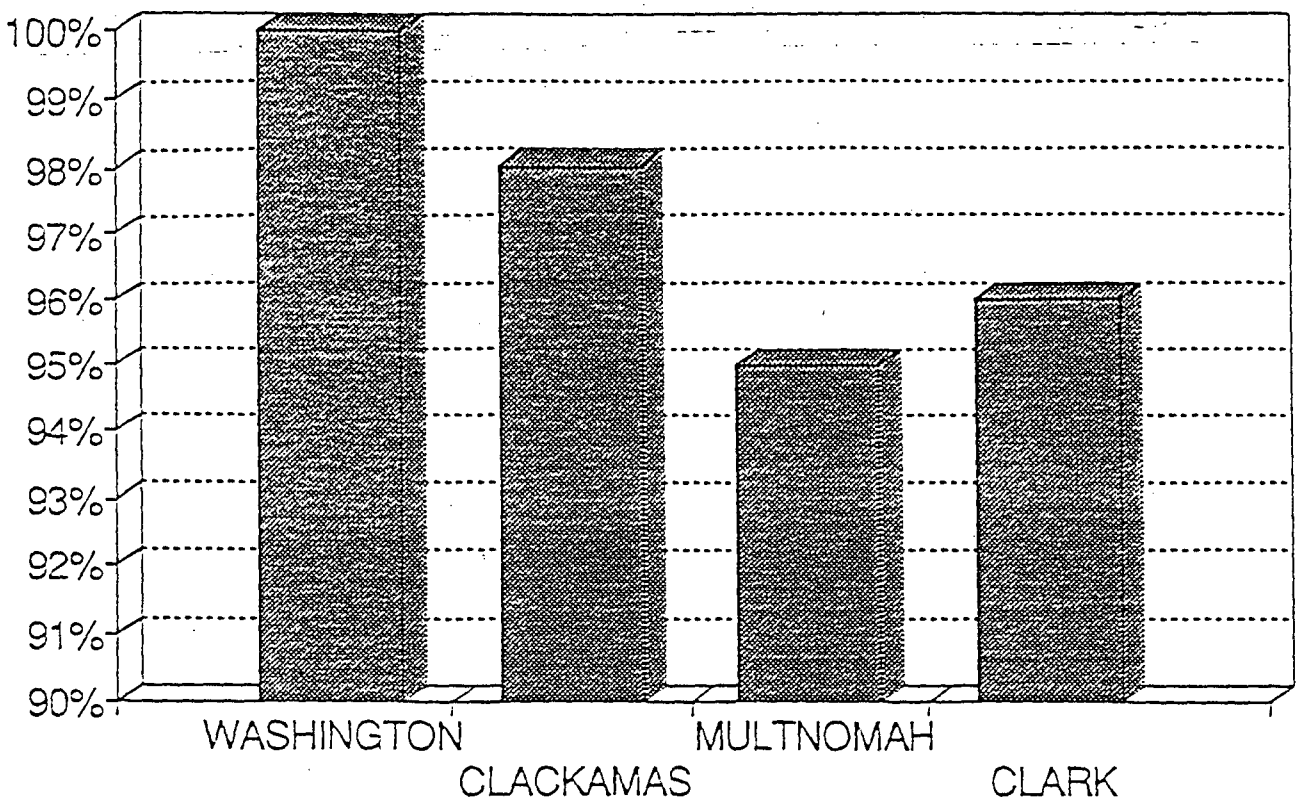
CAAS Board of Commissioners:

- American Ambulance Association
- Emergency Nurses Association
- International Association of Fire Chiefs
- National Association of EMS Physicians
- National Association of EMTs
- National Association of State EMS Directors

# CUSTOMER COMMENT CARDS

## POSITIVE RESPONSES

May 1993




### CUSTOMER SERVICE QUESTIONS

1. Did the Buck ambulance arrive promptly?
2. Did you receive proper medical care?
3. Did our service meet your expectations?
4. Did our medics present themselves in a courteous manner?
5. Were you treated with care and concern?

# WHO ARE THE PEOPLE

# FROM

# PRIVATE COMPANIES?

| | |
|---|---|
| 1992 PARAMEDIC TURNOVER: | 8% |
| 1993 COMPENSATION & BENEFITS: | $41,740 |
| PERCENTAGE OF EMPLOYEES HOLDING STOCK IN THE COMPANY: | 44% |
| WOMEN & MINORITIES | 35% |

## A MATURING WORKFORCE

"These people are not rookies that are looking for temporary challenge . . . they are mature professionals with college age children, simply seeking a continuation of a career they have avocated for years"

- Trace Skeen, President

# RATES: $588 Average Charge

# TOO HIGH?

# COMPARED TO WHAT?

| | | ALS | BLS |
|---|---|---|---|
| SALEM | | 545 | 385 |
| EUGENE/SPRINGFIELD | | 515 | 515 |
| ALBANY | | 575 | 575 |
| BEND | | 485 | 435 |
| SEATTLE | | "Unreasonable To Recover the Full Costs" | |
| AA | "Full Cost" | 580 | 428 |
| CARE | "Full Cost" | 630 | 450 |
| BUCK | "Full Cost" | 580 | 425 |
| PFB Proposed | "Full Cost" | 1,011 | |
| With Tax Subsidy Off-Set of $1,707,114 | | 404 | |

# WHY CAN PRIVATE COMPANIES BE COMPETITIVE WITH RATES?

4-12

"PRIVATE OPERATORS CAN SPREAD THE COST OF PROVIDING EMS TRANSPORT SERVICE OVER A LARGE BASE BY UTILIZATING THE SAME AMBULANCES FOR BOTH EMERGENCY AND NON-EMERGENCY TRANSPORT RUNS."

# VOLATILE PUBLIC POLICY

# PRECEDENT!

"TRANSPORT FEES CHARGED BY THE FIRE BUREAU . . . CAN BE SET AT A LEVEL TO EITHER RECOVER THE COST OF THE ADDITIONAL SERVICE OR GO BEYOND THAT AND PARTIALLY SUBSIDIZE OTHER FIRE SERVICES . . ."

- TRI-DATA EXECUTIVE SUMMARY
1993

HEALTH CARE DOLLARS WILL BE PAYING FOR FIRE SERVICES OR TAX DOLLARS WILL BE PAYING FOR HEALTH CARE.

**Continued Discussion of Drs. Jui and Norton's Concerns, Particularly Regarding Data Management and Coordination**

Mr. Kilmer suggested that the Board hear the rest of the doctor's medical concerns, which are distinct from the issue of how many providers there are. Dr. Norton said that turnover is also a problem. Dr. Jui said that first the county should figure out what EMS needs and then determine an appropriate system. He pointed out the need for the system to be adaptable to new techniques and protocols. Mr. Kilmer asked Dr. Jui if had been able to articulate his concerns at the MAB. Dr. Jui said that he had been able to do so. Mr. Kilmer asked Dr. Jui to continue. Dr. Jui said that there needs to be a way to evaluate skills and to better obtain feedback from the medical community. He also stated that there are certain special needs that have not been addressed: disaster management; urban rescue; injury prevention. From the user point of view cost is a problem. Dr. Jui also listed stability of dispatchers and providers. He emphasized the need for more research on all aspects of the system.

Dr. Norton echoed Dr. Jui's concerns. He stated that quality management should assume a priority. There is a need for a more comprehensive view of data in the system. He pointed out that it was not so much a problem of individual providers but of the cumbersome nature of the system. Mr. Kilmer asked whether the issues of coordination and information sharing could be handled within a multiple provider system. Dr. Norton said that there has been improvement within the current system but that the system needed to be designed so as to encourage cooperation.

Dr. Jui agreed that multiple providers can work together if they share the same values along with the medical community regarding EMS. He said that he would rather have two pro-EMS providers than one anti-EMS provider. He said that from an operational point of view it was easier to have one provider. However, a system can be designed with multiple providers as long as there is a unified medical direction and unified operations. In response to a question from Mr. Lauer, Dr. Jui agreed that the issue was one of coordination. Now there is a need to go through new techniques with each provider. Regarding the model of a single medical director, Dr. Jui said that things can happen faster that way, but there is the danger of no checks and balances. Mr. Kilmer asked how much of a problem it was to review new techniques with multiple providers. Dr. Jui said it was a moderate one.

Mr. Steinman asked Mr. Collins if he could envision a true single provider system. Mr. Collins responded that if he meant a single agency doing all the EMS tasks, the answer was that it would be

# The Oregonian

Founded Dec. 4, 1850. Established as a daily Feb. 4, 1861. The Sunday Oregonian established Dec. 4, 1881. Published daily and Sunday by the Oregonian Publishing Co., 1320 S.W. Broadway, Portland, Oregon 97201

FRED A. STICKEL, President and Publisher

WILLIAM A. HILLIARD, Editor — PATRICK F. STICKEL, General Manager

SANDRA M. ROWE, Executive Editor — DENNIS L. ATKIN, Advertising Director

ROBERT M. LANDAUER, Editorial Page Editor — PATRICK L. MARLTON, Circulation Director


TUESDAY, JUNE 22, 1993

## Keep private ambulances

*Portland should deny firefighters' bid to expand into private-sector ambulance business*

Portland's City Council should not expand the Fire Bureau's budget to include ambulance service at a time all municipal services are at financial risk.

The council bemoans its loss of property taxes because of Measure 5. A similarly strapped Legislature is considering cutting back on grants and state revenue shared with local governments. State and federal officials are eyeing health-care reforms that could reduce payments for ambulance transport.

This is not the time for the City Council to expand the Fire Bureau into a new service.

Equally important, the bureau offers no compelling case that it can do a better job than the private sector.

It contends that providing ambulance service would raise revenue and productively use firefighters' standby time. Yet firefighters in ambulances with critically injured or ill patients are not on standby. They can't drop a patient and rush to a fire.

By contrast, increased duties in fire-safety education and building inspections would allow firefighters to move immediately to their primary task, fighting fires. Saving lives or one major building as a result might quickly match or exceed the dollar benefits projected for firefighter ambulance service.

Firefighters are the first responders to 9-1-1 medical emergencies, without reimbursement to taxpayers. The bureau contends it could charge less than private ambulance companies and generate more than enough revenue from ambulance transport to cover the city's added costs.

The council should be skeptical. Firefighters' wages and benefits are much higher than those paid private ambulance personnel. Also, the bureau offered the same revenue arguments during its 1986 expansion bid. Its figures were successfully challenged then. Today's figures, though refined, are still mushy.

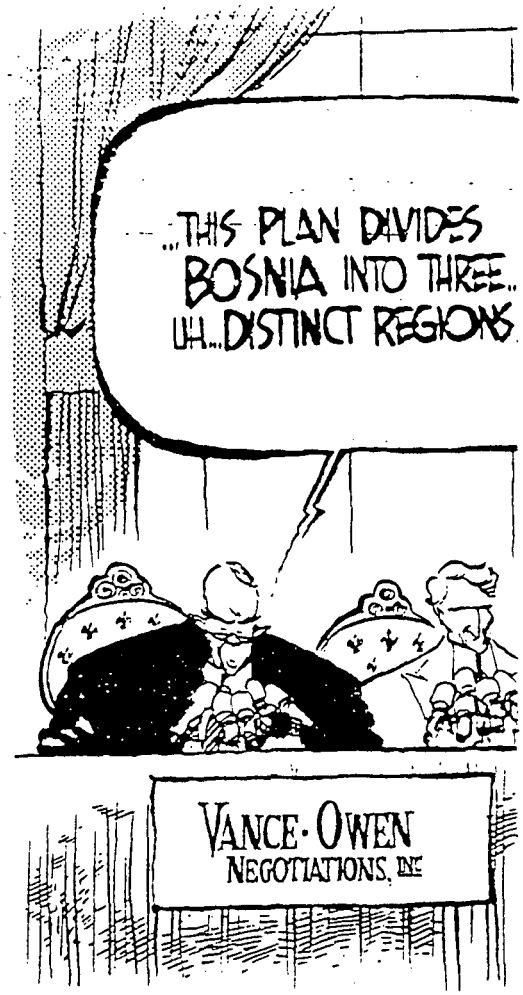
Buck Ambulance officials, admittedly self-interested but also with 80 years of experience providing ambulance service in Multnomah County, are the most vocal critics of the Fire Bureau's revenue and cost projections. One plan advanced by the bureau — to transport only critical patients — is estimated to cost $1,000 per transport; Buck says its cost for advanced-life-support transport is twice that.

That plan might require hiring only a handful of additional firefighters, but it would continue the fragmentation of care that prompted physicians to demand reform in ambulance delivery here in the first place.

Medical experts have long urged Multnomah County to have one ambulance provider, not the three it has now. The Legislature has supported that position with enabling statutes for more than a decade.

Multnomah County needs to keep its eye on the goal: a single ambulance provider, with the improved care and cost efficiencies that promises. The City Council should not confuse the issue by authorizing the Fire Bureau to transport one class of patients and the private sector another.

If the county exercises the oversight the Legislature and the public expect, the private sector is capable of providing high-quality ambulance service at fair prices. City commissioners should not be impatient. If the private sector doesn't do its job, the city can get into the ambulance business easier than it can get out if the bureau's predictions yield red ink instead of black.




## LETTERS

### Despite what GOP says, people voted in Clinton and his pledges

To the Editor: The presidential campaign of 1992 that I listened to and what I remember candidate Clinton saying must have happened in my dreams. I remember Bill Clinton's campaign pledges as follows: To end the ban on gays in the military; to provide investment in jobs programs as long as the programs could be funded without raising the deficit; to raise taxes on the wealthiest Americans.

If I was not dreaming and if Clinton did make these pledges, it remains that people voted for him and he is the elected president. Why all the brouhaha now about these issues? People voted and elected him because of and/or in spite of these pledges.

And regarding Sen. Orrin Hatch's decrying a political figure mentioned as a nominee for justice of the Supreme Court, when Hatch was mentioned as a nominee in the previous administration he didn't make any public statements to withdraw consideration because he was a political figure.

CATHERINE E. COHN
*Oregon City*

### Set up two-tiered property-tax plan

To the Editor: When I voted for Measure 5, the last thing I intended to do was give windfall profits to businesses and corpora-

Oregonian Editorial
Feb 3, 1986

2/3/86 EDITORIAL

# Review life-saving transport

Police, fire and ambulance now respond to most medical emergencies in Portland — and the price to victims and taxpayers is significant enough to demand renewed public research and discussion.

In that light alone, the proposal by Portland Fire Bureau to put itself into the emergency ambulance business is commendable. Certainly, however, skeptics ought to question whether even Portland's fine Fire Bureau ought to be putting private companies out of business, particularly when those companies also are performing well.

In support of its proposal, the bureau advanced several issues pertaining to cost and quality of service: accountability, medical control/supervision, maintenance of paramedic skill levels and number of advanced-life-support transport vehicles, ability to collect data and identify needs, ease in reviewing cases and assuring quality patient care. Additionally, the bureau says, "widespread dissatisfaction" exists with the system now.

That dissatisfaction and the issues listed are cited by the Fire Bureau as leading to its proposal. Not mentioned but surely a finger on the trigger for the effort was a mayor's office memo urging city bureaus to look for ways to improve the city's financial picture — to turn a profit, so to speak, where possible.

The bureau's plan does just that. Collections for its new ambulance service would net the city approximately $1 million a year after initial expenses are paid, according to the bureau's analysis. The $370,000 red-ink entry of the first two years would be replaced by an estimated profit of $813,000 the third year.

Whether the public wants to turn a profit on Fire Bureau emergency service is just one of many questions the proposal raises.

Certainly, the public ought to look at the components that exist in medical response today. They are an enormous improvement over those that existed in 1977 when The Oregonian led a community effort to bring Portland's emergency medical services into the 20th century. Staff Writer Ann Sullivan sparked renewed enthusiasm to do a better job with her report in Northwest Magazine about Seattle's tiered rescue operation.

Since then, cardiopulmonary resuscitation training programs have escalated for citizens here as they did in Seattle. Emergency medical technician (EMT) programs have been implemented for firemen and ambulance attendants particularly. 9-1-1 emergency telephone is available throughout Portland and most of Oregon. A statewide trauma hospital system is being developed.

However, as we said then, "Weaving a fully integrated EMS system is not an overnight task."

In fact, it requires a years-long commitment, and perhaps some additional reordering of service delivery is a logical step today, 8½ years later. Certainly, consideration of the Fire Bureau plan ought to be a part of that review. But this city ought not rush into public delivery of services that the private sector is delivering cost-effectively or could with improved public-sector cooperation.

MILLER, NASH, WIENER,
HAGER & CARLSEN
ATTORNEYS AND COUNSELORS AT LAW
3500 U.S. BANCORP TOWER
111 S.W. FIFTH AVENUE
PORTLAND, OREGON 97204-3699
TELEPHONE (503) 224-5858
TELEX 364462 KINGMAR PTL
FACSIMILE (503) 224-0155

SEATTLE OFFICE:
4400 TWO UNION SQUARE
601 UNION STREET
SEATTLE, WASHINGTON 98101-2352
TELEPHONE (206) 622-8484
FACSIMILE (206) 622-7485

THOMAS E. LINDLEY
ADMITTED IN OREGON, WASHINGTON, AND ILLINOIS
DIRECT: (503) 423-2411

**THE CITY OF PORTLAND FIRE BUREAU'S AMBULANCE TRANSPORT PROPOSAL -- WHO WILL PAY?**

Testimony before the Portland City Council
June 16, 1993

The Fire Bureau's proposal now before you raises very significant legal and political issues--issues that it appears no one has yet addressed. It does this even if you accept the Fire Bureau's own cost estimates. Because the issues are such that they could effectively kill the proposal if they are not addressed, they must be carefully considered.

The Bureau's and Office of Finance and Administration's own numbers show that the rate to be charged for Portland residents is different from a fully-costed rate. That difference is around $600 per run. The costing the Bureau has used applies only where the Bureau has its resources already in place--that is, within the City. Outside Portland, whether in Cascade Locks or much closer, the Bureau does not have existing stations and personnel. Thus, the Bureau's costing cannot apply, and its actual costs must be considered.

There are only two clear scenarios--either the Bureau charges different rates to those in the County, but outside Portland, or the Bureau charges the same rate everywhere.

If the Bureau charges the same rate everywhere, it will certainly be sued by Portland taxpayers who will see it as improper for Portland tax dollars to subsidize out-of-Portland ambulance service, and the sued officials appear likely to lose.

Alternatively, if the Bureau charges a cost differential--here of $600 per transport--then either the individuals transported must pay the $1,011 rate that covers the actual costs, or the County Commissioners must increase county taxes to subsidize that $600 per run difference.

This problem has, so far, been ignored by the Bureau, but it must be addressed. I'll explain it now in somewhat more

detail, and be happy to give the City Attorney additional case and statutory citations.

DISCUSSION

The Fire Bureau is supported by tax dollars paid by city residents. If Multnomah County adopts an ambulance service plan that uses existing Fire Bureau resources to provide ambulance services throughout a single county-wide ambulance service area, county residents living outside the City of Portland will receive the benefits of Fire Bureau services established and supported by taxes paid solely by city residents.

Under Oregon law, if the Fire Bureau (or any other city agency) provides services outside the city's boundaries, the City must be reimbursed for the full cost of those services, including administrative costs and overhead. See ORS 294.470(5); Portland City Code § 5.48.030. That is precisely what is already done when the Fire Bureau provides fire fighting services outside the city limits. ORS 478.310; 476.290; Portland City Code § 3.22.110. Without full reimbursement, city taxpayers will find themselves subsidizing ambulance services offered to non-city residents, and city policymakers and staff will face the prospect of taxpayer suits and personal liability for misusing public funds. ORS 294.100; Burt v. Blumenauer, 299 Or 55, 699 P2d 168 (1985).[1]

The only way to avoid this potential liability would be to ensure that the City is reimbursed in full for the total cost of Fire Bureau services offered outside the city's boundaries, including administration and overhead costs. According to the Fire Bureau's and Office of Finance and Administration's own calculations, the "total program cost" of ambulance transports will be at least $1,011 per transport. Bureau of Fire, Rescue, and Emergency Services Patient Transport Services Proposal, p. 13.

---

[1] The protections and limitations of the Oregon Tort Claims Act, ORS 30.260 to 30.300, will not shield policymakers from liability in a statutory taxpayer action for misappropriation or misuse of public funds. Burt v. Blumenauer, 84 Or App 144, 733 P2d 462, modified and adhered to as modified, 87 Or App 263, 742 P2d 626 (1987).

For transports involving non-city residents, this cost must be recovered by the City in full, presumably through an additional assessment or tax to be imposed on county residents living outside the city limits (to support ambulance service and similar to the assessment already made for fire fighting coverage). The only alternative is a discriminatory rate schedule that charges city residents a subsidized rate sufficient to cover projected "new costs" of $379 per transport, while users outside the city are charged a "non-subsidized" rate--one that will cover the total costs of $1,011 per transport.

Under either option, policymakers will be forced to deal with angry consumers or taxpayers who end up paying more for a Fire Bureau ambulance service that was supposed to be cheaper and more efficient than the current system of private companies providing high quality patient care at reasonable rates with no tax subsidies.

## CONCLUSION

In essence, applying the Fire Bureau's own numbers, its proposal might potentially reduce rates per run for Portland residents, but only to the great detriment of Multnomah County residents who do not live in Portland. That concern must be addressed.

Respectfully submitted,

Thomas E. Lindley

# Emergency Medical Services

**Multnomah County**

RECEIVED
JUN 2 2 1993
GLADYS McCOY
MULTNOMAH COUNTY CHAIR
C: OBC

MEMORANDUM

TO: HANK MIGGINS
CHAIR, BOARD OF COUNTY COMMISSIONERS

FROM: BILL COLLINS
EMS DIRECTOR

DATE: 6-22-93

RE: EMS PLAN PRESENTATION TO THE BOARD ON 6-23-93

==========

ENCLOSED IS A SCHEDULE FOR THE PRESENTATIONS EXPECTED ON JUNE 23,1993.

IF YOU HAVE NO OBJECTIONS, I WILL MAKE THESE AVAILABLE TO THE COMMISSIONERS AT THE MEETING AND TO THE AUDIENCE.

1993 JUN 22 PM 2:51
OREGON

**Health Department**
**426 S.W. Stark Street—9th Floor · Portland, Oregon 97204 · 248-3220 · Fax 248-5453**

AN EQUAL OPPORTUNITY EMPLOYER

# Emergency Medical Services

**Multnomah County**

AMBULANCE SERVICE PLAN PRESENTATIONS

BOARD OF COUNTY COMMISSIONERS

JUNE 23, 1993

EMS STAFF RECOMMENDATIONS

PORTLAND FIRE BUREAU

PORTLAND AREA PARAMEDIC ALLIANCE

EMS MEDICAL ADVISORY BOARD RECOMMENDATIONS

EMS PROVIDER BOARD RECOMMENDATIONS

BUCK MEDICAL SERVICES

**Health Department**
**426 S.W. Stark Street—9th Floor · Portland, Oregon 97204 · 248-3220 · Fax 248-5453**

AN EQUAL OPPORTUNITY EMPLOYER

Clerk of the Board

# Emergency Medical Services

**Multnomah County**

1993 MAY 24 PM 2:18

BOARD OF COUNTY COMMISSIONERS
MULTNOMAH COUNTY
OREGON

MEMORANDUM

TO: Hank Miggins, Chair, Board of County Commissioners
Commissioner Tanya Collier
Commissioner Gary Hansen
Commissioner Sharron Kelley
Commissioner Dan Saltzman

FROM: Bill Collins, EMS Director

VIA: Gary L. Oxman, MD, MPH, Health Officer
Billi Odegaard, Director, Health Department

DATE: May 24, 1993

RE: Schedule for Ambulance Service Plan Action by The Board

NOTE: This memo supersedes the previous proposed schedule sent on April 8,1993

==========

The following is a proposed schedule for the consideration of Ambulance Service Area (ASA) plans and adoption of a Plan by the Board of County Commissioners.

Through the process, the Board will hear and consider all proposed plans for providing emergency ambulance service within the County. After initial work sessions and public testimony, the Board will direct EMS staff to prepare a final draft plan. This draft plan will be further considered and may be modified by the Board in a final work session and two ordinance adoption hearings.

The ordinance resulting from this process will 1) adopt the ASA Plan approved by the Board; and 2) direct EMS Staff and County Counsel to prepare a detailed EMS Ordinance revision implementing the plan after the plan is approved by the Oregon Heath Division.

**Health Department**
**426 S.W. Stark Street—9th Floor · Portland, Oregon 97204 · 248-3220 · Fax 248-5453**

AN EQUAL OPPORTUNITY EMPLOYER

FOR 6/23/93
ORIGINAL
Packet

SCHEDULE:

**Wednesday June 2, 1993 9:30 AM**

Informal Briefing by EMS staff on EMS system design, current system characteristics, ASA plan elements, and requirements and process for ASA Plan Adoption. Discussion by the Board on process and timelines.

**Wednesday June 23, 1993 1:30 PM**

Presentation of proposed ambulance service area plans. This will include recommendations of EMS staff, EMS Medical Advisory Board, EMS Provider Board, Portland Area Paramedic Alliance, and any other parties wishing to present a plan for consideration. Questions by Commissioners. No other public testimony.

**Tuesday June 29, 1993 1:30 PM**

Board Work Session to consider plan elements. Invited testimony.

**Wednesday June 30, 1993 9:30 AM**

Board Work Session to consider plan elements. Invited testimony.

**Thursday July 1, 1993 1:30 PM**

Board Hearing with public testimony on submitted plans and plan elements.

**Tuesday July 6, 1993 2:00 PM**

Board Work Session to consider plan elements and consider and modify draft plan. Invited testimony.

**Thursday July 8, 1993 Regular Meeting 9:30 AM**

First reading of the ordinance adopting the plan. Public testimony.

**Thursday July 15, 1993 Regular Meeting 9:30 AM**

Second reading of the ordinance adopting the plan. Public testimony.

#5 6/2/93

APPENDIX 'A' of 333-28-105

1. CERTIFICATION BY GOVERNING BODY OF COUNTY AMBULANCE SERVICE PLAN

2. OVERVIEW OF COUNTY (Demographic and Geographic description).

3. DEFINITIONS

4. BOUNDARIES
   - (1) ASA Map(s) With Response Time Zones
   - (2) ASA Narrative Description
   - (3) Map(s) Depicting "9-1-1", Fire Districts and Incorporated Cities
   - (4) Alternatives Considered to Reduce Response Times

5. SYSTEM ELEMENTS
   - (1) Response Times
   - (2) Level of Care
   - (3) Personnel
   - (4) Medical Supervision
   - (5) Patient Care Equipment
   - (6) Vehicles
   - (7) Training
   - (8) Quality Assurance
     - (a) Structure
     - (b) Process
     - (c) Problem Resolution
     - (d) Sanctions for Non Compliant Personnel or Providers

6. COORDINATION
   - (1) The Entity That Will Administer and Revise The ASA Plan
   - (2) Complaint Review Process
   - (3) Mutual Aid Agreements
   - (4) Disaster Response
     - (a) County Resources other than Ambulances
     - (b) Out of County(ies) Resources
     - (c) Mass-Casualty Incident Plan(s)
   - (5) Personnel and Equipment Resources
     - (a) Hazardous Materials
     - (b) Search and Rescue
     - (c) Specialized Rescue
     - (d) Extrication
   - (6) Emergency Communication and System Access
     - (a) Telephone
     - (b) Dispatch Procedures
     - (c) Radio System
     - (d) Emergency Medical Services Dispatcher Training

7. PROVIDER SELECTION
   - (1) Initial Assignment
   - (2) Reassignment
   - (3) Application for an ASA
   - (4) Notification of Vacating an ASA
   - (5) Maintenance of Level of Service

8. COUNTY ORDINANCES AND RULES

**823.170 State Emergency Medical Service Committee; members qualifications, terms, duties and compensation.** (1) The division shall appoint a State Emergency Medical Service Committee composed of 18 members as follows:

(a) Seven physicians licensed under ORS chapter 677 whose practice consists of routinely treating emergencies such as cardiovascular illness or trauma, appointed from a list submitted by the Board of Medical Examiners.

(b) Four EMTs at least one of whom is an EMT 1 at the time of appointment.

(c) One volunteer ambulance operator, one person representing governmental agencies that provide ambulance services and one person representing a private ambulance company.

(d) One hospital administrator.

(e) One nurse who has served at least two years in the capacity of an emergency department nurse.

(f) One representative of an emergency dispatch center.

(g) One community college representative.

(2) No more than four members shall be residents of the same congressional district at the time of appointment.

(3) Appointments shall be made for a term of four years in a manner to preserve insofar as possible the representation of the organization described in subsection (1) of this section. Vacancies shall be filled for any unexpired term as soon as the division can make such appointments. The committee shall choose its own chairperson and shall meet at the call of the chairperson or the division administrator.

(4) The State Emergency Medical Service Committee shall advise the division concerning the adoption, amendment and repeal of rules authorized by this chapter.

(5) The chairperson of the committee shall appoint a subcommittee on EMT certification and discipline, consisting of five physicians and four EMTs. The subcommittee shall advise the division and the board on the adoption, amendment, repeal and application of rules concerning ORS 823.130 to 823.160 and 823.205. The decisions of this subcommittee shall not be subject to the review of the full State Emergency Medical Service Committee.

(6) Members are entitled to compensation as provided in ORS 292.495. [Formerly 485.570; 1989 c.782 §16]

**823.180 County plan for ambulance and emergency medical services.** (1) Each county shall develop a plan for the county or two or more contiguous counties may develop a plan relating to the need for and coordination of ambulance services and establish one or more ambulance service areas consistent with the plan for the efficient and effective provision of ambulance services.

(2) Each person, city or rural fire protection district within the county that provides or desires to provide ambulance services shall notify the county in writing if the person, city or district wants to be consulted prior to the adoption or amendment of a county plan for ambulance services.

(3) Prior to adopting or amending a plan under subsection (1) of this section, a county shall notify each person, city or district that notified the county under subsection (2) of this section of its desire to be consulted. The county governing body shall consult with and seek advice from such persons, cities and districts with regard to the plan and to the boundaries of any ambulance service areas established under the plan. After such consultation, the county shall adopt or amend a plan in the same manner as the county enacts nonemergency ordinances.

(4) Any plan developed and any service area established pursuant to subsection (1) of this section shall be submitted to the Health Division.

(5) The division, in consultation with the appropriate bodies specified in subsection (1) of this section, shall adopt rules pursuant to ORS 183.310 to 183.550 that specify those subjects to be addressed and considered in any plan for ambulance services and areas under subsection (1) of this section and those subjects to be addressed and considered in the adoption of any such plan. The rules shall be uniform, as far as practicable, but take into consideration unique circumstances of local districts.

(6) The Health Division shall review a plan submitted under subsection (4) of this section for compliance with the rules of the division adopted under subsection (5) of this section. Not later than 60 days after receiving the plan, the division shall approve the plan if it complies with the rules or disapprove the plan. The division shall give written notice of such action to the county and, when a plan is not approved, the notice shall indicate specifically how the plan does not comply with the rules of the division. The county shall modify the plan to comply with the rules and shall submit the modified plan to the division for review under this subsection.

(7) The rules adopted under subsection (5) of this section shall be enforceable by the

division in a proceeding in circuit court for equitable relief.

(8) This section does not require a county to establish more than one ambulance service area within the county. [Formerly 485.573; 1989 c.722 §3]

**823.190 Rulemaking authority generally.** (1) In accordance with ORS 183.310 to 183.550, the division may adopt and may when necessary amend or repeal such rules as are necessary for carrying out this chapter.

(2) The division is authorized and directed to establish appropriate rules in accordance with the provisions of ORS 183.310 to 183.550 concerning the administration of this chapter. Such rules may deal with, but are not limited to, such matters as criteria for requirements, types and numbers of emergency vehicles including supplies and equipment carried, requirements for the operation and coordination of ambulances and other emergency care systems, criteria for the use of two-way communications, procedures for summoning and dispatching aid and other necessary and proper matters. [Formerly 485.575; 1989 c.782 §18]

**823.200 Rulemaking authority with respect to minimum requirements for ambulances.** (1) The Health Division, in consultation with the State Emergency Medical Service Committee, shall adopt rules specifying minimum staffing and medical and communications equipment requirements for all types of ambulances. The rules shall define the requirements for advanced life support and basic life support units of emergency vehicles, including equipment. The rules shall require that a person state-certified at or above an emergency medical technician 1 training level must ride in the patient compartment when a patient is being transported by a basic life support unit in emergency circumstances. The rules shall also require that a minimum of two persons, one state-certified at or above an emergency medical technician 3 training level, must ride in the patient compartment, and one state-certified at or above an emergency medical technician 1 training level, must staff an advanced life support unit when a patient is being transported in emergency circumstances.

(2) The Health Division may waive any of the requirements imposed by this section in medically disadvantaged areas, as determined by the Director of Human Resources, or upon a showing that a severe hardship would result from enforcing a particular requirement.

(3) The Health Division shall exempt from rules adopted under this section nonprofit air ambulances providing ambulance services. [Formerly 485.577; 1987 c.660 §26; 1989 c.782 §19]

**823.204 Definitions for ORS 823.204 and 823.205.** As used in this section and ORS 803.205, unless the context requires otherwise:

(1) "Board" means the Board of Medical Examiners for the State of Oregon.

(2) "Emergency medical technician 1, 2, 3 and 4" have the meaning in ORS 823.020.

(3) "Scope of practice" means the maximum level of emergency care that an emergency medical technician may provide.

(4) "Standing orders" means the written protocols which an emergency medical technician follows to treat patients when direct contact with a physician is not maintained.

(5) "Supervising physician" means a medical or osteopathic physician licensed under ORS chapter 677, actively registered and in good standing with the board, who provides direction of emergency care provided by emergency medical technicians. [1989 c.782 §27]

**823.205 Rulemaking authority with respect to scope of practice of EMTs and first responders; qualifications of supervising physician.** (1) The Board of Medical Examiners for the State of Oregon shall adopt by rule a scope of practice for emergency medical technicians 1, 2, 3 and 4 and for first responders.

(2) The board shall adopt by rule standards for the qualifications and responsibilities of supervising physicians.

(3) The standing orders for emergency medical technicians and first responders may not exceed the scope of practice defined by the board.

(4) No emergency medical technician 1, 2, 3 or 4 shall provide patient care or treatment without written authorization and standing orders from a supervising physician who has been approved by the board.

(5) The policies and procedures for applying and enforcing this section may be delegated in whole or in part to the Health Division of the Department of Human Resources. [1989 c.782 §28; 1991 c.909 §5]

**823.210 False statements and misrepresentations regarding license or certification prohibited.** (1) It is unlawful for any person or governmental unit to:

(a) Intentionally make any false statement on an application for an ambulance license or for certification as an emergency medical technician or first responder or on any other documents required by the division; or

(b) Make any misrepresentation in seeking to obtain or retain a certification or license.

(2) Any violation described in subsection (1) of this section is also grounds for denial, suspension or revocation of a certification or license under ORS 823.160. [Formerly 485.580; 1989 c.782 §20; 1991 c.909 §6]

**823.215 Requirements regarding use of titles and disclosure of qualifications.** (1) No emergency medical technician 2, 3 or 4 or first responder shall use any title or abbreviation thereof without the designation "emergency medical technician" or "first responder" indicating the level of certification by the division. The technician or responder shall not mislead the public as to the qualifications of the technician or responder.

(2) The term "paramedic" may only be used as an explanatory term of the certified "emergency medical technician 4." [Formerly 677.675; 1991 c.67 §228; 1991 c.909 §7]

**823.220 Authority to enact local ordinances regulating ambulances and emergency medical technicians.** (1) As used in this section, "political subdivision" includes counties, cities, districts, authorities and other public corporations and entities organized and existing under statute or charter.

(2) An ordinance of any political subdivision regulating ambulance services or emergency medical technicians shall not require less than is required under ORS 820.300 to 820.380, or this chapter or the rules adopted by the division under this chapter.

(3) When a political subdivision enacts an ordinance regulating ambulance services or emergency medical technicians, the ordinance must comply with the county plan for ambulance services and ambulance service areas adopted under ORS 823.180 by the county in which the political subdivision is situated and with the rules of the Health Division relating to such services and service areas. The determination of whether the ordinance is in compliance with the county plan shall be made by the county governing body. [Formerly 485.585; 1989 c.722 §2; 1989 c.782 §21]

**823.230 Authority to grant exemptions or variances; rules.** (1) The division may grant exemptions or variances from one or more of the requirements of ORS 820.330 to 820.380 or this chapter or the rules adopted thereunder to any class of vehicles if it finds that compliance with such requirement or requirements is inappropriate because of special circumstances which would render compliance unreasonable, burdensome or impractical due to special conditions or cause, or because compliance would result in substantial curtailment of necessary ambulance service. Such exemptions or variances may be limited in time or may be conditioned as the division considers necessary to protect the public welfare.

(2) In determining whether or not a variance shall be granted, the advice of the State Emergency Medical Service Committee shall be received and in all cases the equities involved and the advantages and disadvantages to the welfare of patients and the owners of vehicles shall be weighed by the division.

(3) Rules under this section shall be adopted, amended or repealed in accordance with ORS 183.330. [Formerly 485.590; 1989 c.782 §22]

**823.240 Authority to receive and disburse federal funds.** The division may receive and disburse such federal funds as may be available for carrying out any of the provisions of ORS 820.330 to 820.380 or this chapter. [Formerly 485.595; 1989 c.782 §23]

**823.250 Replacement of one ambulance service by another.** (1) When a city, county or district requires an ambulance service currently operating within the city, county or district to be replaced by another public or private ambulance service, the city, county or district shall provide that:

(a) Paramedic staffing shall be maintained at least at the levels established in the local plan for ambulance services and ambulance service areas developed under ORS 823.180; and

(b) When hiring paramedics to fill vacant or new positions during the six-month period immediately following the date of replacement, the replacement ambulance service shall give preference to qualified employees of the previous ambulance service at comparable certification levels.

(2) As used in this section:

(a) "Ambulance" has the meaning given that term by ORS 823.020.

(b) "Ambulance service" means any individual, partnership, corporation, association or agency that provides transport services and emergency medical services through use of licensed ambulances.

(c) "District" has the meaning given that term by ORS 198.010.

(d) "Paramedic" has the meaning given that term by ORS 823.020. [1987 c. 845 §1; 1989 c.782 §24]

**823.300 Legislative intent regarding regulation of ambulance services.** The Legislative Assembly declares that the regulation of ambulance services and the establishment of ambulance service areas are important functions of counties, cities and rural fire protection districts in this state. It is the intent of the Legislative Assembly in

this Act to affirm the authority of counties, cities and rural fire protection districts to regulate ambulance services and areas and to exempt such regulation from liability under federal antitrust laws. [1989 c.722 §8]

**823.305 Definition of "ambulance services" for ORS 823.180, 823.220 and 823.315.** As used in ORS 823.180, 823.220 and 823.315, "ambulance services" includes the transportation of an ill, injured or disabled individual in an ambulance and, in connection therewith, the administration of prehospital medical or emergency care, if necessary. [1989 c.722 §5]

**823.310 Requirements for adoption and review of ambulance service plan by counties.** (1) In addition to the other requirements of ORS 823.180 and 823.220, when initially adopting a plan for ambulance services and ambulance service areas under ORS 823.180 or upon any subsequent review of the plan, a county shall:

(a) Consider any and all proposals for providing ambulance services that are submitted by a person or governmental unit or a combination thereof;

(b) Require persons and governmental units that desire to provide ambulance services under the plan to meet all the requirements established by the plan; and

(c) Consider existing boundaries of cities and rural fire protection districts when establishing ambulance service areas under the plan.

(2) Paragraphs (a) and (c) of subsection (1) of this section shall not apply to any county that, on or before the July 19, 1989, has initiated its bid process and solicited bids.

(3) When determining the provider of ambulance services upon initial adoption or subsequent review of a plan under ORS 823.180, a county shall not grant preference under the plan to any person or governmental unit solely because that person or governmental unit is providing ambulance services at the time of adoption or review of the plan. [1989 c.722 §7]

**823.315 Provision of ambulance services when county plan not adopted.** When a county plan is not adopted for a county under ORS 823.180:

(1) A person or governmental unit may provide ambulance services within the county. A city or rural fire protection district may provide such services within and outside the city or district boundaries in accordance with policies adopted by the governing body of the city or district, including operation in other districts or cities by intergovernmental agreement under ORS chapter 190.

(2) A person or governmental unit that did not provide ambulance services prior to January 1, 1989, shall not commence the operation of such services under subsection (1) of this section until July 1, 1990, except within an area:

(a) That is otherwise not being served by any other provider of ambulance services; or

(b) For which the fees or other charges for ambulance services are increased between July 15, 1989, and July 1, 1990, by an existing provider of ambulance services. [1989 c.722 §6]

**823.320 Exchange of services agreement for ambulance and emergency medical services.** (1) A city, rural fire protection district or rural ambulance district providing transportation services through use of licensed ambulances that either individually or jointly accept prepayment from persons within their service areas for ambulance and emergency medical services, or ambulance services only, but not for other health care services, and a for-profit or not-for-profit corporation that accepts prepayment for ambulance and emergency medical services, or ambulance services only, but not for other health services, operating within this state or in another state, may enter into an exchange of services agreement for ambulance and emergency medical services.

(2) Any public entity described in subsection (1) of this section may enter into an exchange of services agreement with another comparable entity, operating within this state or in another state, for ambulance and emergency medical services. [1991 c.958 §1]

**Note:** ORS 823.320 was enacted into law by the Legislative Assembly but was not added to or made a part of ORS chapter 823 by legislative action. See Preface to Oregon Revised Statutes for further explanation.

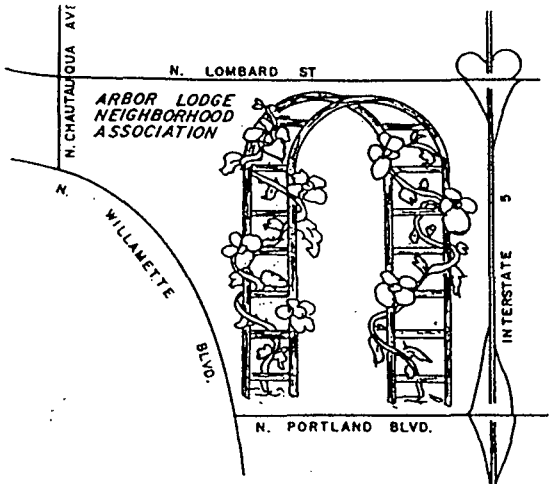
## PENALTIES

**823.990 Penalty for violation of chapter.** (1) Violation of any provision of ORS 823.070 (5), 823.130 or 823.210 is a Class A misdemeanor. Each day of continuing violation shall be considered a separate offense.

(2) Violation of any provision of this chapter is a misdemeanor. In any prosecution for such violation it shall be sufficient to sustain a conviction to show a single act of conduct in violation of any of the provisions of this chapter and it shall not be necessary to show a general course of such conduct. [Formerly 485.992; 1989 c.782 §25]

BCC ✓
6/3/93-Q&B

FOR PUBLIC TESTIMONY




June 2, 1993

Multnomah County Commissioners
c/o Carrie Parkerson, Board Clerk
1120 SW 5th, Suite 1510
Portland, OR 97204

1993 JUN -3 AM 11:28
MULTNOMAH COUNTY
OREGON

Dear Multnomah County Commissioners:

As you know, Emergency Medical Services in the county have a complex past in regard to prehospital care and transportation services in response to emergency calls. We currently have a county divided between four private ambulance service areas which charge varying rates for services, which are excessive when compared to other similar metropolitan areas. There appears to be a movement towards recognition and acknowledgment of the need for a single ambulance service area system, although this has been resisted in the past by several ambulance services which brought suit to prevent a single ASA.

In our review of the Portland Area Paramedic Alliance proposed ordinance and ASA plan (March 12, 1993); the Multnomah County Emergency Medical Services Ambulance Service Planning Report and ASA Plan (1993); and the draft Phase II and III Report of TriData for the City of Portland, we have focused on a system(s) that makes services readily available, timely, of high quality, with financial viability, and which makes optimal use of resources. We favor a system that provides quality assurance of care, a data system that continually monitors provider performance, assures consistent compliance with medical protocols, provides necessary and sufficient paramedics, is geographically well distributed, and is timely in response.

Thus, as potential recipients of EMS in the county, we favor and recommend to you Plan C of the City of Portland's TriData study, which would allow the Fire Bureau to provide all emergency ambulance services, both ALS and BLS. We recognize that the TriData study might not be recommended to you by the City of Portland. If the City Commissioners do not submit this study in appropriate form, we ask you to withhold your decision on the ASA problem resolution until the City can do so in a timely manner. If the City refuses, then we offer the following recommendation.

That the County adopt 5.1 Option #1: Public-Private System of the Multnomah County EMS 1993 ASA Plan, which allows the Fire Department, as first responders, to transport critical patients, but with this revision of the current plan: that Fire Department personnel would also transport patients "...in need of less critical emergency transportation." (p.25). If this is impossible, then we recommend that a clearer definition of "less critical" be obtained. As to 5.1.6 RATES on p. 27, we request that charges for non-emergency ambulance service provided by private companies should be regulated by the County, in lieu of the plan's current language that such service charges not be regulated.

In essence, we believe that current response times and service charges by private ambulance companies in the County are too lengthy and too high. We contend that with current distribution of Fire Department stations and personnel, and with a first response time of approximately four minutes by Fire Department personnel vs. approximately eight minutes by private ambulance services, that the most logical means for providing timely emergency service to residents of Multnomah County residents is through the Fire Department.

As to charges, we urge the County Commission to look to other cities for more financially equitable models than we now have here. In Southern California cities, these employ subscriber fees of approximately $15.00 per year per family for unlimited numbers of emergency medical calls and transport by fire departments. In the City of Mercer Island, WA, where I am from, we had attached to our utility bill a $0.65 per month charge for ambulance fee through the Fire Department. Seattle uses a tax plus an EMS levy to pay for Fire Department medical aid vehicles. Bellevue, WA residents pay for their EMS via the Fire Department through an addition to their property tax bill. In all of King County, WA, EMS is handled by Fire Departments, while nonemergency transport is handled by one private carrier, Shepherd Ambulance.

As it stands now in Multnomah County, the elderly on fixed incomes, people with no insurance, people with insurance but no ambulance provisions, and so forth,can be financially devastated by one or more private ambulance calls per year. We have heard people say that with emergency illness or accident, they have requested family to transport them by taxi or auto to prevent financial distress from an ambulance bill. This is a medically dangerous alternative when time and prehospital medical intervention could prevent death or medical complications.

We urge Multnomah County Commissioners to ignore private ambulance lobbyists or threats of lawsuits in order to provide an EMS service in response to 9-1-1 medical emergencies that is timely, geographically well distributed, and financially equitable. We endorse the Fire Department as sole carrier for medical transport in response to 9-1-1. We urge the Commission to devise a budget that would allow a no-charge service; in lieu of that, we request a levy for such fees, or, at very least, the opportunity for subscriber fees for Fire Department EMS. We request such on behalf of a very high elderly population in Arbor Lodge Neighborhood Association, who are on fixed incomes and who have little or no financial recourses in face of one or more private ambulance bills.

Sincerely,

Gordon Johnston

Konrad Daae

Konrad Daae, President
Arbor Lodge Neighborhood Association

# Emergency Medical Services

**Multnomah County**

TO: MEDICAL ADVISORY BOARD
PROVIDER BOARD
FIRE PROVIDERS
INTERESTED PARTIES

FROM: BILL COLLINS

DATE: 5/12/93

RE: CHANGES TO THE PARAMEDIC ALLIANCE ASA PLAN

I RECEIVED THE ATTACHED CHANGES TO THE PORTLAND AREA PARAMEDIC ALLIANCE ASA PLAN TODAY BY FAX. IN ORDER THAT THEY CAN BE DISCUSSED AT THE 5/14 MAB MEETING I AM SENDING THEM BY FAX TO THE MAB MEMBERS. ALL PERSONS THAT RECEIVED THE INITIAL DRAFT PLAN FROM OUR OFFICE WILL RECEIVE THESE CHANGES BY MAIL.

C: COUNTY COMMISSIONERS
GARY OXMAN,MD

BOARD OF
COUNTY COMMISSIONERS
1993 MAY 14 AM 10: 28
MULTNOMAH COUNTY
OREGON

**Health Department**
**426 S.W. Stark Street—9th Floor · Portland, Oregon 97204 · 248-3220 · Fax 248-5453**

AN EQUAL OPPORTUNITY EMPLOYER

Mult Co Cmrs
FAX @ 248-5453

May 11, 1993

Dear Bill:

Enclosed you'll find language changes addressing conflict of interest and Sec Lint exposure. Please distribute these changes as you see fit.

Thanks,

Cole

Page 8 of Proposed Ordinance:

Section 7. Dispatch of EMS and Emergency Ambulances. There shall be established and operated by the Physician Medical Director a EMS Central Dispatch office within the Public Safety Answering Point (911 telephone center ) for Multnomah County. This office shall receive and dispatch emergency calls for emergency medical services and emergency ambulance services. This office shall promptly dispatch appropriate responders of emergency medical service(s) and emergency ambulance(s) based upon System Standard of Care triage and dispatch standards. The Emergency Ambulance licensee shall have exclusive market rights and responsibilities relative to all 911 medical requests and all medically unstable patients requiring transportation originating within the Ambulance Service Area described in the Multnomah County ASA plan.

***Section 7.1 Simultaneous Response By Other EMS Providers. This ordinance acknowledges the important role of other EMS providers in providing rapid delivery of prehospital care to a patient. Simultaneous responses by other agencies such as fire departments, police departments, and other government agencies within the Ambulance Service Area for the purpose of delivering emergency medical service may be made after consultation with the Physician Medical Director. The Physician Medical Director and a representative from the responding agency shall use the Triage guidelines to determine appropriate responses by non-transporting agencies for optimal patient care. The Physician Medical Director and the representative shall also take into consideration their available resources to determine reasonable, efficient and effective EMS response standards within their districts. EMS responses by other than the Emergency Ambulance provider shall include automatic rapid defibrillation capabilities with a minimum of one responding person trained at the EMT 1 D level.***

**Proposed changes in *Bold***

Page 8 of Proposed Ordinance:

Section 8. Interim Physician Medical Director, Standard of Care and Transition Operations.

Until a System Standard of Care is written by the Physician Medical Director and adopted by the Medical Advisory Board, the current written protocols adopted by the Medical Advisory Board shall remain in effect. This Interim System Standard of Care may be revised by the Interim Physician Medical Director. This Interim System Standard of Care shall not be valid for more than one year after adoption of this ordinance. During the period between the adoption of this Ordinance and the retaining of the Physician Medical Director by Multnomah County, the Interim Physician shall be ~~the Chairperson of the Medical Advisory Board, subject to review by the Board of County Commissioners.~~ ***recommended by the Medical Advisory Board from a list of qualified applicants supplied by the County Employee Services Office; subject to appointment by the Board of County Commissioners. The Interim Physician Medical Director shall have the same medical qualifications as necessary for the Physician Medical Director and shall have had prior experience as a Physician Supervisor of EMT's.*** This interim position shall not extend for a period longer than one year. The EMS office budget shall continue to be funded using the method and formula found in Ordinance 669 : EMS Rule 6.32-090 (User Fees) until a Financial Oversight Board can be appointed, a System Standard of Care adopted and Service Rates approved. This interim funding shall not extend for a period of more than one year.

**Proposed change in *Bold***

---

# Emergency Medical Services

**Multnomah County**

6/30

*From the Desk of*

**Roy R. Kallas, Office of the Director**

1993 JUL - 1 PM 6:28
MULTNOMAH COUNTY
OREGON
BOARD OF
COUNTY COMMISSIONERS

Carrie

Here are some of the plans & info submitted to us. The fire dept has not officially submitted a plan to us so I do not have that at this point. Buck has made some recommendations different than the provider board.

**Health Division**
**Department of Human Services**
**426 S.W. Stark Street—9th Floor · Portland, Oregon 97204 · 248-3220**

AN EQUAL OPPORTUNITY EMPLOYER

# PORTLAND FIRE FIGHTERS' ASSOCIATION

LOCAL FORTY-THREE OF THE INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS

DEDICATED TO THE TRAINING AND ADVANCEMENT OF PROFESSIONAL FIRE FIGHTERS

4530 S.E. 67th AVENUE • PORTLAND, OREGON 97206-4514 • (503) 774-4302 • FAX (503) 774-5476



Affiliated with

•

AFL-CIO

•

INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS

•

OREGON STATE FIRE FIGHTERS COUNCIL

•

NORTHWEST OREGON LABOR COUNCIL


June 8, 1993

TO: Ron Heintzman, President
Amalgamated Transit Union Division 757

FROM: Randy Leonard, President
Local 43 IAFF

SUBJECT: Displaced Multnomah County Private Sector Paramedics

As we discussed at our meeting on June 1, 1993, the Portland Bureau of Fire, Rescue and Emergency Services is considering entry into the 911 transport business.

Within the next five to six weeks, the Fire Bureau, Portland City Council and Multnomah County Commission will be defining what role the Bureau can expect to play in the Ambulance Service Plan (ASP) for Multnomah County. Other organizations will also have considerable input into the ASP planning process.

Even if the Fire Bureau does not become involved in transport, it is likely that many private sector positions will ultimately be lost within Multnomah County if a single provider is selected or if other streamlining occurs. Local 43 has no control over those reductions. However, I am very sensitive to the issue concerning the <u>additional</u> private positions that would be lost if the Fire Bureau should assume responsibility for a portion of the 911 transports. No hard figures are available yet as to how many private paramedics would be displaced.

The City appears willing to take steps to minimize the impact on the private sector by incorporating displaced paramedics into the Fire Bureau.

Basically, three options appear possible to attain that goal:

1. Hold a "closed" entry exam for the position of

Firefighter/Paramedic. Only Multnomah County private sector paramedics would be allowed to test for the position. Affirmative action objectives would likely play a part in the final selection process. Normal firefighter training, probationary period, etc. would apply.

A review of the literature suggests that the incorporation of paramedics willing to be cross-trained as dual role firefighter/paramedics would have advantages over other options. However, this option would exclude otherwise well qualified paramedics with no desire to become firefighters. It would also postpone involvement in transport pending completion of firefighter training.

2. Hire only paramedics who specifically do <u>not</u> wish to become cross-trained as firefighters. Under this scenario, the ATU would probably have more input into the final selection process, or at least influence which pool of candidates would be considered. There would be no firefighter probationary training involved and thus (perhaps) a greater feeling of job security. The ATU could continue to represent those paramedics.

   Any such positions would be filled with a firefighter/paramedic once a vacancy occurred. Eventually, all positions would revert to firefighter paramedic status.

   One advantage to this proposal would be the immediate availability of the new bureau employees to assume a transport role.

   The major disadvantages would center around the differing pay scales, job descriptions, union representation and similar issues that arise when a firefighter/paramedic works side-by-side with a non-sworn paramedic.

3. Some combination of options 1 & 2 above involving closed exam for the firefighter/paramedic position along with a limited number of non-sworn positions. While this scenario might be attractive to many ATU members, I envision considerable confusion in determining which Multnomah County paramedics would be eligible for the two types of positions.

I trust you have had an opportunity to discuss issues related to these and any other options since our last meeting with your members.

Obviously the City Council and the Bureau of Personnel Services would have considerable influence in formulation of the option ultimately selected. However, Local 43 is interested in working with the ATU to recommend a selection process that would in any case, reserve employment opportunities within the Fire bureau for positions that would otherwise disappear for your members.

We fully intend to keep the lines of communication open concerning these issues.

BUCK
MEDICAL SERVICES
1240 S.E. 12th Avenue
P.O. Box 15339
Portland, Oregon 97215-0339

June 22, 1993

To: Multnomah County Board of Commissioners

An extensive hearing was held by the Portland City Commission to hear testimony on the viability and feasibility of an Ambulance Service Area plan that calls for an expanded role of the Portland Fire Bureau. To say that the issues became increasingly clouded during the four hour hearing is perhaps an understatement.

We believe that the positions put forth by our organization over the past few months have been driven by quality and a consistent approach to the delivery of prehospital care. We believe our position not only supports good patient care but also presents win-win situations to all of the interested parties in this process.

The recommendations you see on the attached ASA Proposal allow for the following:

1. Reduction in the number of ambulance providers in Multnomah County from four to two. The current and future merging of ambulance companies is a natural response to the multiple provider issue. The reduction can be accomplished without a fear of litigation as in the past.

2. A defined role for the Fire Bureau that allows a number of opportunities to generate revenue and control cost.

    a. A $15 per transport fee paid by the Ambulance Provider to the First Response Agency would amount to about $250,000 per year. A $30 fee would amount to $500,000 per year and so forth. We recommend the fee be set as an offset once Option B is consistently in place and the Ambulance Rates can be reduced.

b. Ambulance rates should allow the ambulance provider to exchange disposable equipment used by the First Response Agency which should result in the deletion of another $150,000 to $200,000 per year in Portland Fire Bureau Costs as a first responder.

c. Portland Fire Bureau transport capable rescue units may be included in the System Status Plan by agreement during periods of peak demand, low demand, and/or system overload. Revenue generated from such transports to be credited to Portland Fire Bureau accordingly.

3. This plan calls for the greatest contribution to patient care that can be identified in the County system today. The ability to provide rapid defibrillation within four minutes is the one indisputable component of any EMS system...it simply is not consistently being provided in Multnomah County today.

4. The integration of the ambulance system across multiple levels of medical transportation demands allows the system to retain the economies of scale that are currently enjoyed. The managed care concept is supportive of this plan.

5. The natural competitiveness that exists between private and public agencies will continue to cause an elevation of the level of care. There will be no room or opportunity for lethargy or complacency of status quo under this plan.

6. While any rate decreases will be dependent upon the fee paid to the first responder agencies, the public will benefit by a decreased tax load on services that are being extended to health care related activity via the first responder agencies. The greatest opportunity for decreased ambulance rates comes from the implementation of Option B.

The plan components that have been slightly modified from the County EMS office recommendation can be developed into an ASA plan that promotes the improvement and integrity of a quality EMS system without sacrificing the gains we have made over the past twenty years.

- Dispatch triage will ensure that all 9-1-1 requests receive the same level of service.
- The closest ambulance will be dispatched to a 9-1-1 request.
- Training and medical direction will become more defined and consistent.
- A process will be used to evaluate "enhancements" on a cost/benefit basis.
- The integration of ambulance transportation allows the application of economy of scale.
- The elimination of a "hand-off" to a lesser trained person.
- Rates can eventually be decreased or an investment can be made back into the system with cost-savings allocated toward rural development.
- A true public/private partnership that offsets public sector cost while providing an opportunity for private business retention.
- Ultimate accountability that emphasizes performance rather than effort.

Testimony presented at the City Council hearing clearly acknowledged that rates within Multnomah County are not inconsistent with other areas of the state by comparison. In fact, the overall average charge for all levels of medical transportation in Multnomah County are significantly less than other urban areas in the state of Oregon.

We also believe that first response is a necessary component of any high-quality EMS system and that possibilities do exist to offset some of the associated costs through the rates charged by the ambulance provider. This process allows participating agencies to recover some portion of costs while providing a return to the tax payer at the same time.

Please consider these issues in the development of our Multnomah County ASA plan.

Sincerely,

BUCK MEDICAL SERVICES

D. Trace Skeen
President/CEO

DTS/kp

Attachment

# RECOMMENDATIONS FOR
# MULTNOMAH COUNTY ASA PLAN

Multnomah County Commissioners should adopt an ASA plan that maintains the integrity of the high quality ambulance system that is currently in place while at the same time providing enhancements and fine tuning based on sufficient data that justifies improved patient outcomes.

1. Multnomah County should comprise a single ASA that specifies the performance criteria for various providers of EMS within that ASA.

2. Multnomah County should incorporate an EMS system that meets the current high performance standards of the industry including a First Response to 9-1-1 requests within four (4) minutes with 90% reliability within urban growth boundaries. The level of care of First Response within the urban growth boundaries should be a minimum of EMT with Rapid Defibrillation capabilities.

3. Ground ambulance transport service for 9-1-1 requests should be provided by contracted private ambulances of no more than two providers throughout the County within specified primary geographical response areas that operate within a fluid deployment system status plan.

4. Ground ambulance transport service for non-emergent requests should be provided by private ambulances throughout the County.

5. Air ambulance services should be provided by private helicopter and fixed wing providers.

6. Ambulance staffing shall be at a level determined by one of the following options:

    a. Private ambulances responding to 9-1-1 requests should be staffed by two EMT-Paramedics so long as the First Response system within the urban growth boundary is provided at the EMT-D level on a consistent basis.

    b. Private ambulances responding to 9-1-1 requests should be staffed by one EMT-Paramedic and one EMT-Basic should the First Response system within the urban growth boundary be upgraded to the ALS level on a consistent basis.

7. Dispatch for all 9-1-1 calls and ambulance move-up should be provided by the Bureau of Emergency Communications (BOEC).

8. Primary radio communications will be phased in to the 800 Mhz system with Mobile Data Terminals (MDTs) to be used for dispatch and CAD communications. The ambulance transport units and transport capable rescue vehicles shall be equipped with automatic vehicle locator devices (AVL) that allow for the dispatch of the closest ambulance.

9. Medical direction, supervision, training and quality assurance must be provided through a single EMS Medical Director or Medical Director agency employed by the County.

10. The County Health Department EMS Program Office should continue to administer the EMS system.

11. The County Health Department EMS Program Office will maintain a pre-hospital database that will evaluate system components and make recommendations to improve patient outcomes based on validated data.

12. The cost of EMS First Response shall be funded primarily with Fire Bureau budget allocations from tax base. Ambulance rates shall also be set in an amount that provides a "First Responder" off-set fee for all transports in which contracted ALS First Responder agencies arrive and assist on scene. Ambulance rates shall also be set in an amount that provides a "disposable medical equipment" supply exchange with contracted First Responder agencies.

13. Multnomah County shall establish uniform rates for ambulance providers and shall regulate rates based on full cost recovery for services rendered with reasonable reserves for future investment. Rate adjustments shall be tied to a regional consumer price index that considers medical, transportation and all component computations.

14. All requests for pre-hospital, non-interfacility emergencies shall be accessed through the 9-1-1 system. Non-emergency requests for service shall be accessed through individual provider seven digit telephone numbers. The County shall approve a triage guide for agencies utilizing seven digit telephone access that will cause them to channel emergency requests into the 9-1-1 system.

15. Emergency Medical Dispatchers at the 9-1-1 center will triage emergency medical requests utilizing medical director authorized dispatch protocols into life-threatening, non-life threatening and non-emergency classifications.

16. Response times shall be as follows within urban growth boundaries:

**OPTION A**

| PROVIDER | LIFE-THREATENING | | NON-LIFE THREATENING | |
|---|---|---|---|---|
| 1st Response EMT-D | 4 minutes | 90% | 4 minutes | 90% |
| Ambulance | 8 minutes | 90% | 12 minutes | 90% |

**OPTION B**

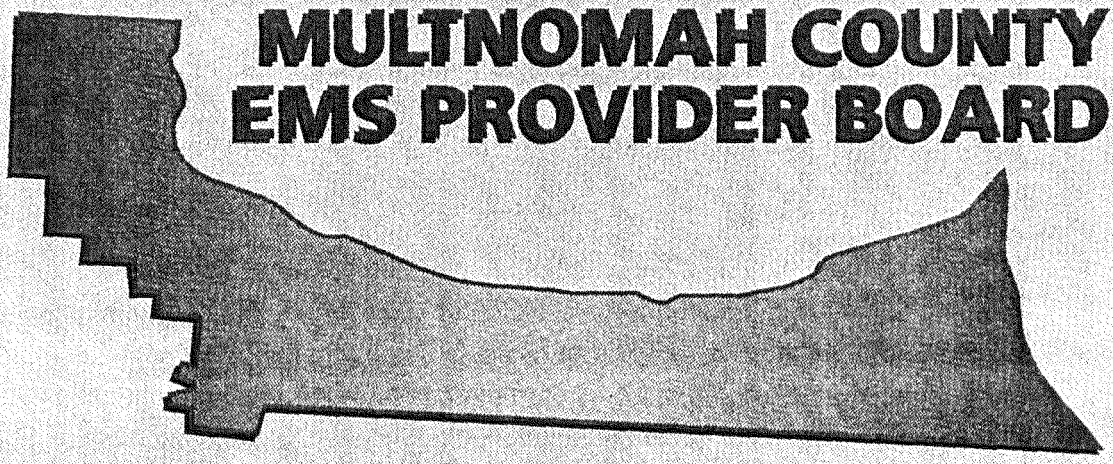
| PROVIDER | LIFE-THREATENING | | NON-LIFE THREATENING | |
|---|---|---|---|---|
| 1st Response EMT-Paramedic | 4 minutes | 90% | 4 minutes | 90% |
| Ambulance | 10 minutes | 90% | 12 minutes | 90% |

Response time zones for suburban and rural areas shall be defined.

17. Multnomah County should establish a Financial Oversight Board that will be responsible for establishing rates, conducting cost/benefit analysis for system upgrades and reviewing proposals that impact the cost of providing service.

18. Multnomah County should impose contractual obligations that include fines for non-performance, conditions of default, reassignment of the ASA and performance securities that inure to the benefit of citizens of Multnomah County in the event of default.

# REPORT
OF THE
# MULTNOMAH COUNTY EMS PROVIDER BOARD



TO THE
# BOARD OF COUNTY COMMISSIONERS
ON
# AMBULANCE SERVICE AREA PLANNING

June 18, 1993

# REPORT

# OF THE

# MULTNOMAH COUNTY EMS PROVIDER BOARD

# TO THE

# BOARD OF COUNTY COMMISSIONERS

# ON

# AMBULANCE SERVICE AREA PLANNING

June 23, 1993

# EXECUTIVE SUMMARY

The EMS Provider Board consists of representatives of all public and private emergency medical services pre-hospital care providers in Multnomah County. During recent months, the Provider Board has held 15 public meetings to develop recommendations for changes to the County EMS system and to evaluate recommendations made by others. The Provider Board invited all interested parties to participate in these hearings, heard testimony, and discussed the County EMS system in depth.

Based on these meetings, the Provider Board has adopted recommendations and comments contained in this Report. The objective of the Provider Board, in conducting its meetings and making its recommendation, is to reduce system costs while improving quality of care.

The Provider Board is recommending a "tiered response" public/private partnership system in which public fire agencies will provide first responder services, with automatic external defibrillation capability. Portland Fire Bureau fire medic units staffed with two EMT/Paramedics will provide transport services for Life-Threatening Emergencies; and two private providers (Care/AA and Buck) will provide transport services, staffed with at least one EMT/Paramedic and one EMT/Basic for Non-Life Threatening Emergencies, and for non-emergencies and inter-facility transfers. This basic public/private partnership "tiered response" system allows implementation of a more refined pre-hospital EMS system than that presently in place. A number of refinements also are contained in the Provider Board's recommendations.

The Provider Board's "tiered response" public/private partnership recommendation is similar in most respects to the recommendation of County EMS in its Draft County Plan dated March 18, 1993. The only critical difference between the Provider Board recommendation and the County EMS draft recommendation is that the Provider Board recommends that there be two private providers (Care/AA and Buck) for Non-Life Threatening Emergencies, while County EMS recommends one. On this point of difference, the Provider Board believes that there are significant benefits to the system in having two providers, and that a shift to one provider actually will make the system more expensive. This is discussed in detail in the Report.

The Provider Board believes that its recommendations, if implemented, will result in substantial savings in private ambulance provider transport costs. These savings are detailed in this Report. In order to determine net system savings, it will be necessary to subtract from this amount any net cost of fire medic transport services called for by these recommendations.

The Provider Board also believes that these recommendations will maintain or improve the existing high level of care in the Multnomah County EMS system. This will occur due to a number of factors, including but not limited to (1) installation of a System Physician Medical Director, which will be the final step in efforts by the major public and private providers over the past eighteen months to unify medical supervision of the system at a single, well-qualified institution; (2) implementation of a Total Quality Management program under the direction of the Medical Director; (3) focusing transport of Life Threatening Emergencies on the Portland Fire Bureau's fire medic units, which will result in paramedics dealing with Life Threatening Emergencies having a substantially higher level of experience with such emergencies than at present.

In total, the Provider Board believes these recommendations will result in a more efficient and more effective - that is, less costly and higher quality - pre-hospital emergency medical services system than the present system or any alternative system being recommended by others. In addition, these recommendations will provide a system that is stable, yet adaptable to future change as needed. Most important, these recommendations, if adopted, can be implemented quickly, can mark an end of 15 to 20 years of battles over pre-hospital emergency medical services, and can allow resources devoted to those battles to be redirected toward implementation of the recommendations. The Provider Board therefore hopes the County will give these recommendations its most serious consideration.

(Meetings of the Provider Board during this period always included representatives of Buck, Care, AA, and Tualatin Valley (licensed separately but operated as a part of Care) ambulance companies; usually included a representative of the Portland Fire Bureau; and initially included a representative of Gresham Fire. The final voting on this Report included only Buck, Care, AA, and TVA. All of them agreed on most of the Provider Board's recommendations. The only point of disagreement was over this Report's "tiered response" recommendation, which the Care/AA/TVA group supported and Buck opposed. Buck may elect to submit its alternative to the "tiered response" recommendation, either as a "minority report" or as a separate recommendation. The Portland Fire Bureau did not participate in voting on this Report's recommendations, as the Portland City Council has not yet taken a position on what the Bureau's role in the Multnomah County system should be. However, the Bureau has indicated informally that if the City Council approves Fire Bureau participation in the system as a transporter of patients, then the Bureau can support the recommendations contained in this Report.)

# SUMMARY OF PROVIDER BOARD RECOMMENDATIONS

The recommendations of the Provider Board, covering all aspects of ambulance services, are:

## 1. System Access

A. The 911 center will receive all calls for pre-hospital emergency medical services. (This does not include inter-hospital transfers, which will remain outside the 911 system, consistent with present practice.)

B. All calls for pre-hospital non-emergency medical services will be to regular 7-digit telephone numbers directly connecting the caller to a private service provider.

C. When private service providers receive calls to their 7-digit telephone numbers, they will use County EMS-approved triage guidelines to determine whether calls should be referred to the 911 center as emergencies or handled directly by the private service provider.

## 2. Triage

The Emergency Medical Dispatcher at the 911 center will triage all requests for emergency medical services, based on triage guidelines approved by the System Physician Medical Director. Based on the triage, those requests will be identified as Life Threatening Emergencies, as Non-Life Threatening Emergencies, or as Non-Emergencies. The Dispatcher will dispatch emergency medical services to respond to both Life Threatening Emergencies and Non-Life Threatening Emergencies. The Dispatcher will refer Non-Emergencies to private transport providers.

## 3. System Response.

A. Tiered Response. Fire units will provide First Responder services in all emergencies. Fire medic units will provide transport services for Life Threatening Emergencies, as identified under the triage guidelines. Private ambulance operators will provide transport services for Non-Life Threatening Emergencies.

B. Staffing.

1. Fire medic units providing transport for Life Threatening Emergencies will be staffed by 2 EMT/Paramedics.

2. Private ambulance units providing transport for Non-Life Threatening Emergencies will be staffed by 1 EMT/Paramedic and 1 EMT/Basic.

3. Fire first response units will be staffed by at least 1 EMT trained in the use of automatic external defibrillation.

C. Response Times.

1. Urban Area First Response. First responders will make their best effort to meet a response time of 4 minutes or less 90% of the time.

2. Urban Area Life Threatening Emergencies. Fire medic units will meet a response time of 8 minutes or less 90% of the time.

3. Urban Area Non-Life Threatening Emergencies. Private ambulance units will meet a response time of 12 minutes or less 90% of the time.

4. Rural Area First Response. First responders will make their best effort to meet a response time of 4 minutes of less 90% of the time.

5. Rural Area Life Threatening Emergencies. Fire medic units will respond as quickly as possible and will meet a response time of 25 minutes.

6. Rural Area Non-Life Threatening Emergencies. Private ambulance units will respond as quickly as possible and will meet a response time of 25 minutes.

7. Definition. Urban areas are those areas inside an Urban Growth Boundary. Rural areas are those areas outside a UGB.

8. Automatic Defibrillation Units. Rural areas will have first preference in the acquisition of first responder automatic defibrillation units.

9. **Measurement**. A response time will begin to run at the time the dispatched unit acknowledges receipt of the dispatch order from the Emergency Medical Dispatcher and will stop running when the unit reports arrival at the scene of the incident.

10. **Exceptions**. County EMS will authorize exceptions to the response time requirements when it is not reasonably possible, due to force majeure, such as severe weather conditions, earthquakes, mass casualty incidents, and similar occurrences, to meet the requirements. Under those circumstances, service providers will be required to meet a "best efforts" requirement.

## 4. Treatment and Transport

A. Treatment by all providers will be in accord with medical protocols adopted by the System Physician Medical Director.

B. Transport will be by either fire medic units (Life Threatening Emergencies) or private ambulance units (Non-Life Threatening Emergencies) in accord with triage protocols adopted by the System Physician Medical Director.

1. **Back up of Fire Medic Units**. Under circumstances specified by protocols approved by the System Physician Medical Director, the Emergency Medical Dispatcher will dispatch a private emergency ambulance unit to a Life Threatening Emergency rather than a fire medic unit. Such circumstances may include, for example, when a private emergency ambulance unit is closer to the incident and the closest fire medic unit cannot respond within 8 minutes.

2. **Posting of Units**. To the extent provided for in protocols approved by County EMS, the Emergency Medical Dispatcher will determine the posting of fire medic units identified for transport of Life Threatening Emergencies and of private ambulance units identified for transport of Non-Life Threatening Emergencies or, when specified by protocols, for back up for Life Threatening Emergencies. Except as provided in the protocols, the service provider will determine the posting of units.

3. Dispatch of Closest Unit. For Life Threatening Emergencies, the closest fire medic unit will be dispatched. For Non-Life Threatening Emergencies, the closest private emergency ambulance unit will be dispatched.

## 5. Facility Resources

A. Two Level One Trauma Centers

B. Specialty Burn Units

C. Emergency Departments

Transporting units will transport patients to the appropriate facility as determined by protocols adopted by the System Physician Medical Director.

## 6. Quality Improvement

The System Physician Medical Director will appoint a Quality Improvement Committee that includes a representative from each fire provider, from each private ambulance provider, from the Medical Resource Hospital, from the Bureau of Emergency Communications, and from local public law enforcement agencies. Under the guidance of the System Medical Director, the Committee will establish and coordinate operation of a Total Quality Management program, including but not limited to establishing a data base and retrieval system.

## 7. System Revenue Sources

User fees will be the primary source of revenues to fund the transportation of emergency patients, as is the present practice.

## 8. System Cost

All system costs will be identified and supported by either user fees or tax revenues. As system costs change, adjustments will be made to system revenues to assure that system revenues support all system costs.

## 9. Rates

A. County EMS will establish a Rate Committee to set a uniform rate for emergency fire medic and private emergency ambulance services.

B. The Committee must establish rates sufficient to allow providers to recover the full costs of the providers' services, plus any other cost the County determines should be supported by user fees (such as the cost of County EMS administration).

## 10. System Oversight/Regulation

A. The medical direction of all pre-hospital emergency medical services will be under the authority of a System Physician Medical Director. The Medical Director will report to the Health Department and will chair the Medical Advisory Board. The Medical Director will be the physician of record for all system EMTs, with the related authority and responsibility established by Oregon law. The Medical Director will have authority to appoint physician agents to act as an adjunct in providing medical direction to the system, but at all times will remain fully responsible for medical direction of the system. The Medical Director, the physician agents, and the Medical Resource Hospital functions all will be at a single institution, contracted with by the County, to assure uniform and well coordinated medical direction to the system. Full details of the Provider Board's Medical Direction recommendation are contained in the Report, below.

B. There will be a single County ambulance service area for Life Threatening Emergencies, with the Portland Fire Bureau providing fire medic unit transport services for the Life Threatening Emergencies.

C. There will be two ambulance service districts for Non-Life Threatening Emergencies, with a private ambulance provider (Buck in one and the merged Care/AA in the other) assigned to each district.

# INTRODUCTION

On April 6, 1993, the Multnomah County EMS Provider Board decided to meet twice a week in order to review ASA plans then being proposed by others and to forward its own recommendations to the Multnomah County Board of Commissioners. The Provider Board has held a total of 15 meetings, to which it invited a broad array of interests to present their views. The Provider Board heard from County EMS staff, the County Health Officer, a representative of the physician supervisors at OHSU, a doctor member of the Medical Advisory Board, and a representative of the Portland Area Paramedic Alliance. The Provider Board also heard from its own members, including Portland and Gresham fire bureaus and private ambulance services providers. A court reporter was present at every meeting to make a transcript of the proceedings. The transcripts have been provided to the Board of Commissioners.

These Provider Board meetings culminated in the adoption of the recommendations contained in this Report. In addition, in reviewing a draft plan prepared by County EMS staff, the Provider Board became concerned about the lack or improper interpretation or presentation of data supporting staff's principal rationale for its proposal: lower costs. Additionally, the Provider Board was concerned that staff's proposal had hidden impacts on consumers which had not been addressed. In reviewing a proposal prepared by the Portland Area Paramedic Alliance (PAPA), the Provider Board was particularly concerned with its design for medical supervision. The PAPA design, by giving the Medical Advisory Board authority over the Medical Director, undermines current trends within the EMS system for unifying medical supervision and for placing authority for medical decisions in the hands of a single Physician Medical Director. The proposal also lacked any analysis of the financial impacts of the proposal.

## HISTORY

In General. The first recorded use of organized ambulance service was during the Napoleonic Wars in Europe, in 1812. There, ambulances were used to remove wounded soldiers from the battlefield.

Much later, in 1966, a report by the United States National Academy of Sciences' Research Council identified accidental death as a "neglected disease" and declared that there were no standards in the United States for ambulances and ambulance drivers.

Congress responded to the 1966 report in 1973 by adopting the Emergency Medical Services Act (Public Law 93-154). The Act identified 15 components of an effective EMS system, which any system design had to address in order to qualify for federal funding. Although federal funding of EMS systems did not survive the 1970s, the Act's 15 components served as a foundation for future EMS development.

In the late 1960s, private ambulance services in the Portland area, and in the mid-1970s, public and private ambulance services around the nation initiated the provision of Advanced Life Support (ALS) services. ALS services involved acute patient intervention, such as establishing intravenous (IV) lines, insertion of airways directly into the trachea, and comparable procedures. The conduct of these procedures required special training of ambulance personnel, beyond that previously provided. This resulted in the establishment of a "Paramedic" level of Emergency Medical Technician, also referred to in Oregon as an EMT-4.

In 1989, the American College of Emergency Physicians (ACEP) published the book "Principals of EMS Systems," calling for 13 components of an EMS system:

1) medical direction;
2) pre-hospital transportation agencies;
3) dispatch;
4) communications;
5) protocols (triage, treatment, transport, and transfer);
6) receiving facilities;
7) specialty care units;
8) training;
9) financing;
10) audit and quality assurance;
11) public information and education;
12) mutual aid; and
13) disaster response.

In 1992, the U.S. Fire Administration held a national forum on EMS Management, calling for a slightly different list of EMS system components.

As this brief history shows, the process of defining an appropriate EMS system is still taking place. This reflects the fact that pre-hospital care is a field of work that still is in its infancy.

Finally, two recent definitions of an "EMS System" reveal how recently another factor - cost of service - has come into play. The 1992 U.S. Fire Administration Report on EMS Management stated that an EMS system is "a comprehensive, coordinated arrangement of health and safety resources that serves to provide timely and effective care to victims of sudden illness and injury." Similarly, a prominent consultant on EMS management has defined an EMS system as "those organizations, individuals and resources from whom some action is required to ensure a timely and medically-appropriate response to medical emergencies." What is most significant about these two recent definitions is that neither of them mentions the need that system costs be "reasonable" or "affordable." Even more recently than these definitions, cost containment has become a forefront concern in all areas of medical services, including pre-hospital emergency medical services. As Multnomah County Health Officer Dr. Gary Oxman has observed, any current consideration of prehospital emergency medical services provision must include serious consideration of ways to contain costs. Thus current experience and need have outstripped even these recent definitions of EMS systems.

<u>In Multnomah County</u>. This history of evolving EMS policy has been played out in Oregon and Multnomah County over the past 10 to 20 years.

In 1981, the Oregon Legislature adopted a law giving counties the authority to establish ambulance service areas (ASAs) within their boundaries. In response, Multnomah County in 1982 adopted and submitted to the State an ASA plan establishing four ASAs within the County. (Although these four ASAs still exist, by the end of summer 1993 the number effectively will have been reduced to two by the merger of Care Ambulance Company and AA Ambulance Company. Care and Tualatin Valley Ambulance Company already operate as a single unit.)

Throughout the 1970s and 1980s in Multnomah County, the emphasis of regulatory efforts in the EMS area was on achieving ever-increasing quality of care. Thus Multnomah County over time adopted very strict response time requirements; very conservative emergency ambulance dispatch protocols (i.e., very few calls received by 911 are triaged out as non-emergencies, with the

## EXHIBIT 4

## AUTOMATIC EXTERNAL DEFIBRILLATOR

Cost per unit - $5,300.00 to $7,000.00. Assuming the per unit cost is $5,300.00, then total cost for 42 units equals $222,600.00.

42 units required, based on:

33 pieces of apparatus for Portland (Multnomah County)
2 for Corbett Fire District
5 for Gresham Fire District
1 for Sauvie Island Fire District
1 for Skyline Fire District

The units would be purchased over a period of three years, costing $74,200.00 per year. ($222,600 divided by 3 years = $74,200 per year).

If the units were to be purchased and the cost recovered through transport rates, the cost per transport would be $3.42.

($74,200.00 divided by 21,700 transports = $3.42 per transport.)

This cost does not include a maintenance agreement or extra units for replacement, which would be recommended. This cost also, however, does not reflect the potential for cost savings in a bulk purchase.

result that the County has an extraordinarily high number of no-transport emergency ambulance responses); high ambulance staffing requirements (2 paramedics on each emergency ambulance); and other similar requirements. During this time period, some of the ambulance providers expressed repeated concern about the impact of these requirements on system costs. Characteristic of this period of time, however, EMS system policy makers considered system costs to be either a non-issue or a relatively unimportant issue, and the expressing of cost concerns by private providers generally was considered by policy-makers to be obstructionist. Thus during this time period, notwithstanding expressions of concern about cost, the County adopted regulatory requirements at the high end of those adopted elsewhere in the United States, creating a substantial upward pressure on system costs. (Nevertheless, even with these high regulatory requirements, on a per capita of population basis, Multnomah County's ambulance system costs have been at the low to moderate end of the spectrum.)

This non-attention to system costs underwent a change in the last half of the 1980s. At that time, Multnomah County initiated a study of Multnomah County ambulance rates. Initially, it was determined that ambulance rates in the County were too high, relative to areas with comparable demographics, and the multiple-provider ambulance structure in the County was blamed. The County in the mid-80s therefore adopted an ASA plan calling for a single County-wide ambulance service provider, to be selected through a competitive bid process. This resulted in litigation that stalled the ASA planning process.

In 1989, partly in response to the Multnomah County situation, the Oregon Legislature revised the ASA planning law and the State Health Division adopted new regulations concerning ASA planning. The County EMS Office then revived the single provider ASA plan and began to prepare it for County Commission consideration. During this period, however, the determination that rates in Multnomah County were too high relative to other areas was discredited, and a review of comparable areas with systems that had gone from multiple providers to single providers revealed that a significant number were having trouble containing rates and maintaining quality of care. Therefore, in late 1991 the then pending consideration of a single provider ASA plan stalled of its own accord.

Beginning in 1992, the County EMS Office initiated the process of ASA planning anew, in the hopes of arriving at a relative consensus of those involved in EMS services in the County. Although most of those involved in EMS services participated in this process, it was substantially undermined by the refusal of key members of the Medical Advisory Board to participate in a meaningful way. Essentially, these were members who continued to hold the anti-multiple provider mind set from the mid-80s.

During the consensus-building process, some consideration was given to suggestions that the driving force behind ambulance system costs was the high level of Multnomah County regulatory requirements, rather than the number of providers in the system. Within recent months, partly as a result of the Provider Board meetings, and partly as a result of public debate about the need for cost containment in all areas of medical services, it appears that even more recognition is being given to the role of County regulations in defining ambulance system costs. The Provider Board hopes, by this Report, to show in a concrete way that the main determinant of ambulance system costs in Multnomah County in fact is the County's regulatory requirements and that in proportion to the impact of County regulatory requirements on costs, the impact of having one or two providers is not significant.

## OBJECTIVES AND APPROACH

With the above-described historical context as background, the Provider Board approached EMS system planning with the following objectives:

1. Maximize the use of existing resources to gain the most efficiencies reasonably possible, without sacrificing long term system stability and adaptability.

2. Contain the cost to the user of ambulance service, at least holding rates charged to their present level and preferably creating the opportunity for rate reductions.

3. Maintain the level of service delivery to the user, at least sustaining the current quality of care and preferably improving quality of care.

In engaging in system planning, the Provider Board also recognized that the many components of an EMS system are complex and interrelated. It seldom is possible to make adjustments to one component without affecting at least several other components. Thus changes to raise quality of care may increase system costs; reductions in system revenues through rate reductions may reduce the quality of care the system is able to deliver; and so on. Therefore, proposed changes in system components must be reviewed with caution and carefully coordinated to be sure the changed system functions as predicted and desired. The Provider Board approached system planning with this in mind.

In organizing its recommendations, the Provider Board has approached the system in terms of 10 key components, which will cover all of the matters required to be addressed by a county ASA plan under state law. These key components are:

1. System Access
2. Triage
3. System Response
4. Treatment and Transport
5. Facility Resources
6. Quality Improvement
7. System Revenue Sources
8. System Cost
9. Rates
10. System Oversight/Regulation

This report will address each of these components using the following format:

A. System component description - This will describe what the component is.

B. Provider Board recommendation - This will set out the Provider Board's recommendation for how the component should be treated by the Multnomah County EMS system plan.

C. Impact on Service Delivery - This will describe the impact of the recommendation on quality of patient care.

D. Impact on Cost - This will describe the impact of the recommendation on system costs.

E. Impact on Rates - This will describe the impact of the recommendation on system rates and on system revenues.

# KEY COMPONENT RECOMMENDATIONS

## 1. SYSTEM ACCESS

System Component Description. In order to receive pre-hospital emergency medical services, a person must have a way to gain access to the EMS system to make a request for the services. The System Access component of an EMS System describes specifically how a person gains access to the system to make a request for services.

Provider Board Recommendation.

A. The 911 center will receive all calls for pre-hospital emergency medical services. (This does not include inter-hospital transfers, which will remain outside the 911 system, consistent with present practice.)

B. All calls for pre-hospital non-emergency medical services will be to regular 7-digit telephone numbers directly connecting the caller to a private service provider.

c. When private service providers receive calls to their 7-digit telephone numbers, they will use County EMS-approved triage guidelines to determine whether calls should be referred to the 911 center as emergencies or handled directly by the private service provider.

This recommendation is a continuation of the current County EMS approach to system access. This approach results in calls for emergency services being directed to 911 and calls for non-emergency services being directed to private service providers. The distinction between emergency and non-emergency calls will be based on triage guidelines established by the County. Due to other recommended changes, these triage guidelines will be subject to the authority of the System Physician Medical Director, as described in component 10, below.

Within the System Access component, the Provider Board recommends:

The County will implement a Public Education Program on the proper use of the 911 system. One goal of the public education will be to insure that the 911 system is not used for non-911 calls, so that it can be available for people with true emergencies. Another goal of the education will be to insure that people with legitimate 911 calls actually use the 911 system.

Impact on Service Delivery. Apart from the Public Education Subcomponent, the recommendation continues the current approach to system access and therefore will not affect quality of patient care. The Public Education Component should improve quality of care in two ways: (1) By reducing the number of non-911 calls handled by call-receiving personnel, the personnel will be able to handle 911 calls and generate a response more rapidly; and (2) By getting those with 911 calls to use the 911 system, people needing emergency medical services will be able to request services sooner, thereby receiving an earlier response. The level of improvement is difficult to quantify.

Impact on Cost. Apart from the Public Education Subcomponent, the recommendation will not change system costs. County EMS should develop a proposal and budget for the Public Education Subcomponent, which will identify the cost of the Subcomponent. Consideration should be given to holding costs down by using existing emergency services personnel to help with public education through messages to groups with which they already are in contact. A successful program, over time, may reduce the cost of call-taking by reducing the number of initially misdirected calls.

Impact on Rates. The recommendation should not affect system rates or revenues. This assumes that any cost of the Public Education component will be publicly funded, rather than being funded by revenues generated from users.

## 2. TRIAGE

System Component Description. Once a caller gains access to the 911 system, the Emergency Medical Dispatch function begins. The purpose of the function is to determine the location, nature, and severity of the event leading to the call and the appropriate units to respond to the event. Subcomponents of this function include key question interrogation of the caller, dispatch prioritization, and pre-arrival instructions to the responding unit(s).

In Multnomah County, after a person dials 911, a 911 call taker answers the call. The call taker determines whether the person wants police, fire, or medical services. When the caller answers "medical," the 911 call taker transfers the call to an Emergency Medical Dispatcher. The Dispatcher then interrogates the caller based on written triage guidelines to determine:

a. the caller's location;
b. the chief complaint;
c. a call back number.

The Dispatcher then dispatches a unit to respond to the call. While the unit is being dispatched, the Dispatcher interrogates the caller to determine the nature and severity of the medical problem. The questions are determined by written Medical Dispatch Priority guidelines. Information gained is communicated to the unit dispatched to respond to the call.

Provider Board Recommendation.

The Emergency Medical Dispatcher at the 911 center will triage all requests for emergency medical services, based on triage guidelines approved by the System Physician Medical Director. Based on the triage, those requests will be identified as Life Threatening Emergencies, as Non-Life Threatening Emergencies, or as Non-Emergencies. The Dispatcher will dispatch emergency medical services to respond to both Life Threatening Emergencies and Non-Life Threatening Emergencies. The Dispatcher will refer Non-Emergencies to private transport providers.

Impact on Service Delivery. Presently, the Emergency Medical Dispatcher triages 911 calls only as emergency or non-emergency. Thus a vehicle dispatched to an "emergency" call must be staffed and equipped appropriately to handle any emergency. Further, responses to the most urgent emergencies are spread among all the paramedics in the system. Also, vehicles must respond to all calls within a response time needed for the most urgent emergencies.

The Provider Board's recommendation provides for a more accurate and active triage of 911 calls by the Emergency Medical Dispatcher. Under the recommendation, the Dispatcher will triage emergencies into two groups: Life Threatening and Non-Life Threatening. This then will allow several system improvements to occur:

1. Vehicles staffed and equipped specially to respond to Life Threatening Emergencies can respond to those calls, while vehicles staffed and equipped appropriately to respond to Non-Life Threatening Emergencies can respond to those calls.

2. Responses to Life Threatening Emergencies can be provided by a limited group of paramedics, thus increasing the number of Life Threatening Emergency calls they handle, thereby increasing their skills. This has been a top quality of care priority of the emergency medical community.

3. Response times for Non-Life Threatening Emergencies can be adjusted to an appropriate level, allowing system cost savings.

Impact on Cost. The triage change itself will not have a significant impact on system costs, although the other changes enabled by the triage change, discussed below, will impact system costs. The triage change itself will increase the work of the Emergency Medical Dispatcher, but the Provider Board does not believe this work increase will result in increased costs.

The Provider Board also anticipates that the System Physician Medical Director will consider and change the triage guidelines for purposes of separating Emergencies from Non-Emergencies. According to County EMS, 911 presently receives approximately 40,000 calls annually for medical services. Approximately 10,000 of these are triaged as not medical emergencies. The remaining 30,000 of these are dispatched as emergency calls. Of these calls, approximately 24,400 are completed. Of the completed calls, approximately 4,200 are Life Threatening Emergencies. Of the other 20,000 completed calls, a significant number are Non-Emergencies. The number of emergency dispatches that do not result in emergency transports is high in Multnomah County, relative to other areas.

The Provider Board believes that improved triage guidelines could greatly reduce the number of Non-Emergency calls that are responded to as emergencies, with a first responder and an emergency transport vehicle arriving at the scene. If implemented, improved triage guidelines could result in significant savings of system costs.

Impact on Rates. This recommendation will not have an impact on system rates or revenues, although issuance of improved triage guidelines by the System Physician Medical Director, by reducing system costs, would allow a reduction in system revenue needs and resulting rate reductions.

## 3. SYSTEM RESPONSE

System Component Description. Following triage, the Emergency Medical Dispatcher must issue a dispatch order to the appropriate vehicle to respond to a call. The Dispatcher presently dispatches a fire first responder and a private emergency ambulance to respond to an emergency call. The first responder goal is to respond within 4 minutes 90% of the time. Within each ambulance service area, emergency ambulances must reach the scenes within 8 minutes 90% of the time.

Provider Board Recommendation.

A. Tiered Response. Fire units will provide First Responder Services in all emergencies. Fire medic units will provide transport services for Life Threatening Emergencies, as identified under the triage guidelines. Private ambulance operators will provide transport services for Non-Life Threatening Emergencies.

Impact on Service Delivery. This change will concentrate the treatment and transport of Life Threatening Emergencies on the limited group of Portland Fire Bureau paramedics who will staff the Bureau's fire medic units. Presently, private ambulance paramedics handle a combination of both Life Threatening and Non-Life Threatening Emergencies and of non-emergencies. Given the number of paramedics needed to handle all these calls, the Life Threatening Emergencies are spread "thinly" among the total paramedic group. Thus ambulance crews presently transport on the average 5.9 Life Threatening Emergency patients per month, or 71.2 per year. The tiered response system, on the other hand, will focus the Life Threatening Emergencies on the smaller group of fire medic unit paramedics. This will result in each fire medic unit paramedic crew transporting 14.6 Life Threatening Emergencies per month, or 175 per year, which is 2.5 times the number a paramedic transports in the present system. See Exhibit 1. A top quality of care priority of the emergency medical community has been to increase the experience level of paramedics dealing with Life Threatening Emergencies. Although there are no data or studies indicating that greater experience of paramedics with Life Threatening Emergencies increases the quality of care they give, the medical community's assumption is that greater experience will increase quality of care. This change accomplishes this objective.

The use of a tiered responses, with fire medic units transporting Life Threatening Emergencies and private providers transporting Non-Life Threatening Emergencies, is the foundation of the Seattle EMS system. The Seattle system is considered by many experts to be one of the top systems in the country in quality of care - although preliminary information from a current study suggests that Multnomah County's quality of care may be even better. The Provider Board recommendation, however, would improve on the Seattle model. In Seattle, the Non-Life Threatening Emergencies are handled by private ambulances staffed by EMT/Basics. The Provider Board's recommendation is that Non-Life Threatening Emergencies be handled by emergency ambulances staffed at least with one EMT/Paramedic and one EMT/Basic. This recommendation sets a higher standard of care than the Seattle standard.

Impact on Cost. With fire medic units transporting Life Threatening Emergencies, the private ambulance providers will be responding to less calls and therefore will be able to reduce their staffing levels. County EMS estimates that there annually are approximately 4200 Life Threatening Emergency transports. This reduction in private ambulance transports, with a commensurate saving in staffing levels, will result in reduced private provider costs. Against these savings in system cost, in order to determine net savings, it is necessary to offset Portland Fire Bureau costs resulting from fire medic units Life Threatening Emergency transports. The Portland Fire Bureau costs are outside the scope of this Report.

The private provider cost savings from the "tiered response" system recommended in this Report are set out in Exhibit 2. As shown in the Exhibit, the total private provider cost savings from implementation of the tiered system as recommended in this Report will be approximately $2,440,000 annually.

Impact on Rates. The cost savings to the private providers will mean that the private providers will need less revenues to cover costs. They will lose revenues from the 4200 Life Threatening Emergency transports that fire medic units will handle. Even accounting for these lost revenues, however, the private providers will have additional savings that will allow a further reduction in revenues to the private providers. The revenue needs of the private providers, following implementation of tiered response system as recommended in this Report, are set out in Exhibit 3. As shown in the Exhibit, the total private provider revenue needs will be approximately $6,870,000 annually.

Ambulance service providers are not able to collect 100% of their billings. Because of this, they must set their rates higher than the average revenue needed per transport. The rates charged must be enough higher that, when the percentage collection rate is applied to total billings, the actual amount received yields the average revenue needed per transport. The rate that would need to be charged per Non-Life Threatening Emergency transport in order to achieve the average revenues needed per transport is set out in Exhibit 3. As shown in the Exhibit, the needed charge per transport will be approximately $550, assuming that all savings are applied to rate reductions and that operations strictly are at a break-even.

Provider Board Recommendation.

B. Staffing.

1. Fire medic units providing transport for Life Threatening Emergencies will be staffed by 2 EMT/Paramedics.

2. Private ambulance units providing transport for Non-Life Threatening Emergencies will be staffed by 1 EMT/Paramedic and 1 EMT/Basic.

3. Fire first response units will be staffed by at least 1 EMT trained in the use of automatic external defibrillation.

Impact on Service Delivery. The tiered response system allows a much more targeted response to emergency calls.

As stated above, by having fire medic units handle Life Threatening Emergencies, experience with these more urgent incidents will be focused on Portland Fire Bureau's fire medic unit paramedics. According to the emergency medical community, this will increase the quality of care for Life Threatening Emergencies. These units will be staffed by 2 paramedics, as is presently the case for all emergency transports.

For Non-Life Threatening Emergencies, the vehicle staffing will be revised to 1 EMT/Paramedic and 1 EMT/Basic. This makeup of ambulance crew is appropriate for Non-Life Threatening Emergencies and, indeed, is more the norm for emergency ambulance transport than the 2 EMT/Paramedic staffing presently required in Multnomah County. There are no data or studies indicating that this change in staffing will have an effect on patient outcome.

The staffing of first responder units with at least 1 EMT capable of automatic defibrillation will have a positive impact on quality of care if the first response vehicles have automatic defibrillation equipment. This is the one area of pre-hospital emergency medical services that has been subject to scientific study. The use of automatic defibrillation has a significant positive impact on patient outcome in cardiac arrest cases.

Impact on Cost. The change in staffing of private ambulances responding to Non-Life Threatening Emergencies, from the present 2 EMT/Paramedics to 1/EMT/Paramedic and 1 EMT/Basic, will result in significant cost savings. The savings are set out in Exhibit 2. The savings amount to 23.5% of ambulance personnel costs, or $6.30 per unit hour of ambulance service. A "unit hour" of ambulance service means simply that one ambulance is in service for one hours.

Staffing first responder units with at least 1 EMT capable of automatic defibrillation should not result in significant system costs, as most first responders have that staffing now, and having all first responder EMTs not yet so capable become capable of automatic defibrillation can be accomplished through normal EMT training and education. Not all first responder units, however, have automatic defibrillation equipment. Acquiring such equipment would be an added system cost. This is discussed as part of recommendation C(7), below.

Having fire medic units staffed by 2 EMT/Paramedics transporting Life Threatening Emergencies, as stated previously, will result in added costs to Portland Fire Bureau.

Impact on Rates. With the reduced private ambulance costs to respond to Non-Life Threatening Emergencies, due to the recommended staffing change, there will be a reduction in the revenues needed to cover private ambulance costs. This reduction is included in the revenue calculations made in Exhibit 3. This reduction, in turn, will contribute to the reduction in rates described in Exhibit 3. (Note that if a staffing change from 2 EMT/Paramedics to 1 EMT/Paramedic and 1 EMT/Basic were made, but no other changes were made to the present system, the annual system cost savings would be in excess of $790,000, or approximately $45 per call. This illustration shows the driving impact that regulatory requirements have on system costs.)

Provider Board Recommendation.

C. Response Times.

1. Urban Area First Response. First Responders will make their best effort to meet a response time of 4 minutes of less 90% of the time.

2. Urban Area Life Threatening Emergencies. Fire medic units will meet a response time of 8 minutes or less 90% of the time.

3. Urban Area Non-Life Threatening Emergencies. Private ambulance units will meet a response time of 12 minutes or less 90% of the time.

4. Rural Area First Response. First responders will make their best effort to meet a response time of 4 minutes or less 90% of the time.

5. Rural Area Life Threatening Emergencies. Fire medic units will respond as quickly as possible and will meet a response time of 25 minutes.

6. Rural Area Non-Life Threatening Emergencies. Private ambulance units will respond as quickly as possible and will meet a response time of 25 minutes.

7. Definition. Urban areas are those areas inside an Urban Growth Boundary. Rural areas are those areas outside the UGB.

Impact on Service Delivery. The recommended first responder goal of a 4 minute or less response time 90% of the time is consistent with current practice. Similarly, the recommended urban area response time requirement of 8 minutes or less 90% of the time for Life Threatening Emergencies is consistent with current practice. These recommendations therefore will have no impact on quality of care.

The recommended response time requirement of 12 minutes or less 90% of the time for Non-Life Threatening Emergencies is a change from the present 8 minute requirement. In developing the triage protocols, the System Physician Medical Director will need to draw the line between Life-Threatening and Non-Life Threatening Emergencies so that a changed response time from 8 to 12 minutes for Non-Life Threatening Emergencies does not result in a significant reduction in quality of care. It is important to remember, in this regard, that a first responder will be on the scene tending the patient in Non-Life Threatening Emergencies, so the only difference will be a 4 minute delay in the time transport begins. There are no data or studies indicating that this change in response time will have an effect on patient outcome.

For rural areas, the "best efforts - 25 minutes maximum" response time requirement is consistent with present practice. Presently, the closest emergency ambulance is dispatched to rural area calls, and the vehicle arrives as soon as possible. It is impossible, however, at any reasonable staffing level, to arrive at all areas of the county within 8 or 12 minutes. Therefore rural area calls frequently fall within the 10% of permitted response times over 8 minutes. (According to County EMS, the rural areas account for only 2% of the County's population and 2% of the calls.) The Provider Board recommendation therefore makes explicit what already is happening in the system. It is true that separating urban and rural response time requirements creates a slight relaxation of the requirement for urban areas, since rural calls no longer will count against the urban area 90% reliability requirement. This is something the System Physician Medical Director will be able to consider, and the Director will be able to recommend an adjustment to the urban area response time requirement if the Director believes this slight relaxation will significantly impact quality of care.

Separation of urban and rural response time requirements will have the benefit of allowing a focus on the particular problems of providing pre-hospital emergency medical services in rural areas. To some extent, a slower response time is part of the price paid by those living in rural areas in exchange for the benefits attained from rural living. There are things that can be done, however, to improve emergency medical response in rural areas. One change can be to give rural areas first preference in the acquisition of first responder automatic defibrillation units. This will substantially remediate any loss of quality of

care, in terms of patient outcome, that otherwise occurs due to longer response times. A second change can be to make more use of Lifeflight in responding to rural calls that will have long vehicle response times. This is an adjustment that the System Physician Medical Supervisor and County EMS Administrator should study and consider, as the new system is implemented.

Impact on Cost. The change in response time requirements for Non-Life Threatening Emergencies, from 8 minutes 90% to 12 minutes 90%, will result in significant cost savings. These savings are set out in Exhibit 2. The savings amount to approximately $1,800,00, or approximately $100 per transport.

Impact on Rates. With the changed response time requirement, there will be a reduction of revenues needed to cover private ambulance costs. This reduction is set out in Exhibit 3. This reduction, in turn, will contribute to the reduction in rates described in Exhibit 3.

Provider Board Recommendation.

8. Automatic Defibrillation Units. Rural areas will have first preference in the acquisition of first responder automatic defibrillation units.

Impact on Service Delivery. As stated above, the speedy use of automatic defibrillation units has been shown to have a significant positive impact on patient outcome in cardiac arrest cases. Thus there will be a significant quality of care benefit if first responders have automatic defibrillation capability. This benefit is emphasized in rural areas, where transport units are not able to respond as rapidly as in urban areas. Therefore, special emphasis should be on seeing that rural first responders have automatic defibrillation capability.

Given that the changes recommended by the Provider Board will generate significant savings in the transport of Non-Life Threatening Emergencies, the System Physician Medical Director and the County EMS Administrator will be able to consider County purchase of automatic defibrillation units for rural first responders, with the costs recovered by the transport providers through rates and reimbursed to the County. This may be necessary, as the rural first responders have indicated that financial constraints may prevent them from otherwise acquiring automatic defibrillation equipment.

Impact on Cost. Automatic defibrillation units cost about $5,300 each when purchased in small quantities. The system will need to acquire approximately 42 units. Thus the total acquisition cost will be approximately $220,000, not taking into account any quantity discounts. The acquisition cost will be paid either by the first responder acquiring the unit, with tax

dollars, or by the transport providers, with revenues generated by user rates. See Exhibit 4.

Impact on Rates. If the acquisition of defibrillation units is financed through tax dollars, there will be no need for added system revenues and no impact on rates. If financed through system revenues, then rates will have to be increased. This amounts to approximately $5.26 per transport, assuming the purchase of units is spread out over three years. See Exhibit 4.

Provider Board Recommendation.

9. Measurement. A response time will begin to run at the time the dispatched unit acknowledges receipt of the dispatch order from the Emergency Medical Dispatcher and will stop running when the unit reports arrival at the scene of the incident.

Impact on Service Delivery. This recommendation is a clarification of the response time requirements. Recently, in a review of EMS dispatcher practices, County EMS discovered that some EMS dispatchers were logging calls as dispatched prior to the time the dispatch orders were received by the dispatched transport units. This resulted in EMS records indicating a substantial number of transport units were dispatched earlier than actual receipt of the dispatch orders. This in turn created the impression that the transport providers were not meeting the County's 8 minute 90% response time requirement. This EMS dispatcher mis-recording of response times now is being corrected. Also, an historic review of dispatch audio tapes against past EMS dispatch records has been done by the transport providers to determine the extent of the EMS dispatch mis-recording of response times. The historic review demonstrated that when the actual dispatch time was used - the time of transport unit receipt of the dispatch order - the transport providers were meeting the response time requirement. The Provider Board's recommendation thus will be an acknowledgment that the response time begins to run when the dispatch order is acknowledged by the dispatched unit and not some earlier time.

Also, some fire first responders have been computing response times, not from receipt of a dispatch order, but from a later time when the first responder unit departs from its base. The Provider Board recommendation also will correct this practice.

Finally, the Provider Board recommendation will make clear that if a unit fails to report arrival at the scene, the response time clock will keep running until an arrival report is received. Since units on occasion have failed to report arrival, this will encourage proper reporting.

Overall, this recommendation will result in the generation of more accurate information about system functioning.

Impact on Cost. This recommendation will have no impact on system cost except that, to the extent it avoids disputes about response time measurement, it will save the time and cost associated with the disputes.

Impact on Rates. This recommendation will have no impact on rates.

Provider Board Recommendation.

10. Exceptions. County EMS will authorize exceptions to the response time requirements when it is not reasonably possible, due to force majeure, such as severe weather conditions, earthquakes, mass casualty incidents, and similar occurrences, to meet the requirements. Under those circumstances, service providers will be required to meet a "best efforts" requirement.

Impact on Service Delivery. This recommendation makes explicit what already is implicit in the operation of the Multnomah County system. Ambulance staffing and deployment are done in a way that will enable providers to meet the County response time requirement under most circumstances. However, it would be fiscally unwise and in some cases, impossible, to staff and deploy vehicles in a way that would enable providers to meet the response times under rare extreme circumstances, and no one expects the providers to do so. This recommendation will allow County EMS to declare certain events as exception periods and to require "best efforts" in those periods.

Since the recommendation merely matches County policy to what actually will occur in exceptional conditions, it will not have any impact on quality of care.

Impact on Cost. This recommendation will have no impact on costs.

Impact on Rates. This recommendation will have no impact on rates.

## 4. TREATMENT AND TRANSPORT

Provider Board Recommendation.

A. Treatment by all providers will be in accord with medical protocols adopted by the System Physician Medical Director.

Impact on Service Delivery. This recommendation changes the controlling authority over treatment protocols from the Medical Advisory Board to the System Physician Medical Director. This is part of a larger proposal to unify medical control of the system under a single person with ultimate medical authority. This is discussed in more depth under recommendation 10(A), below.

Impact on Cost. This recommendation will have no impact on costs.

Impact on Rates. This recommendation will have no impact on rates.

Provider Board Recommendation.

B. Transport will be by either fire medic units (Life Threatening Emergencies) or private ambulance (Non-Life Threatening Emergencies) in accord with triage protocols adopted by the System Physician Medical Director.

Impact on Service Delivery. See discussion under System Response, above.

Impact on Cost. See discussion under System Response, above.

Impact on Rates. See discussion under System Response, above.

Provider Board Recommendation.

1. Backup of Fire Medic Units. Under circumstances specified by protocols approved by the System Physician Medical Director, the Emergency Medical Dispatcher will dispatch a private emergency ambulance to a Life Threatening Emergency rather that a fire medic unit. Such circumstances may include, for example, when a private emergency ambulance unit is closer to the incident and the closest fire medic unit cannot respond within 8 minutes.

Impact on Service Delivery. This recommendation will give the Medical Director the authority to tailor the dispatch of transport units so that, in cases the Director deems appropriate, private emergency ambulances can back up fire medic units as transporters of Life-Threatening Emergencies. The Director might choose to do this, for example, where there is a close private emergency ambulance and only a far removed fire medic unit that will have a long response time; or when there is a mass casualty incident creating a substantial drain on fire medic units. The

Medical Director will adopt protocols authorizing private emergency ambulance backup when the Director believes backup will improve patient care, taking into consideration all of the circumstances. Thus this recommendation creates the potential for quality of care enhancement.

Impact on Cost. If the Medical Director chooses to provide for private emergency ambulance backup of fire medic units under some circumstances, this could allow the achievement of some system cost savings. This could occur through (1) a reduction in the number of fire medic units the system must support; and (2) absorption of the calls by existing private emergency ambulances without increasing the number of ambulances available. Whether in fact this would occur, and if so the amount of cost savings, will depend on the specific backup protocol approved by the Medical Director.

Impact on Rates. If the Medical Director adopts such a protocol, and if the protocol adopted allows a reduction in system costs, then there could be a reduction in rates.

Provider Board Recommendation.

2. Posting of Units. To the extent provided for in protocols approved by County EMS, the Emergency Medical Dispatcher will determine the posting of fire medic units identified for transport of Life Threatening Emergencies and of private ambulance units identified for transport of Non-Life Threatening Emergencies or, when specified by protocols, for backup for Life Threatening Emergencies. Except as provided in the protocols, the service provider will determine the posting of units.

Impact on Service Delivery. This recommendation makes the service providers - first responder, Portland Fire Bureau for fire medic units, and the two private ambulance providers - initially responsible for deciding where to locate their respective vehicles under the different circumstances that occur. As Figures 1 and 2 show, demand for services varies by time of day and day of week. Thus the providers need to deploy vehicles in a manner that balances the need to be efficient (the supply of vehicles does not exceed the demand) against the need to be effective (the supply is sufficient to meet the response time requirement). Since the service providers are responsible for meeting the response time requirements, it is appropriate that they take the lead in determining the posting of vehicles. This is consistent with the current practice in Multnomah County.

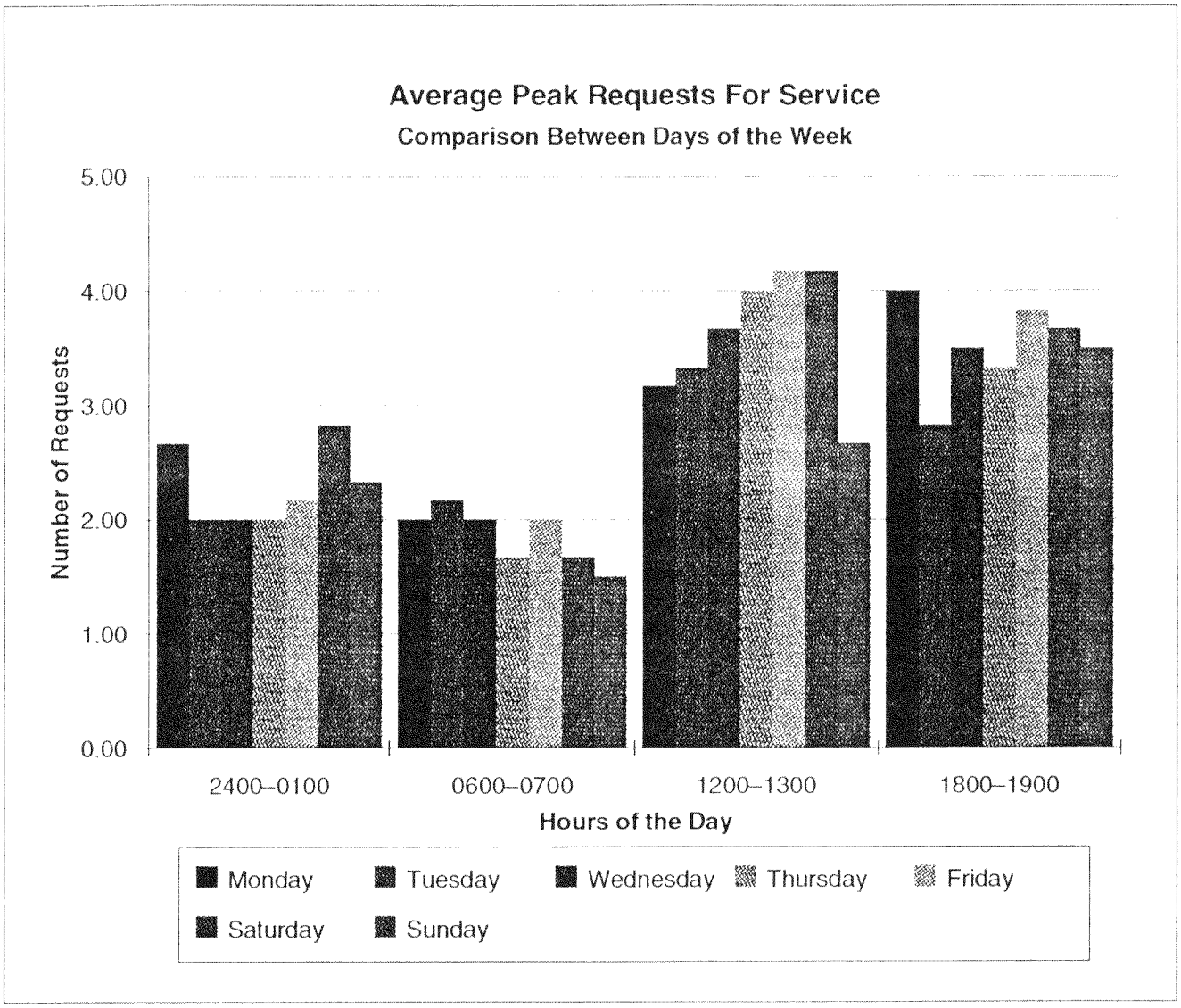

Average Peak Requests For Service
Comparison Between Days of the Week
5.00
4.00
3.00
2.00
1.00
0.00
Number of Requests
2400–0100
0600–0700
1200–1300
1800–1900
Hours of the Day
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

FIGURE 1

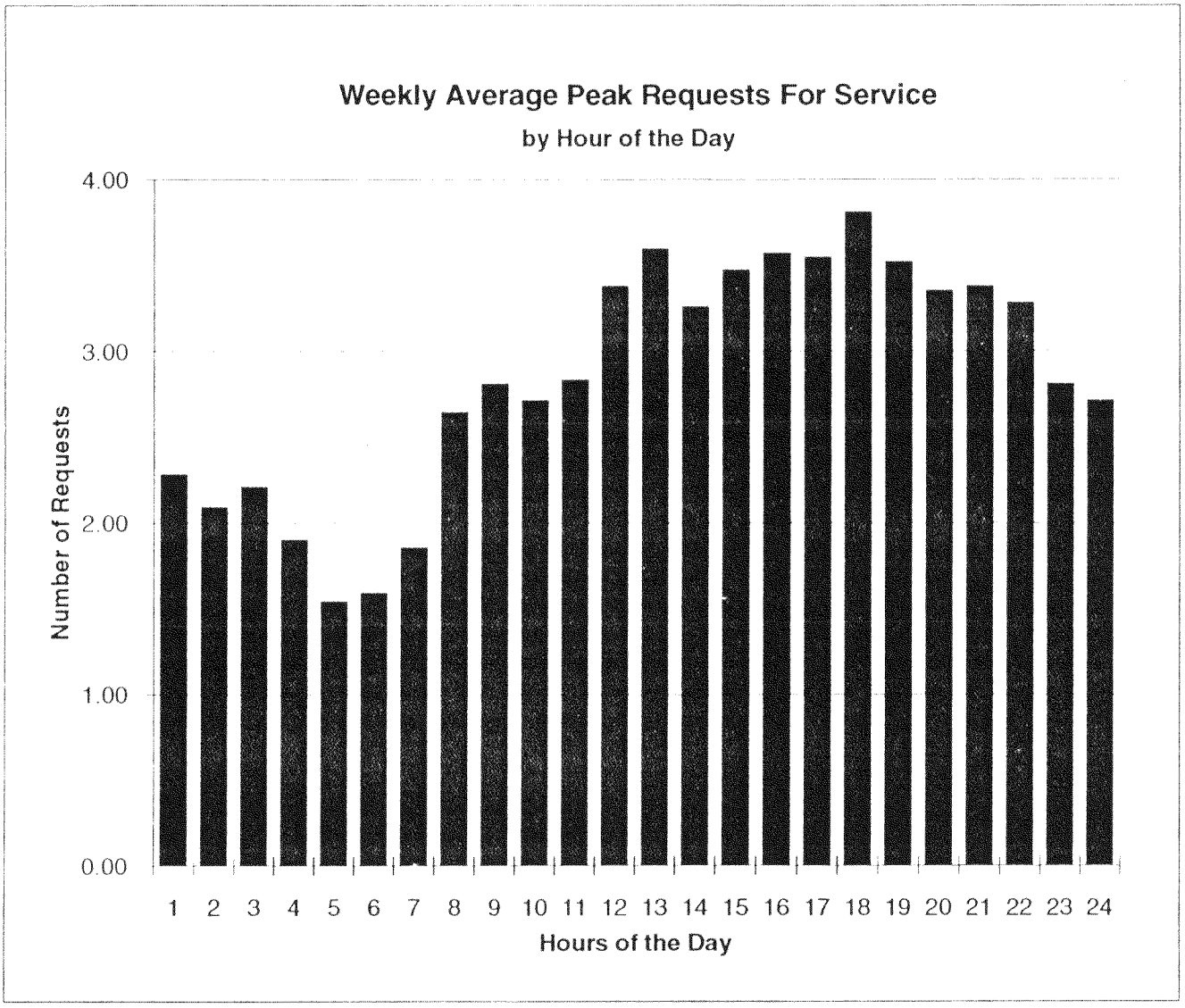

Weekly Average Peak Requests For Service
by Hour of the Day
Number of Requests
4.00
3.00
2.00
1.00
0.00
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Hours of the Day

FIGURE 2

The Provider Board's recommendation, however, does authorize County EMS, by protocol, to participate in the posting of vehicles. This becomes significant under circumstances where a large number of vehicles are in use and there thus is a reduced number of vehicles available to the system. Under those circum stances, the Emergency Medical Dispatcher needs to be able to move remaining available vehicles to locations that have been predetermined by protocol for the specific time period and number of available vehicles. This also is consistent with current practice.

Impact on Cost. This recommendation will not have an impact on costs.

Impact on Rates. This recommendation will not have an impact on rates.

Provider Board Recommendation.

3. Dispatch of Closest Unit. For Life Threatening Emergencies, the closest fire medic unit will be dispatched. For Non-Life Threatening Emergencies, the closest private emergency ambulance unit will be dispatched.

Impact on Service Delivery. A criticism of the present County system has been that due to the ASA boundaries, the closest ambulance is not always dispatched to an emergency call. Although there has been no systematic review and is little if any documentation that this is a problem, and although there is no documentation of any effect on quality of care, the Provider Board understands the need always to dispatch the closest emergency ambulance.

Impact on Cost. This recommendation will not have a significant impact on cost.

Impact on Rates. This recommendation will not have a significant impact on rates.

## 5. FACILITY RESOURCES

Provider Board Recommendation.

A. Two Level One Trauma Centers
B. Emergency Departments
C. Specialty Burn Units

Transporting units will transport patients to the appropriate facility as determined by protocols adopted by the System Physician Medical Director.

Impact on Service Delivery. This recommendation is consistent with the present system, except that it places authority over the identification of the appropriate receiving facility with the System Physician Medical Director.

Impact on Cost. This recommendation will have no impact on cost.

Impact on Rates. This recommendation will have no impact on rates.

## 6. QUALITY IMPROVEMENT

Provider Board Recommendation.

> The System Physician Medical Director will appoint a Quality Improvement Committee that includes a representative from each fire provider, from each private ambulance provider, from the Medical Resource Hospital, from the Bureau of Emergency Communications, and from local public law enforcement agencies. Under the guidance of the System Physician Medical Director, the Committee will establish and coordinate operation of a Total Quality Management program, including but not limited to establishing a data base and retrieval system.

Impact on Service Delivery. This recommendation will result in the establishment of a system-wide, coordinated quality management program. Presently, each provider, public or private, has its own program. Although the opportunity for diversity in the present system may have benefits, there also are benefits from a systemwide program. This particularly is true in relation to the systemwide creation of a data base and retrieval system, which will allow for true quality of care studies to be done.

In addition, by placing the recommended Quality Improvement Committee and the quality management program under the authority of the System Physician Medical Director, the County will be able

to assure that the quality management program covers all aspects of the County pre-hospital system, from call receiving at BOEC to handing off of the patient at the receiving facility.

The Provider Board contemplates that the Quality Improvement Committee, under the Medical Director's guidance, will adopt a "Total Quality Improvement" that provides continuous quality improvement for the entire pre-hospital emergency medical services system. In the United States today, most pre-hospital emergency medical services systems focus on those isolated incidents in which the quality of care is poor (the "outlier" incidents). See Figure 3. With this as the starting point, most of the systems' quality of care resources are focused on the very small "outlier" portion of the system. This results in little quality of care improvement overall.

On the other hand, a total quality improvement program focuses on quality improvement for the entire system. This results in continuous quality improvement throughout the system. In the long run, this improves quality of care for all patients, not just for "outliers." See Figures 3, 4, 5, and 6.

Impact on Cost. Any impact on cost will depend on the nature of the Total Quality Management program established under this recommendation. It therefore is not possible to predict cost impacts at this time.

Impact on Rates. It is not possible to predict rate impacts at this time.

## 7. SYSTEM REVENUE SOURCES

Provider Board Recommendation.

> User fees will be the primary source of revenues to fund the transportation of emergency patients, as is the present practice.

Impact on Service Delivery. So long as revenues from user fees are sufficient to pay the cost of transport in the recommended system, this recommendation will have no impact in quality of care.

Impact on Cost. This recommendation will have no impact on cost.

Impact on Rates. The County system is abnormal in that (1) not only does it provide no tax subsidy for emergency ambulance transport service, whereas $3 per capita of population per year is considered to be a standard subsidy, (2) but also the County finances the County's EMS administrative costs, $232,000 in 1993, through revenues from user fees. The Provider Board's

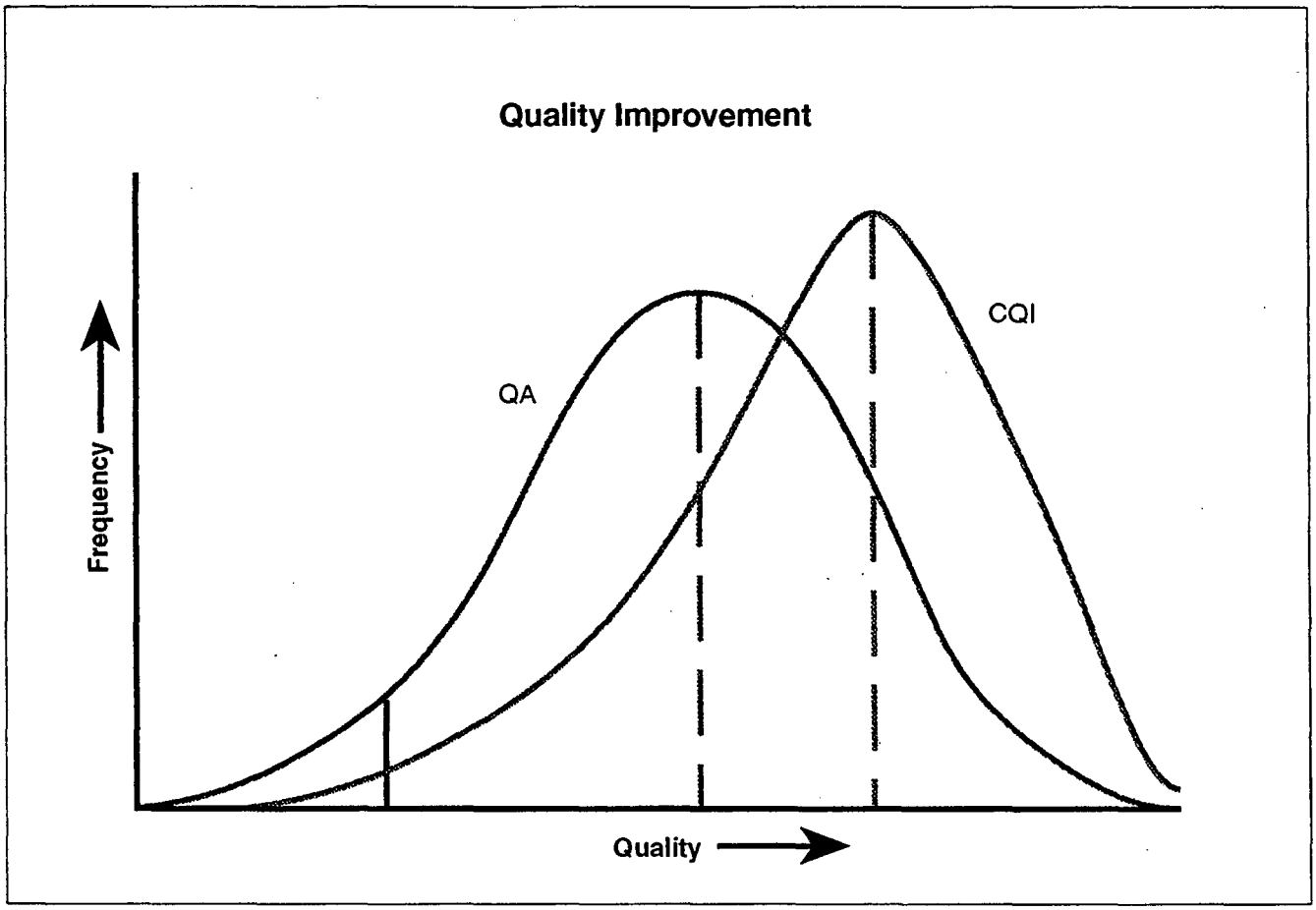



FIGURE 4

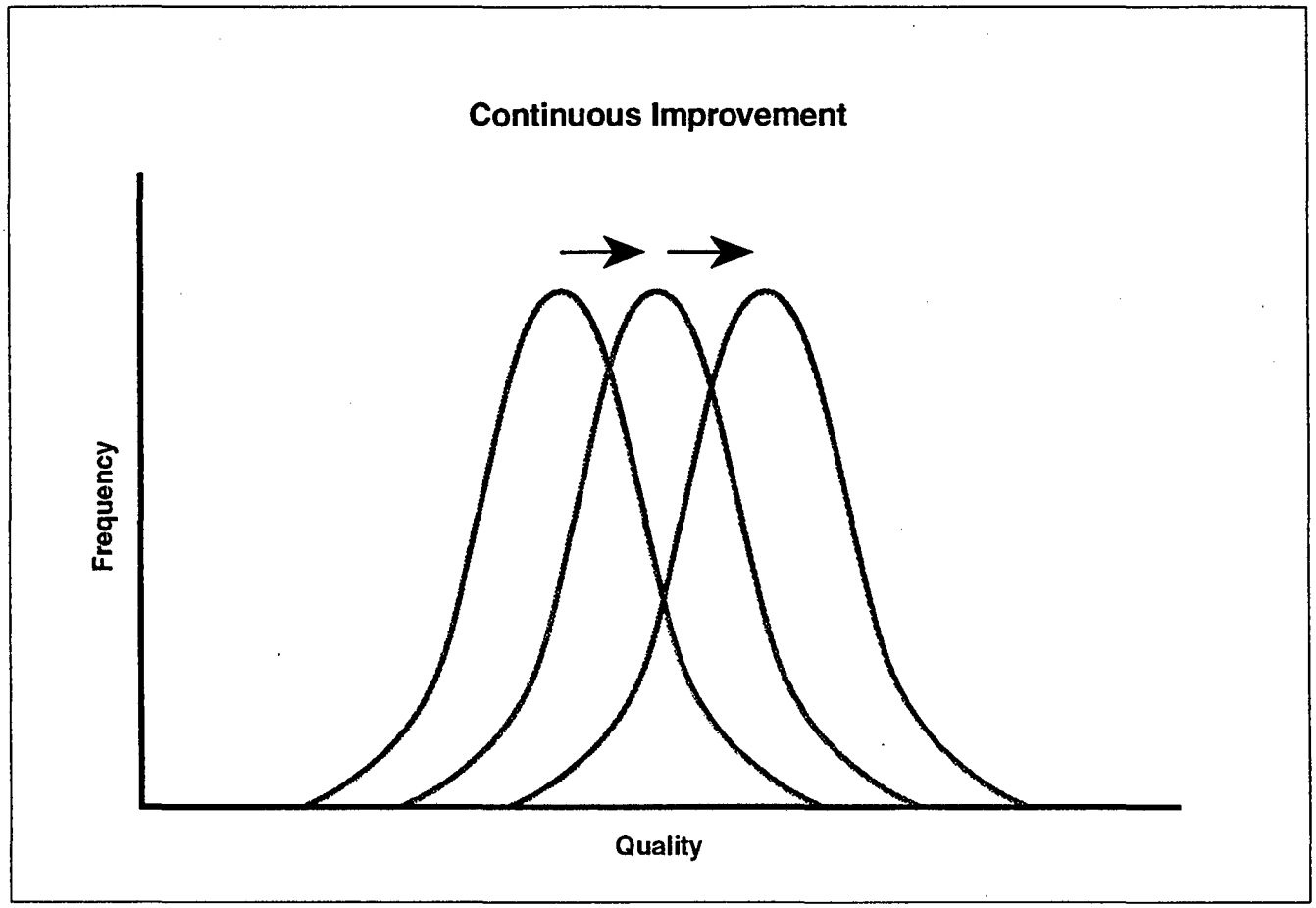



FIGURE 5

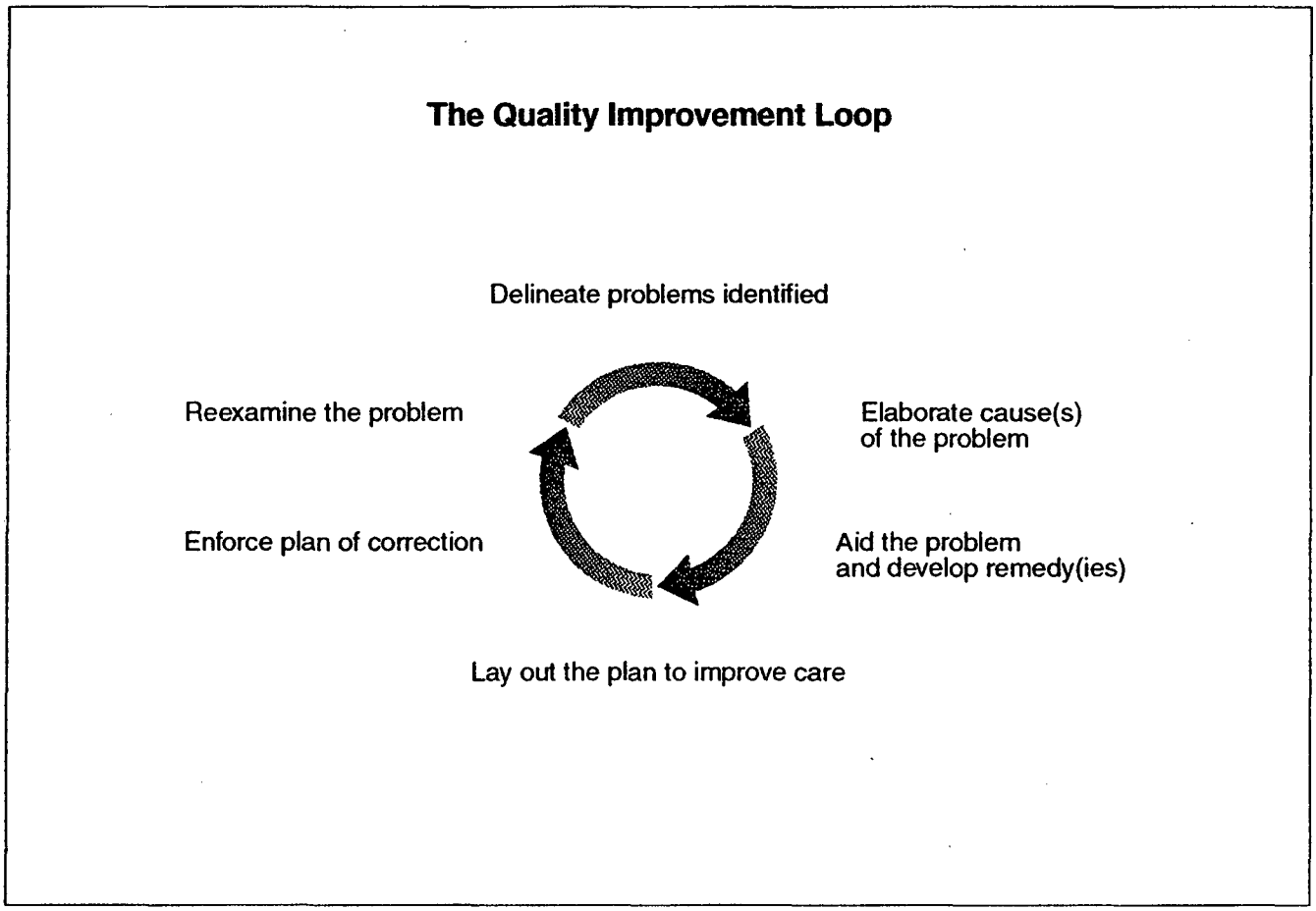

The Quality Improvement Loop
Delineate problems identified
Elaborate cause(s) of the problem
Aid the problem and develop remedy(ies)
Lay out the plan to improve care
Enforce plan of correction
Reexamine the problem

FIGURE 6

recommendation recognizes that this situation is likely to continue. A result of these County policies is that ambulance users must pay a substantially higher proportion of total pre-hospital costs than is normal.

This recommendation assumes that non-transport costs of the system - e.g., first response and EMS dispatch - will continue to be funded with tax dollars. To the extent this does not occur, rates will be even higher.

## 8. SYSTEM COST

Provider Board Recommendation.

> All system costs will be identified and supported by either user fees or tax revenues. As system costs change, adjustments will be made to system revenues to assure that system revenues support all system costs.

Impact on Service Delivery. This recommendation will assure that system revenues are high enough to cover the costs of the recommended system. This in turn will assure that the recommended system can be implemented.

Impact on Cost. This recommendation will have no impact on costs.

Impact on Rates. This recommendation will assure that as system changes are considered, simultaneous consideration is given to the impacts of the changes on system costs and to the need to adjust revenues, and therefore rates, to match cost changes. By establishing this kind of discipline in the process of making system changes, it will be possible to evaluate proposed system changes in relation to concomitant rate impacts. This will have a tempering effect on some system changes that would require rate increases and will encourage changes that would allow rate reductions.

## 9. RATES

Provider Board Recommendation.

A. County EMS will establish a Rate Committee to set a uniform rate for emergency fire medic and private emergency ambulance services.

Impact on Service Delivery. This recommendation will have no impact on service delivery.

Impact on Cost. The exercise of County regulatory authority over rates will mean additional County administrative expense.

The level of such expense is outside the scope of this Report. However, the added administrative expense should be more than offset by reduced administrative expense once the ASA planning process is completed.

Impact on Rates. The Provider Board does not believe that the conduct of the rate regulation process itself, as an administrative process, will impact rates. However, the purpose of rate regulation obviously is to determine rates and assure that they are adequate to cover proper system costs but are not excessive. A major benefit of this recommendation will be to assure County citizens that the emergency transport rates are appropriate.

Provider Board Recommendation.

B. The Committee must establish rates sufficient to allow providers to recover the full costs of the providers' services, plus any other cost the County determines should be supported by user fees (such as the cost of County EMS administration).

Impact on Service Delivery. By requiring that rates be set at a level sufficient to recover the costs the County requires transport providers to incur, this recommendation will assure that the system is financially capable of delivering the specified service.

Impact on Cost. This recommendation will not impact costs.

Impact on Rates. As indicated in the discussion under System Cost, this recommendation will assure that proposed system changes are evaluated in relation to concomitant cost, and therefore rate, impacts. This will have a tempering effect on some system changes that would require rate increases to cover their costs.

## 10. SYSTEM OVERSIGHT/REGULATION

Provider Board Recommendation.

A. The medical direction of all pre-hospital emergency medical services will be under the authority of a System Physician Medical Director. The Medical Director will report to the Health Department and will chair the Medical Advisory Board. The Medical Director will be the physician of record for all system EMTs, with the related authority and responsibility established by Oregon law. The Medical Director will

have authority to appoint physician agents to act as an adjunct in providing medical direction to the system, but at all times will remain fully responsible for medical direction of the system. The Medical Director, the physician agents, and the Medical Resource Hospital functions all will be at a single institution, contracted with by the County, to assure uniform and well coordinated medical direction to the system.

The above recommendation is a summarization of a much more detailed recommendation adopted by the Provider Board following a hearing, testimony, and discussion on the issue of system medical direction. During the hearing, the Provider Board heard extensive testimony from a representative of the current group of provider physician supervisors and from the Medical Resource Hospital's representative to the Medical Advisory Board. Both are affiliated with Oregon Health Sciences University. The full text of the Provider Board's recommendations is as follows:

Multnomah County
Emergency Medical Services
Provider Board

May 12, 1993

# MEDICAL DIRECTION OF PREHOSPITAL EMERGENCY MEDICAL SERVICES

## BACKGROUND

Medical direction of prehospital emergency medical services has historically been provided by physicians retained by individual provider agencies. Off-line medical direction, through written protocols, has been standardized to a substantial degree by consolidation of the private providers' and the Portland Fire Bureau's physician supervisors under the auspices of the Oregon Health Sciences University. The physician supervisors have representation on a multi-jurisdictional group called the Tri-County Protocol Subcommittee. That group has been able to write protocols that are nearly standard for Multnomah, Clackamas, and Washington county. The system has been criticized in the past because of the extended time necessary for protocol implementation and the absence of a single medical director responsible for the entire system.

The Multnomah County Ambulance Service Area (ASA) Plan must contain a model for medical direction of emergency medical services. The Provider Board presents a proposal for medical direction that will preserve the advances made to date and will put in place the last changes needed to fully respond to past criticism.

## OBJECTIVES

The model for medical direction of prehospital emergency medical services must:

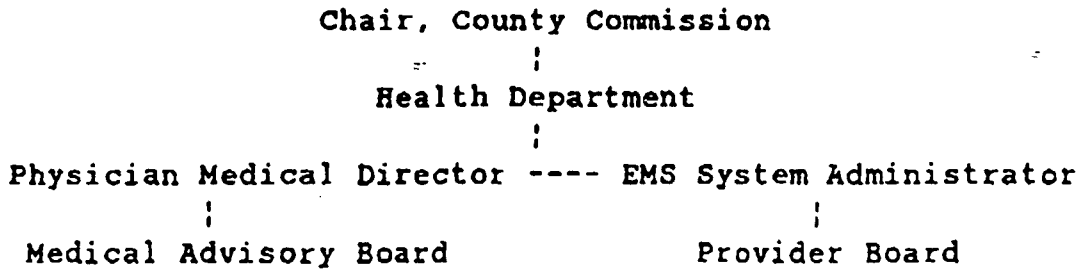
1. Preserve historical improvements,

2. Place authority and accountability over all clinical and patient care aspects of the EMS system in the purview of a Medical Director, and

3. Maintain consistency with adjacent jurisdictions (regionalization).

## REPORTING STRUCTURE AND ADVISORY POSITIONS

The Medical Director will report directly to the Health Department. An EMS System Administrator will have parallel authority to the Medical Director and will also report to the Health Department. The Medical Director will chair the Medical Advisory Board (MAB). As a result, the MAB will have direct advisory input to the Medical Director. EMS providers will have the same direct advisory relationship to the EMS System Administrator. The following organizational chart depicts the recommended reporting structure.




## MEDICAL DIRECTOR

Multnomah County should employ or contract with a Medical Director that has authority over all clinical and patient care aspects of the EMS system, with a job description that has the following qualifications and responsibilities as recommended by the American College of Emergency Physicians as modified by local needs and experiences:

**Qualifications.**

1. License to practice medicine or osteopathy.

2. Familiarity with the design and operation of prehospital EMS systems.

3. Experience or training in the prehospital emergency care of the acutely ill or injured patient.

4. Experience or training in medical direction of prehospital units.

5. Active participation in the Emergency Department management of the acutely ill or injured patient.

6. Experience or training in the instruction of prehospital personnel.

7. Experience or training in the EMS quality improvement process.

8. Experience or training in the EMS law and regulations.

9. Knowledge of EMS dispatch and communications.

10. Knowledge of local mass casualty and disaster plans.

11. Board certification in emergency medicine.

12. Affiliation with a teaching institution.

13. Academic and research experience.

14. Knowledge of trauma systems.

Responsibilities.

1. Set and ensure compliance with patient care standards and dispatch and medical protocols.

2. Implement protocols and standing orders under which the prehospital care providers function.

3. Implement the process, protocols, and standards for the provision of on-line medical direction. (MRH)

4. Ensure the appropriateness of initial qualifications of prehospital personnel involved in patient care and dispatch.

5. Ensure the qualifications of prehospital personnel involved in patient care and dispatch are maintained on an ongoing basis through education, testing, and credentialing.

6. Develop and implement an effective quality improvement program for continuous system and patient care improvement.

7. Promote EMS research.

8. Serve as Chair of the Medical Advisory Board.

9. Maintain a regionalized approach to the delivery of prehospital care through participation with emergency departments, physicians, EMTs, providers, and adjacent jurisdictions.

10. Arrange for coordination of activities such as medical mutual aid, medical disaster planning and management, and hazardous materials response.

11. Promulgate public education and information on the prevention of emergencies.

**Authority.**

1. Promulgate dispatch protocols and pre-arrival instructions, medical protocols for ALS and BLS providers, communications protocols, and system procedures.

2. Set standards for prehospital care personnel including medical call takers, first responders, ambulance personnel, on-line medical direction physicians and others.

3. Provide medical input into the issuance, renewal, suspension, revocation and restriction of the licenses and permits required by the Multnomah County for medical call takers, first responders, ambulance personnel, on-line medical direction physicians and others.

4. Appoint and replace physician agents having the same qualifications as the Medical Director to act as an adjunct for the purposes of inservice education, field supervision, quality improvement, and provider interface, and other duties as described by Oregon law.

5. Serve as the physician of record with the authorizations and responsibilities set out in Oregon law.

RECOMMENDATION

The Medical Director, physician agents, and MRH should be at a single institution in order to provide a fully collegial atmosphere for medical supervision and to avoid the inappropriate interjection of inter-hopsital competitive issues into medical supervision of the EMS system. OHSU has demonstrated its ability to meet this requirement and has done an outstanding job in providing these services. The provider Board therefore recommends that OHSU be the organization to fill this role. Under this arrangement, one OHSU physician would be designated by contract as the Medical Director of the system, and would have the authority to designate other OHSU physicians to work as the Medical Director's agent under the Medical Director's control.

Impact on Service Delivery. The testimony of physicians before the Provider Board was that medical direction for the EMS system, off-line medical supervision of pre-hospital care personnel, and on-line supervision of such personnel through the Medical Resource Hospital (MRH) can work best when housed at a single institution. At this single institution, there would be a single, identified Medical Director who would have authority to designate physician agents to carry out assigned portions of the Director's responsibilities. Regardless of agent designations, however, the Medical Director would be fully responsible for medical direction and would be the physician of record for personnel engaged in pre-hospital EMS.

This proposal has two principle benefits. (1) It will provide for integrated, uniform, and fully coordinated medical direction and supervision throughout the EMS system. (2) By housing these functions within a single institution, with a collegial atmosphere and an already existing team approach, it will be possible to avoid the intrusion into medical direction of the kinds of inter-hospital competition, jealousies, and historic antagonism that have evidenced themselves in the functioning of the Medical Advisory Board itself as it has worked on the medical direction issue.

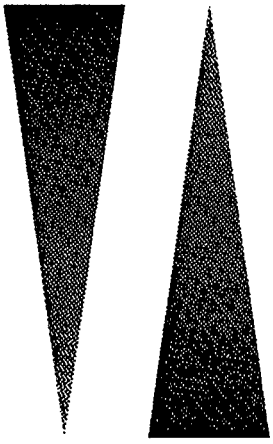
Implementation of this proposal would allow the recent gains that have been made - with Care/AA, Buck, and the Portland Fire Bureau consolidating physician supervision at a single institution, which also is the MRH - to be retained. Further, it would add the final elements to a fully integrated medical direction by bringing the remaining pre-hospital EMS providers into the integrated medical direction system and by establishing the requirement that one physician at the contracting institution be designated as the Medical Director who will be ultimately responsible and who will have ultimate authority.

The Provider Board recommendation that Oregon Health Sciences University be the institution with which the County contracts for Medical Direction, as described, was by a split vote. OHSU presently is the MRH and also provides medical supervision for all but a few of the pre-hospital EMS providers. OHSU is doing an excellent job. There has been no evidence that a change would produce any improvement in care or any reduction in system costs. Thus there is no basis for a change from OHSU to any other institution. However, some Provider Board members felt it was not appropriate to designate a specific institution as the institution at which the System Physician Medical Director should be located.

Figure 7 graphically shows how responsibilities would be split between the System Physician Medical Director and the EMS Administrator. Figures 8 and 9 are organizational charts showing the organization of the current EMS system and the organization of the Provider Board's recommended EMS system.

## The Continuum of Shared Responsibility

**MEDICAL DIRECTOR**



**ADMINISTRATIVE DIRECTOR**

- Medical Direction (patient care)
- Protocols
- Training
- Receiving Facilities
- Specialty Care Units
- Interfacility Transportation
- Audit and Quality Improvement
- Disaster Planning
- Dispatch
- Public Information and Education
- Communications
- Mutual Aid
- Finances

FIGURE 7

## Current EMS System

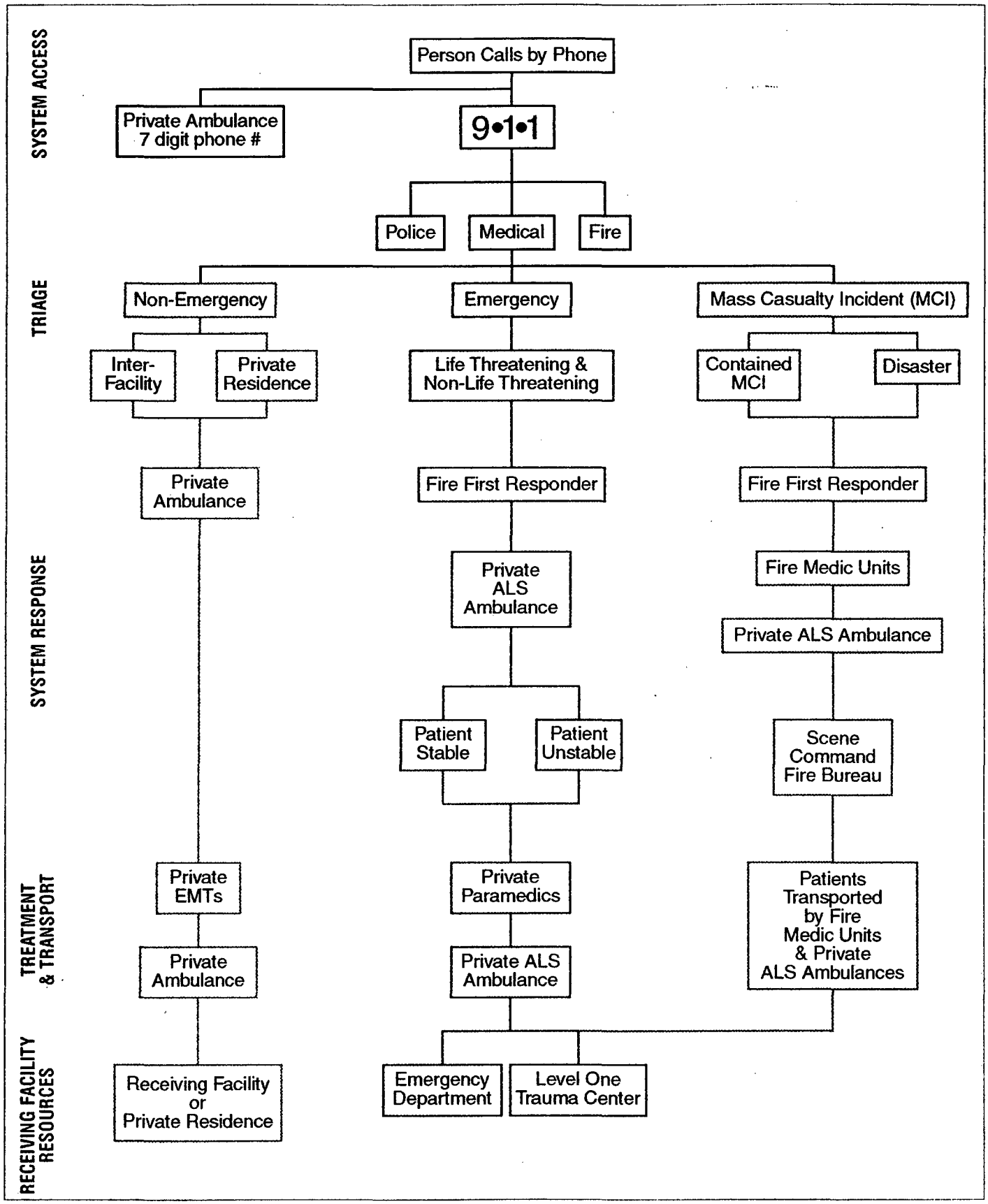



FIGURE 8

## Proposed EMS System

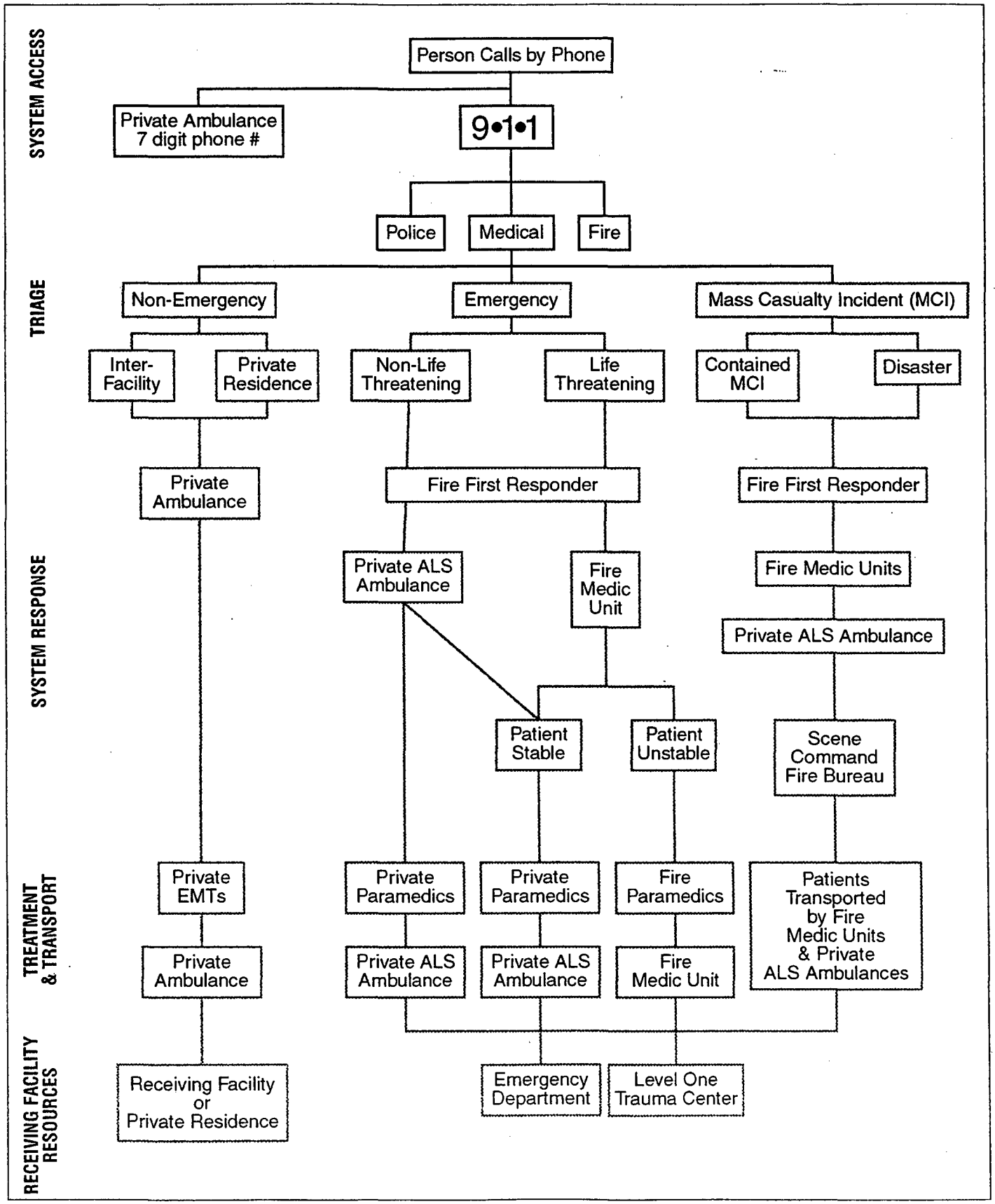



FIGURE 9

Impact on Cost. Despite attempts to identify the cost of a strong System Physician Medical Director arrangement, as desired by the emergency medicine community and as recommended by the Provider Board, County EMS and the Medical Advisory Board to date have been unable to provide an estimate of cost. The Provider Board believes that such an arrangement is likely to be more costly than the present system, but cannot presently predict the added cost.

Impact on Rates. If the strong System Physician Medical Director arrangement is more costly than the present arrangement, there will be a need for additional tax or user fee revenues to pay for the added costs. The Provider Board assumes that tax revenues will not be available to pay for the added costs. Therefore, additional user fee revenues will need to be generated through rates.

Provider Board Recommendation.

B. There will be a single County ambulance service area for Life Threatening Emergencies, with the Portland Fire Bureau providing fire medic unit transport services for the Life Threatening Emergencies.

C. There will be two ambulance service districts for Non-Life Threatening Emergencies, with a private ambulance provider (Buck in one and the merged Care/AA in the other) assigned to each district.

Impact on Service Delivery. As stated previously, having the Portland Fire Bureau fire medic units handle Life Threatening Emergencies will concentrate the experience with these incidents within a limited group of paramedics. This has been a major objective of the emergency medicine community, which believes this will improve quality of care for these incidents. This also will provide a system in which the closest appropriate transport vehicle always is dispatched to the "time-critical" Life Threatening Emergencies.

At the same time, the recommendation for two districts for Non-Life Threatening Emergencies will provide several benefits:

1. It will avoid having the entire County pre-hospital emergency medical services system at the mercy of the fiscal health and effectiveness of a single provider. There is an historic ~~tendency~~ for systems with single providers to become "captives" of the providers - that is, the provider ~~becomes locked~~ in place, notwithstanding problems the provider may have. This has occurred in a substantial number of cases, which previously have been documented for the County. Once

the single provider is locked in place, there is an effective loss of regulatory control, and the provider is able to force the relaxation of system requirements,thus diminishing quality of care, or causing rate increases, or both. On the other hand, with other viable providers in place, no one provider can gain this kind of control.

2. The presence of other providers brings an element of competition into play, with each trying to do better than the others. In the one study underway on quality of care in the County, as compared to elsewhere, preliminary data indicate that for the type of incident studied, patient outcomes in the County are extremely good relative to elsewhere. Although the reason for this is not certain, inter-provider competitive factors may play a role.

3. Over time, the number of private providers in Multnomah County has been diminishing through a natural process. First, Care Ambulance and Tualatin Valley Ambulance unified their services. Now, Care and AA are merging, with the merger to be completed by September 30, 1993. Thus the system has gone from 4 ASAs to 2 effective ASAs on its own. The Provider Board recommendation will provide for 2 ASAs, but will not foreclose the possibility of a future merger of Buck and Care/AA in the future.

4. The availability of backup providers will assure that the County will not be left at any time with no provider that is able to function. This is important in that a provider can become unable to function due to labor disputes, financial problems, or loss of a County license.

5. It is important to recognize that the private providers have made substantial investments in the community over many years. The quality of care they provide is outstanding. Good public policy indicates they should be allowed to continue in service and should not have their businesses destroyed.

6. The Provider Board's recommendation keeps the County's options open for future system development. Following implementation of the Provider Board's recommendations, the County should allow time for the "new" system to gel, to see what benefits have been realized and what unforeseen problems have occurred. Then sometime down the road, perhaps after a 5 year interval, the County can consider whether further revisions will be desirable. The County will have more realistic options to consider at that time, if the Provider Board

recommendation for tiered response with two private providers for Non-Life Threatening Emergencies is adopted.

Impact on Cost. The impact of the Provider Board recommendation on costs is discussed under System Response, above. The cost impact of having two private providers for Non-Life Threatening Emergencies rather than one is discussed in the evaluation of the County EMS proposal, below.

Impact on Rates. The impact on rates is discussed under System Response, above.

# RESPONSE TO MULTNOMAH COUNTY EMS PLAN

The Provider Board's "Key Component Recommendations," set out above, in most cases are similar to the recommendations set out in the Draft "Multnomah County Emergency Medical Services Ambulance Service Planning Report and Ambulance Service Area Plan 1993" (Draft County EMS Plan), dated March 18, 1993. Both the Provider Board and County EMS call for a tiered response system, with Life Threatening Emergencies transported by Portland Fire Bureau fire medic units and Non-Life Threatening Emergencies transported by the private sector. The only major difference between the two is that the Provider Board recommends that two private emergency ambulance providers (Care/AA and Buck) participate in the transport of Non-Life Threatening Emergencies, whereas County EMS recommends that only one private provider participate. (As context, the total EMS system actually has nearly 35 providers. See Figures 10 and 11.)

The Provider Board's response, in this Report, to the Draft County EMS Plan will focus on the single issue whether there should be one or two private emergency ambulance providers under the tiered response system. Further, in addressing that issue, the Provider Board will address only those key reasons County EMS has given as the basis for its recommendation of a single private provider. In hearings following the initial proposal of EMS plans, the Provider Board may identify other shortcomings of the Draft County EMS Plan, as the Board deems appropriate.

The Draft County EMS Plan states that the primary reason for its recommendation of a single private provider is that a <u>three</u> provider system would be more costly. See page 21 of the Draft County EMS Plan. (As of the March 18, 1993 date of the Draft Plan, it appeared that three private providers - Care, AA, and Buck - wanted to continue to provide emergency ambulance service. Since then, Care and AA have agreed to and actually initiated a merger, with a September 30, 1993 date as the deadline for completing the merger. The Draft County EMS Plan thus did not consider the alternative of a two private provider system.)

The Draft Plan states that a secondary reason for a single private provider is some unquantified gain in medical control and uniformity. The Draft Plan admits, however, that there are no data to support a conclusion that there will be a gain. Further, since issuance of the Draft Plan, County EMS has agreed that there is no medical quality of care basis for choosing one provider over two or three, if all the other recommended changes are implemented. For this reason, this Report will not address medical quality of care as a basis for choosing one provider or two.

# Providers in the Multnomah County EMS System

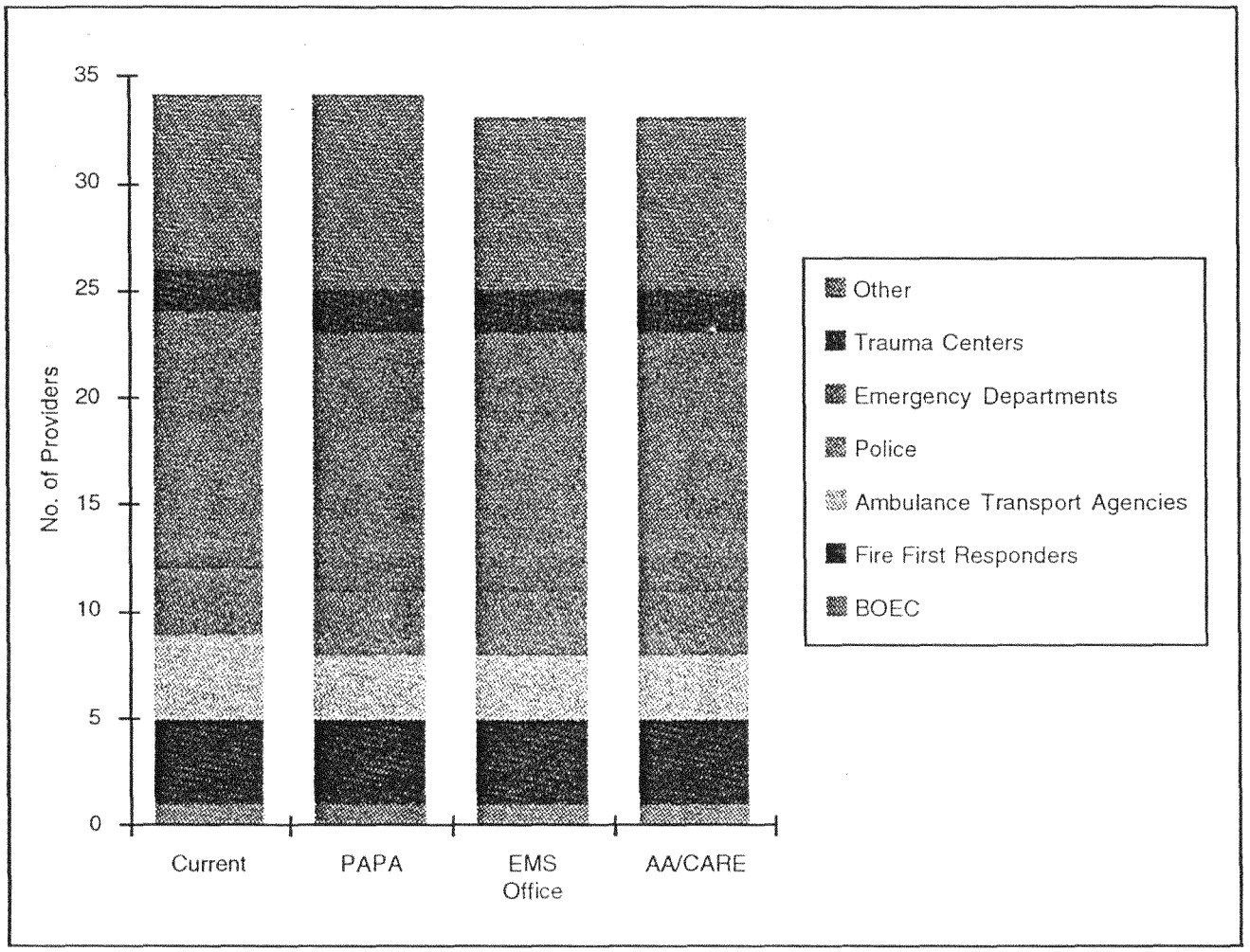



FIGURE 10

# Providers in the Multnomah County EMS System

| *Providers* | Current System | Proposed: PAPA (Single Provider) | Proposed: EMS Office (Public—Private) | Proposed: AA/CARE Portland Fire Bureau |
|---|---|---|---|---|
| ● BOEC | 1 | 1 | 1 | 1 |
| ● Fire First Responders[1] | 4 | 4 | 4 | 4 |
| ● Ambulance Transport Agencies[2] | 4 | 3[7] | 3[8] | 3[9] |
| ● Police[3] | 3 | 3 | 3 | 3 |
| ● Emergency Departments[4] | 12 | 12 | 12 | 12 |
| ● Trauma Centers[5] | 2 | 2 | 2 | 2 |
| ● Other | | | | |
| MRH | 1 | 1 | 1 | 1 |
| CHIERS | 1 | 1 | 1 | 1 |
| City Cab | 1 | 1 | 1 | 1 |
| Mutual Aid[6] *Transport - 1 First Response - 3* | 4 | 4 | 4 | 4 |
| Car-A-Van | 0 | 1 | 0 | 0 |
| Life Flight Helicopter | 1 | 1 | 1 | 1 |
| **Total** | **34** | **34** | **33** | **33** |

*Footnotes*

[1] Portland Fire Bureau, Gresham Fire Department, Corbett Fire District, Sauvie Island Fire District

[2] AA, Buck, Care; Community Ambulance is a BLS provider.

[3] Portland Police Bureau, Gresham Police Department, Multnomah County Sheriff's Office

[4] Mt. Hood Medical Center, Portland Adventist, Woodland Park, Providence, Emanuel, Bess Kaiser, Eastmoreland, Good Samaritan, UOHSC, Providence Milwaukie, Kaiser-Sunnyside, St. Vincent's

[5] Emanuel, UOHSC

[6] Transport: Metro West Ambulance, First Response: Clackamas County Fire District #1, Tualatin Valley Fire and Rescue (TVFR), District #20; there are other Fire First Responder Agencies not listed

[7] Emergency and at least one non-emergency; plus Community Ambulance

[8] Ambulance Provider and non-emergency; plus Community Ambulance

FIGURE 11

The Draft Plan also may suggest that County EMS's job will be easier dealing with one private provider rather than three, with some benefit overall to the EMS system. The extent of any hypothetical benefit is unspecified, and County EMS did no analysis to support such a suggestion. The Provider Board understands County EMS does not consider this a significant factor and therefore will not address it.

Thus this portion of the Provider Board's Report will focus on what County EMS in its Draft Plan identified as the primary reason for choosing a one private provider rather than a three private provider system: supposed financial benefit to the system. Since issuance of the Draft Plan, County EMS has indicated this is the only real basis for its recommendation.

## UNIT HOURS

The Draft County EMS Plan, on page 14 and again on page 21, makes a point about "unit-hours," creating the impression that there will be a need for less "unit hours" in a system that has one private emergency ambulance company, with a resulting elimination of system costs. At best, the wording of the Draft Plan on this issue is exceedingly unfortunate, creating a completely misleading understanding for the reader and leading most readers to an incorrect conclusion. Less charitably, some of the Draft Plan's key statements simply are false. The following is an explanation of the flaws in the impression created by the Draft Report. The Provider Board understands that County EMS has no disagreement with the basics of this explanation.

A "unit hour" represents one hour during which an emergency ambulance is in service. An ambulance system has some fixed costs and some costs which are variable depending on the number of unit hours. For example, costs for ambulance staffing are variable based on unit hours.

Presently, private emergency ambulance units handle both 9-1-1 emergency calls and non-emergency calls received by the private providers. In other words, the vehicles handling 9-1-1 calls are not "dedicated" (limited) to emergency calls. By transporting both emergency and non-emergency calls, the private providers believe they are able to make the most efficient use of their vehicles. Rather than having emergency ambulances idle for long periods while awaiting emergency calls, they handle non-emergency calls while they wait. See the analysis in Exhibit 3.

According to data gathered by County EMS, the current system provides 125,684 emergency ambulance unit hours in a year. This represents the number of hours an ambulance staffed for handling

emergencies is operational. Although the Draft County EMS Plan does not so state, these 125,684 hours are to handle both emergency and non-emergency calls.

The Draft Plan then states that based on work done by a system status planning group, it would be possible to design a system dedicated to handling only emergency calls that could handle all emergency calls using only 86,476 unit hours. (It is not proper for the Draft Plan to attribute this number to the system status planning group. The number was supposed to be subjected to a computer simulation to be sure it would allow the system to meet the expected geographic distribution of calls and to meet response time requirements. Although County EMS asserts that this simulation was done, through use of a University of Washington computer program, County EMS never has documented the simulation or provided information regarding the underlying computer program, despite repeated written and oral requests from the Provider Board and its members. Until this information has been provided and accepted as satisfactory, County EMS should not represent the 86,476 unit hours as being a number developed by the system status planning group.)

The Draft Plan then concludes:

> "The results of the group's system status planning study shows that 39,208 unit-hours could be saved each year by switching to a single ASA system. This means that the system could meet its response goals for 9-1-1 calls with roughly three to four fewer ambulances on the street at most times during the day."

This statement is false. The 39,208 "savings" is <u>not</u> the result of switching to a single ASA system. The 39,208 "savings" is the difference between the 125,684 unit hours needed for a system where emergency vehicles carry both emergency and non-emergency calls and the 86,476 unit hours supposedly needed for the emergency transport side of a system where emergency vehicles are dedicated exclusively to emergency calls. This difference is the result of creating what is called a "dedicated" system - emergency vehicles dedicated exclusively to emergency calls, and is irrespective of the number of providers. No analysis has been done to indicate whether the 86,476 unit hours number for a dedicated system would be in any way affected by the number of providers, and in a properly designed system the number of providers should not make any difference. (Indeed, the Draft County EMS Plan concedes this at page 16, where it states, "This [variable] cost [as a function of unit hour deployment] is essentially independent of the number of transporting ambulance providers.) To say the least, it is very disturbing to the Provider Board that this number would be incorrectly attributed to a switch to a single ASA system.

Secondly, this statement is grossly misleading. It suggests that there can be a "saving" of 39,208 unit hours. This is reiterated on page 21, where the Draft Plan states:

> "Applying only the paramedic cost of $26.83 per unit-hour, deploying an estimated 39,208 fewer unit-hours, will result in a savings of $1,050,951. i.e., an 11% reduction in the total system cost."

In making these statements, County EMS simply ignored the fact that the current 125,684 unit hours covers both emergency and non-emergency calls. If emergency ambulances are to be dedicated exclusively to emergency calls, then additional vehicles will have to be operational to handle non-emergency calls. County EMS made no effort to determine whether the number of unit hours to handle the non-emergency calls would be less than, equal to, or more than the 39,208 unit hours "savings" cited in the Draft Report. Thus it is, at best, grossly misleading to characterize these 39,208 unit hours as "savings." Presumably, they simply represent the present system's emergency vehicle unit hours associated with non-emergency calls, while the 86,476 unit hours represent emergency vehicle time associated with emergency calls.

When asked whether they had calculated the number of unit hours that would be needed to handle non-emergency calls, if a shift were made to emergency call dedicated units, County EMS indicated they had made no such calculation. When asked why not, County EMS responded that it was responsible only for emergency transport, so that the number of unit hours needed for non-emergency calls was irrelevant. This seems irresponsible, to the Provider Board. The shift to a fully dedicated system will mean an overall loss of efficiency, i.e., the total emergency and non-emergency unit hours needed in a dedicated system will exceed the 125,684 unit hours needed in a non-dedicated system, making the total emergency and non-emergency system more expensive. County EMS' response that this is irrelevant is not acceptable. (For a related example of the general importance of having units transport both emergency and non-emergency calls, see Exhibit 3.)

County EMS can point to some statements in the Draft Plan which indicate it has ignored the impact of it recommendation on the cost of non-emergency services. Those statements, however, are ambiguous and do not dispel the fact that the Draft Plan's statement is false in its major premise and misleading in its conclusion, as outlined above. There is no reason to believe there will be an overall unit hour savings from a dedicated system, and any calculated change in unit hours from changing to a dedicated system has nothing to do with the number of providers. (The one possible valid use of the 86,476 unit hours asserted to be needed for the emergency transport side of a dedicated system, if that number is correct, is in determining the maximum number of unit hours that might be charged to

emergency ambulance rates in any system, whether dedicated or non-dedicated.)

## ADMINISTRATION AND GENERAL OVERHEAD

The Draft County EMS Plan states:

> "[I]t could be argued that if there is a change from three providers to one, the costs associated with administration and general overhead could be reduced by as much as two thirds. These costs represent expenditures duplicated by each provider. Assuming that these duplicated costs could be reduced by one-half, rather than two thirds, there could be a savings in administration and overhead of up to $1,585,980." (Pg. 17)
>
> "The cost study identified additional savings of up to $1,525,980 in duplicated costs of administration and general overhead. This represent 16% of current costs." (Pg. 21)

Notwithstanding the Draft Plan's reference to a "cost study," County EMS concedes that it did not do any "cost study" related to whether administration and general overhead become more efficient as an emergency ambulance provider becomes larger. Instead, County EMS simply decided that must be the case and arbitrarily selected a 50% savings as the amount that would be saved in shifting from three providers to one. (County EMS has not done a re-evaluation since announcement of the Care/AA merger.)

It is unfortunate that County EMS has not done a study on this issue. For at least the last seven years, there has been an argument about whether one large ambulance provider will be more efficient than three (now two). There has been ample time for the County to survey large and small providers around the United States to see if there is a pattern of increased or decreased efficiency as a provider becomes larger. County EMS certainly should have the burden to do this if it believes this would be a reason for changing to a single provider. However, County EMS has not done this. (Note that at a level below "administration," staffing is dictated by fairly standard "span of control" measures and is relatively independent of provider size. Thus a field supervisor can handle approximately 25 personnel; an accounts receivable representative can process about 25 accounts per day.)

There is evidence, however, indicating that in fact in the areas of administration and general overhead large providers are not more efficient than small providers. First, in the Care/AA merger, it appears unlikely that there will be significant economies in administration and general overhead; rather, economies and diseconomies of scale largely will balance out. Second, and more important, information on administrative costs of different sized ambulance companies indicates just the opposite of County EMS conclusions. County EMS decided that, as a percentage of total system cost, administrative costs and general overhead would be less for a large single provider than for three small providers. Available information on administrative costs of systems indicates just the opposite: when actually studied, it appears that, as a percentage of total system costs, administrative costs are higher for large providers than they are for small providers. A recent study of ambulance systems in the United States indicated that administration and marketing costs, as a percentage of operating costs, increase as the provider's size increases:

| Size of Provider (Total Operating Costs) | $500,000 - $1,000,000 | $1,000,001 - $5,000,000 | $5,000,001 - 10,000,000 |
|---|---|---|---|
| Administrative and Marketing (% of Operating Costs) | 3% | 18% | 20% |

Thus if a shift from the current two providers to one provider in Multnomah County would have any impact on system costs, the impact would be to increase the costs, not decrease them as asserted by County EMS.

The Provider Board is extremely concerned about the lack of care and rigor of County EMS on this issue. To simply "make up" an assumption that one large provider is more efficient in overall administration than a few smaller providers is not adequate and is irresponsible when one is considering restructuring an entire system and destroying existing businesses that have served the County for decades. County EMS should have gathered data from other systems in the United States, to find out what relationship provider size has to administrative efficiency. This certainly is the case now, in the face of the clear evidence that in fact larger providers are substantially less efficient, administratively. If County EMS wishes to pursue this issue further, notwithstanding the above evidence, the Provider Board will be happy to assist with such data gathering. This absolutely should be done before a shift is made from two providers to one, in light of the evidence this would increase system cost.

## PROVIDER DISPATCH CONTROL CENTERS

The Draft County EMS Plan states:

> "[T]he EMS Program maintains a dispatch center at BOEC for all 9-1-1 calls. Provider control centers exist primarily for other purposes, e.g. dispatch of non-emergency calls. The current system therefore inappropriately allocates the $594,996 cost of the private control centers to emergency calls. This amount could be saved through implementation of a single provider ASA with appropriately allocated costs." (Pg. 17)
>
> "Ambulance company dispatch/control center cots of $594,986 represent another 6% cost reduction." (Pgs. 21-22)

These statements, like those regarding unit hours discussed above, are false. County EMS asserts that in a "dedicated" system, where emergency ambulances respond only to emergency calls and do not handle non-emergencies, it is not appropriate to charge private provider dispatch control center costs to emergency transports through emergency rates. County EMS' theory is that the private provider dispatch control centers serve no useful function as to the emergency calls. Even if this were completely true, which it is not, this issue has nothing to do with the number of providers. Rather, it has to do with a shift to a dedicated system, which can be done irrespective of the number of providers. Thus the assertion that any "saving" is "through implementation of a single provider ASA with appropriately allocated costs" is false.

Further, the balance of County EMS' statements is misleading. First, the provider dispatch control centers in any system will perform functions related to emergency vehicles other than simply dispatching them. For example, the control centers are the initial collection point for billing data; they also are a data collection point for system status planning. Therefore, even if, in a dedicated system, some portions of control center costs should be excluded in determining rates, other portions of those costs should be included. What costs should be included and what costs should be excluded is a matter to abe determined in rate making proceedings. (Alternatively, BOEC could revamp its operations to perform these roles. Whether BOEC would be willing to do this, and at what cost, has not been explored by County EMS.)

Second, an allocation of provider dispatch control center costs away from emergency transports does not represent a "saving." It simply represents a cost transfer from the emergency rate payer to the non-emergency rate payer. Although County EMS does recognize this in its Draft Plan with some

general language, County EMS basically takes the position that this is acceptable because non-emergency rates are not its concern. Even if this is an acceptable position, however, it is not proper to identify the provider control center cost as a "saving" when in fact there is no evidence anything will be saved. Rather, some portion of the control center cost, in rate proceedings, will be reallocated.

## SUMMARY

The Draft Plan identifies only the above three areas - unit hours, administration and general overhead, and provider dispatch control centers - with any specificity as "savings" areas justifying a change from two providers to one.

As demonstrated above, County EMS' calculations in two of these areas - unit hours and provider dispatch control costs - are not related to the number of providers but rather are related to whether there is a "dedicated" emergency ambulance system or a system in which emergency ambulances respond to both emergency and non-emergency calls.

Only one area - administration and general overhead - relates to the number of providers. Here, County EMS asserts that one provider will be more efficient than three, but has done no study and has sought no data to support its position. County EMS concedes that it has no basis for this assertion other than its own thinking. Against this recent information, discussed above, indicates that in fact, one large provider will be less efficient administratively than two (not three) smaller providers. Thus a shift to one provider will <u>increase</u>, not decrease, costs.

Finally, apart from this system "efficiency" reason for retaining two private providers of Non-Life Threatening Emergency service, there are a number of other very good reasons for having two providers rather than one. These are listed at pages 41 and 42, above.

## RESPONSE TO PAPA PLAN

Major portions of the Portland Area Paramedic Alliance Plan, dated March 12, 1993, are paralleled by aspects of both the Draft County EMS Plan and the Provider Board recommendations, particularly in the area of medical supervision and control. The Provider Board, for reasons already set out in this Report, believes the PAPA Plan's recommendation for a single provider is not carefully thought out (as evidenced by a complete lack of financial analysis) and would result in a degradation of the current system. For that reason, the PAPA Plan's single provider recommendation should be rejected.

## EXHIBIT 1

## NUMBER OF LTE PATIENT ENCOUNTERS PER PARAMEDIC

Reasonably assume 4200 Life Threatening Emergency (LTE) transports per year.

Reasonably assume 118 private paramedics in the current system, which equals 59 paramedic crews in the system. (118 divided by 2 = 59 crews)

4200 LTE transports per year divided by 59 crews equals 71.2 LTE Transports per crew per year or 5.9 per month on the average.

Reasonably assume eight Fire Medic Units with 24 crews using 48 paramedics. Then each crew will see on average 175 LTE transports per year or 14.58 per month. This is nearly 2.5 times the number currently seen by private paramedic crews.

EXHIBIT 2 - Page 1

## COST SAVINGS OF THE PUBLIC/PRIVATE PARTNERSHIP MODEL

### Current system cost

Unit hour cost - $75.45 (according to page 16 of the Draft County EMS Plan)

Unit hour salary cost of EMT/Paramedic personnel - $26.83 (two EMT/Paramedics on a vehicle)

Reasonably assume the cost difference between an EMT/Paramedic and an EMT/Basic is $1,338.00 per month.

Calculations:

EMT/Paramedic salary - $2262.71/month
25% benefits and taxes, for an FTE of $2828.00/month

EMT/Basic salary - $1221.27/month
22% benefits and taxes, for an FTE of $1,490.00/month

Thus the cost of an EMT/Basic is 47% less than the cost of an EMT/Paramedic. Unit hour salary cost is $26.83 for two Paramedics. $26.83 divided by 2 equals $13.42 per person unit hour cost.

$13.42 x 47% = $6.30 per unit hour cost difference if one person is an EMT/Basic rather than an EMT/Paramedic.

$75.45 - 6.30 (cost difference) = $69.15 unit hour cost, with one EMT/Basic and one EMT/Paramedic.

Currently, according to the Draft County EMS Plan, the private providers' emergency ambulances are in service 125,684 unit hours per year.

| | | | |
|---|---|---|---|
| | 125,684 unit hours/year | | 125,684 unit hours/year |
| x $ | 75.45 current unit hours | x | $69.15 reduced unit hour cost |
| | $9,482,857.80 | | $8,691.048.60 |

The difference between the two yields a cost savings of $791,809.20 per year. (See note.)

$791,809.20 divided by 17,500 private 9-1-1 transports in the tiered response system yields a possible reduction of up to $45.25 per patient call.

Note: This cost savings would not be fully realized in year one, as the companies would replace EMT/Paramedics through attrition. Also, approximately 30% of the private units will retain two EMT/Paramedics, for training and other operational reasons.

The next area of cost savings is in the reduction of total crews on the street, as a result of changing the response time requirements from 8 minutes to 12 minutes for Non-Life Threatening Emergencies.

The estimated crew reduction is three twenty-four hour equivalent units, which results in a savings of 26,280 unit hours a year.

26,280 unit hours
x $69.15 unit hour cost
$ 1,817,262.00 per year savings.

Total cost savings =

1) reduction of three 24 hour equivalent units results in savings of $1,817,262.00

2) remaining unit hours of 99,404 at $69.15 instead of the current $75.45 cost per unit hour, results in a savings of $626,245.20

($75.45 x 99,404 = $7,500,031.80; $69.15 x 99,404 = $6,873,786.60. $7,500,031.80 - 6,873,786.60 = $626,245.20)

Total savings: $1,817,262.00
626,245.20

**$2,443,507.20**

The $2,443,507.20 savings divided by 17,500 private 9-1-1 transports equals a $139.63 per transport cost reduction.

EXHIBIT 3 - Page 1 of 2

## SYSTEM REVENUE REQUIREMENTS

### SYSTEM COST

Total unit hours = 99,404

Unit hour cost = $69.15

Total unit hours x unit hour cost = break even point for the providers, assuming all of the figures taken from the Draft County Report are accurate.

99,404 total unit hours
x $69.15 unit hour cost
$ 6,873,786.60 system cost

$6,873,786.60 cost divided by 17,500 private Non-LTE 9-1-1 transports equals $392.79 cost per Non-LTE 9-1-1 transport.

### SYSTEM REVENUE

Current average billed amount according to the County is $588.00

Assume the average collected amount is 65% of the $588 figure, which equals $382.20

17,500 Non-LTE 9-1-1 transports
x $382.20
$ 6,688,500.00 in revenues at current rates

Assume that since the system wants to be as efficient as possible, the private units transporting Non-Life Threatening Emergencies also will transport non-emergencies. Also assume that the number of private provider non-emergency transports with these vehicles will be 20% of the number of Non-Life Threatening Emergency transports, which adds an additional 3500 non-emergency transports to these vehicles' work.

Assume that None-Emergency calls average only half of the average collected amount for Emergency transports, or $191.00 per Non-Emergency transport.

$191.00 x 3500 transports = $6,668,500.00

| | |
|---|---|
| 9-1-1 Non-LTE transport revenue | $6,668,500.00 |
| Non-Emergency transport revenue | + 668,500.00 |
| Total revenues | $7,357.000.00 |
| System cost | -6,873,786.60 |
| Net gain | $ 483,214.00 |

## SYSTEM REVENUE REQUIREMENTS

Assume that the net gain of $483,214.00 is applied entirely to rate reductions and is spread in equal amounts to each emergency and non-emergency transport. Then the reduced revenue need per transport, for a break-even operation, is $483,214.00 divided by 21,000 transports = $23.01 per transport. $23.01 per transport divided by .65 collection rate = $35.40 rate reduction. $588 current average rate - 35.40 = $552.60 average rate.

Clerk of Board

# Emergency Medical Services

**Multnomah County**

MEMORANDUM

TO: HANK MIGGINS, CHAIR, BOARD OF COUNTY COMMISSIONERS
COMMISSIONER TANYA COLLIER
COMMISSIONER GARY HANSEN
COMMISSIONER SHARRON KELLEY
COMMISSIONER DAN SALTZMAN

FROM: BILL COLLINS
EMS DIRECTOR

VIA: GARY L. OXMAN, MD
HEALTH OFFICER

BILL ODEGAARD
DIRECTOR, HEALTH DEPARTMENT

DATE: JUNE 22, 1993

RE: AMBULANCE SERVICE PLAN RECOMMENDATIONS

1993 JUN 22 PM 12:20
OREGON

==========

ENCLOSED IS THE FINAL DRAFT OF THE EMS RECOMMENDATIONS FOR AN AMBULANCE SERVICE PLAN FOR MULTNOMAH COUNTY.

THESE ARE THE RECOMMENDATIONS THAT WILL BE PRESENTED TO THE BOARD ON JUNE 23, 1993.

WE ARE LOOKING FORWARD TO WORKING WITH THE BOARD ON THE DEVELOPMENT OF THE FINAL PLAN THAT WILL BE SENT TO THE STATE HEALTH DIVISION FOR APPROVAL. IF THERE ARE ANY QUESTIONS PLEASE LET US KNOW.

**Health Department**
**426 S.W. Stark Street—9th Floor · Portland, Oregon 97204 · 248-3220 · Fax 248-5453**

AN EQUAL OPPORTUNITY EMPLOYER

# Emergency Medical Services

**Multnomah County**

PROPOSED

MULTNOMAH COUNTY, OREGON

AMBULANCE SERVICE PLAN

1993

RECOMMENDED BY

MULTNOMAH COUNTY EMERGENCY MEDICAL SERVICES

OF THE

MULTNOMAH COUNTY HEALTH DEPARTMENT

# PROPOSED
# MULTNOMAH COUNTY, OREGON
# AMBULANCE SERVICE PLAN
# CONTENTS


PLAN SUMMARY

1. CERTIFICATION BY THE GOVERNING BODY OF THE COUNTY AMBULANCE SERVICE PLAN

2. OVERVIEW OF COUNTY

    2.1. GEOGRAPHY

    2.2. POPULATION

    2.3. POPULATION CHARACTERISTICS

    2.4. EMS RESOURCES

3. DEFINITIONS

4. AMBULANCE SERVICE AREA BOUNDARIES

    4.1. ASA NARRATIVE DESCRIPTION

    4.2. ALTERNATIVES CONSIDERED TO REDUCE RESPONSE TIMES

5. SYSTEM ELEMENTS

    5.1. RESPONSE TIMES

        5.1.1. DISPATCH

        5.1.2. STANDARDS

    5.2. LEVEL OF CARE

    5.3. PERSONNEL

        5.3.1. FIRST RESPONSE

        5.3.2. AMBULANCE

    5.4. MEDICAL SUPERVISION

5.4.1. EMS MEDICAL DIRECTOR

5.4.2. ON-LINE MEDICAL CONTROL

5.4.3. RETROSPECTIVE MEDICAL CONTROL

5.5. PATIENT CARE EQUIPMENT

5.5.1 FIRST RESPONDERS

5.5.2 AMBULANCES

5.6. VEHICLES

5.6.1 FIRST RESPONDERS

5.6.2 AMBULANCES

5.7. TRAINING

5.7.1. TECHNICIANS

5.7.2. CONTINUING EDUCATION

5.8. QUALITY ASSURANCE

5.8.1 STRUCTURE

5.8.2 PROCESS AND PROBLEM RESOLUTION

5.8.3 SANCTIONS

6. COORDINATION

6.1. THE ENTITY THAT WILL ADMINISTER AND REVISE THE ASA PLAN

6.1.1. PLANNING

6.1.2. RATE DETERMINATION

6.1.3. EMS ADMINISTRATION

6.2. COMPLAINT REVIEW

6.3. MUTUAL AID AGREEMENTS

6.3.1. ROUTINE EMS SERVICE

6.3.2. UNUSUAL CIRCUMSTANCES

6.4. DISASTER RESPONSE

6.4.1 MASS CASUALTY INCIDENT

6.4.2 DISASTERS

6.5. PERSONNEL AND EQUIPMENT RESOURCES

6.5.1 HAZARDOUS MATERIALS

6.5.2 SEARCH AND RESCUE

6.5.3. SPECIAL EMERGENCY RESPONSE TEAM (SERT)

6.5.4. SPECIALIZED RESCUE AND EXTRICATION

6.6. EMERGENCY COMMUNICATIONS AND SYSTEM ACCESS

6.6.1. TELEPHONE

6.6.2. DISPATCH

6.6.3. RADIO COMMUNICATIONS

6.6.4. HOSPITAL AVAILABILITY

6.6.5. EMERGENCY MEDICAL SERVICES DISPATCHER TRAINING

7. PROVIDER SELECTION

7.1. INITIAL ASSIGNMENT

7.2. REASSIGNMENT

7.3. APPLICATION FOR AN ASA

7.4. NOTIFICATION OF VACATING AN ASA

7.5. MAINTENANCE OF LEVEL OF SERVICE

8. COUNTY ORDINANCES AND RULES

# AMBULANCE SERVICE PLAN
## SUMMARY

The Multnomah County Board of County Commissioners, based on the findings, conclusions, and system design options and recommendations identified in the Health Department EMS planning report, have approved the following plan:

1. Multnomah County will comprise a single Ambulance Service Area.

2. First response to 9-1-1 medical calls will be provided by fire districts at the service level goal of defibrillator trained EMT-Basic or EMT-Paramedics.

3. Ground ambulance transport for 9-1-1 emergency calls will be by fire EMT-Paramedic units (fire medic units) for critical patients and by private emergency ambulances for non-critical emergency patients.

4. All other ambulance service will be provided by private, non-emergency ambulances.

5. Air ambulance services will be provided by private helicopter and airplane providers.

6. Fire medic ambulances will be staffed by two EMT-Paramedics. Contract ambulances will be staffed by one EMT-Paramedic and one EMT-Basic.

7. Dispatch for all 9-1-1 calls and ambulance move-ups will be provided by the City of Portland, Bureau of Emergency Communications (BOEC).

8. Primary radio communications will be on the 800Mhz system. Mobile Data Terminals (MDT) will be used for dispatch and communications with the BOEC dispatch computer.

9. Medical direction and supervision will be provided by an EMS Medical Director employed by the county.

10. The EMS Program Office in the Health Department will administer the ASA and the EMS system in Multnomah County.

11. EMS will maintain a pre-hospital patient care, dispatch, and hospital disposition data base for the use in monitoring performance.

12. The EMS system will use the Continuous Quality Improvement process to ensure the quality and improvement of patient care.

13. The cost of transport by fire services, contract ambulances, and the EMS Medical Director and EMS Program Office will be financed by fees charged to people receiving care through the 9-1-1 medical response system.

14. Multnomah County will work with other jurisdictions to move toward a regional approach to EMS.

CERTIFICATION
OF THE
MULTNOMAH COUNTY
AMBULANCE SERVICE PLAN

The undersigned certify that pursuant to Oregon Administrative Rules 333-28-095 through 333-28-130 that:

Each ambulance service plan element contained in these rules has been addressed and considered in the adoption of this plan by the Board of County Commissioners and,

In the Board's judgment, the ambulance service area established in the plan provides for the efficient and effective provision of ambulance services and,

To the extent they are applicable, the County has complied with ORS 823.180(2)(3) and 823.310 and existing local ordinances and rules.

Dated at Multnomah County,----------.

Hank Miggins
Chair, County Board of Commissioners

Approved:

Laurence Kressel
County Counsel

# 2. OVERVIEW OF MULTNOMAH COUNTY

## 2.1 GEOGRAPHY.

Multnomah County is the most densely populated county in Oregon It is a predominately urban area with approximately 97% of the population residing within the urban growth boundary established by METRO. The County extends from the junction of the Willamette and Columbia Rivers on the west to the foothills of the Cascade Mountains on the east. The County covers 465 square miles.

Because of the hills in various areas of the county snow and ice can cause problems with emergency response.

The large park, forest, and watershed areas in the county may be a barrier to access by emergency vehicles and special rescue resources may be needed. While these areas are hard to reach, fortunately there are few calls for service in these areas.

## 2.2 POPULATION.

1990 Census data shows the following populations:

| Jurisdiction | Population | Per cent of county population |
|---|---|---|
| City of Portland | 437,398 | 74.9 |
| City of Gresham | 68,235 | 11.7 |
| City of Troutdale | 7,852 | 1.3 |
| City of Wood Village | 2,814 | 0.5 |
| City of Fairview | 2,391 | 0.4 |
| City of Maywood Park | 794 | 0.1 |
| Unincorporated Areas (by subtraction) | 64,403 | 11.0 |
| Total County | 583,887 | 100.0 |

In addition to the population living in Multnomah County, a large influx of people occurs during the working day increasing the population by up to 25%.

## 2.3 RACIAL AND ETHNIC CHARACTERISTICS.

| | |
|---|---|
| Caucasian | 86.9% |
| African American | 6.0% |
| Asian | 4.7% |
| Native American | 1.2% |
| Other | 1.2% |
| Total | 100.0% |

## 2.4 EMERGENCY MEDICAL RESOURCES

Organizations within Multnomah County currently providing emergency medical services include:

Fire Departments - 3- with paramedics
- 5 -BLS only

Ambulance Companies - 5

Hospitals - 9 - emergency medical services
- 1 - psychiatric emergency services only

Air Ambulance - 1

Fire Departments are the first response providers for the entire county. They respond on essentially all of the 9-1-1 medical calls.

Four of the five ambulance companies provide response for 9-1-1 emergency calls. They, and the additional fifth company provide a variety of non-emergency ambulance and medical transport services. All ambulances are licensed by Multnomah County EMS.

All hospitals, with the exception of one, provide emergency services and serve as receiving hospitals for the emergency ambulance services. There are two level-one trauma hospitals in the County. In addition, some patients are transported to hospitals in Washington County, Clackamas County, and Southwest Washington.

## 3. DEFINITIONS

"Advanced Life Support" (ALS) means those medical services that may be provided within the scope of practice of a person certified as an EMT-Paramedic as defined in ORS Chapter 823.

"Ambulance Service Area" (ASA) means a geographic area which is served by one ambulance service system and may include all or a portion of one or more counties.

"Ambulance Service Plan" means a written document which outlines a process for establishing a county emergency medical system.

"Basic Life Support" (BLS) means those medical services that may be provided within the scope of practice of a person certified as an EMT-Basic as defined in ORS Chapter 823.

"Bureau of Emergency Communications" (BOEC) means the Bureau within the City of Portland that maintains the "9-1-1" telephone answering system and the dispatch service for police and EMS for the County.

"CHORAL" means the on-line computer link among all of the receiving hospitals within Multnomah County that provides information on the status of those hospitals for receiving ambulance transports.

"County" means Multnomah County, Oregon.

"Emergency Medical Dispatcher" (EMD) means a person who is certified by the Board on Public Safety Standards and Training as defined in ORS 401.735.

"Emergency" means a non-hospital occurrence or situation involving illness, injury, or disability requiring immediate medical services, wherein delay of such services is likely to aggravate the condition and endanger personal health or safety.

"Emergency Medical Services" (EMS) means those prehospital functions and services whose purpose is to prepare for and respond to medical emergencies.

"Emergency Medical Services Medical Director" (EMSMD) means a physician employed by the County to provide medical direction to the EMS system and medical supervision to EMTs providing emergency services within the County.

"EMS Program Office" means that organizational division within the County Health Department responsible for the administration of the EMS system in the County.

"Emergency Medical Technician" (EMT) means a person certified at one of the levels of practice defined in ORS Chapter 823.

"Fire Medic Ambulance" means an ambulance, operated by the Portland Fire bureau, licensed for ALS service, that responds to emergency medical calls.

"First Responder" means an organization that provides fast response to emergency medical calls by EMTs prior to the arrival of an ambulance. These organizations are fire departments throughout the County.

"HEAR" means the radio frequency used for ambulance to hospital and hospital to hospital radio communications.

"Medical Advisory Board" means the advisory committee appointed by the Multnomah County Board of Commissioners as defined in MCC 6.32.

"MCC 6.32" means the Multnomah County Code cited as the Multnomah County Emergency Medical Services Code.

"Mass Casualty Incident" (MCI) means an emergency medical incident with a sufficient number of injured or ill persons to meet the requirements for scene and medical management as defined in the EMS Administrative Rules, MCI Plan.

"MED NET" means those radio frequencies used for EMS dispatch, on-line medical control, and MCI communications.

"Medical Resource Hospital" (MRH) means that hospital, contracted to EMS, to provide on-line medical advice and control to EMTs.

"Non-Emergency Ambulance" means an ambulance, licensed by the County, that provides routine transportation to patients who do not require emergency response. The level of care is dependent upon the patient's need.

"On-line Medical Advice (Control)" means medical direction and advice given to an EMT, by a physician, via radio or telephone as a supplement to the written patient care protocols.

"Private Emergency Ambulance" means an ambulance, operated by a private company, and licensed by the County to respond to emergency medical calls.

"Public Safety, Answering Point" (PSAP)/ 9-1-1 means the organization that answers calls for police, fire, and emergency medical assistance that are received from persons dialing 9-1-1. This service is provided by BOEC.

## 4. AMBULANCE SERVICE AREA BOUNDARIES

### 4.1 DESCRIPTION.

All of Multnomah County (see Section 2) comprises a single ambulance service area. The response time standard is currently uniform throughout the county. There is concern that the portions of the county that are rural in nature and have a low population density cannot support the ground response time standard and that it should be changed to reflect a more realistic requirement.

The use of the Urban Growth Boundary, developed by METRO, as a demarcation between urban and rural ambulance response time areas in the County will provide for a more realistic application of response time standards (Attachment A )

### 4.2 ALTERNATIVES FOR RESPONSE TIME REDUCTION. (INTERGOVERNMENTAL AGREEMENTS)

Because of the need to provide the most efficient service to citizens within Multnomah County, certain areas of the County have been deemed better served by agencies responding from outside the County. Intergovernmental agreements specify the details of service for each of these areas. (Attachment B) The areas affected are:

The far East portion of the Columbia Gorge.

The community of Dunthorpe.

The Skyline area in the Northwest portion of the County.

The area adjacent to Columbia County served by Highway 30.

In addition Multnomah County EMS serves areas in other jurisdictions by similar agreements. These areas are:

The North end of Sauvie Island.

Portions of the City of Portland located in Washington County.

The more organized use of helicopter response in the rural areas will help diminish the possible effects of the longer ground response. Identifying area where the use of the helicopter is considered the first choice of transport can speed the arrival time of the aircraft.

It is the intent of this plan to foster regional approaches to ambulance service area planning and management in order to reduce any negative effects due to political boundaries.

A maps showing the fire districts for first response, and city boundaries is included in Attachment C.

# 5.SYSTEM ELEMENTS

## 5.1 RESPONSE TIMES.

### 5.1.1 DISPATCH.

At least ninety (90) per cent of responses to medical calls received by the Public Safety Answering Point (PSAP - 9-1-1) will be dispatched within eighty(80) seconds. The BOEC fire/EMS dispatch will dispatch both fire first response and ambulances.

Medical call-taking and dispatch will be governed through a performance contract between Multnomah County EMS and BOEC. This contract specifies the procedures to be used for dispatch, the triage requirements for calls, pre-arrival instructions to be given to callers and the review process to be used for the medical dispatch function. The development of these criteria is the responsibility of the EMS Medical Director.(Attachment D)

### 5.1.2 STANDARDS.

Response time will be measured from the time of the dispatched unit's acknowledgment of the call notification by BOEC until the time that unit reports arrival at the scene of the emergency. The following response time standards apply only to emergency calls. Non-emergency calls dispatched by BOEC, or turned over to non-emergency ambulances, will be run in an expeditious manner.

First Responders will respond to at least ninety (90) per cent of medical calls in four (4) minutes, zero (0) seconds or less.

Rural First responders will respond in an expeditious manner.

Within the Urban Growth Boundary:

Fire medic ambulances will respond to at least ninety (90) per cent of medical calls in eight (8) minutes, zero (0) seconds or less.

Private ambulances will respond to ninety (90) per cent of medical calls in twelve (12) minutes, zero (0) seconds or less.

Outside the Urban Growth Boundary:

Fire medic ambulances will respond to at least ninety (90) per cent of medical calls in twenty (20) minutes, zero (0) seconds or less.

Private ambulances will respond to at least ninety (90) per cent of medical calls in twenty (20) minutes, zero (0) seconds or less.

## 5.2 LEVEL OF CARE.
(MEDICAL CALL RESPONSE DESIGN)

Multnomah County's emergency medical services will be provided using a "tiered" system of response. All emergency medical calls will receive either a BLS or ALS first response. Based on the priority dispatch triage criteria employed by EMS Dispatch, a fire medic ambulance or a private ambulance will be dispatched to the incident. Upon the arrival of the first responder, (or fire medic ambulance if first at the scene), a determination will be made as to the necessity and level of transport required. Fire medic ambulances will transport those patients in need of critical care as defined in the treatment protocols and triage guide. All other patients will be transported by private ambulances. First responders will remain at the scene when a contract ambulance is requested. Fire medic ambulances will return to service at the earliest opportunity, including those "canceled enroute", in order to maximize their availability and minimize emergency response resource requirements.

Transport triage criteria will be developed by the EMS Medical Director. It is estimated that up to twenty five(25) percent of 9-1-1 patients will be transported by fire medic units in Multnomah County.

## 5.3 PERSONNEL

### 5.3.1 FIRST RESPONSE

It is the goal of this system to have all first responders trained to the EMT-Basic level. It is recognized that because of the size and the volunteer nature of the Rural Fire Protection Districts serving Multnomah County, this training level may not be feasible in the near future.

Portland Fire and Gresham Fire currently have all response personnel trained to the EMT Basic level and provide ALS first response with some units with at least one (1) EMT-Paramedic responding.

### 5.3.2 AMBULANCES

Fire Medic ambulances will be staffed with two (2) EMT-Paramedics.

Private Emergency ambulances will be staffed with one (1) EMT-Paramedic and one (1) EMT-Basic

Ambulances providing non-emergency services and facility transfers will meet the staffing requirements necessary for the level services to be provided: BLS - two (2) EMT-Basic, ALS - one (1) (EMT-Paramedic and one (1) EMT-Basic. Additional standards may be set by the EMS Medical Director for critical care transfers or other specialized services.

Ambulances providing transport services to hospital-based transport teams, but not providing direct patient care with the ambulance crew members, must meet the BLS standards.

## 5.4 MEDICAL SUPERVISION

### 5.4.1 EMS MEDICAL DIRECTOR

Multnomah County will employ an EMS Medical Director (EMSMD) who will be the physician supervisor for all EMTs providing emergency medical services in the County. The EMSMD will provide medical input to all aspects of the EMS system and will have specific authority to set uniform standards of patient care for the County. These standards will include, but not be limited to:

Dispatch and pre-arrival protocols;

Transport triage criteria and protocols;

County specific EMT requirements;

Approved equipment, supplies and drugs;

Patient care protocols;

Medical criteria for response times; and

Patient transfer criteria.

The EMSMD will create policies for limiting the practice of EMTs if necessary and will ensure that these policies are carried out with adequate due process protections. The EMSMD will also set specific standards for training and education for EMTs and EMDs.

The EMSMD will ensure that all providers within the system participate in a quality management program designed to provide for the continuous quality improvement in patient care and all other aspects of emergency medical services. This process will provide the basis for changes in medical care protocols and the educational and training standards set forth by the EMSMD.

An EMS Medical Advisory Board will provide advice to the EMSMD. Other committees and groups may be formed to provide specific advice to the EMSMD or the EMS program.

(see Attachment E - EMSMD position description)

### 5.4.2 ON-LINE MEDICAL CONTROL

On-line medical control will be provided by the Medical Resource Hospital (MRH). Standards for on-line medical control and MRH operations will be set forth by the EMSMD and implemented through a performance contract with the hospital. The EMSMD will monitor the execution of that contract. (Attachment F )

### 5.4.3 RETROSPECTIVE MEDICAL CONTROL

(SEE QUALITY ASSURANCE, SECTION 5.8)

## 5.5 PATIENT CARE EQUIPMENT

Requirements for equipment and supplies will be determined by the level of service (ALS, BLS, emergency, non-emergency) provided.

### 5.5.1 FIRST RESPONDERS

All first response vehicles will be required to carry equipment and supplies appropriate to their level of service.

### 5.5.2 AMBULANCES

All ambulances will be required to maintain equipment, supplies, and drugs appropriate for their level of service (ALS, BLS) as required under OAR 333-28-050 and as required by the EMSMD. Ambulances will be inspected on a regular basis to determine compliance with these requirements. (Attachment G )

## 5.6 VEHICLES

### 5.6.1 FIRST RESPONDERS

First response vehicle standards are the responsibility of the agency that operates them.

### 5.6.2 AMBULANCES

Ambulances will meet all relevant State and Federal statutes and rules and will be required to meet any County requirements that are more stringent.

## 5.7 TRAINING AND EDUCATION.

### 5.7.1 EMERGENCY MEDICAL TECHNICIANS (EMT) LEVELS

Training and certification required for those technicians providing ALS care will be the level of EMT-Paramedic. In addition to the requirements for State certification, the EMSMD may require additional training or education.

Training and certification for other EMTs will be at least the level of EMT-Basic. In addition to the requirements for State certification, the EMSMD may require additional training or education.

It is the intent of this plan to require at a minimum, EMT-Basic training and certification for all 9-1-1 medical call first responders in the future.

### 5.7.2 CONTINUING EDUCATION.

At a minimum the EMS Program will provide for an annual inservice to introduce changes in patient care protocols, administrative rules, State requirements and other pertinent information. All EMT-Paramedics will be required to attend in order to maintain their credentials, approved by the EMSMD. In addition, a series of continuing education conferences will be coordinated through MRH.

The EMSMD may require additional training and education. Provider agencies may offer training and education to their employees, however this training and/or education must be approved by the EMSMD. Coordination of offerings between providers will be strongly encouraged. The training and education criteria set forth by the EMSMD will

be based on the needs identified in the quality improvement process.

## 5.8 QUALITY ASSURANCE AND IMPROVEMENT

### 5.8.1 STRUCTURE

The basis for quality assurance in the County will be a Continuous Quality Improvement (CQI) process. This model, based on the Total Quality Management theory espoused by W. Edwards Deming, is currently employed in a number of service industries, including hospitals. The focus of this process is the identification of potential problems through a statistical analysis of data representing various aspects of system performance (e.g. dispatch, EMT patient care). Specific indicators and benchmarks are used in the problem identification process. When problems are identified, their resolution is accomplished within the involved system components through participation by the people responsible for the operation of these components. The process employed may utilize peer review, a problem solving group, or other methods. Problems are addressed at the appropriate level within the organization. The end result is improved service.

The central point for the CQI process will be the System Quality Management Committee, chaired by the EMSMD, with representation from all components in the system. The committee will coordinate the process and make recommendations, based on data reviews and problem solving outcomes.

### 5.8.2 PROCESS AND PROBLEM RESOLUTION

The CQI process will analyze data on all aspects of the EMS system including dispatch, response times, medical supervision and control, patient care, EMT and EMD performance, and other components. The data will come from computer databases, patient care reviews, complaint patterns, patient outcomes, and other relevant sources. The outcomes of the process are information, problem solving, and system improvement. These outcomes will serve as the basis for system change.

The EMS office will provide staff support for the CQI process. The CQI process is *not* oriented on fixing blame for mistakes, but on learning from the analysis and resolution of identified problems.

### 5.8.3 SANCTIONS

It is not the purpose of the CQI process to apply sanctions or other remedies to non-compliant providers. Any remedies employed will be identified in the contract or agreement with the provider. Any remedies directed to individual EMTs will be the responsibility of the EMSMD.

# 6. COORDINATION

## 6.1 ASA PLANNING AND ADMINISTRATION

### 6.1.1 PLANNING

MCC 6.32 establishes the authority by the Board of County Commissioners (BCC) to develop, approve, and administer the ambulance service plan. MCC 6.32 further defines the administration of the EMS system and the license requirements for ambulances providers (emergency and non-emergency) and first responder agencies.

Input into the planning process and into EMS system operations was received from the Medical Advisory Board (MAB) and the Provider Board as provided for in MCC 6.32. In addition, all interested parties were invited to participate in work groups that provided specific input and technical advice for the planning process.

### 6.1.2 RATE DETERMINATION AND CONTROLS

Rates for emergency response ambulance service will be set as part of the agreement and contracting process. A committee, comprised of EMS providers, business experts, and service users, will serve as a rate review body to hear and recommend action concerning initial rate proposals and any subsequent requests for rate adjustments. Formulas may be applied to the rate adjustment process such as the Consumer Price Index and will be specified in the contract. The committee recommendations will be made to the EMS Program and the BCC as part of the contract approval process.

Non-emergency ambulances will not be subject to the rate determination process. Fees charged for their services will be driven by the market for such services.

### 6.1.3 EMS ADMINISTRATION

Administration of the ambulance service plan and the EMS system will reside with the Multnomah County Health Department, EMS Program Office. All medical care components of the system will be under the authority of the EMS Medical Director.

Specific relationships with first responders and emergency ambulance providers will be delineated in intergovernmental agreements and service contracts These

documents will be performance oriented and specify the duties, responsibilities, compensation, remedies, and other aspects of the relationship between the County and the provider.

The EMS program Office will administer and monitor these agreements and make recommendations to the BCC on the continuance, renewal, or termination of the agreements.

Non-emergency ambulances will be regulated by ordinance and no agreements will be executed.

## 6.2 COMPLAINT REVIEW AND RESOLUTION

Complaints regarding EMS provider actions or services will be received by the EMS Program Office from any source. All information relevant to the complaint will be collected and reviewed by EMS staff. The information may include dispatch records, patient care reports, invoices for service, incident reports, hospital records, interviews, and other documents. Complaints will be resolved through three mechanisms:

1. Medical care complaints will be referred to the Quality Assurance Case Review for impartial review and recommendations. Disposition of these complaints will be handled by the EMS Medical Director.

2. Dispatch and system response complaints will be initially reviewed by EMS staff. Some complaints may be referred to the Dispatch Committee for review and recommendation. Individual case dispositions will be handled by the EMS Program Office.

3. Complaints about ambulance charges and other non-medical, provider-related complaints will be reviewed by the EMS Program staff who will be responsible for the disposition of each case.

All complaints that include medical or other sensitive information about identifiable patients will be considered a function of the Quality Assurance process. Confidentiality will be protected as required by relevant statutes.

All complaints and their resolutions will constitute a data source available to the Quality Improvement process. In addition, all complaint information will be available to the EMS Medical Director for use in the medical supervision of EMTs.

## 6.3 MUTUAL AID AGREEMENTS.

### 6.3.1 ROUTINE EMS SERVICES (AMBULANCE AND FIRST RESPONSE)

For certain portions of Multnomah County, intergovernmental agreements will allow for response from agencies outside of the County. Multnomah County agencies will respond into other jurisdictions under similar agreements. The areas are described in Section 4.2.

### 6.3.2 UNUSUAL CIRCUMSTANCES (MCI, DISASTER )

Fire District mutual aid agreements are in place for events that overtax the resources of a given fire district. These will apply for EMS services in a disaster or other major incident.

Similar agreements will be executed to allow ambulances from outside the County to respond at the request of EMS Dispatch.

In addition, all ambulance licensed in Multnomah County are required to respond to disasters and MCI when requested to do so by the EMS Office.

## 6.4 DISASTER RESPONSE.

### 6.4.1 MASS CASUALTY INCIDENT.

The County's Mass Casualty Incident (MCI) plan is developed by a multi-disciplinary, tri-county committee and adopted under County Ordinance (MCC 6.32). This plan, and similarly adopted plans used by the counties surrounding Multnomah County provide the direction for the organization and use of resources in the event of a MCI. This plan is also incorporated as an annex in the emergency management disaster plans of the County and other local jurisdictions.(Attachment H)

In an MCI, medical communication and patient destination is the responsibility of the Regional Hospital which maintains the HEAR radio network.

In the event that resources exceeding those normally available for EMS service to the County are needed, additional ALS and BLS ambulances and other resources within the County may be used. The EMS Administrator (or BOEC, per protocol) may request the use of out-of-county resources through those jurisdiction's emergency managers. A resource list is maintained at BOEC.

### 6.4.2 DISASTERS

Planning has started that will identify how medical resources will be used in the event of a disaster. For purposes of this planning, disasters are events that disrupt the normal infrastructure that is relied upon to provide daily EMS services. These could include earthquakes, floods, or other events that cause failure of communications, roads, power, medical care sites, overwhelming numbers of ill or injured, or similar problems. The plan will include initial assumptions on the availability of emergency medical care, immediate operations, and recovery from the event. This planning is a cooperative regional activity.

## 6.5 SPECIAL PERSONNEL AND EQUIPMENT.

### 6.5.1 HAZARDOUS MATERIAL RESPONSE (HAZ-MAT)

HAZ-MAT response is the responsibility of the fire districts within Multnomah County. HAZ-MAT response plans include the determination of the hazard, its effect on people, and the appropriate neutralization, decontamination and medical care actions to take in the pre-hospital and hospital settings. (Attachment I)

Transport and receiving hospital standards for exposed patients and care givers are under development.

### 6.5.2 SEARCH AND RESCUE

Search and rescue operations are the responsibility of the Multnomah County Sheriff. The Sheriff's Office serves as incident commander for search and rescue operations. EMS and fire responders provide resources as required by the incident commander. In addition to the governmental and associated volunteer resources, there is a specialized team (Reach and Treat) available from one licensee.(Attachment J)

### 6.5.3 SPECIAL EMERGENCY RESPONSE TEAM (SERT)

In addition to the standard EMS response, specialized paramedics from the fire services provide emergency medical service to the Police SERT team members. This is a function controlled by the police and not part of the normal EMS response.

### 6.5.4 SPECIALIZED RESCUE

Multnomah County, through the fire districts, has the following specialized rescue abilities:

Extrication

High Angle Rescue

Trench Rescue

Dive rescue

There is no specialized medical component to these rescue services. Medical care is provided by Fire EMTs assigned to the rescue team.(Attachment I)

## 6.6 EMERGENCY COMMUNICATIONS AND SYSTEM ACCESS.

### 6.6.1 TELEPHONE

All of Multnomah County is served through a single Public Safety Answering Point (PSAP, 9-1-1 center) accessible by callers through Enhanced 9-1-1. (Note: the Port of Portland Airport is considered a secondary answering point). EMS contracts with the Portland City Bureau of Emergency Communications (BOEC) for emergency call answering, medical triage and pre-arrival instructions, and emergency ambulance dispatch. In addition BOEC provides the same service for all police departments in the county and will soon provide similar services for the fire departments. All personnel are trained to meet Emergency Medical Dispatch (EMD) standards as prescribed by the State. In addition, under County rules, if a person calls an ambulance company and needs emergency care, the company must triage that request using the same triage guide that is used at BOEC and then pass call information to BOEC.

### 6.6.2 AMBULANCE AND FIRST RESPONSE DISPATCH

Current EMS call-taking and dispatch is governed by a set of protocols and procedures, developed by a committee of dispatchers, first responders, EMTs, providers, and physicians. With the proposed changes in the system, "criteria based dispatch" protocols and procedures will be recommended to the EMS Medical Director and promulgated as formal County EMS administrative rules. EMS Dispatch at BOEC is required to use these protocols and procedures. (Attachment K -Current protocols)

BOEC will dispatch all first responders and emergency ambulances.

9-1-1 medical calls are initially processed by call-takers who use the EMS approved call triage guide to determine the nature of the call and the level of emergency or non-emergency response required.

Call information is then sent (via computer) to the dispatcher. Through a computer aided dispatch system (CAD)under development, the status of all fire units and ambulances is available to the dispatcher. The dispatcher sends fire and ambulance units as appropriate, depending on the nature and location of the call.

As dispatch is under way, the call-taker (who has remained on the line) may provide the caller with pre-arrival instructions for patient care as specified by the protocol.

Depending upon the location of the call and the availability of ambulances, an out-of-county unit may be dispatched. This is accomplished via direct radio contact or by telephone to the appropriate dispatch center.

### 6.6.3 RADIO COMMUNICATIONS

Current:

All dispatch is done on (UHF) MED NET 9 (462.950).

Medical direction from MRH is communicated on (UHF) MED NET 4 (463.075).

Ambulance to receiving hospital patient information is communicated on (VHF) HEAR (155.340 MHz)

MCI communication is done on (UHF) MED NET 1 (463.000)

Effective January 1, 1994:

All of the above communications will be done utilizing a "800 MHz trunked" radio system now being installed through out the County by the City of Portland. In addition each emergency unit will be equipped with a mobile data terminal (MDT) for communication with EMS dispatch and the CAD system. The ability to use the HEAR system will be maintained.

### 6.6.4 HOSPITAL AVAILABILITY

The availability of hospitals to receive ambulance patients is communicated on a computer network (CHORAL). This system displays a number of hospital status conditions that may result in the diversion of ambulances. (Attachment L)

### 6.6.5 EMERGENCY MEDICAL DISPATCHER TRAINING

All dispatchers and call takers at both BOEC and at the ambulance companies are trained to meet Emergency Medical Dispatcher EMD standards set forth by the State Board on Public Safety Standards and Training (BPSST). The EMS Medical Director is responsible for the medical protocols used by these dispatchers and for the medical supervision of their performance and may set forth additional requirements.

# 7. PROVIDER SELECTION

## 7.1 INITIAL ASSIGNMENT

The initial assignment of providers will involve two processes:

The fire transport service will be assigned to the Portland Fire Bureau (PFB) through an intergovernmental agreement. PFB will provide service to all of Multnomah County and will execute any necessary agreements with other fire districts that may be required. These agreements will require County approval.

The private ambulance service will be awarded through a competitive bid process or by other methods carried out in accordance with approved County procedures. If bid, the EMS Program will develop a request for proposal (RFP) document to solicit proposals from interested parties. The County will appoint a committee of independent reviewers with no interest in the award to accept the proposals, review them according to pre-determined criteria, and select the provider that best meets those criteria. The committee will recommend that provider to the Board of County Commissioners for award of the contract.

## 7.2 REASSIGNMENT

Should the PFB resign its interest in providing transport services, or should the County terminate the agreement for service, the contracting process described in the initial assignment process will be used to select a single private provider for all emergency ambulance services.

Should the initially selected private provider resign its interest in the ASA or should the County terminate its agreement for service, the contracting process identified in the initial assignment process will be used to select a replacement ambulance service.

## 7.3 APPLICATION FOR AN ASA

Applications from prospective ambulance providers will be accepted in accordance with the provisions of the RFP.

## 7.4 NOTIFICATION OF VACATING AN ASA

A notice of resignation of its interest in the ASA by either the PFB or the private ambulance provider will be required in accordance with the provisions of the initial service agreement or contract.

## 7.5 MAINTENANCE OF LEVEL OF SERVICE

In order to insure that emergency medical services are uninterrupted should a provider vacate the ASA, a one year notice will be required in the intergovernmental agreement between PFB and the County. This will allow the County sufficient time to select another provider. A similar six month notice will be required in the agreement with the private ambulance provider. Penalties for insufficient notice will be made part of the contract.

# Emergency Medical Services

**Multnomah County**

ATTACHMENTS

TO THE

MULTNOMAH COUNTY

AMBULANCE SERVICE PLAN

1993

## ATTACHMENTS

A. ASA AND RESPONSE TIME ZONES

B. INTERGOVERNMENTAL AGREEMENT
RESPONSE TO MEDICAL CALLS

C. 9-1-1 FIRE DISTRICTS CITIES

D. BOEC CONTRACT

E. EMS MEDICAL DIRECTOR
POSITION DESCRIPTION

F. MEDICAL RESOURCE HOSPITAL CONTRACT

G. AMBULANCE EQUIPMENT
ALS
BLS

H. MASS CASUALTY INCIDENT PLAN

I. HAZ-MAT
SPECIALIZED RESCUE

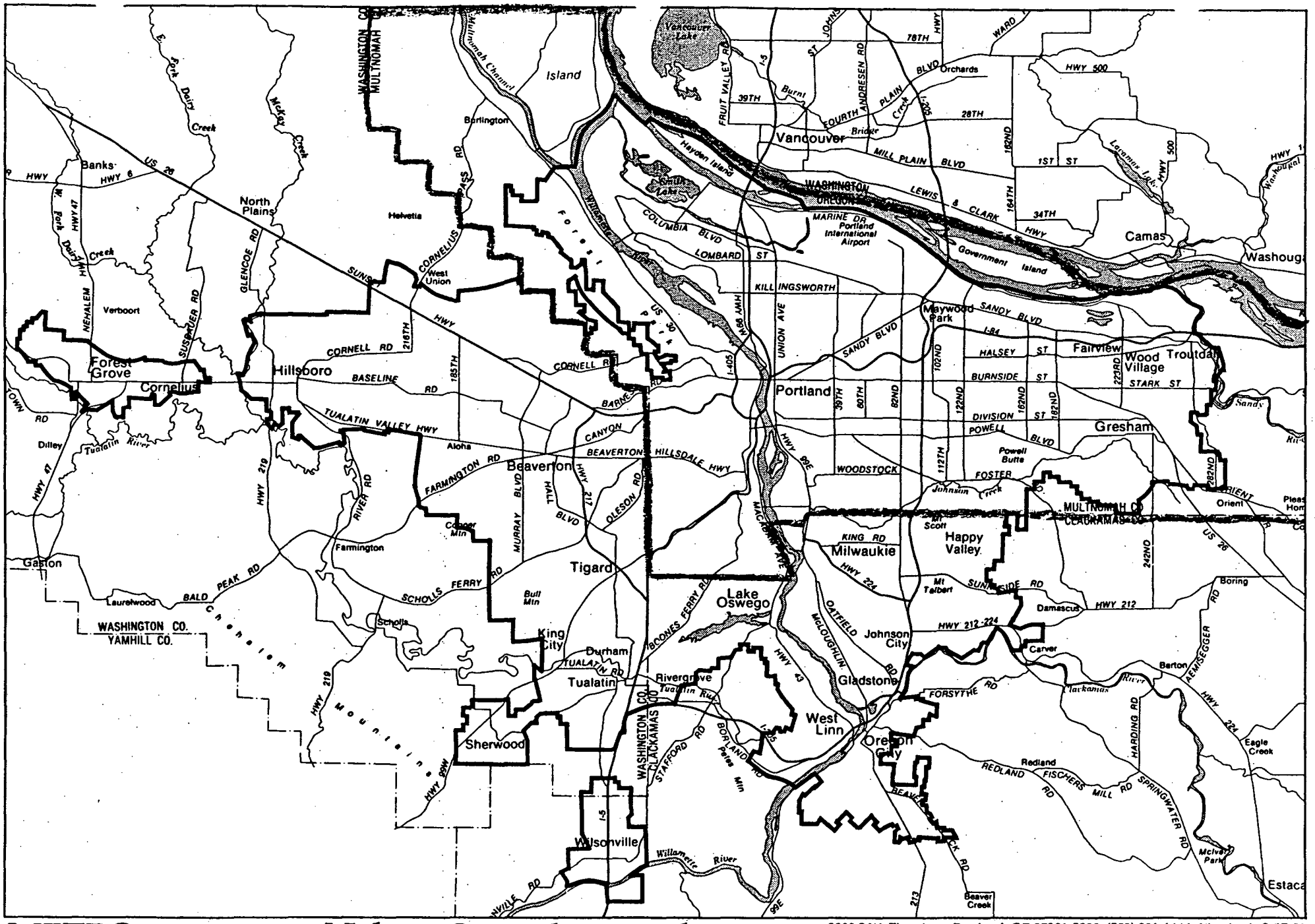
J. SEARCH AND RESCUE PROTOCOL

K. DISPATCH PROCEDURES
TRIAGE GUIDE

L. CHORAL

# ATTACHMENT A

# ASA MAP AND RESPONSE TIME ZONES




**METRO**

# *Urban Growth Boundary*

2000 S.W. First Ave., Portland, OR 97201-5398, (503) 221-1646, 1" = 4 mi., 3-87-01

# ATTACHMENT B

# INTERGOVERNMENTAL AGREEMENT

# RESPONSE TO MEDICAL CALLS

# (EXAMPLE)

INTERGOVERNMENTAL AGREEMENT
Between
MULTNOMAH COUNTY
and
WASHINGTON COUNTY

Multnomah County and Washington County enter into this agreement pursuant to the authority granted in Oregon Revised Statutes 190.010 in order for Multnomah County to administer the regulation of emergency medical and ambulance services under the Multnomah County Code in the area of Washington County that is within the city limits of the City of Portland. Multnomah County is a political subdivision of the State of Oregon, organized and existing under the laws and Constitution of the State of Oregon. Washington County is a political subdivision of the State of Oregon, organized and existing under the laws and Constitution of the State of Oregon.

THE PARTIES AGREE THAT:

1. Effective upon passage of this agreement by both counties, Multnomah County shall administer the regulation of emergency medical and ambulance services under the Multnomah County Code in the area of Washington County that is within the city limits of the City of Portland.

2. Multnomah County shall comply with all applicable state and federal laws, rules and regulations that are now in effect regarding emergency medical and ambulance services.

3. Multnomah County shall defend, save harmless, and indemnify Washington County and any of its officers, employees, and agents to the extent obligated by the Oregon Tort Claims Act, where applicable, against any and all claims or demands arising out of any and all alleged acts or omissions by Multnomah County or any of its Officers, employees, or agents occurring during administration of emergency medical and ambulance services in the area of Washington County that is within the city limits of the City of Portland.

4. Washington County shall have no responsibility for the cost of administering emergency medical and ambulance services in the area covered by this agreement, and shall receive no portion of the franchise fees, if any, adopted and collected by Multnomah County.

5. This agreement shall continue indefinitely but may be terminated by either party with sixty (60) days written notice to the other party.

RATIFIED
Multnomah County Board
of Commissioners
11/30/89

Bonnie L. Hays
Chairman
Washington County
Board of Commissioners

10-30-89
Date

Attest:

Pam Pickbast
Recording Secretary

Approved as to form:

Washington County Counsel

Gladys McCoy
Chair
Multnomah County
Board of Commissioners

12/4/89
Date

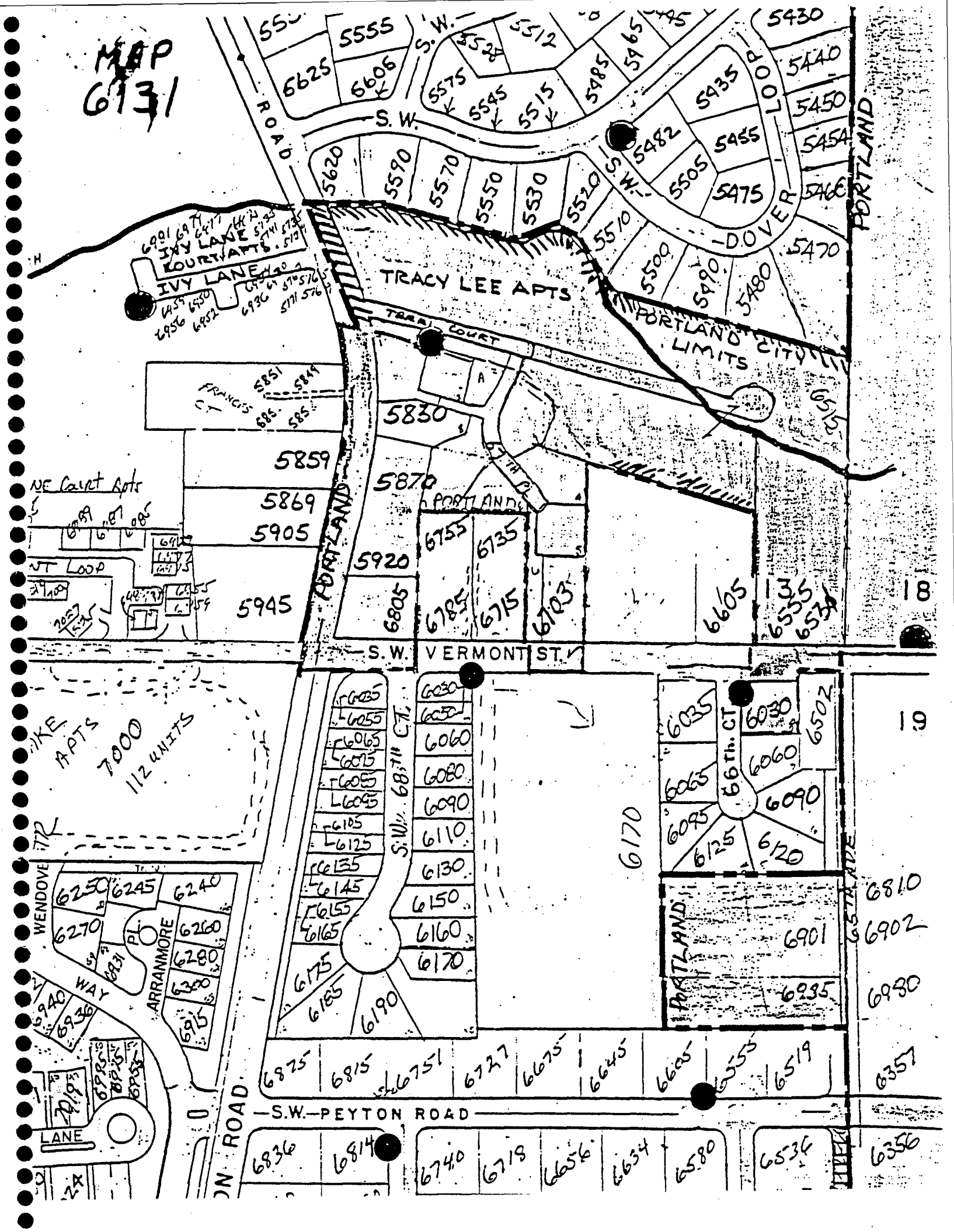
Attest:

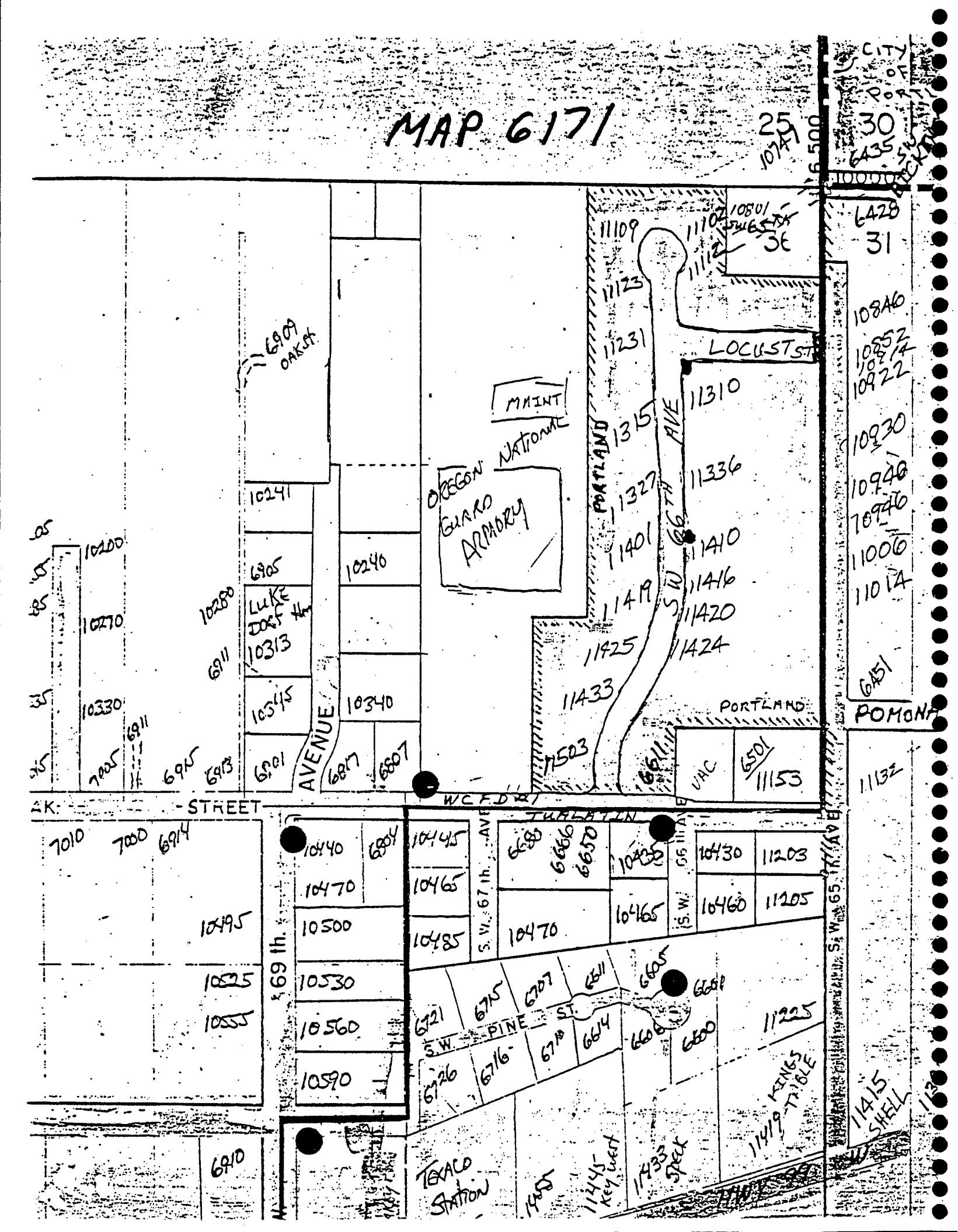
Anne McGawin
Recording Secretary

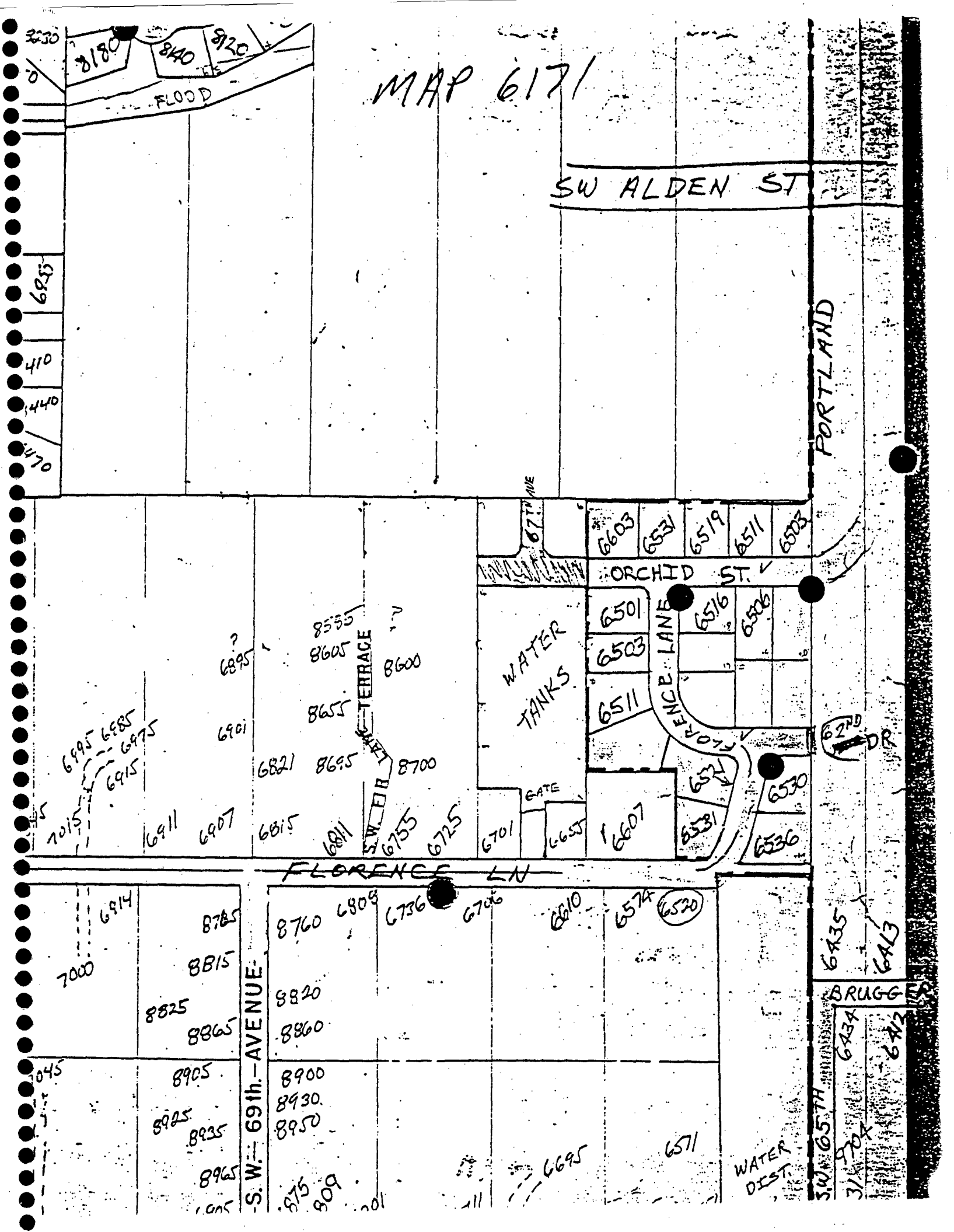
Approved as to form:

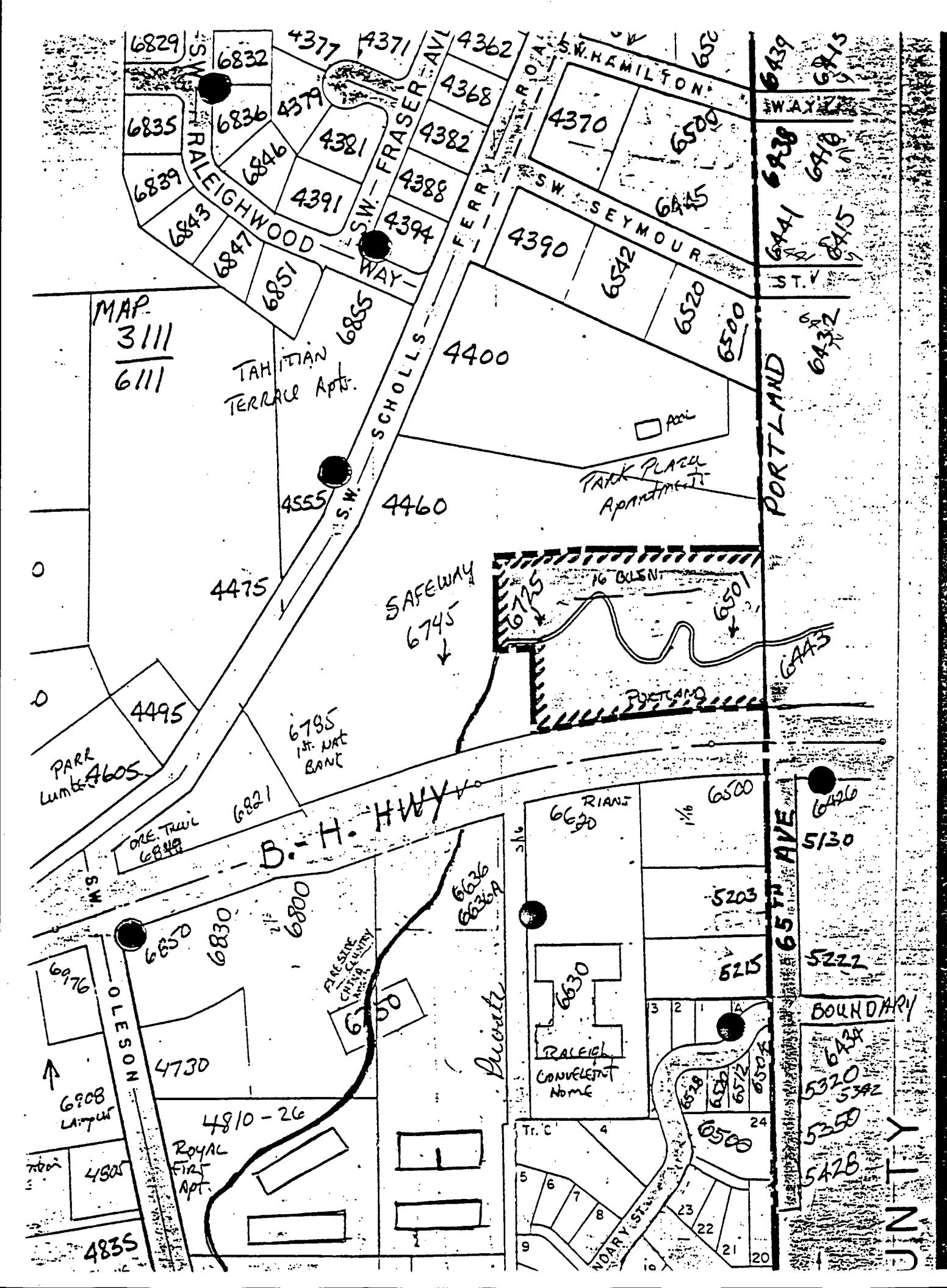
Multnomah County Counsel

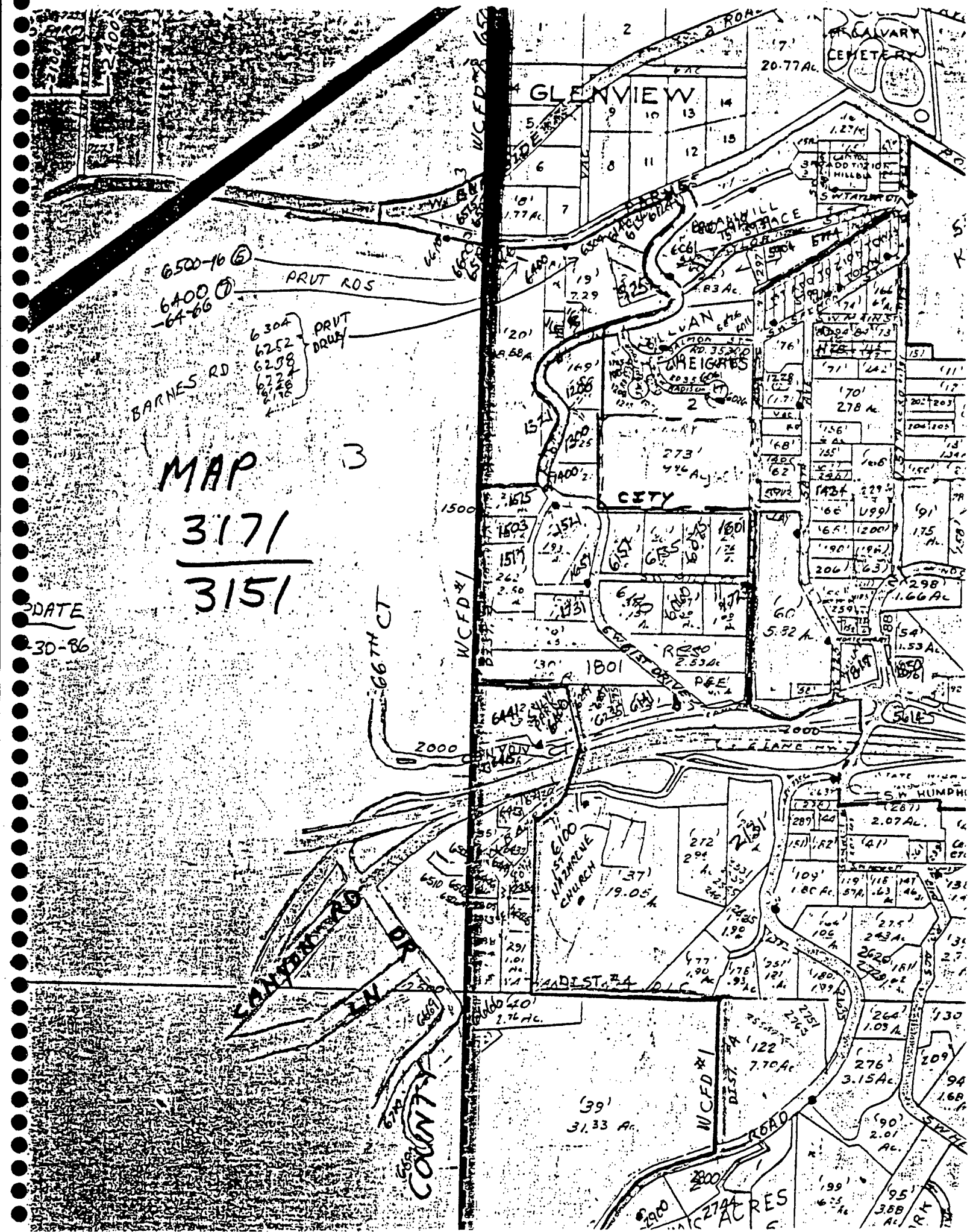
APPROVED WASHINGTON COUNTY
BOARD OF COMMISSIONERS
MINUTE ORDER # 89-285
DATE 8-8-89

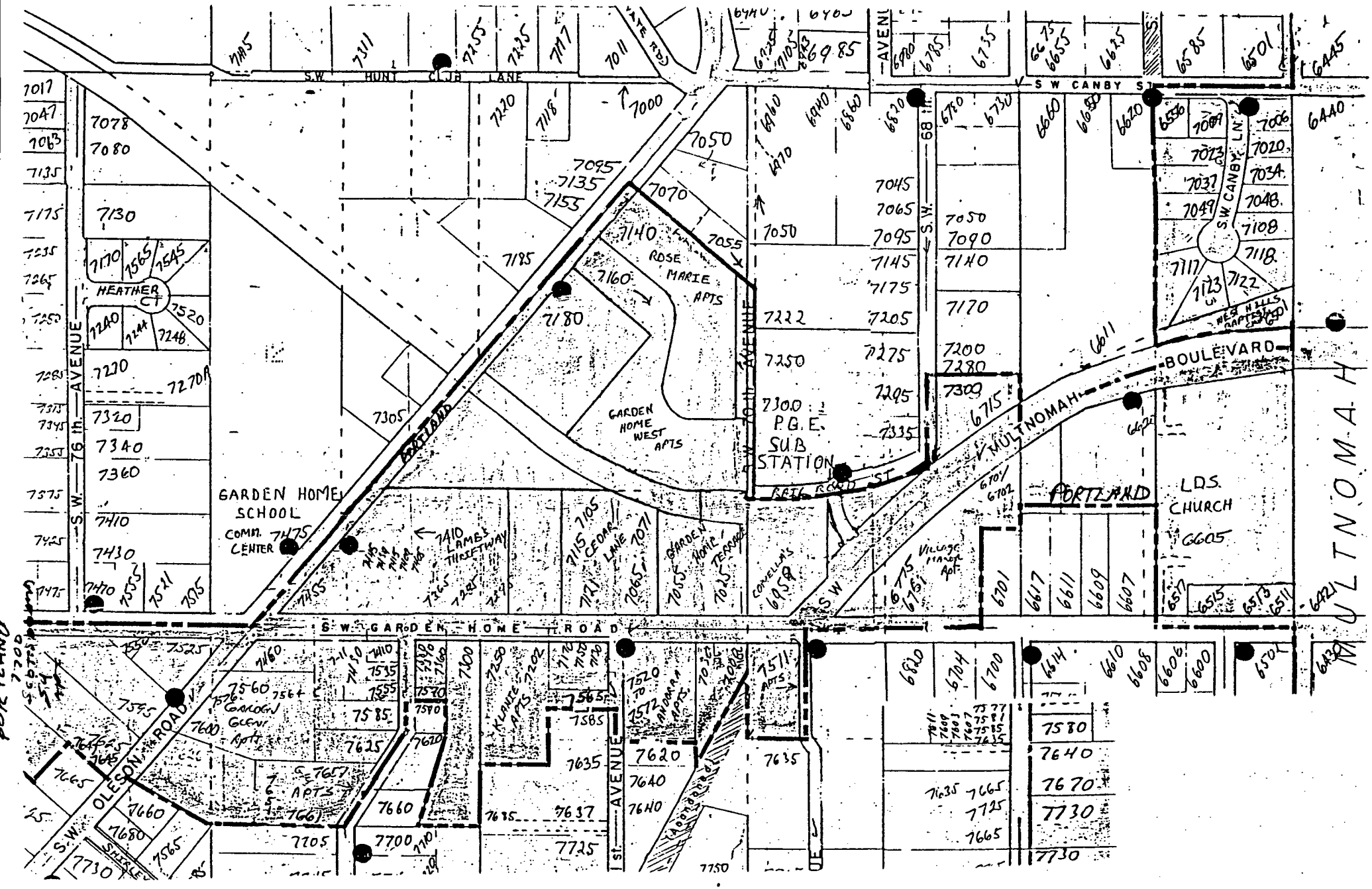

MAP 6131
S.W. ROAD
S.W. LOOP
S.W. DOVER
PORTLAND
TRACY LEE APTS
IVY LANE COURT APTS.
IVY LANE
TRACY COURT
PORTLAND CITY LIMITS
FRANCIS CT
NE Court Apts
ST LOOP
PORTLAND
S.W. VERMONT ST.
IKE APTS
7000
112 UNITS
S.W. 68TH CT.
66th. CT
WENDOVE
ARRANMORE
PL.
WAY
LANE
S.W. PEYTON ROAD
18
19


MAP 6171
CITY OF PORTLAND
25
30
31
6435
6428
10747
6500
10801
11109
11102
11112
11123
11231
LOCUST ST
10846
10852
10914
10922
10930
10946
10946
11006
11014
11310
11315
11327
11336
11401
11410
11419
11416
11420
11425
11424
11433
11503
6451
POMONA
PORTLAND AVE
MAINT
OREGON NATIONAL GUARD ARMORY
6909 OAK ST
10241
10200
10270
10280
10313
10330
10345
10340
6905
6911
6913
6901
6907
6807
AVENUE
LUKE DOCT
VAC
6501
11153
11132
OAK STREET
WCFDR
TUALATIN
7010
7000
6914
10440
6804
10445
10470
10465
10485
10495
10500
10525
10530
10555
10560
10590
69th
S.W. 67th AVE
6680
6666
6650
10435
10430
11203
10460
11205
10470
S.W. 65th AVE
6721
6715
6707
6611
6605
6601
PINE ST.
6626
6616
6610
6604
6600
11225
6910
TEXACO STATION
11445
KEY LUCY
11433
SPEEDY
11419
KINGS TABLE
11415
SHELL
HWY 99


MAP 6171
SW ALDEN ST
PORTLAND
67TH AVE
ORCHID ST.
WATER TANKS
FLORENCE LANE
62ND DR
SW TERRACE
FLORENCE LN
S.W. 69th AVENUE
BRUGG
SW 65TH
WATER DIST.
FLOOD
GATE
8180
8140
8120
8555
8605
8600
8655
8700
6895
6901
6821
6815
6811
6755
6725
6701
6655
6607
6695
6685
6975
6915
7015
6911
6907
6914
7000
8785
8815
8825
8865
8760
6809
6736
6706
6610
6574
6530
6531
6536
6603
6531
6519
6511
6503
6501
6516
6506
6503
6511
6435
6413
6434
6412
6304
8905
8925
8935
8965
8900
8930
8950
8975
809
201
111
6695
6571
045
410
440
470
695


MAP 3111 6111
TAHITIAN TERRACE APTS.
PARK PLAZA APARTMENTS
SAFEWAY
6745
1ST. NAT BANK
RALEIGH CONVELESCENT HOME
ROYAL FIRS APT.
PARK LUMBER
PORTLAND
S.W. HAMILTON
S.W. SEYMOUR
S.W. RALEIGHWOOD WAY
S.W. FRASER AVE
S.W. FERRY RD.
S.W. SCHOLLS
B.-H. HWY
S.W. OLESON
65TH AVE
BOUNDARY
JUNCTY
4370
4371
4377
4379
4381
4362
4368
4382
4388
4394
4390
4400
4460
4475
4495
4555
4605
4730
4810-26
4835
6500
6520
6542
6445
6439
6415
6441
6432
6426
6425
6501
6443
6829
6832
6835
6836
6839
6843
6846
6847
6851
6855
6785
6821
6849
6850
6830
6800
6636
6636A
6630
6620
6576
6508
5130
5203
5222
5215
5320
5342
5350
5428
5434


GLENVIEW
CALVARY CEMETERY
20.77 Ac.
WCFD #1
6500-16
6400-64-66
PRVT ROS
6304
6252
6258
6224
6178
PRVT DRWY
BARNES RD
MAP 3171/3151
DATE 3-30-86
CITY
1500
1801
66TH CT
2000
SANDALWOOD DR
COUNTY
ACRES
ROAD
WCFD #1
DIST #4
6100 ST MARONE CHURCH
19.05 Ac.
31.33 Ac.
7.70 Ac.
3.15 Ac.
2.07 Ac.
1.66 Ac.
1.53 Ac.
5.32 Ac.
2.78 Ac.
1.75 Ac.
2.01 Ac.
3.88 Ac.
1.80 Ac.
2.53 Ac.
2.60 Ac.
1.77 Ac.
7.29
4.68 A
4.96 Ac.
1.83 Ac.
1.27 Ac.
1.03 Ac.
2.76 Ac.
1.90 Ac.
.93 Ac.
1.09 Ac.
2.43 Ac.
1.01 Ac.
.57 Ac.
.63 Ac.
.41 Ac.
.53 Ac.
.99 Ac.
.95 Ac.
.99 Ac.
.65 Ac.
.74 Ac.
.68 Ac.
.62 Ac.
.60 Ac.
.56 Ac.
.54 Ac.
.50 Ac.
.46 Ac.
.43 Ac.
.39 Ac.
.37 Ac.
.35 Ac.
.33 Ac.
.31 Ac.
.29 Ac.
.27 Ac.
.25 Ac.
.23 Ac.
.21 Ac.
.19 Ac.
.17 Ac.
.15 Ac.
.13 Ac.
.11 Ac.
.09 Ac.
.07 Ac.
.05 Ac.
.03 Ac.
.01 Ac.


S.W. HUNT CLUB LANE
S.W. CANBY ST
S.W. 76th AVENUE
S.W. 70th AVENUE
S.W. 68th
S.W. CANBY LN.
HEATHER CT
ROSE MARIE APTS
GARDEN HOME WEST APTS
P.G.E. SUB STATION
BIG ROAD ST
BOULEVARD
MULTNOMAH
PORTLAND
L.D.S. CHURCH
GARDEN HOME SCHOOL
COMM. CENTER
LAMB'S THRIFTWAY
CEDAR LANE
GARDEN HOME TERRACE
CORNELIA'S
VILLAGE MINOR APT
S.W. GARDEN HOME ROAD
OLESON ROAD
S.W. 1st AVENUE
KUHNLE APTS
ANDORA APTS
7511 APTS
S.W. SHIRLEY
WEST HILLS BAPTIST CH

INTERGOVERNMENTAL AGREEMENT
Between
MULTNOMAH COUNTY
and
WASHINGTON COUNTY

Multnomah County and Washington County enter into this agreement pursuant to the authority granted in Oregon Revised Statutes 190.010 in order for Multnomah County to administer the regulation of emergency medical and ambulance services under the Multnomah County Code in the area of Washington County that is within the city limits of the City of Portland. Multnomah County is a political subdivision of the State of Oregon, organized and existing under the laws and Constitution of the State of Oregon. Washington County is a political subdivision of the State of Oregon, organized and existing under the laws and Constitution of the State of Oregon.

THE PARTIES AGREE THAT:

1. Effective upon passage of this agreement by both counties, Multnomah County shall administer the regulation of emergency medical and ambulance services under the Multnomah County Code in the area of Washington County that is within the city limits of the City of Portland.

2. Multnomah County shall comply with all applicable state and federal laws, rules and regulations that are now in effect regarding emergency medical and ambulance services.

3. Multnomah County shall defend, save harmless, and indemnify Washington County and any of its officers, employees, and agents to the extent obligated by the Oregon Tort Claims Act, where applicable, against any and all claims or demands arising out of any and all alleged acts or omissions by Multnomah County or any of its Officers, employees, or agents occurring during administration of emergency medical and ambulance services in the area of Washington County that is within the city limits of the City of Portland.

4. Washington County shall have no responsibility for the cost of administering emergency medical and ambulance services in the area covered by this agreement, and shall receive no portion of the franchise fees, if any, adopted and collected by Multnomah County.

5. This agreement shall continue indefinitely but may be terminated by either party with sixty (60) days written notice to the other party.

Bonnie L. Hays
Chairman
Washington County
Board of Commissioners

8-8-89
Date

Attest:

Pam Pyshant
Recording Secretary

Approved as to form:

[signature] 8/2/89
Washington County Counsel

Chairman
Multnomah County
Board of Commissioners

Date

Attest:

Recording Secretary

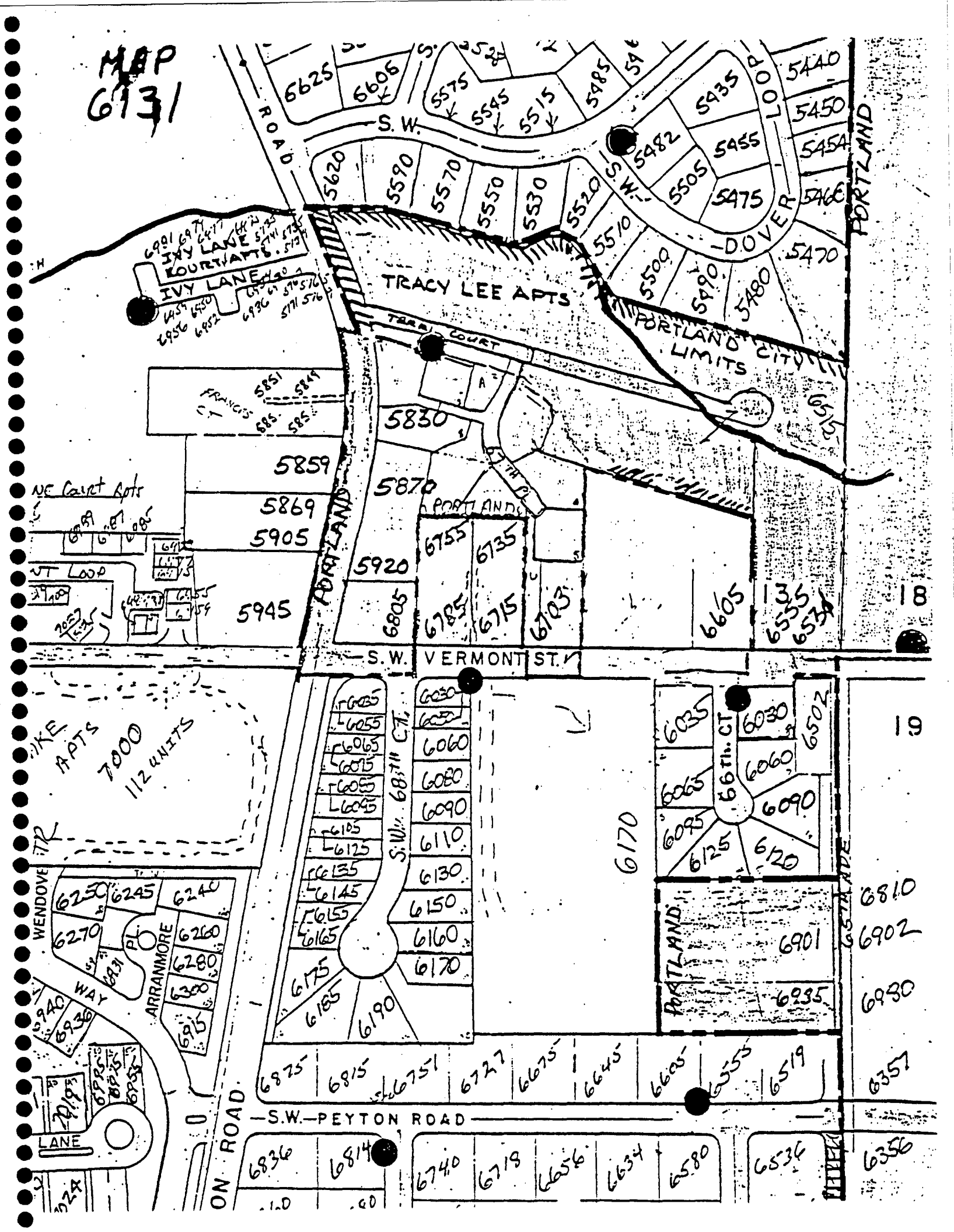
Approved as to form:

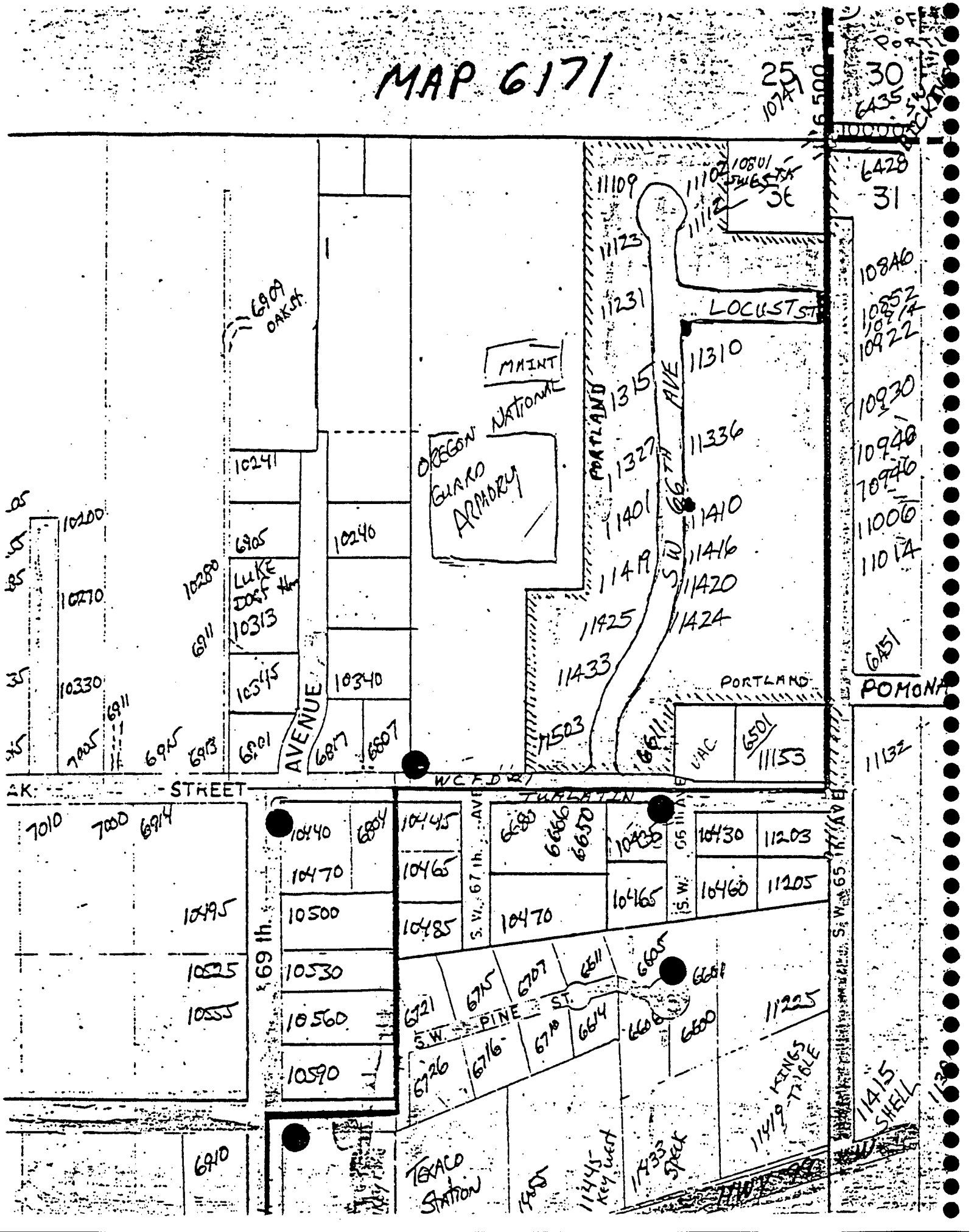
Multnomah County Counsel

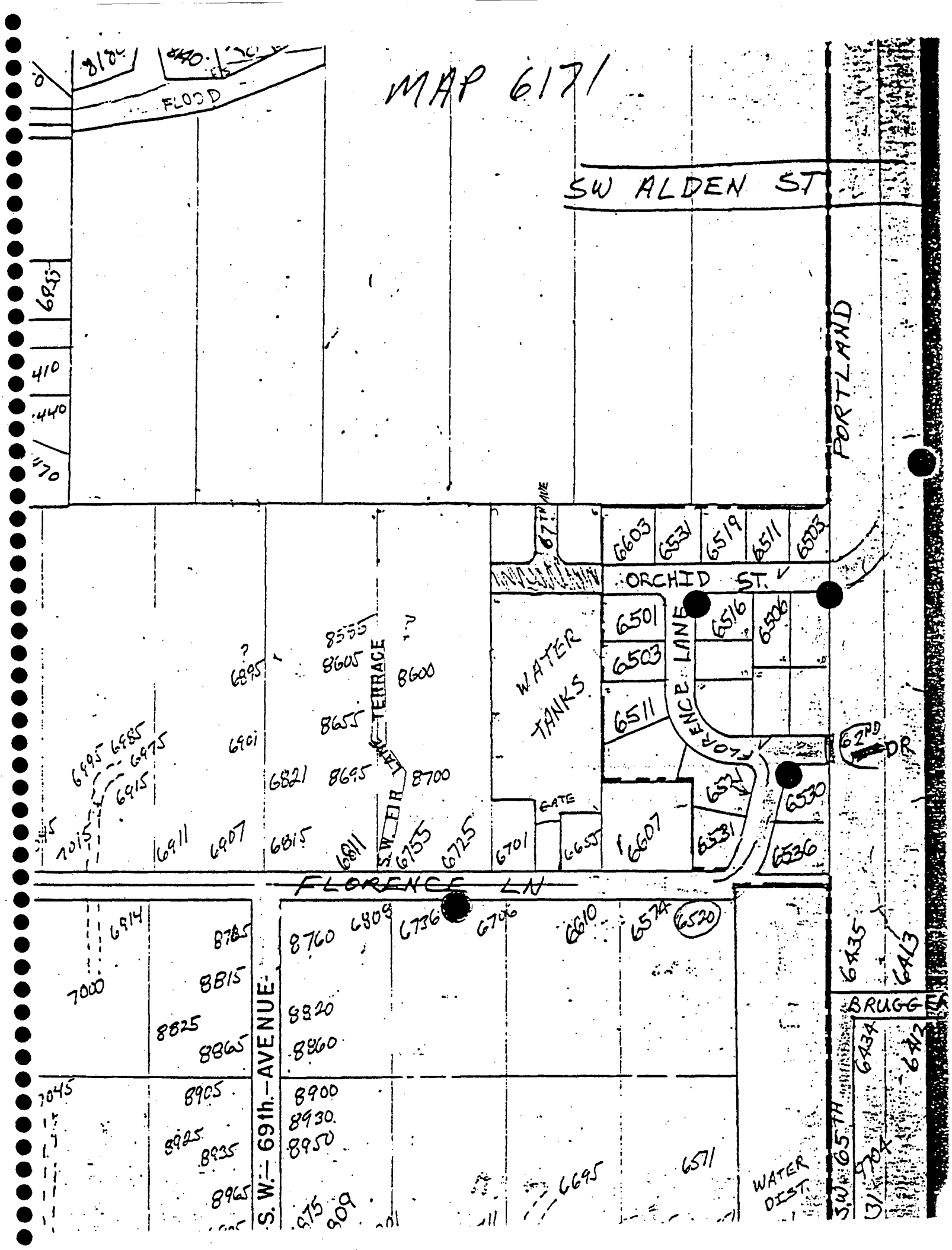
APPROVED WASHINGTON COUNTY
BOARD OF COMMISSIONERS
MINUTE ORDER # 89-285
DATE 8-8-89

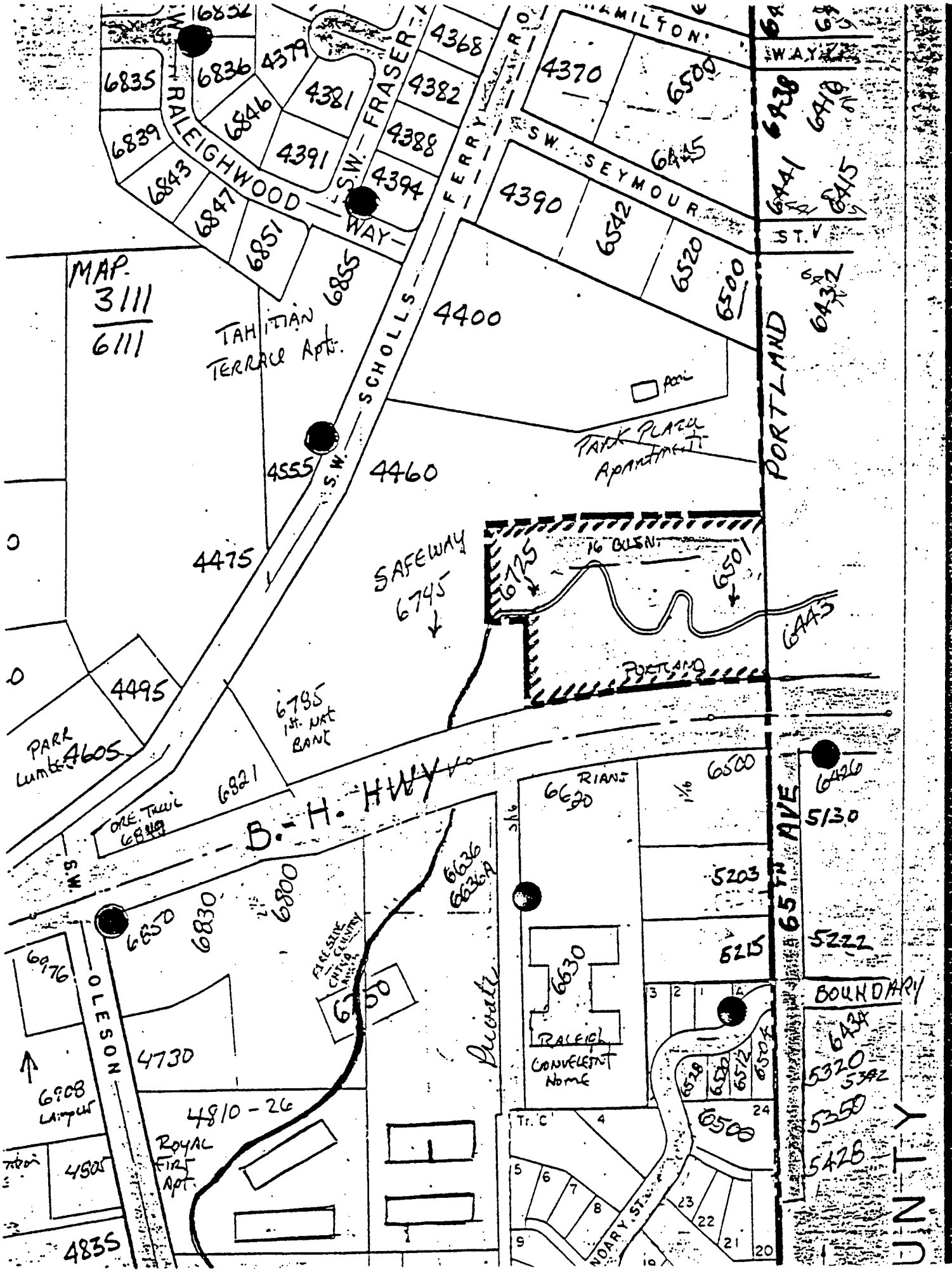


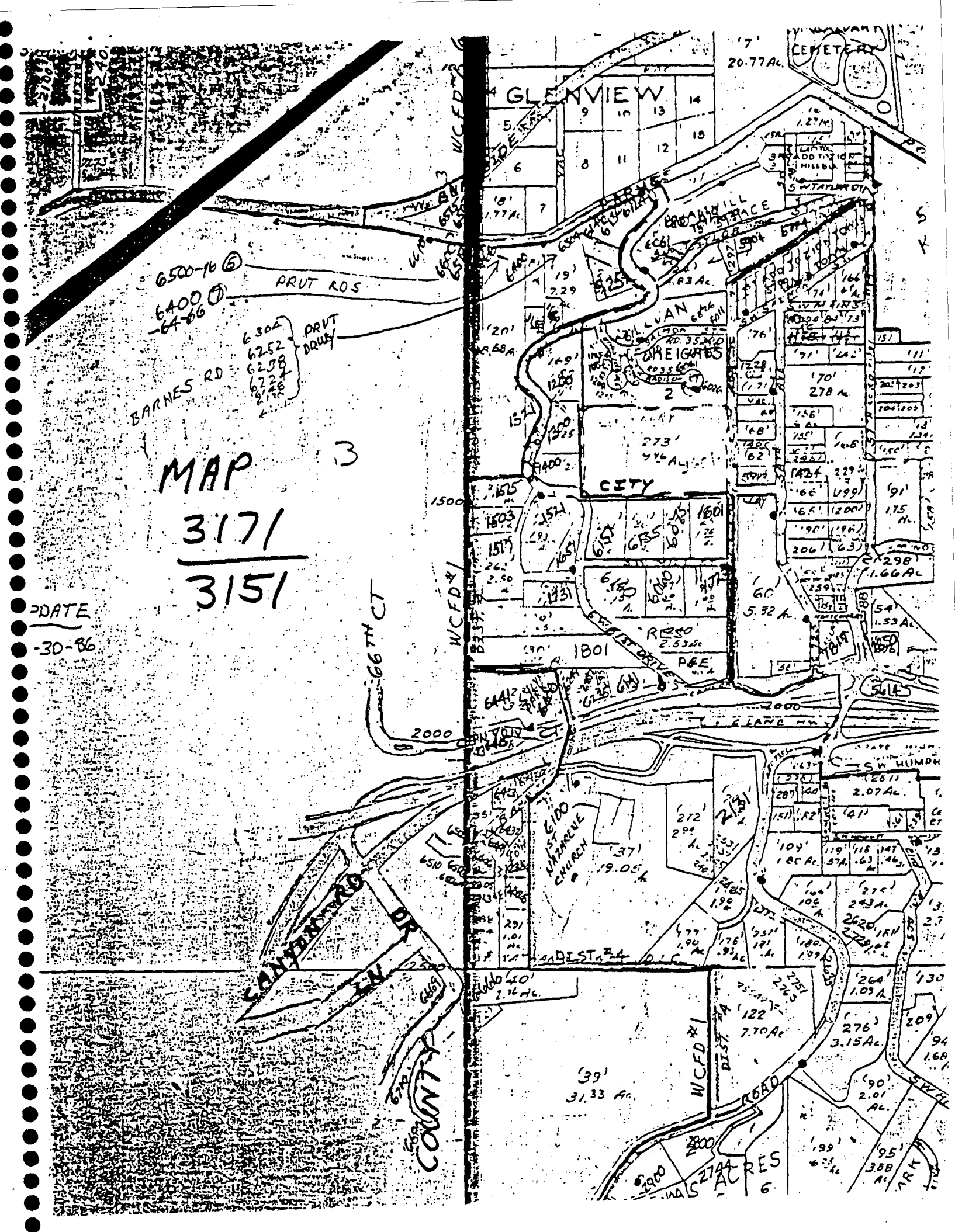
CC:BB:0050c:01/30/89

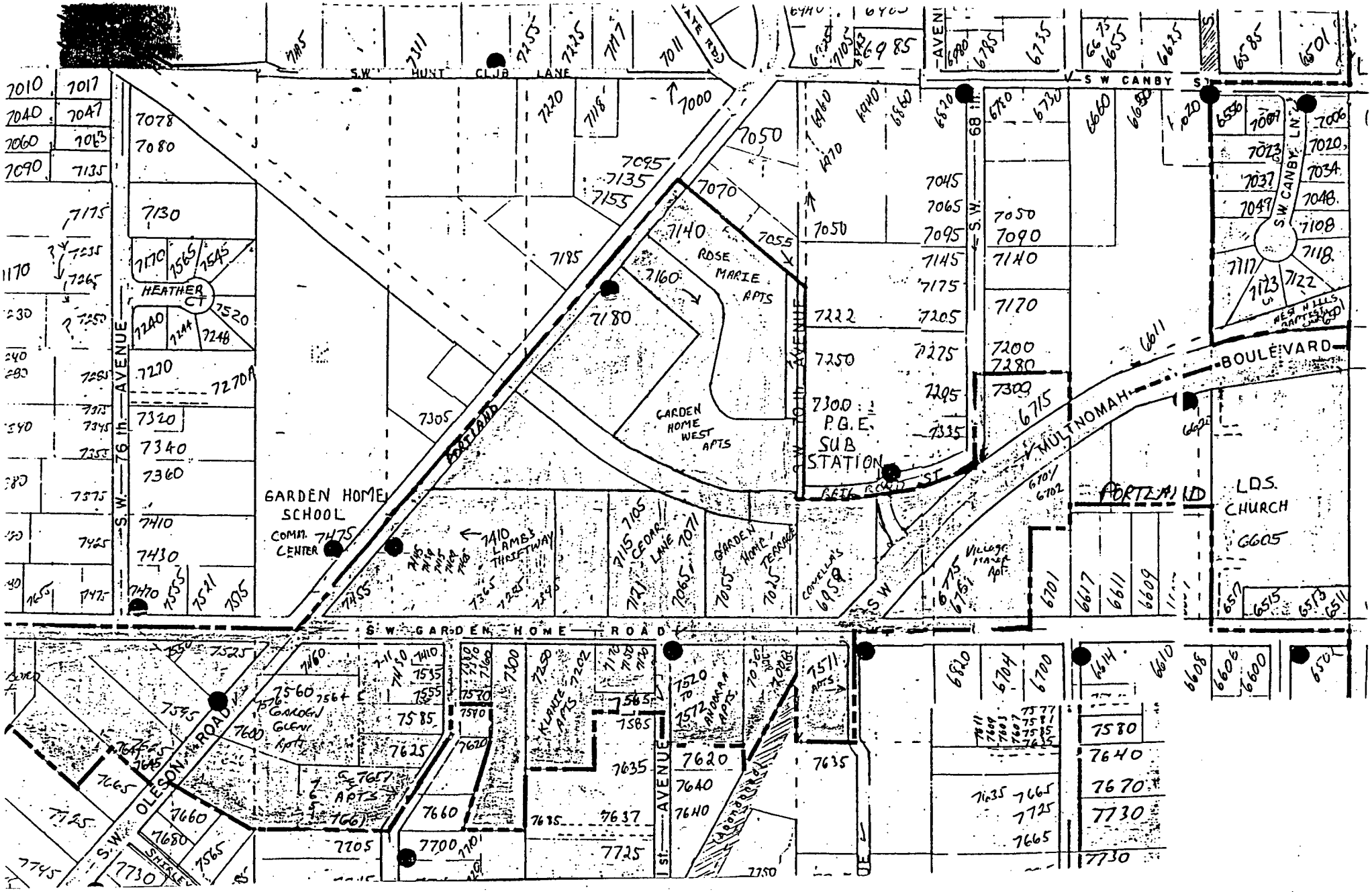

MAP 6131
S.W. ROAD
S.W. LOOP
S.W. DOVER
PORTLAND
IVY LANE COURT APTS.
IVY LANE
TRACY LEE APTS
TARA COURT
PORTLAND CITY LIMITS
NE Court Apts
PORTLAND
S.W. VERMONT ST.
7000
112 UNITS
S.W. 68TH CT.
66th. CT
WENDOVE
PL.
ARRANMORE
WAY
LANE
ON ROAD
S.W.—PEYTON ROAD
6170
6901
6935
6810
6902
6930
6357
6356


MAP 6171
25
10741
30
6435
POOF
SCENIC
6500
6428
31
10801
TWIGSTA
3E
11102
11112
11109
11123
11231
LOCUST ST.
10846
10852
10914
10922
10930
10946
10946
11006
11014
11310
11315
11327
11336
11401
1410
11419
11416
11420
11425
1424
11433
6451
POMONA
PORTLAND
MAINT
OREGON NATIONAL GUARD ARMORY
PORTLAND AVE
S.W. 66TH AVE
6909
OAK ST.
10241
10200
10270
10280
LUKE DORF Inc
10313
10315
10330
10340
6905
6911
7005
6917
6913
6901
6817
6807
AVENUE
11503
6611
VAC
6501
11153
11132
WCFD #1
TUALATIN
OAK STREET
7010
7000
6914
10440
6804
10470
10495
10500
10525
10530
10555
10560
10590
69th
10445
10465
10485
S.W. 67th AVE
6680
6666
6650
10435
10430
11203
10460
11205
10470
S.W. 65TH AVE
6721
6715
6707
6611
6605
6681
S.W. PINE ST.
6716
6710
6664
6660
6600
11225
6926
6910
TEXACO STATION
7450
11445
KEY WEST
11433
SPEEDY
KINGS TABLE
11419
11415
SHELL
HWY 99


MAP 6171
SW ALDEN ST
FLOOD
PORTLAND
67TH AVE
ORCHID ST.
WATER TANKS
FENCE LINE
62ND DR
GATE
SW TERRACE LANE
FLORENCE LN
S.W. 69th AVENUE
BRUGG
SW 65TH
WATER DIST.
6603
6531
6519
6511
6503
6501
6516
6506
6503
6511
6532
6530
6531
6536
6607
6701
6655
6725
6755
6811
6821
6815
6907
6911
6915
6901
6895
6975
6985
6995
8555
8605
8600
8655
8695
8700
7015
7000
6914
8785
8815
8825
8865
8760
8820
8860
8900
8905
8925
8930
8935
8950
8965
6809
6736
6706
6610
6574
6520
6435
6413
6434
6412
6704
6695
6571


MAP 3111 6111
TAHITIAN TERRACE Apts.
PARK PLACE Apartments
SAFEWAY 6745
PARK LUMBER 4605
RALEIGHWOOD WAY
SW FRASER
SW SCHOLLS FERRY RD
SW SEYMOUR
HAMILTON WAY
PORTLAND
16" GLEN
PORTLAND
B. H. HWY
SW 65TH AVE
OLESON
BOUNDARY
RALEIGH CONVALESCENT HOME
ROYAL FIRS Apt.
4400
4460
4475
4495
4730
4810 - 26
4835
4555
4390
4370
4379
4368
4381
4382
4388
4391
4394
6835
6836
6846
6839
6843
6847
6851
6855
6500
6542
6520
6445
6441
6438
6418
6415
6432
6425
6501
6495
6485
6795 1st NAT BANK
6821
6830
6800
6650
6636
6630
6500
6215
5203
5222
5130
5320
5342
5350
5428
6426
6976
6908 LATTUR
4505
4835
Tr. C
4
5
6
7
8
9
10
20
21
22
23
24
1
2
3
14


GLENVIEW
CEMETERY
20.77 Ac.
6500-16
6400
-64-66
PRVT RDS
6304
6252
6298
6224
6146
2196
PRVT DRWY
BARNES RD
MAP 3
3171
3151
DATE
-30-86
WCFD #1
66TH CT
CITY
1500
1801
RD
2000
SW HUMPH
6100
1ST NAZARENE CHURCH
19.05 Ac
CANTERBURY DR
LN
COUNTY
WCFD #1
DIST #4
ROAD
39
31.33 Ac.
122
7.70 Ac
276
3.15 Ac
2.07 Ac.
1.09 Ac
2.01 Ac.
1.66 Ac
1.53 Ac
5.52 Ac
1.75 Ac
2.79 Ac
1.90 Ac
1.12 Ac
1.77 Ac
7.29
4.58 Ac
4.58 A
2.50
2.53 Ac
1.01 Ac
1.90
.93 Ac
.63
.57 A
.46 Ac
.35 Ac
.38 Ac
2774 ACRES
6


S.W. HUNT CLUB LANE
S W CANBY ST
S.W. 76 th AVENUE
HEATHER CT
ROSE MARIE APTS
S.W. 70th AVENUE
PORTLAND
GARDEN HOME WEST APTS
P.G.E. SUB STATION
BELL ROAD ST
MULTNOMAH BOULEVARD
GARDEN HOME SCHOOL
COMM. CENTER
LAMB'S THRIFTWAY
CEDAR LANE
GARDEN HOME TERRACE
CONNELLY'S
Village Manor Apt.
L.D.S. CHURCH
S W GARDEN HOME ROAD
OLESON ROAD
S.W. 1st AVENUE
SHEILEY
KLAHIE APTS
ANDORA APTS
7511 APTS
Garden Glen Apts

**EMERGENCY MEDICAL SERVICE MUTUAL ASSISTANCE AGREEMENT**

**AMBULANCE COVERAGE FOR DUNTHORPE AREA**

This Agreement defines response districts of Ambulance Companies in the area commonly referred to as the Dunthorpe Area.

Dunthorpe area is from Radcliff Street at the north; west to Frank Street (or Portland City limits); south to Multnomah County line; east to Willamette River.

When a medical emergency occurs in the Dunthorpe Area, the coverage responsibilities have been defined as follows:

If an ambulance company is unable to send a unit to a call in its designated area, the closest unit from an adjoining district will be dispatched.

All providers must be in and remain in compliance with all applicable State, County, and other governmental laws, ordinances, reules, and regulations when providing service. Each provider will be solely responsible for any losses, injuries or other damages it may cause or sustain.

This document shall become effective upon Agreement by all parties of its content and shall remain in effect until thirty days written notice is given of intent to withdraw.

Metro West Ambulance
METRO WEST AMBULANCE

J.D. Fuiten

Date: 3/9/90

Tualatin Valley Ambulance
CARE AMBULANCE
TUALATIN VALLEY AMBULANCE

Mark Drake

Date: March 2, 1990

EMS ISSUES : DUNTHORPE / LAKE OSWEGO

1. First Responder agency serving area
   - Identify specific agency(s)
   - Mutual aid agreements
   - Written contracts
   - Review and correct MSAG

2. Notification of First Responder agency
   - Whose responsibility ?
   - Technical capabilities / procedures
     - Selective routing
     - BOEC / FAD CAD link

3. ALS Ambulance Service serving area
   - Identify specific Service —
   - Mutual aid agreements —
   - Written contracts ?
   - Review and correct MSAG —

4. Notification of ALS Ambulance Service
   - Whose responsibility ?
   - Technical capabilities / procedures
     - Selective routing
     - Conference call (ensure proper unit assignment)

5. Data collection and call review
   - Who desires / requires it ?
   - Response time monitoring

DUNTHORPE : SPECIFIC QUESTIONS

1. MetroWest

   - Staffing levels

     - Units must be ALS

     - What is level currently ? Is every ambulance consistent ?

   - Radio (Units responding into Multnomah County must contact BOEC on MedNet 9 and check CHORAL system on 9 or 4[MRH]).

   - Vehicle licensing in Multnomah County (refer : 2/21/90 letter)

     - Must be done now if not accomplished already

2. Current Mutual Aid agreements -- documents filed ?

   - SW Ambulance (TVA) / MetroWest

   - Portland Fire Bureau / Lake Oswego Fire Department

   - BOEC / LOCOM

3. US West Selective Routing

   - Technical capability

   - Implementation agreement

4. BOEC SOP

   - First Responder notification procedure / responsibility

   - ALS Ambulance notification procedure / responsibility

   - BOEC / LOCOM conferencing for response information sharing

# DUNTHORPE / RIVERDALE

MetroWest / CareTVA Mutual Aid

Detail reference : Thomas Brothers map pages 364,365,355

PFB map book pages O-8 thru O-14m N-13, N-14

This SOP defines response districts of Fire Departments and Ambulance Companies in the West Hills Skyline area (Skyline Blvd. from Barnes Road intersection to the Columbia County Line, bordered on the West by Highway 26 and on the East by Highway 30).

RESPONSIBILITY ACTION

EMS DISPATCHER — If the call is in the Skyline area :

1. Notify FAD for First Responder.
2. Notify FireCom regarding ambulances --
   A. Inform them if BOEC is dispatching AA or Care/TVA per guidelines outlined below, OR:
   B. Request that they dispatch Metro-West Ambulance.

METRO WEST AMBULANCE — All area on and West (Hwy 26 side) of Skyline Blvd. from Sunset Highway (26) to the borders of Washington and Columbia Counties, including the roads that branch from Skyline in this section.

AA AMBULANCE — All area and roads East (Hwy 30 side) of but not including Skyline Blvd.
NOTE : AA coverage on Hwy 30 extends East to RR bridge (6800 block) and includes roads branching from Hwy 30.

NOTE : There are two "Springville Lane"s --
- one intersects Hwy 30 (AA area)
- one intersects NW Springville Road (MetroWest area)

CARE/TVA AMBULANCE — The area on NW Cornell Road from the East approach to the Skyline/Cornell intersection, continuing North on Skyline from Cornell to Thompson, and all roads branching from this "loop" section (see map following).

IF AN AMBULANCE COMPANY IS UNABLE TO SEND A UNIT TO A CALL IN ITS DESIGNATED AREA, DISPATCH THE CLOSEST UNIT.

NOTE : Any call in this area should be conferenced with FireCom to inform them of responses from Multnomah County. FireCom will inform BOEC of responses from their agencies.

NOTE : Certain sections of the Skyline area do not have any dedicated First Responder services -- FAD will determine the uncovered sections upon call notification and inform BOEC at that time.

# EMERGENCY MEDICAL SERVICE MUTUAL ASSISTANCE AGREEMENT

## AMBULANCE COVERAGE FOR SKYLINE AREA

This agreement defines response districts of Ambulance Companies in the West Hills, commonly known as the Skyline Area (Skyline Blvd. from Barnes Road intersection to the Columbia county Line, bordered on the West by Highway 26 and on the East by Highway 30).

When a medical emergency occurs in the Skyline Area, the coverage responsibilities have been defined as follows :

| | |
|---|---|
| METRO WEST AMBULANCE | ALL area on and West (Highway 26 side) of Skyline Blvd. from Sunset Highway to the borders of Washington and Columbia Counties, including the roads that branch from Skyline in this section. |
| AA AMBULANCE | All area and roads East (Hwy 30 side) of Skyline Blvd.<br><br>NOTE : AA coverage on Highway 30 extends East to RR bridge (6800 block) and includes roads branching from Highway 30. |
| CARE/TVA AMBULANCE | The area on NW Cornell Road from East approach to Skyline/Cornell intersection, continuing North on Skyline from Cornell to Thompson, and all roads branching from this "loop" section. (see map) |

NOTE: There are two "Springville Lane"s --
- one intersects Highway 30 (AA area)
- one intersects NW Springville Road (MetroWest area)

If an ambulance company is unable to send a unit to a call in its designated area, the closest unit from an adjoining district will be dispatched.

All providers must be in and remain in compliance with all applicable State, County and other governmental laws,ordinances, rules and regulations when providing service. Each provider will be solely responsible for any losses, injuries or other damages it may cause or sustain.

This document shall become effective upon agreement by all parties of its content and shall remain in effect until thirty days written notice is given of intent to withdraw.

| AA AMBULANCE | CARE AMBULANCE | METRO WEST AMBULANCE |
|---|---|---|
| Pete Robedeau | Mark Drake | J.D. Fuiten |

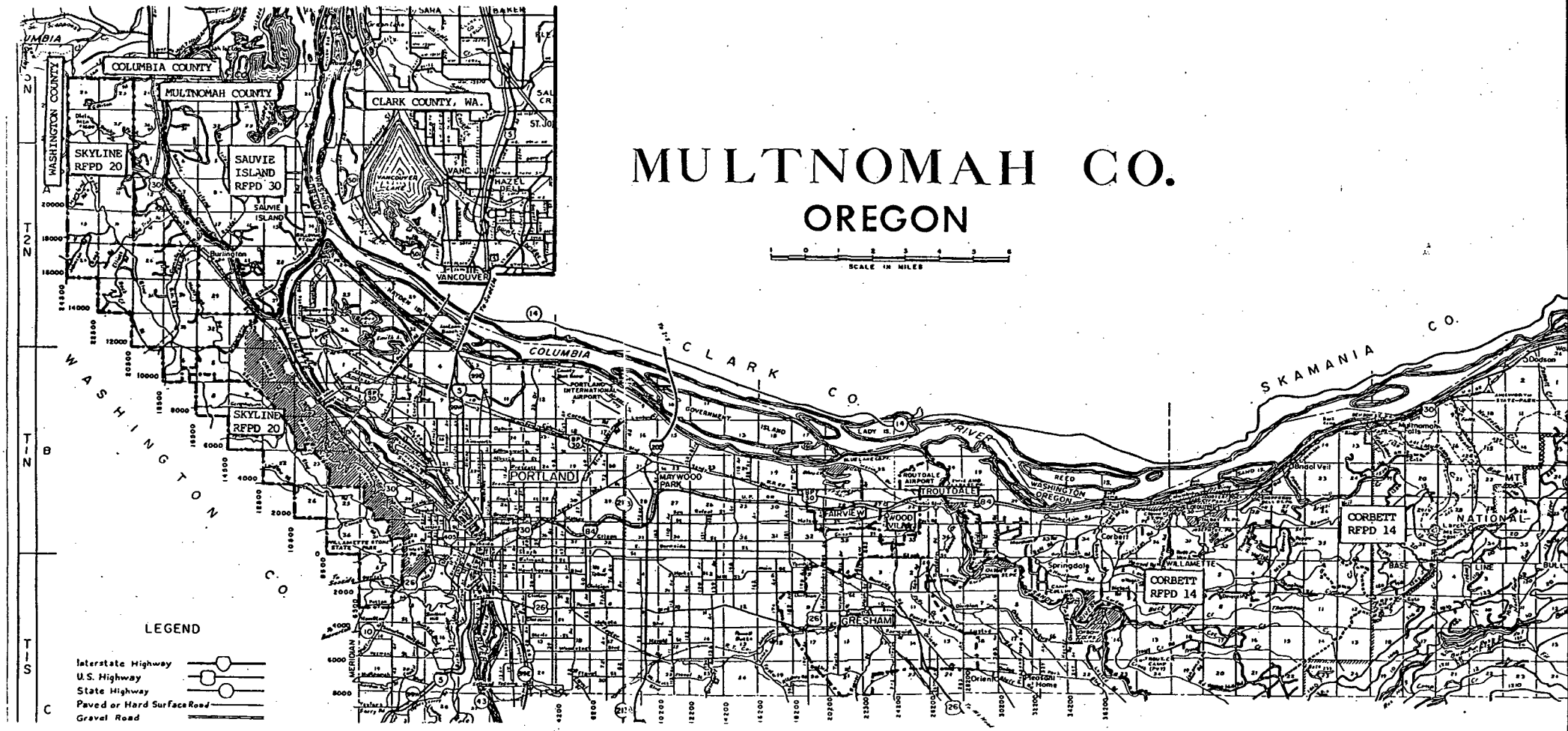
10/88

Rev. 6/89

SKYLINE
AA [---]
CARE/TVA [---]
METROWEST [---]
Always conference with FireComm regarding calls in the Skyline Area

# ATTACHMENT C

# 9-1-1 FIRE DISTRICTS CITIES




# FIRE DISTRICTS AND CITIES

# ATTACHMENT D

# BOEC CONTRACT

EMS

21789

Exhibit D

OCT 29 1984

# PERFORMANCE AGREEMENT

## BUREAU OF EMERGENCY COMMUNICATIONS

The City of Portland, hereinafter referred to as City, through its Bureau of Emergency Communications, hereinafter referred to as BOEC, and the City-County Emergency Medical Services, hereinafter referred to as EMS, agree as follows:

1. General Scope:

   City agrees to perform call receipt, dispatch, information, associated services and management of the City-County Emergency Communications/Operation Center, hereinafter referred to as Center.

2. Administrative Responsibility:

   The parties hereby agree that the City shall possess and exercise administrative authority and responsibility to manage and maintain the Center, and nothing in this Agreement shall change title to, ownership of, or access to the Center, any of its equipment or any other real and personal property of the parties.

3. Reports and Files:

   EMS shall have access at all times to all of BOEC's manual and automated records and files except that summary reports produced for a specific user agency shall not be disclosed

without written permission of that user. EMS shall have the right to review all computer programs written for or by the BOEC.

City and EMS agree to share with other user agencies all non user-specific information on operational data pertaining to incidents received for or dispatched as part of its periodic information processing requirements. The Center is not prohibited from using user-generated data for annual reporting and budgetary purposes. These shall be in the form of Computer Assisted Dispatch (CAD) and Mobile Data Terminals (MDT) transaction history printouts.

4. Monthly Reports:

During the period of this Agreement, City shall continue to submit monthly management reports to EMS in accordance with a mutually agreed upon format.

5. Data Retention and Dissemination:

All CAD and MDT magnetically recorded data shall be retained for a period of at least twelve months unless an extension is specifically requested. Audio tapes shall be retained for at least seven months unless EMS requests that specific audio tapes be retained for an additional period of time. Any additional costs incurred by City in the storage of CAD and MDT magnetically recorded data and audio tapes beyond the agreed upon time shall be paid by EMS.

6. Special Reports:

Special requests for nonroutine data, not readily retrievable from the CAD system shall be honored when authorized by the chief liaison with BOEC or his designee. Special requests shall be made through the Director or the Operations Manager and shall not exceed 50 cumulative hours per year of staff time, excluding requests for investigation of official complaints and incident information requested during the shift when it occurred, and shall not require the use of resources which are unbudgeted.

7. Security and Privacy:

The confidentiality and privacy of BOEC records and tapes shall be protected under a mutually agreed upon security and privacy plan consistent with relevant laws and regulations. The concerned user agency shall be consulted and give authorization prior to the release of records that are sensitive or otherwise non-routine in nature.

8. Requests for Service:

A. All citizen requests for, or complaints about EMS service, the action taken, and the ultimate disposition of said requests for service will be sent to EMS on a monthly basis.

B. Complaints received by BOEC from citizens concerning EMS members' performance will be referred directly to EMS.

Complaints from citizens about BOEC services received by EMS will be referred directly to BOEC administration.

9. System Maintenance:

Routine maintenance that will interfere with the operation of the primary system shall not be permitted unless a backup system is in place so that there is no change in service to field units. In the event that routine maintenance will require an interruption or significant reduction of service to field units, scheduling of such routine maintenance must receive prior written approval of EMS.

10. Air Time:

Air time usage and procedures on each channel will conform to all applicable Federal and State regulations. The radio log and summaries of hourly traffic shall be available on request. Operational channels will be kept open to ensure the maximum effective air time usage possible.

11. Levels of Service:

A. BOEC shall maintain and support all operations, including computer programs and software, required to provide EMS with highest level of communications service. EMS will be notified in writing at least 30 days before the implementation of any change in the BOEC's level of service or operation procedures which may impact EMS operations. Any such changes which

affect EMS operations will not be implemented without prior EMS approval.

B. EMS agrees to accept the below listed performance specifications, Net 8 service information standards, and response time requirements.

1) Police Communications Telephone Performance Specifications:

(a) "A" System Performance Specification: Overall four week (28) day average - no more than 5.5% of the calls will be delayed more than 20 seconds during any one 28 day reporting period.

(b) "B" System Performance Specifications: During periods of heavy call volume, a "B" telephone answering group may be employed to process non-emergency calls. City will report "B" system statistics regularly to EMS.

C. Response Time:

| Type of Call | Monthly Average |
|---|---|
| Hot Incident & Priority 1 Calls (Code 3) | |
| Create to Send | 1 minute (Goal) |
| Priority 2 (Code 1) | |
| Create to Send | 1.8 minutes (Goal) |

City agrees to attempt to reduce Priority 2 create to dispatch time average to absolute minimum.

D. Changes which have a major operational or budgetary impact on BOEC shall be implemented upon appropriate consultation with those users who are so impacted and the Commissioner-in-Charge of BOEC. Unanticipated major changes will be subject to a separate service charge mutually agreed upon prior to implementation. However, this in no way implies that the BOEC has the authority to prohibit changes in the operational policy of EMS.

E. When in the opinion of a field supervisor, an incident requires the exclusive use of a radio net, a dispatcher staffed and dedicated channel will be provided.

12. Sworn Personnel:

The maximum number of sworn law enforcement personnel assigned to BOEC on a full-time basis for all user agencies shall not exceed eight (8) sworn personnel assigned by the Portland Police Bureau, and four (4) sworn personnel assigned by Multnomah County. Assignment and transfers of sworn personnel to and from the Center will be arrived at by mutual consultation and agreement between the appropriate parties.

13. Charges for Services:

A. Charges for communications delivered by BOEC to EMS pursuant to this Agreement, unless otherwise provided herein, shall be based upon the proportion of EMS' calls for service dispatched relative to the total number of calls for law enforcement and emergency medical services

dispatched by BOEC on the basis of total dispatches over the 12 month period ending December 31st preceding the budgeted year. EMS reserves the right to verify all Center statistics and computer programs used to generate Center data.

B. Whenever additional users are added to and affect the communications system, charges will reflect the proportion set forth in Paragraph 13A, based on comparable, actual, or estimated data during the initial year and actual BOEC generated data thereafter.

C. Charges for separately contracted Multnomah County services provided to BOEC such as micowave, sworn personnel overtime and background investigations shall be set off against BOEC service charges to sheriff.

14. Billings:

Billings will be sent to EMS every 28 days beginning July 1, 1984. Payments will be due the City of Portland 30 days thereafter. Computations shall be based on statistics from thirteen 28-day periods ending on or about the previous December 31.

A. Penalty:

A penalty on late payments will be assessed at the rate of 1 per cent per month or as otherwise prescribed by the Portland City Code for late payments.

B. Reconciliation:

Reconciliation to actual user costs shall be made quarterly using the most recent previous quarter.

15. Budget and Contract Review:

EMS will have an opportunity to review and comment upon the Center's annual budget prior to its submission to City Council no later than March 31st. EMS will also have the opportunity to comment on any possible amendments to this contract at that time.

16. Report Takers:

EMS shall be responsible for setting its own policy and developing its own procedures regarding the taking of reports in lieu of dispatching field units.

17. Liability:

The City shall defend against any and all claims brought or actions filed against the Center or any of its employees, shall hold County and user agencies harmless from any and all claims of whatever nature which result from any activity of the Center not undertaken at the direction of the County or user agencies or its officers, employees or agents, and shall indemnify the County or user agencies and hold it harmless from any and all liability, loss or damage the County or user agencies may suffer as a result of claims, demands, costs or judgments against the County as a result of any Center activity so undertaken, pursuant to ORS 30.260 et seq. The County or user agencies agree to promptly notify the Center and the City's Bureau of Risk Management of any claims or demands made against the County as a result of any activity of the Center.

18. Term of Agreement:

City and EMS agree that this Performance Agreement shall take effect upon its execution and shall be retroactive to July 1, 1984 and shall continue thereafter indefinitely, but it shall be subject to modification or amendment by the parties as they may mutually agree in writing. It may be cancelled by either party at the end of the preceding fiscal year upon 90 days prior written notice.

19. Notices:

All notices pursuant to the terms of this Agreement shall be addressed as follows:

Notice to City of Portland:

Director
Bureau of Emergency Communications
2960 SE 103rd Drive
Portland, Oregon 97266

Notice to Emergency Medical Services:

Director
Emergency Medical Services
426 SW Stark Street
Portland, Oregon 97204

IN WITNESS WHEREOF, the County acting by and through its County Executive, and the City, acting by and through its Commissioner in Charge of BOEC and Auditor and pursuant to Ordinance No. _____, have caused this agreement to be executed on the dates noted below.

MULTNOMAH COUNTY, OREGON

By Dennis Buchanan
Dennis Buchanan,
County Executive

Date: 10-1-84

APPROVED AS TO FORM:

Peter Keating
John B. Leahy
County Counsel

CITY OF PORTLAND, OREGON

By _____
Commissioner Mildred A. Schwab

Date: _____

APPROVED AS TO FORM:

SIGNED

_____
Christopher R. Thomas
City Attorney

By SIGNED _____
Auditor Jewel Lansing

Date: _____

156695

Contract #: 21480

162148

26339

EXHIBIT "A"

BUREAU OF EMERGENCY COMMUNICATIONS
INTERGOVERNMENTAL AGREEMENT

JUL 10 1990

THIS AGREEMENT is made and entered into by and between the CITY OF PORTLAND, party as a municipal corporation of the State of Oregon, hereinafter referred to as "City," MULTNOMAH COUNTY, a political subdivision of the State of Oregon, hereinafter referred to as "County," the CITY OF GRESHAM a municipal corporation of the State of Oregon, and the CITY OF TROUTDALE, a municipal corporation of the State of Oregon, pursuant to the authority granted in Chapter 190 of Oregon Revised Statutes.

W I T N E S S E T H:

RECITALS

WHEREAS, the City of Portland and the County have established a combined City-County emergency call receiving, dispatch and operations center at Kelly Butte known as the BUREAU OF EMERGENCY COMMUNICATIONS, hereinafter referred to as the "Center;" and

WHEREAS, the Center was equipped by, and the Microwave System purchased through, federal grants and the expenditure of City and County monies, resulting in both City and County having a proprietary interest in it, and was developed as a joint and consolidated City-County venture; and

WHEREAS, it is in the public interest to continue to own the Center jointly; and

WHEREAS, agencies of the City of Gresham and the City of Troutdale have used the services of the Center but the cities themselves have not been parties to this agreement; and

WHEREAS, it is desirable that the Cities of Gresham and Troutdale should be parties to this enabling agreement; and

WHEREAS, the City and other user jurisdictions have agreed that the Center will carry out its service functions to the community without regard to the geographical boundaries of the respective parties; and

WHEREAS, the City, and other user jurisdictions must provide for the management, operation and maintenance of the Center and have agreed that the City will control such functions on a day-to-day basis; and

WHEREAS, the City, and other user jurisdictions have agreed that the operations of the Center shall be carried out by nonsworn personnel; and

WHEREAS, Emergency Medical Dispatching was added to the Center as a new function December 9, 1980; and

WHEREAS, County-wide emergency telephone call ("911") receipt and processing for fire, police and ambulance services was implemented in the Center November 9, 1981; and

WHEREAS, ORS 401.710, et seq. (HB 3178, 1981) has, as of January 1, 1982, preempted and replaced the Multnomah County telephone tax which provided the financing base for these 911 services; and

WHEREAS, the orderly continuation of these 911 services and their financial support from state telephone tax revenues is in the mutual best interest of the City, County, and other user jurisdictions; and

WHEREAS, the Center's equipment and other personal property which makes possible the operation of the Center is purchased with monies collected for charges for service; and

WHEREAS, for executive and administrative purposes the Center will function as a bureau within the City;

NOW, THEREFORE, with the Center operating as generally indicated in the foregoing RECITALS and in consideration of the terms, conditions and convenants contained hereinbelow, the parties hereto agree as follows:

1. MISSION STATEMENT

The mission of the Center is to receive and process emergency telephone calls from the citizens of the City, and other user jurisdictions, to dispatch emergency services, and to provide quarters and facilities for command during emergency operations. For purposes of this agreement, the term "Users" means agencies of the jurisdictions that are parties to this agreement. Users shall have performance agreements as provided in Section 5 of this Agreement. The Center shall function as the Emergency Telephone system as defined in ORS 401.710, et seq., and, as such, shall:

a. Receive, process and dispatch calls for law enforcement services utilizing equipment, procedures and staffing levels to ensure the shortest response time and maximum safety to citizens consistent with effective law enforcement management.

b. Receive, process and dispatch calls for emergency medical response in support of the aims and intent of the County's Emergency Medical Services Code and rules and City Ordinance 150180.

c. Receive and process calls for Fire Service to Portland Fire Alarm Dispatch.

Subject to the conditions that there is no reduction or change in service levels and there is no increase in cost to the parties to this agreement thereby, the same or similar emergency services may be performed for other government agencies pursuant to other agreements between the City and other user agencies.

2. User-City Relationships

The Center is a joint User-City operation, the day-to-day management, operation and fiscal control of the Center is the responsibility of the City. The Center and Center's manual and automated records and files shall be accessible as provided in respective performance agremeents to authorized representatives of the City and user jurisdictions. The day-to-day administration of the Center will be the responsibility of a Civilian Director who is chosen by the City in consultation with the user agencies. Consultation shall include, but not be limited to, the following: system users shall develop a job description for the Civilian Director to be forwarded to the Director of the Portland Bureau of Personnel. At least one member of the interview panel to choose a Civilian Director will be chosen from among the non-City members of the User Board. When a civil service list is established for a Civilian Director, such list will be shared with user jurisdictions for review and comment. The Director shall report to the City but may not be dismissed without consultation with the User Board.

3. User Board

A user board, the organization and membership of which will be provided for in the performance agreements adopted by jurisdictions which are parties to this agreement is established. The user board will review proposed policy changes and advise the Center Director and/or the Commissioner in charge of the Bureau and the Executive authorities of jurisdictions with participating user agencies regarding policy changes and other matters which may be under consideration by the jurisdictions board.

4. Emergency Operations

The City, and other users shall have access to the Center to direct and dispatch such emergency operations as circumstances may require. Although the City has the administrative responsibility and authority for the management of the Center, the parties shall prepare, agree upon and abide by such procedures and protocols necessary for the joint emergency management use of the Center during emergencies. The City's emergency manager shall have the responsibility for the development of the protocols. The protocols shall include coordination with the Center's director.

5. Performance Agreement(s)

The City and the jurisdictions shall negotiate separate performance agreement(s) relating to the provision of various types of emergency telephone call processing services (911) and other services by the City to the Jurisdictions. These performance agreement(s) will contain a description of the specific types of service to be provided by the Center to the Jurisdictions, including, but not limited to, systems management, service levels, management information reports, data request processing, system and data security and privacy, service costs, and data retention and dissemination.

6. Center Personnel

The Center shall operate with nonsworn personnel. All nonsworn personnel performing emergency call processing and communication services shall be employees of the City. The parties agree that the Director of the Center shall possess and exercise administrative and management authority over all nonsworn personnel assigned to the Center.

7. Budget

(a) The City and Jurisdictions who are parties to this agreement, through their budget processes, will provide adequate resources consistent with the Center's mission. The Center shall be an appropriation unit of the City and funds necessary to operate the Center shall be appropriated by the City. The Jurisdictions reserve

the right to participate in the Center's budget process. Prior to submission for City budget review, the user jurisdictions shall receive copies of all documents relating to the Center's budget in sufficient time to review and comment upon said documents. The user jurisdictions will pay their agreed-upon proportionate share of the expenses of operating the Center as noted in the performance agreement(s) referred to in Part 5, then in effect between the parties. The performance agreements shall stipulate a formula used to determine costs to each party. The formula shall be uniformly applied to all user agencies. In the event the parties cannot agree to a budget for the Center, the City or other user jurisdictions shall have the right to terminate this agreement insofar as it regulates and provides for a relationship between the City and a user jurisdiction as provided in section 13 of this agreement.

The Center's budget will reflect the total costs incurred as a result of the Center's operation, including the use and maintenance of the County's Microwave System. The budget will provide a detailed cost analysis of those costs to be incurred in the planning, installation, operation and improvement of the emergency telephone system (911).

The costs incurred by the County for the Center's use and the County's maintenance of the County's Microwave shall be reflected in the Center's quarterly billing in accordance with the agreed-upon formula in the performance agreement then in effect between the parties. Each quarter, the County shall submit to the Director a report of all costs incurred by the County in support of the center.

8. Property Settlement Upon Termination

a) In the event this agreement is terminated, the City and Users shall mutually agree upon a monetary settlement that will compensate Users for their interests in Center equipment.

b) In recognition of City's proprietary interest in the County's microwave system, the County will, in the event of termination, provide the City with the continued use of the microwave system on a contractual basis. Charges for the City's use of the County's microwave system shall be based on the City's proportionate share of the system's operation and maintenance cost. If the County discontinues use of the microwave system, the City shall have first right to purchase the system at its fair market value.

c) If the parties cannot agree upon a monetary settlement for any such Center equipment that compensates the user jurisdictions for their interests therein, then the matter of the respective interests in such equipment or the fair market value thereof shall be determined pursuant to ORS 190.710 et seq. in consideration of the provisions of this section (number 8) of this agreement.

9. Liability

The City shall defend against any and all claims brought or

actions filed against the Center or any of its employees, shall hold Jurisdictions harmless from any and all claims of whatever nature which result from any activity of the Center not undertaken at the direction of a user or its officers, employees or agents, and shall indemnify the User and hold it harmless from any and all liability, loss or damage the User may suffer as a result of claims, demands, costs or judgments against the User as a result of any Center activity so undertaken, pursuant to ORS 30.260 et seq. Each Jurisdiction agrees to promptly notify the Center and the City's Bureau of Risk Management of any claims or demands made against any user as a result of any activity of the Center.

10. Limitations

Nothing contained in this Agreement shall be construed as a grant of any legislative power by either the City, the County, or other users, to any party or to the Center.

11. Construction

This Agreement shall be liberally construed to effect the purposes expressed herein.

12. Termination of Previous Agreements

The City and County executed the "Emergency

Communications/Operations Center Agreement" on December 19, 1974, and amending agreements on September 4, 1975, November 16, 1976, August 16, 1979, and December 15, 1983 which agreements established a combined City-County emergency call receiving, dispatch and operations center at Kelly Butte (hereinafter referred to as "Agreements"). Because the parties consider it to be in their mutual interest for said Agreements to be terminated, it is agreed between the parties that said Agreements are terminated as of the date hereof and only those rights, convenants, obligations, duties and responsibilities concerning the Center that are incorporated into this Agreement are in effect between the parties.

13. Term, Modification and Review of Contract

a) This Agreement shall take effect on the last day of signature by the authorized representatives of the parties here to, and shall continue thereafter indefinitely, but it shall be subject to modification or amendment as they may mutually agree in writing as provided in subsection d) of this section.

b) This contract may be terminated by mutual consent of the parties.

c) Any party may cease to participate in this Agreement by providing all other parties with written notice at least six (6) months

prior to July 1st of the year in which the party wishes to cease participating.

d) Any party wishing to amend the Agreement shall notify each of the other parties by providing a statement of issues and provisions which the notifying party wishes to modify and a date for the initiation of negotiation not sooner than 30 days not later than 90 days after the date of notification.

e) This Agreement shall be reviewed by the parties to this Agreement at least once every three years beginning with the date of execution of this agreement.

14. Nonassignment

Neither the City nor the County nor any other user jurisdictions may assign any function, responsibility or asset of the Center to any other governmental agency nor to any person or entity without the written consent of the other parties.

15. Notices

All notices pursuant to the terms of this Agreement shall be addressed as follows:

Notices to City - Commissioner in Charge
1220 S. W. Fifth Avenue
Portland, Oregon 97204

Notices to County - 1. Director, Emergency Medical Services
426 S. W. Stark, Second Floor
Portland, Oregon 97204

2. Sheriff, Multnomah County
Hansen Building
12240 N. E. Glisan
Portland, Oregon 97230

3. County Chair
Room 134 Multnomah County Courthouse
1021 S. W. 4th Avenue
Portland, Oregon 97204

Notices to City of Gresham- Gresham City Manager
1333 N. W. Eastman Parkway
Gresham, Oregon 97030

Notices to City of Troutdale Troutdale City Manager
104 S. E. Kibling
Troutdale, Oregon 97060

IN WITNESS WHEREOF, the County, acting by and through its County Executive, the City of Gresham, acting by and through its Mayor, and the

City of Troutdale, acting by and through its Mayor, and the City of Portland, acting by and through its Commissioner in charge of the Center and Auditor and pursuant to Ordinance No. _____, have caused this Agreement to be executed on the dates noted below.

MULTNOMAH COUNTY, OREGON

By Gladys McCoy
Gladys McCoy, County Chair

Date: 6/21/90

REVIEWED:

By
Laurence Kressel, County Counsel

By
Bob Skipper, Sheriff

Date: May 24, 1990

CITY OF PORTLAND, OREGON

By
Commissioner

APPROVED AS TO FORM:

Date: 7-6-90

By
City Attorney

By
City Auditor

Date: 7/10/90

CITY OF TROUTDALE, OREGON

By Sam K Cox
Mayor

Date: 6-28-90

APPROVED AS TO FORM:

By
Jim Jennings, City Attorney

By
City Manager

Date: 6-28-90

CITY OF GRESHAM, OREGON

By
Mayor

Date: 7/2/90

APPROVED AS TO FORM:

By
Thomas Sponsler, City Attorney

By
City Manager

Date: 6/29/90

21480

162448

ORDINANCE NO. 162448

*Authorize an intergovernmental agreement between the City, Multnomah County, Gresham and Troutdale for the provision of emergency dispatch and related services by the Bureau of Emergency Communications. (Ordinance)

The City of Portland ordains:

Section 1. The Council finds:

1. The Bureau of Emergency Communications (BOEC) provides emergency dispatch and related services to the County and other cities within Multnomah County.

2. The users of BOEC services currently contract with the City based on a Performance Agreement entered into in 1987 and subsequently amended in 1988. This agreement deals with operating policies, reporting requirements and billing methodology and procedures.

3. Broader policy issues including personnel policies, role of a user's committee, and management responsibilities are not adequately addressed in the Performance Agreements.

4. The intergovernmental agreement attached to this ordinance and marked Exhibit A addresses the broad policy issues pertaining to the operation of BOEC.

5. Multnomah County and the cities of Gresham and Troutdale have already ratified this agreement through their elected, legislative bodies.

6. Such agreements are authorized pursuant to Chapter 190 of Oregon Revised Statutes and Section 2-105(a) 4 of the Charter of the City of Portland.

21480

162448

# ORDINANCE No.

NOW, THEREFORE, the Council directs:

a. The Commissioner of Public Safety and the City Auditor to execute an intergovernmental agreement with Multnomah County, and the cities of Gresham and Troutdale for the provision of emergency dispatch and related services substantially in the form of the attached Exhibit A.

Section 2. The Council declares that an emergency exists in order to immediately protect and preserve the public health, safety and welfare by insuring the continuity of emergency dispatch and related services within the Portland area; therefore, this Ordinance shall be in force and effect from and after its passage by Council.

Passed by the Council, OCT 12 1989

BARBARA CLARK
Auditor of the City of Portland
By Mary Flanagan Deputy

Commissioner Dick Bogle
David Logsdon:ug
October 5, 1989

# ATTACHMENT E
# EMS MEDICAL DIRECTOR
# POSITION DESCRIPTION

March 5, 1993

# EMS MEDICAL DIRECTOR
(Exempt/Unclassified)

## DEFINITION

To provide medical supervision for all emergency medical technicians providing pre-hospital patient care within the County, and to provide medical direction to all components of the emergency medical services system.

## SUPERVISION RECEIVED AND EXERCISED

Receives administrative direction from the Director, Health Department.

Exercises technical supervision over emergency medical technicians.

**EXAMPLES OF DUTIES** - Duties may include, but are not limited to, the following:

Develop uniform standards of emergency care within the County; solicit input regarding standards from physicians, nurses, emergency medical technicians, ambulance providers, first responder providers, hospitals, government agencies, and other interested organizations and individuals.

Accompany emergency medical technicians during the performance of medical duties for the purpose of supervision, education, and system evaluation.

Promulgate and revise, as necessary, medical care standards for: priority dispatch/pre-arrival instructions; ALS and BLS patient care protocols; hospital destination criteria; accreditation requirements for pre-hospital care personnel beyond State standards; staffing, equipment, supplies, and operational criteria for first response vehicles, ground ambulances, air ambulances, specialized critical care and mobile intensive care ambulances, and non-emergency patient transport vehicles for incorporation into licensing requirements; response times for first responders and transporting emergency ambulances; the transferring of patients between hospitals; and the provision of medical services in areas of public assembly.

Set standards for the provision of on-line medical control.

Develop and supervise a quality management program to ensure continuous improvement of all levels of care within the emergency medical services delivery systems.

Set standards and objectives, and participate in the continuing education and training of pre-hospital care personnel.

Approve emergency medical technicians for practice in the County. Establish policies and due process for the limiting of practice of emergency medical technicians, including probation, suspension, or revocation of physician orders.

Perform related duties as assigned.

## QUALIFICATIONS

Knowledge of:

Principles, practices, and procedures of emergency medicine.

Principles, practices, and procedures of pre-hospital patient care.

Principles, practices, and procedures of public health.

**QUALIFICATIONS** (Continued)

Knowledge of: (Continued)

Federal, state, and local laws and regulations governing the practice of emergency medicine and pre-hospital emergency medical services.

Principles of supervision, training, and performance evaluation.

Ability to:

Effectively administer a variety of emergency medical care activities.

Interpret and apply applicable federal, state, and local laws, rules, regulations, and policies governing emergency medical services.

Establish and maintain cooperative working relationships with those contacted in the course of work.

Communicate clearly and concisely, both orally and in writing.

Gain cooperation through discussion and persuasion.

Supervise, train, and evaluate assigned staff.

Experience and Training Guidelines:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Three years of increasingly responsible emergency medical services experience, including system medical direction and emergency medical technician supervision.

**AND**

Training:

Graduation from an accredited medical school and completion of an emergency medicine residency.

License or Certificate:

Possession of, or ability to obtain, an appropriate and valid license to practice medicine in the State of Oregon.

Board certification in emergency medicine.

92ES

# ATTACHMENT F
# MEDICAL RESOURCE HOSPITAL
# CONTRACT

MULTNOMAH COUNTY
AND
OREGON HEALTH SCIENCES UNIVERSITY
EMERGENCY MEDICAL SERVICE AGREEMENT

THIS INTERGOVERNMENTAL AGREEMENT is made and entered into this 29 day of June, 1992, by and between MULTNOMAH COUNTY, a political subdivision of the State of Oregon (hereinafter referred as "COUNTY"), and the OREGON HEALTH SCIENCES UNIVERSITY, acting by and through the Oregon State Board of Higher Education on behalf of the State of Oregon (hereinafter referred to as "STATE"),

WITNESSETH:

WHEREAS, COUNTY's Health Department requires services which Contractor is capable of providing, under terms and conditions hereinafter described, and

WHEREAS, STATE is able and prepared to provide such services as COUNTY does hereinafter require, under those terms and conditions set forth; now, and

WHEREAS, Multnomah County Code (MCC) and Emergency Medical Services (EMS) rules require a single medical direction point, a single point of data collection, and research, therefore

IN CONSIDERATION of those mutual promises and the terms and conditions set forth hereafter, the parties agree as follows:

1. Term.

The term of this Agreement shall be from July 1, 1992, to and including June 30, 1993, unless sooner terminated under the provisions hereof.

2. Services.

A. STATE shall furnish on-line medical direction and comply with the following performance indicators:

1) All calls requesting on-line medical direction must be answered by the appropriate physician in fifty-five (55) seconds at least ninety percent (90%) of the time.

2) STATE must provide a process to assure that staff physicians are knowledgeable of the protocols. This process may include but not be limited to: educational sessions, tests, and inservice for protocol updates. The process must be approved by COUNTY.

3) STATE will develop a process for Standard Operating Procedures (SOP) adoption which governs on-line medical direction. COUNTY will review operating procedures prior to their implementation. STATE will adhere to the SOPs at all times. Failure to provide these SOP's for COUNTY review is a breach of Contract.

4) A plan must be developed and approved by the COUNTY which details a problem solving process for any complaint or issues presented to the STATE's medical director or communications coordinator. This plan must assure a complaint resolution which will be furnished to the COUNTY no more than thirty (30) days from date of complaint filing.

5) The STATE will implement a quality assurance/quality improvement process that reviews standards, operations, and performance, identifying problems and their solutions. This process will allow for input from COUNTY, and will report summary data and findings to the Medical Advisory Board Quality Assurance Subcommittee on a quarterly basis.

6) The STATE will participate in the COUNTY's quality assurance process by providing a staff member, when requested, and by providing medical resource hospital data and information on a timely basis as requested by the Quality Assurance Committee.

7) The Medical Resource Hospital medical director shall meet with the Multnomah County physician supervisors at their regularly scheduled meetings to discuss online medical control issues and exchange information.

B. The STATE shall provide trauma communications coordination and comply with the following performance indicators. The trauma communications coordination function is being provided at the request of the Area Trauma Advisory Board (ATAB I).

1) All trauma communication coordination requests must be answered within ten (10) seconds ninety percent (90%) of the time.

2) The STATE must develop a process which allows for Standard Operating Procedures (SOP) adoption and includes the Area Trauma Advisory Board and COUNTY review prior to implementation. The STATE will adhere to the SOPs at all times.

3) The STATE must provide a plan which details a problem solving process for any complaint. The plan must assure that the STATE has an outcome from the complaint which will be furnished to the COUNTY no more than thirty (30) days from the date of complaint filing.

C. The state will assist in provision of inservice training to emergency medical technicians in Multnomah County and comply with the following performance indicators:

1) The number of inservices which will be offered in each year is twelve (12), but is adjustable to more or fewer at COUNTY and STATE discussion.

2) The coordination of those courses will be carried out through a joint arrangement with the STATE, COUNTY, and other hospitals in Multnomah County.

3) STATE services required are that cases and case summary for case review will be provided. One MRH physician will be in attendance to provide the case review.

D. STATE shall be responsible for central data collection for medical direction and trauma communication coordination activities. STATE shall comply with the following performance indicators:

1) STATE is to collect this data from Emergency Medical Technicians at the time that they contact STATE for on-line medical direction or Trauma Communications Coordination (TCC) functions.

2) The specific data points to be collected are referenced in appendix A.

3) Raw data points are to be provided to COUNTY for monthly periods. These will be in the form of diskettes in dBase 3 form, provided no later than the 30th of the following month.

4) The data points as described in appendix A may be modified upon the concurrence of COUNTY and STATE.

5) STATE shall provide a trauma communications center monthly report which complies with the format in appendix B.

6) The data (voice tapes, written reports, and all data points collected) is the sole property of COUNTY, which has the sole authority for release of the data. COUNTY shall prescribe guidelines to be used for the release of the data and STATE must follow these guidelines. It is the intent of guidelines that they facilitate and not impede academic research (see appendix C).

7) STATE shall also provide COUNTY proof of Joint Commission of American Hospitals (JCAH) accreditation and that it meets or exceeds all requirements of MCC 6.31.060 (A-6) and rules adopted pursuant thereto.

3. Compensation.

A. COUNTY agrees to pay STATE $10,200 based on the following terms:

1) COUNTY agrees to maintain MRH radio base station, six UHF portable radios, and the multichannel recorder used to provide MRH communications.

2) One quarter advance of the total amount upon execution of this Agreement, balance payable in three (3) quarterly installments upon receipt of billings from STATE.

3) Expenditure reports are to be sent to the EMS Director, Health Department, 426 SW Stark, 9th Floor, Portland, Oregon 97204.

B. COUNTY certifies that either federal, state or local funds are available and authorized to finance the costs of this Agreement. In the event that funds cease to be available to COUNTY in the amounts anticipated, COUNTY may terminate or reduce Agreement funding accordingly. COUNTY will notify STATE as soon as it receives notification from funding source. Reduction or termination will not effect payment for accountable expenses prior to the effective date of such action.

C. All final billings affecting Agreement payments must be received within thirty (30) days after the end of the Agreement period. Agreement payments not triggered or billed within this specified time period will be the sole responsibility of STATE.

4. Contractor is Independent Contractor

A. STATE is an independent contractor and is solely responsible for the conduct of its programs. STATE, its employees and agents shall not be deemed employees or agents of COUNTY.

B. STATE shall defend, hold and save harmless COUNTY, its officers, agents, and employees from damages arising out of the tortious acts of STATE, or its officers, agents, and employees acting within the scope of their employment and duties in performance of this Agreement subject to the limitations and conditions of the Oregon Tort Claims Act, ORS 30.260 through 30.300, and any applicable provisions of the Oregon Constitution.

C. COUNTY shall defend, hold and save harmless STATE, its officers, agents, and employees from damages arising out of the tortious acts of COUNTY, or its officers, agents, and employees acting within the scope of their employment and duties in performance of this Agreement subject to the limitations and conditions of the Oregon Tort Claims Act, ORS 30.260 through 30.300, and any applicable provisions of the Oregon Constitution.

5. Workers Compensation

A. STATE shall maintain Workers' Compensation insurance coverage for all non-exempt workers, employees, and subcontractors either as a carrier insured employer or a self-insured employer as provided in Chapter 656 of Oregon Revised Statutes.

6. Contractor Identification

STATE shall furnish to COUNTY its employer identification number, as designated by the Internal Revenue Service.

7. Subcontracts and Assignment

STATE shall neither subcontract with others for any of the work prescribed herein, nor assign any of STATE'S rights acquired hereunder without obtaining prior written approval from COUNTY. COUNTY by this Agreement incurs no liability to third persons for payment of any compensation provided herein to STATE.

8. Access to Records

A. STATE agrees to permit authorized representatives of COUNTY, and/or the applicable Federal or State government audit agency to make such review of the records of the STATE as COUNTY or auditor may deem necessary to satisfy audit and/or program evaluation purposes. STATE shall permit authorized representatives of COUNTY Health Department to site visit all programs covered by this Agreement. Agreement costs disallowed as the result of such audits, review or site visits will be the sole responsibility of STATE. If a Agreement cost is disallowed after reimbursement has occurred, STATE will make prompt repayment of such costs.

9. Waiver of Default.

Waiver of a default shall not be deemed to be a waiver of any subsequent default. Waiver of breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the provisions of this Agreement.

10. Adherence to Law

A. STATE shall adhere to all applicable laws governing its relationship with its employees, including but not limited to laws, rules, regulations and policies concerning workers' compensation, and minimum and prevailing wage requirements.

B. STATE shall not unlawfully discriminate against any individual with respect to hiring, compensation, terms, conditions or privileges or employment, nor shall any person be excluded from participation in, be denied the benefits or, or be subjected to discrimination under any program or activity because of such individual's race, color, religion, sex, national origin, age or handicap. In that regard, STATE must comply with all applicable provisions of Executive Order Number 11246 as amended by Executive Order Number 11375 of the President of the United States dated September 24, 1965, Title VI of the Civil Rights Act of 1964 (42 U.S.C. §2000(d)) and Section 504 of the Rehabilitation Act of 1973 as implemented by 45 C.F.R. 84.4. STATE will also comply with all applicable rules, regulations and orders of the Secretary of Labor concerning equal opportunity in employment and the provisions of ORS Chapter 659.

11. Modification

A. In the event that COUNTY's Agreement obligation is amended by a federal or state initiated change, COUNTY shall amend this Agreement through written notification of changes sent to STATE by mail. STATE shall sign the amendment and return to COUNTY within twenty (20) working days of receipt of COUNTY's notification document.

B. Any other amendments to the provisions of this Agreement, whether COUNTY or STATE initiated, shall be reduced to writing and signed by both parties.

12. Integration

This Agreement contains the entire Agreement between the parties and supersedes all prior written or oral discussions or Agreements.

13. Record Confidentiality

STATE agrees to keep all client records confidential in accordance with State and Federal statutes and rules governing confidentiality.

14. Early Termination

A. Violation of any of the rules, procedures, attachments, or conditions of this Agreement may, at the option of either party, be cause for termination of the Agreement and, unless and until corrected, of funding support by COUNTY and services by STATE, or be cause for placing conditions on said funding and/or services, which may include withholding of funds. Waiver

by either party of any violation of this Agreement shall not prevent said party from invoking the remedies of this paragraph for any succeeding violations of this Agreement.

B. This Agreement may be terminated by either party by sixty (60) days written notice to the other party.

C. Immediate termination or amendment by COUNTY may occur under any of the following conditions; or

1) Upon notice of denial, revocation, suspension or nonrenewal of any license or certificate required by law or regulation to be held by STATE to provide a service under this Agreement.

2) Upon notice if STATE fails to start-up services on the date specified in this Agreement, or if STATE fails to continue to provide service for the entire Agreement period.

3) Upon notice to COUNTY of evidence that STATE has endangered or is endangering the health and safety of clients/residents, staff, or the public.

D. Payment to STATE will include all services provided through the day of termination and shall be in full satisfaction of all claims by STATE against COUNTY under this Agreement.

E. Termination under any provision of this section shall not affect any right, obligation or liability of STATE or COUNTY which accrued prior to such termination.

15. Litigation.

A. STATE shall give COUNTY immediate notice in writing of any action or suit filed or any claim made against STATE or any subcontractor of which STATE may be aware of which may result in litigation related in any way to this Agreement.

16. Oregon Law and Forum

This Agreement shall be construed according to the law of the state of Oregon.

17. Certification Regarding Lobbying

A. No federal appropriated funds can be or will be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or an employee of any agency, a member of congress, an officer or employee of congress, or an employee of a member of congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

B. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of congress, an officer or employee of congress, or an employee of a member of congress in connection with this contract, the contractor shall complete and submit Standard Form-111, "Disclosure Form to Report Lobbying," in accordance with its instructions.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly appointed officers the date first written above.

OREGON HEALTH SCIENCES UNIVERSITY

By David C. Bunnell
William C. Neland
Associate Vice President
for Administration
for

Date 6/29/92

93-6001786W
Federal I.D. Number

MULTNOMAH COUNTY, OREGON

By Gladys McCoy
Gladys McCoy
Multnomah County Chair

Date 6/11/92

HEALTH DEPARTMENT

By: Billi Odegaard
Billi Odegaard, Director

Date: 5/19/92

EMERGENCY MEDICAL SERVICES

By:
William Collins, Director

Date: 5-8-92

REVIEWED:

LAURENCE KRESSEL, County Counsel
for Multnomah County, Oregon

By:

Date: 6-1-92

**RATIFIED**
**Multnomah County Board of Commissioners**

C-8 June 11, 1992



[5024K-p]

# ATTACHMENT G

# AMBULANCE EQUIPMENT

## ALS

## BLS

# Emergency Medical Services

**Multnomah County**

## Ambulance Inspection Form
## 1992-1993

Agency _____ Unit Number _____ Vehicle _____

Inspected By _____ At _____ Date _____

Service Level: ( ) ALS ( ) ALS/BLS ( ) BLS

Crew 1 _____ Certification Number _____

ODL: ( ) current ACLS: ( ) current BCLS: ( ) current

Crew 2 _____ Certification Number _____

ODL: ( ) current ACLS: ( ) current BCLS: ( ) current

Cultures: ( ) No ( ) Yes Source: _____

**Multnomah County Required Equipment**

| | | Minimum Required* | Critical* | On Board* |
|---|---|---|---|---|
| 1 | Adult long backboard with 4 restraining devices | 2 | 1 | |
| 2 | Extremity restraining devices; (e.g., Flexcuffs) | 8 | 4 | |
| 3 | Adult intubation stylettes | 2 | 1 | |
| 4 | Pediatric intubation stylettes | 2 | 1 | |
| 5 | Chest decompression kit | 2 | 1 | |
| 6 | Tracheal lumen airway device, Pertrach OR Nutrake | 1 | 1 | |
| 7 | Adult resuscitation bag with reservoir, disposable | 2 | 1 | |
| 8 | Infant resuscitation bag with reservoir, disposable | 2 | 1 | |
| 9 | Endotracheal tubes; ____2.5, ____3.0, ____3.5, ____4.0, ____4.5, ____5.0, ____5.5, ____6.5, ____9.0 | 2 ea. | 1 ea. | |
| 10 | Endotracheal tubes; ____7.0, ____7.5, ____8.0, ____8.5 | 3 ea. | 1 ea. | |

**Health Department**
**426 S.W. Stark Street—9th Floor · Portland, Oregon 97204 · 248-3220 · Fax 248-5453**

AN EQUAL OPPORTUNITY EMPLOYER

| | | Minimum Required* | Critical* | On Board* |
|---|---|---|---|---|
| 11 | Nasopharyngeal airways; ____26, ____28, ____32 (or equivalent sizes) | 2 ea. | 1 ea. | |
| 12 | Adult ECG monitoring electrode sets | 12 | 4 | |
| 13 | Pediatric ECG monitoring electrode sets | 4 | 2 | |
| 14 | Pediatric defibrillation paddles | 1 | 1 | |
| 15 | Conductive gel<br>**OR** Conductive pads (Defib pads) | 2 tube<br>6 sets | 1<br>3 | |
| 16 | Pacing patches<br>**AND** Pacing cables; IF PACE CAPABLE | 3 sets<br>2 | 1<br>1 | |
| 17 | 60 cc syringe with catheter tip | 2 | 0 | |
| 18 | Nasogastric tubes; ____14 Fr, ____18 Fr | 2 each | 0 | |
| 19 | Syringes, sterile; ____1 cc, ____3 cc, ____6 cc, ____12 cc, ____20 cc | 5 each | 2 each | |
| 20 | Needles, sterile; ____Vacuum tube, ____20 Ga, ____18 Ga, ____18 Ga FILTER | 5 each | 2 each | |
| 21 | 2" Adhesive type tape, rolls | 2 | 1 | |
| 22 | Cold Packs, chemical | 4 | 0 | |
| 23 | OB kits, disposable | 2 | 1 | |
| 24 | Adult 3-chambered Pneumatic Anti-Shock Garment | 1 | 0 | |
| 25 | Triangular Bandages | 4 | 0 | |
| 26 | K-Y® type lubricant<br>**OR** Unit dose K-Y® type lubricant | 2<br>10 | 1<br>4 | |
| 27 | Exam gloves, latex **OR** vinyl; each<br>____Large, ____Medium, ____Small | 1 box | 15 pr. | |
| 28 | Blood glucose meter device; (e.g., Exactech®) **AND**<br>Blood glucose meter strips | 1<br>10 | 1<br>2 | |
| 29 | Waterless antiseptic hand cleaner | 2 | 1 | |
| 30 | Balanced salt solution, plastic containers;<br>____500 cc, ____1000 cc | 10 each | 4 | |
| 31 | Micro drip administration sets | 10 | 4 | |

| | | Minimum Required* | Critical* | On Board* |
|---|---|---|---|---|
| 32 | Regular administration sets | 10 | 4 | |
| 33 | Blood pump administration sets | 4 | 1 | |
| 34 | Intravenous control devices, (e.g., Soluset® or Dial-a-flow®) | 4 | 2 | |
| 35 | Intravenous catheter needles; ____24 Ga, ____20 Ga, ____18 Ga, ____16 Ga, ____14 Ga | 10 each | 4 each | |
| 36 | Intravenous catheter needles; ____10 Ga, OR ____12 Ga | 2 | 1 | |
| 37 | Butterfly needles; ____25 Ga, ____23 Ga | 2 each | 0 | |
| 38 | Needles for Intraosseous access | 2 | 1 | |
| 39 | Adult tourniquets, disposable | 3 | 2 | |
| 40 | Pediatric tourniquets, disposable | 2 | 1 | |
| 41 | Vacuum tubes (red top) | 5 | 2 | |
| 42 | Vacuum tube holders | 3 | 0 | |
| 43 | Skin cleansing pads (e.g., Alcohol pads OR Betadine® pads) | 50 | 10 | |
| 44 | Betadine® type ointment<br>OR Unit dose Betadine® type ointment | 2 tube<br>10 pks | 0<br>0 | |
| 45 | Male adapter plugs | 10 | 0 | |
| 46 | Sodium Chloride injectable preloads | 10 | 0 | |
| 47 | Sharps disposal unit (must be in kit) | 1 | 1 | |
| | | | | |
| | | | | |
| | | | | |

## Multnomah County Required Medications

| | | Dose | Minimum Required* | Critical Level* | On Board* | Earliest Exp. Date |
|---|---|---|---|---|---|---|
| 1 | Activated Charcoal | 50 gm | 4 | 2 | | |
| 2 | Adenosine | 6 mg | 5 | 5 | | |
| 3 | Albuterol | 2.5 mg | 10 | 4 | | |
| 4 | Atropine Sulfate | 1 mg | 10 | 2 | | |
| 5 | Bretylium | 500 mg | 6 | 5 | | |
| 6 | Dextrose | | | | | |
| A | 50% | 50 cc | 6 | 2 | | |
| B | Liquid | 10 gm | 4 | 2 | | |
| 7 | **DIAZEPAM** | 10 mg | 4 | 2 | | |
| 8 | Diphenhydramine | 50 mg | 4 | 1 | | |
| 9 | Dopamine | 400 mg | 2 | 1 | | |
| 10 | Epinephrine | | | | | |
| A | 1:1000 MDV | 50 cc | 2 | 1 | | |
| B | 1:1000 | 1 cc/1 mg | 2 | 1 | | |
| C | 1:10000 | 10 cc/1 mg | 10 | 5 | | |
| 11 | Furosemide | 40 mg | 4 | 3 | | |
| 12 | Glucagon | 1 mg | 2 | 1 | | |
| 13 | Inapsine | 2.5 mg/16 cc | 6 | 2 | | |
| 14 | Ipecac Syrup | 1 fl oz. | 2 | 1 | | |
| 15 | Lidocaine | | | | | |
| A | 2% | 100 mg | 6 | 3 | | |

| | | Dose | Minimum Required* | Critical Level* | On Board* | Earliest Exp. Date |
|---|---|---|---|---|---|---|
| B | 20% | 2 Gm | 2 | 1 | | |
| 16 | **MORPHINE** | 10 mg | 3 | 1 | | |
| 17 | Naloxone | 2 mg | 6 | 3 | | |
| 18 | Nitroglycerine spray or tablets | 0.4 mg | 2 units | 1 unit | | |
| 19 | Sodium Bicarbonate | 50 mEq | 3 | 3 | | |
| 20 | Thiamine | 100 mg | 4 | 1 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

**Medications In "BOLD" must be inventoried and locked**

* MINIMUM REQUIRED = the minimum quantity that MUST be on the unit to be placed in service and available to respond to a dispatch order.

* CRITICAL LEVEL = the minimum quantity that MUST be on the unit to remain in service. A quantity less than specified in this column will require the unit to be removed from all service and restocked to minimum level before being returned to service and available to respond to a dispatch order.

* ON BOARD = the actual quantity of items physically on the unit.

earliest expiration date = self explanatory

Equipment on advanced life support (ALS) vehicles. Each ALS vehicle (ambulance/rescue) shall, unless otherwise provided for, carry as a minimum, the supplies and equipment listed on the Oregon Health Division inspection form and the Multnomah County EMS inspection form (Exhibit J).

# Oregon Health Division
# Emergency Medical Services & Trauma Systems Section
# Ground Ambulance Inspection Form

☐ Initial ☐ Reinspection

Date: _____ Time: _____

Business Name: _____

Ambulance Location: _____

Non-Emergency Tel. #: _____

Contact Person: _____

Type of Organization: ☐ Fire Department ☐ Hospital Operated ☐ Private
☐ Industrial ☐ Municipal ☐ Volunteer

Level of Care: ☐ BLS ☐ BLS/ALS ☐ ALS

Vehicle Availability: ☐ On-line ☐ Reserve

Make of Vehicle: _____ Year of Manufacture: ____ License#: _____

Vehicle Identification Number: _____

Model: ☐ Type I ☐ Type II ☐ Type III ☐ Other _____

Mileage: _____

# Oregon Health Division
# Emergency Medical Services & Trauma Systems Section
# Ground Ambulance Inspection Form

☐ Initial ☐ Reinspection

Vehicle License# _____ Vehicle Mileage _____

**Inspection Codes:**
1 = Present and in good working order.
2 = Item placed on vehicle at time of inspection.
3 = Item not present or not in good working order.

**Rating Categories:**
CRITICAL EQUIPMENT IS IN BOLD AND CAPS
Equipment in this category that is either missing or not in good working order shall result in the immediate suspension of the license to operate until corrected.

## Mechanical Equipment

☐ Horn, one dual electric.
☐ Siren, electronic with two speakers mounted in grille. Control functions - manual, wail and yelp.
NOTE: "Hi-Lo" sound is not allowed. Lighting, Refer to KKK-A-1822B or C diagram for Type I, II, and III requirements:
☐ **I II III HEADLAMPS, white - 2 with dim/bright switch**
☐ I II III Front side marker lamps, amber - 2
☐ I II III Front side reflectors, amber - 2
☐ I II III Front turn signals, amber (including vehicular hazard warning signal flasher) - 2
☐ I III Front identification lamps, amber - 3
☐ I III Front clearance lamps, amber - 2
☐ I II III Rear side marker lamps, red - 2
☐ I II III Rear side reflectors, red - 2
☐ I II III Rear reflectors, red - 2
☐ I III Rear identification lamps, red - 3
☐ I III Rear clearance lamps, red - 2
☐ **I II III REAR STOP, tail & turn signal lamp, red (turn signal section may be amber) - 2**
☐ I II III Rear backup lamp, white - 1
☐ I II III Rear license plate lamp, white - 1
☐ I II III Front warning light, red - 1
☐ I II III Front warning light, white - 1
☐ I II III Rear warning lights, red - 2
☐ I II III Rear warning light, amber - 1
☐ I II III Side warning lights, red - 2 per side
☐ I II III Grille lights, red - 2
☐ I II III Intersection lights - 1 per side
☐ I II III Side floodlights - 1 per side
☐ I II III Rear floodlight - 1
☐ I II III Spotlight hand-held OR roof mounted - 1
☐ **SEAT BELTS with retractor devices - 1 each seat**

*Brake System*
☐ Main brakes
☐ Parking brake
☐ Backup alert alarm

*TIRES and tire changing equipment*
☐ **FRONT, minimum tread of 3/32" (even wear)**
☐ **REAR, minimum tread of 3/32" (even wear)**
☐ Spare, minimum tread of 3/32" (even wear)
☐ Jack with handle
☐ Lug wrench

*Windows, window cleaning equipment and mirrors*
☐ Windshield, # of rock chips _____, # of cracks _____, length _____.
☐ **WINDSHIELD WIPER (dual, electric, multi-speed)**
☐ Windshield washer
☐ Water level ☐ OK ☐ Low
☐ Windshield defroster
☐ Windows (side and rear) # of cracks _____, length of cracks _____.
☐ Window between driver and patient compartment for type II and III vehicles
☐ Outside mirrors; Right side - 1 and Left side - 1

☐ Engine oil level, ☐ OK ☐ Low
☐ Transmission oil level, ☐ OK ☐ Low
☐ Fan belts
☐ Starter
☐ Electrical system, with all lights on, amp meter read (+)
☐ Battery system, dual 12 volt system with labeled selector device
☐ Shock absorbers ☐ front ☐ rear
☐ Exhaust system
☐ Tailpipe(s) discharge to side of ambulance
☐ **HEATER**
☐ Front
☐ **REAR**
☐ Air conditioner
☐ Front
☐ Rear

## Patient Care Equipment

**OXYGEN (MEDICAL)**
*Installed system,*
☐ Compartment ventilated to outside.
☐ No other equipment stored in cabinet.
☐ Tank has at least 3000 liter capacity and contains at least 500 liters.
☐ **FLOWMETER TEST RESULTS.**
☐ **PORTABLE SYSTEM, tank has at least 300 liter capacity. Must have one full spare tank.**
☐ **FLOWMETER TEST RESULTS.**
☐ **TANKS PROPERLY SECURED.**
☐ All tanks must be inspected and have a hydrostatic pressure test by a qualified person, tanks stamped with a date followed by a *, +, or star are good for 10 years, all other markings after a date are good for 5 years.

OXYGEN NON-REBREATHER MASKS WITH TUBING
- ☐ **PEDIATRIC - 3**
- ☐ **ADULT - 3**
- ☐ Oxygen Nasal Cannulas with tubing, adult - 3
- ☐ Mouth-to-Mask Ventilation Devices with one-way valve, adult - 2

OROPHARYNGEAL AIRWAYS (PLASTIC OR RUBBER)
- ☐ **INFANT - 2**
- ☐ **CHILD - 2**
- ☐ **SMALL ADULT - 2**
- ☐ **MEDIUM ADULT - 2**
- ☐ **LARGE ADULT - 2**
- ☐ **EXTRA LARGE ADULT - 2**

**BAG-VALVE-MASK VENTILATION DEVICES (each mask must be transparent and semi-rigid)**
- ☐ **ADULT / CHILD, BAG - 1**
- ☐ **TEST RESULTS**
- ☐ **INFANT, BAG - 1**
- ☐ **TEST RESULTS**
- ☐ **MASK SIZES, 0, 1, 2, 3, 4, 5 - 1 ea.**

SUCTION ASPIRATOR
- ☐ Installed (independent of oxygen supply), 1000 ml collection bottle
- ☐ **TEST RESULTS**
- ☐ **PORTABLE (may be either battery, oxygen or manually powered)**
- ☐ **TEST RESULTS**
- ☐ Water for rinsing, 8 ounces.
- ☐ **SUCTION CATHETERS (Assorted sizes, neonatal to adult) _____, #_____**

*Litters, fasteners and anchorages*
- ☐ **WHEELED COT, w/mattress, and three restraining devices (chest, hip and knee) at least 2" with a quick release buckle - 1**
- ☐ **SIDE OR CENTER cot fastener with quick release feature - 1**
- ☐ Folding stretcher(s) with three restraining devices (chest, hip and knee), at least 2" wide with a quick release buckle. Number required is based on the litter-carrying capacity of the ambulance, number _____

BACKBOARDS (HAVE NECESSARY RESTRAINING DEVICES)
- ☐ **SHORT or equivalent; i.e. KED - 1**
- ☐ **LONG - 1**
- ☐ **PEDIATRIC, a modified short or long backboard is acceptable - 1**
- ☐ Scoop stretcher -1

*Splinting materials*

EXTRICATION COLLARS (soft foam rubber cervical collars are NOT allowed)
- ☐ **SMALL - 1**
- ☐ **MEDIUM - 2**
- ☐ **LARGE - 1**
- ☐ **HEAD IMMOBILIZERS - 2**
- ☐ Extremity splints, upper - 3
- ☐ Extremity splints, lower - 3

*Traction splints*
- ☐ Adult - 1
- ☐ Child - 1, OR
- ☐ Adult/Child combination - 1

*Bandaging and dressing materials*
- ☐ Elastic gauze bandages; Kling OR Kerlix type - 12
- ☐ Gauze 4" X 4" sterile sponges - 24

*Sterile bulk dressings*
- ☐ 8" X 30" - 4, OR
- ☐ 7" X 8" - 8
- ☐ Non-porous 4" X 4" sterile dressings - 4
- ☐ Adhesive OR hypo-allergenic 1" tape - 3 rolls
- ☐ Bandage shears - 2

*Other patient care equipment*
- ☐ **OBSTETRICAL Kit, disposable - 1**
- ☐ Hypothermia thermometer in protective case - 1
- ☐ **GLOVES, disposable - 15 pair**
- ☐ **FACE MASKS, disposable - 6**
- ☐ **PROTECTIVE EYEWEAR - 2**
- ☐ Hand cleaning solution - 16 oz. OR cloths - 8
- ☐ Cleaning disinfectant - 8 oz
- ☐ **CONTAINER(S) for used needles, each kit - 1, #_____**
- ☐ **CONTAINER for contaminated gloves, masks, etc.**
- ☐ Rigid eye shields - 2
- ☐ Emesis container - 1 two-liter container with plastic liners - 2
- ☐ **STETHOSCOPE - 1 adult**

ANEROID SPHYGMOMANOMETER
- ☐ **ADULT - 1**
- ☐ Extra Large Adult - 1
- ☐ Department of Transportation Emergency Response Guide Book (Initial Response to Hazardous Material Incidents), 1987 or newer, or equivalent - 1
- ☐ Triage tags - 25

*Medications, fluids and cardiac care equipment for a BLS ambulance*
- ☐ **EPINEPHRINE 1:1000 - 2 ampules**
  **Exp. Date _____/_____/_____**
- ☐ Syrup of Ipecac - 1
  Exp. Date _____/_____/_____
- ☐ Activated Charcoal - 1
  Exp. Date _____/_____/_____
- ☐ Glucose, liquid - 1
  Exp. Date _____/_____/_____
- ☐ Irrigation fluid 1000 cc
  Exp. Date _____/_____/_____

*Participating in an approved EMT-D Program*
- ☐ Defibrillator, auto or semi-auto - 1
- ☐ Patient cables - 2
- ☐ Contact gel - 1 tube OR
- ☐ Pre-gelled defib pads - 3 sets
- ☐ Monitoring electrodes - 12
- ☐ ECG paper - 3 rolls
  (if not a tape recording device)

MEDICATIONS, FLUIDS AND PATIENT CARE EQUIPMENT FOR AN ALS AMBULANCE
- ☐ **MONITOR/Defibrillator/Write-out portable with adult paddles - 1**
- ☐ **PATIENT CABLES - 2**
- ☐ **CONTACT GEL - 1 tube, or**
- ☐ **Pre-gelled defib pads - 3 sets**
- ☐ Monitoring electrodes - 12
- ☐ ECG paper - 3 rolls
- ☐ **LARYNGOSCOPE HANDLE - 1**
  Extra batteries - 2
- ☐ **LARYNGOSCOPE BLADES**
- ☐ **Sizes 0, 1, 2, 3, 4 - 1 ea.**
- ☐ Extra bulbs - 2

☐ **INTUBATION TUBES - 2 ea., 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0 and 8.0 mm**
☐ **INTRAVENOUS FLUIDS, STERILE, ASSORTED.**
**Exp. dates: ☐ good ☐ bad**
**VASCULAR ACCESS DEVICES**
☐ **butterfly devices 23 & 25 gauge - 2 ea.**
☐ **over-the-needle 14, 16, 18, 20, 22 & 24 gauge - 2 ea.**
☐ **intraosseous needle - 1**
☐ **INTRAVENOUS MEDICATIONS, STERILE, ASSORTED.**
**Exp. dates: ☐ good ☐ bad**
**COPY OF STANDING ORDERS:**
☐ **BLS**
☐ **EMT-D**
☐ **ALS**
☐ Signed by supervising physician.
Name of physician:

_____

Date standing orders were last signed:
_____/_____/_____

NOTE: Standing orders must be reviewed and signed annually.

Ambulance carrying controlled substances must have:
☐ A locked box that is attached to the inside of a locked cabinet.
☐ Keys to each of the locks (the same key cannot be used for both locks).
☐ Sign in/out log for each controlled substance.
☐ ALL DEVICES AND EQUIPMENT NOT STORED IN CABINETS MUST BE PROPERLY FASTENED TO PREVENT ITEMS FROM MOVING ABOUT WHILE THE VEHICLE IS IN MOTION OR IF INVOLVED IN AN ACCIDENT.

## Linen Supplies

☐ Pillows with plastic covering - 1 for each stretcher, total #_____
☐ Pillow cases (may be either cloth or paper) - 3
☐ Cot sheets (may be either cloth or paper) - 6
☐ **Blankets - 1 for each stretcher, total #_____**

## Security and Rescue Equipment

☐ **FIRE EXTINGUISHER, 5 lb., type 2A-10BC (must be accessible from either the patient or driver's compartment) - 1**
☐ Flashlight - 1
☐ Batteries: ☐ good ☐ bad
☐ Bulbs: ☐ good ☐ bad
☐ Extra set of packaged and dated batteries,
Exp. Date _____/_____/_____
☐ Road flares = 180 min.
Exp. Date _____/_____/_____
☐ Leather gloves - 2 pair
☐ Crowbar, 24" - 1
☐ Wrecking bar, 51" - 1
NOTE: A pry-ax type tool may be substituted for the crowbar and wrecking bar.

## Communication Equipment and Records

☐ RADIO ☐ VHF ☐ UHF ☐ Other
radio frequencies: _____

**PATIENT CARE REPORT FORM**
☐ Using own form
☐ Using the state-approved form
☐ Ambulance usages records (i.e. dispatch records) kept in office.
☐ Maintenance records, kept in office.

## Patient Compartment Dimensions

*Patient compartment*
☐ Length; must be at least 116" (B) and 122" (C) from the front partition to the inside surface of the rear door at the floor. Actual _____"
☐ Distance; must be at least 25" and not more than 30" of unobstructed space at the head of the primary patient stretcher (measure from backrest of EMT seat to forward edge of stretcher). Actual _____"
☐ Distance; must be at least 10" from the end of the stretcher to the inside surface of the rear door. Actual _____"
☐ Width; must be 18" + - 6" clear isle way between primary stretcher and squad bench. Actual _____"
☐ Height; must be at least 60." Actual _____"

*Doors*
☐ "Door-Open" warning device
Right forward side, must be at least:
☐ 30" wide. Actual _____"
☐ 42" high for a type II. Actual _____"
☐ 54" high for a type I and III. Actual _____"
Rear loading, must be at least:
☐ 44" wide. Actual _____"
☐ 46" high. Actual _____"
Between driver and patient compartment for Type II and III, must be at least:
☐ 17" wide. Actual _____"
☐ 46" high. Actual _____"
☐ 150 sq. inches of window. Actual _____"

## Emblems and Markings

*Front:*
☐ Word "AMBULANCE" in 4 inch high blue block letters in mirror image, centered above the grille, on an orange or white background.
☐ "Star of Life" a 3 inch blue emblem located to both the left and right of the word "AMBULANCE."

*Sides:*
☐ Word "AMBULANCE" in 6 inch high blue block letters on each side.
☐ "Star of Life" 16 inch blue emblem on each side.

*Rear:*
☐ Word "AMBULANCE" in 6 inch high blue block letters.
☐ "Star-of-Life" 12 inch blue emblem on each rear door.

*Top:*
☐ "Star of Life" in a 32 inch high blue emblem.

## Ambulance Exterior

Need of body work ☐ Yes ☐ No
Need of painting ☐ Yes ☐ No
Cleanliness: ☐ excellent ☐ good ☐ fair ☐ poor ☐ very poor

## Ambulance Interior

Need of upholstery work ☐ Yes ☐ No
Equipment stored in a neat and organized manner ☐ Yes ☐ No
Cleanliness: ☐ excellent ☐ good ☐ fair ☐ poor ☐ very poor

## Displaying Signs, Licenses & Certificates

☐ "Star of Life" Ambulance 1822B or 1822C Sticker/Decal

Location: _____

*"NO SMOKING" Signs*
☐ Driver's Compartment
☐ Patient Compartment
☐ Health Division Ambulance License

Location: _____

☐ DEA License filed in ambulance business office.

## Inspection Finding and Disposition

Can the person assisting in the inspection locate the equipment in a timely manner? ☐ Yes ☐ No

☐ Initial inspection acceptable.
*☐ INITIAL INSPECTION NOT ACCEPTABLE. THE INSPECTION REVEALS VIOLATIONS THAT CONSTITUTE AN IMMEDIATE DANGER OR THREAT TO THE PUBLIC. THE LICENSE FOR THIS VEHICLE IS HEREBY SUSPENDED AND SHALL REMAIN SUSPENDED UNTIL THE VIOLATIONS HAVE BEEN CORRECTED.
*☐ Initial inspection NOT acceptable. The inspection reveals violations that do not constitute an immediate danger or threat to the public. Notify the Division in writing that the non-critical violations have been corrected by:
Date: _____/_____/_____, Time:_____
☐ Reinspection acceptable.
*☐ Reinspection NOT acceptable. Remit a check in the amount of $50 made payable to the "Oregon Health Division."
☐ Copy of the ambulance inspection form given to the ambulance service representative.

Ambulance Service Representative:

_____
Signature Time

*County Health Dept. Representative notified:

_____
Signature Time

*County Ambulance Service Plan Administrator notified:

_____
Signature Time

Inspection completed by:

_____
Signature Time

# ATTACHMENT H

# MASS CASUALTY INCIDENT PLAN

# Multnomah County

# Emergency Medical Services

# Mass Casualty Incident Plan

1993

MULTNOMAH COUNTY

EMERGENCY MEDICAL SERVICES

MASS CASUALTY INCIDENT PLAN

TABLE OF CONTENTS


I. GENERAL

A. Purpose

B. Information

C. Definitions

D. Legal Authority

E. Policy

II. LEVELS OF ACTIVITY

III. ACTIVATION

IV. COMMUNICATIONS

V. DOCUMENTATION

VI. DEMOBILIZATION

VII. ACTIVITY CHECKLISTS

A. Level I

B. Level II

C. Level III

# MULTNOMAH COUNTY

# EMERGENCY MEDICAL SERVICES

# MASS CASUALTY INCIDENT PLAN

## I. GENERAL

A. Purpose:
The Mass Casualty Incident Plan outlines the response policies and procedures for emergency medical services providers and agencies in Multnomah County to be implemented in the event of a Mass Casualty Incident (MCI).

B. Information:
The following titles of the National Interagency Incident Management System (NIIMS) Incident Command System (ICS) are used:

| NIIMS ICS |
|---|
| Emergency Center |
| EMS Assembly Area |
| Medical Branch Director |
| Medical Communications Group Supervisor |
| Medical Transportation Group Supervisor |
| Triage Group Supervisor |
| Treatment Group Supervisor |

C. Definitions:

State Advanced Life Support (ALS) Unit: A unit staffed by at least two persons: one state-certified at or above the EMT 1 level and one state-certified at or above the EMT 3 level, or an RN, PA or physician trained in prehospital emergencies as defined in OAR 333-23-050 2 (a), (A) and (B).

Multnomah County ALS Ambulance: An ambulance staffed, according to Multnomah County Administrative Rule, by at least two Oregon Certified EMT 4s.

All-Call: An interhospital survey conducted on the Hospital Emergency Administrative Radio (HEAR) System to determine the number of critical and/or noncritical patients each facility can handle.

Ambulance Staging Area: Area where arriving ambulances and personnel can be assembled in close proximity to the incident.

Basic Life Support (BLS) Unit: A unit staffed by at least two persons: one state-certified at or above the EMT 1 level or an RN, PA or physician trained in prehospital emergencies.

Bureau of Emergency Communications (BOEC): A city of Portland bureau responsible for management of the Multnomah County Public Safety Answering Point (PSAP) located at Kelly Butte. This bureau coordinates 9-1-1 communications for Emergency Medical Services, Law Enforcement and Fire Services throughout Multnomah County including the cities of Portland, Gresham, Troutdale, Wood Village, and Fairview.

Critical Incident Stress Debriefing (CISD): A confidential discussion organized and performed by a Critical Response Team (CRT) composed of responders, peers, and mental health professionals. [The Critical Response Team responds to any situation faced by emergency services personnel that causes them to experience unusually strong emotional reactions which may potentially interfere with their ability to function either at the scene or later.]

Emergency Center: A facility established and equipped to perform coordination in support of a large scale emergency or disaster.

EMS Assembly Area: Area where arriving ambulances and personnel can be assembled in close proximity to the incident.

EMS Assembly Area Manager: Individual designated to manage the EMS Assembly Area(s).

EMS Dispatch: An integral part of the Bureau of Emergency Communications. EMS Dispatch functions as a central point for 9-1-1/medical call taking and dispatch. During a Mass Casualty incident, EMS Dispatch will monitor the operations frequency, assign additional requested resources, and ensure sufficient medical coverage for other EMS incidents.

Fire Alarm Dispatch (FAD): Communications center for fire services in Multnomah County.

Fire Command: Senior Fire Officer on-scene.

Fire Rescue: A fire service unit which has medical capability.

Hospital Emergency Administrative Radio (HEAR): VHF radio system coordinated by Regional Hospital during a Mass Casualty incident--used to ascertain and assemble information regarding hospital resources.

Immediate Danger Zone: Area surrounding an incident in which there is a potential danger to life. Incident Command will determine its boundaries.

Incident Command ("Command"): Radio designation and "title" of person or persons responsible for overall direction of the incident.

Incident Commander: Person designated by the public safety agency in charge to command the scene.

Jurisdiction: Multnomah County and those jurisdictions within Multnomah County.

Landing Zone (LZ): A well-marked area, 100 ft. x 100 ft., designated and secured by fire or law enforcement personnel for helicopter landing.

Medical Branch Director: An EMT 4 who coordinates all on-scene emergency medical services activities.

Medical Communications Group Supervisor: An EMT 4 who coordinates Regional Hospital communications and patient destinations with transporting ambulance assignments.

Medical Examiner: is responsible for removal of deceased from area and coordinates morgue activities.

Medical Resource Hospital (MRH): Acts as back-up to Regional Hospital in the event of Regional Hospital communications failure.

MedNets: UHF radio frequencies designated for Emergency Medical Services communications.

Morgue: Temporary area initially designated by the Medical Branch Director and Transportation Group Supervisor, where deceased victims will be taken--location may be changed by Medical Examiner.

Patient Loading Zone: Designated area adjacent to the patient treatment area, where transporting units receive and load patients.

Patient Treatment Area: Designated area where patients are brought, reassessed, and treated after initial triage and tagging by a Triage Team member. Treatment priority sections will be marked, corresponding with colors of triage tags.

Regional Hospital: Facility coordinating patient destinations with hospital resources.

Staging Area: Area where arriving fire service equipment, other vehicles and personnel stage to be in close proximity to the incident.

Transportation Group Supervisor: An EMT 4 who establishes treatment areas and supervises patient loading into transport units.

Treatment Group Supervisor: An EMT 4 who coordinates all activities in the treatment areas.

Triage: Process of sorting patients by severity of injury.

Triage Group Supervisor: An EMT 4 who coordinates triage, patient assessment, and tagging.

Triage Tag: Multicolored tie-on tag used to indicate condition and treatment priority of patients.

Triage Priority Colors:

Red - Priority 1 - Critical
Life threatening medical emergencies, i.e., airway, breathing and/or circulation problems.

Yellow - Priority 2 - Noncritical
Not as seriously injured as Priority 1 patients, but possibility exists for rapid deterioration of physical condition.

Green - Priority 3 - Ambulatory
Require treatment, but can wait for transportation without immediate threat to life.

Black - Priority 0
Expired or mortal injuries.

Triage Tagging: Method used to categorize condition of patients, according to severity of injuries. A triage team member will assign tags corresponding in color with treatment priority areas: red - priority 1; yellow - priority 2; green - priority 3; black - priority 0. The triage tag shall stay with the patient through hospital admittance.

D. Legal Authority:

Oregon Revised Statutes:

ORS 431.607 Emergency Medical Services and Trauma System

ORS 823.00 Ambulances and Emergency Personnel

ORS 823.180 County plan for ambulance and Emergency Medical Services

Oregon Administrative Rules:

| | |
|---|---|
| 333-28-000 through 333-28-063 | Ambulances and Emergency Medical Technicians - October 17, 1991. |
| 333-28-095 through 333-28-130 | County Ambulance Service Area Plans - May 7, 1990. |
| 333-200-000 through 333-200 090 | Emergency Medical Services and Trauma Centers - June 26, 1987; Amendments October 9, 1987. |
| 333-205-000 through 333-205-060 | Trauma System Hospital Identification in Trauma Area #1 - June 26, 1987; Additions April 28, 1988. |

Multnomah County Code:

| | |
|---|---|
| MCC 6.32 | Ambulance Services |

Multnomah County EMS Administrative Rules:
Permanent and Emergency Rules

Other:
State Trauma Advisory Board Plan

Area Trauma Advisory Board I Plan - April 4, 1988

E. Policy:
The Mass Casualty Incident (MCI) Protocol will be used to coordinate incidents involving ten or more total patients.

During a mass casualty incident, emergency medical services providers and agencies will conduct operations to provide immediate resources, to minimize the loss of life through prompt medical treatment in the field, and to coordinate field medical services and activities with existing medical facilities and other support services and resources.

It is an EMS policy that agencies having the responsibility to provide needed emergency services be notified of an impending or actual incident as soon as appropriate in order to initiate preparedness or response activities.

**The Trauma System is NOT used for mass casualty incidents.**

On-scene personnel will have authority to act in a timely manner within the incident command system at the scene.

If the first units responding to an incident are BLS or ALS staffed with only one EMT 4:

A. Medical Branch Director shall order ALS units as needed to fill the EMT 4 positions.

B. Designated BLS personnel shall perform MCI tasks normally assigned to EMT 4s until relieved.

## II. LEVELS OF ACTIVITY

Level I:
An incident exists involving ten or more total patients or the potential for 10 or more patients.

Level II:
An incident exists where the number of MCI-dedicated ALS ambulances has reduced the available ALS ambulances within Multnomah County to a Minimum Coverage Level of 3 or below.

Level III:
An incident exists where the number of MCI-dedicated ALS ambulances has reduced the available ALS ambulances within Multnomah County to a potential EMS Coverage Level of 0.

## III. ACTIVATION

The first arriving Advanced Life Support unit on the scene shall identify itself and advise EMS Dispatch of the following:
1. The exact location of the incident.

2. The type of incident (transportation accident, fire, explosion, etc.).
3. Environmental conditions (hazardous materials, extreme weather, etc.).
4. Number of ALS ambulances needed.
5. Immediate danger zone.
6. Assembly area.
7. Recommended routes to and from the scene.
8. Approximate number of patients.

First Fire ALS Unit:

- Provides personnel to perform duties of the Medical Branch Director and Triage Group Supervisor.

- Provides the identification vests, task cards, and triage area tarps.

  (If the first arriving Fire Unit is not ALS staffed, the Triage Group Supervisor's duties may be assigned to ALS Ambulance personnel and the Transportation Group Supervisor's duties assigned to BLS fire personnel until relieved by fire ALS personnel.)

First ALS Ambulance Unit:

- Provides personnel to perform duties of the Transportation Group Supervisor and Communications Group Supervisor.

## IV. COMMUNICATIONS

Field units SHOULD NOT use the HEAR system -- it is reserved for interhospital traffic. Units transporting patients should not give receiving hospitals updates or patient care reports.

MedNet 1 is the dedicated MCI channel for on-site coordination, communication with Regional Hospital and the request/direction of additional medical personnel through EMS Dispatch.

If MedNet 1 is disabled, MetNet 4 will be used. (MRH will continue to function for medical direction and non-MCI trauma communications on MedNet 4).

MCI Medical Operations:

MedNet 1 (UHF):
Medical Sector Coordinator; Communications Group Supervisor; Transportation Group Supervisor; Triage Group Supervisor; ALS Ambulances; LifeFlight; EMS Dispatch; Fire Rescues, dedicated BOEC MCI operator.

Interhospital Coordination:

HEAR System (VHF):
Regional Hospital and Area Hospitals.

Primary EMS Dispatch:

MedNet 9 (UHF):
Routine EMS Operations.
Initial assignment of units to MCI.
Reassignment of units after transport.

## V. DOCUMENTATION

The Communications Group Supervisor will fill out and maintain the Mass Casualty Incident Log.

**All MCI operations documents will be copied and forwarded to the Multnomah County Emergency Medical Services office within five working days.**

An accounting of the expense of the Multnomah County Emergency Services Agencies may be kept and made available upon request to the Multnomah County/city Office of Emergency Management for the purpose of compiling and reporting to the county.

## VI. DEMOBILIZATION

1. Appropriate callbacks will be made by agencies who made initial contacts, at the direction of the Incident Commander, 9-1-1 center will cancel units, agencies will cancel personnel.

2. Personnel-on-scene will check with Incident Command before clearing scene.

3. All agencies should consider contacting a Critical Response Team (CRT) which performs Critical Incident Stress Debriefing (CISD) for their personnel. Requests for the Oregon Critical Response Team (OCRT) may be made through Medical Resource Hospital.

## VII. ACTIVITY CHECKLIST

A. Level I

An incident exists involving ten or more total patients.

| Position | Task |
|---|---|
| Emergency Medical Services Dispatch | Verify Mass Casualty Incident and its location, dispatch initially requested units.<br><br>If EMS Dispatch is advised that hazardous materials are involved in the incident, IMMEDIATELY notify all responding agencies.<br><br>Notify BOEC supervisors, adjust staffing pattern, inform law enforcement dispatch. |

| Position | Task |
| --- | --- |
| | Relay incident information to Regional Hospital. |
| | Broadcast incident and frequency information to all on-line EMS units. |
| | Put air ambulance services on standby. |
| | Call all ground ambulance companies and have them put all available units on the air for potential response. |
| | Notify the EMS Office. |
| | Monitor the operations frequency and dispatch additional EMS units per request of the Medical Branch Director or Incident Commander. |
| | Cancel ground and air ambulances per request of Medical Branch Director or Incident Commander. |
| First arriving ALS Unit _____ | Advise Emergency Medical Services Dispatch of the following: |
| | This is an MCI. |
| | The exact location of the incident. |
| | The type of incident (transportation accident, fire, explosion, etc.). |
| | Environmental conditions (hazardous materials, extreme weather, etc.). |
| | Number of ALS ambulances needed. |
| | Immediate danger zone. |
| | Assembly area. |
| | Recommended routes to and from the scene. |
| | Approximate number of patients. |

| Position | Task |
|---|---|
| First Fire ALS Unit | Provide the Medical Branch Director and Triage Group Supervisor. |
| | Distribute the identification vests and task cards to the Transportation Group Supervisor, Communication Group Supervisor, Triage Group Supervisor, and Medical Branch Director. |
| | Provide triage tags. |
| | Provide color coded tarps or markers for treatment areas. |
| Medical Branch Director | Coordinate ALL on-scene EMS activity. |
| | Ensure that EMS Dispatch gets pertinent incident information. |
| | Appoint Triage Group Supervisor. |
| | Order ambulances, as needed, per Communications Group Supervisor. |
| | Coordinate all EMS activities with Incident Command. |
| | Order additional resources for Medical Branch (manpower, buses, medical supplies, Red Cross, Medical Examiner, etc.). |
| | Delegate establishment of air ambulance Landing Zone (LZ). |
| | Constantly assess performance of group supervisors and make personnel changes if necessary. |
| Triage Group Supervisor | Perform rapid triage. |
| | Estimate number of patients and type of injuries, i.e., Head, peds, OB, Chest, Burns, Radiation, HazMat. |

| Position | Task |
| --- | --- |
| | Give this information to the Medical Branch Director and the Communications Group Supervisor. |
| | Go back, start "tagging" patients. |
| | Confer with Medical Branch Director to establish extrication teams. |
| | Ensure that no unnecessary equipment is brought into scene where patients are located. |
| | Move patients to treatment areas as soon as possible. |
| First ALS Ambulance_____ | Provide EMT 4 Transportation Group Supervisor and EMT 4 Communications Group Supervisor. |
| Medical Communications Group Supervisor____ | Establish communications with Regional Hospital on Mednet 1. |
| | Designate the Ambulance Assembly area. Relay location to Medical Branch Director. |
| | Start MCI log, using information from the Triage Group Supervisor. |
| | If necessary, designate a communications assistant to assure an organized flow of information from scene to Regional Hospital. |
| | Request additional ambulances, including BLS ambulances, if needed, via the Medical Branch Director. |
| | Keep a unit ready for loading in the Loading Zone at all times. |
| | As soon as a unit is ready to transport, tell Regional Hospital the number and type of patients on board. Regional will determine unit destination. |

| Position | Task |
| --- | --- |
| | Inform loaded ambulance of its destination, ensure its safe departure, and immediately request another ambulance to move in from the staging area to the loading zone. |
| Medical Transportation Group Supervisor____ | Establish patient treatment areas after conferring with the Medical Branch Director regarding location.<br><br>Establish patient loading zone. Consider proximity to treatment area and ambulance approach and exit routes.<br><br>Assign patients from treatment area to ambulances.<br><br>Supervise the number and priority of loading of patients.<br><br>As soon as patients have been loaded, tell the Communications Group Supervisor the ambulance unit and number/type of patients on board. (Head, Peds, OB, Chest, Burns, Radiation, HazMat, etc.)<br><br>If extra medical equipment is needed, request from the Medical Branch Director.<br><br>Do not allow patients to "stack up" in the loading zone.<br><br>If necessary, delegate the loading of ambulatory patients into buses. |
| Treatment Group Supervisor_____ | Coordinate all activities in the treatment area with the Transportation Group Supervisor.<br><br>Organize treatment areas and order additional medical equipment and manpower through the Medical Branch Director.<br><br>Maintain contact with Triage Group Supervisor. Accept patients into treatment areas. |

| Position | Task |
| --- | --- |
| | Provide BLS care to patients. ALS care may be possible later in the incident when resources allow.<br><br>Identify the order in which patients are to be transported.<br><br>Keep the treatment area as secure as possible.<br><br>If ambulatory patients are loaded onto buses or grouped together in one location, attempt to provide secure access and egress points (so patients or their parents do not leave the scene). All patients triaged must be accounted for! |
| Additional Arriving Ambulances_____ | Go to the EMS Assembly Area and remain with your vehicle.<br><br>Report your arrival to the Communications Group Supervisor. (EMS Assembly Area Manager if one has been designated.)<br><br>Load patients as assigned by Transportation Group Supervisor.<br><br>Transport to medical facility as assigned by Communications Group Supervisor and provide patient care enroute. |
| Additional Arriving Rescues_____ | Respond to Staging Area.<br><br>Report arrival to the Staging Area Manager; wait for assignment.<br><br>If assigned as an ambulance, report to EMS assembly area and remain with your vehicle. On arrival, inform Communication Group Supervisor (EMS Assembly Area Manager if one has been designated.) |
| Air Ambulances_____ | Switch to predesignated operations net for instructions and landing zone location and remain with your aircraft after landing.<br><br>Load patients as assigned by Transportation Group Supervisor. |

| Position | Task |
|---|---|
| | Transport to medical facility as assigned by Communications Group Supervisor. |
| Regional Hospital | Establish contact with Communications Group Supervisor. |
| | Initiate HEAR System "All-Call" and relay information to others on emergency notification list. |
| | Coordinate patient information between field personnel and receiving hospitals. |
| | Coordinate transportation assignments from incident site to hospitals. |
| | Upon request, provide medical direction in case Medical Resource Hospital communications fail. |
| Medical Examiner | Direct tagging of possessions and preserve conditions at the scene for investigative agencies. |
| | Direct removal of the deceased from the area, and coordinate morgue activities. |
| Incident Commander | Oversee and manage all on-scene incident operations. |
| Law Enforcement | Coordinate with Incident Command. |
| | Perform on-scene operations and tasks according to agency procedures and Incident Command Directives. |
| Fire Service | Coordinate with Incident Command. |
| | Perform on-scene operations and tasks according to agency procedures and Incident Command directives. |

B. Level II

An incident exists where the number or MCI-dedicated ALS ambulances has reduced the available ALS ambulances within Multnomah county to the minimum coverage level 3 established by Multnomah County Administrative Rules.

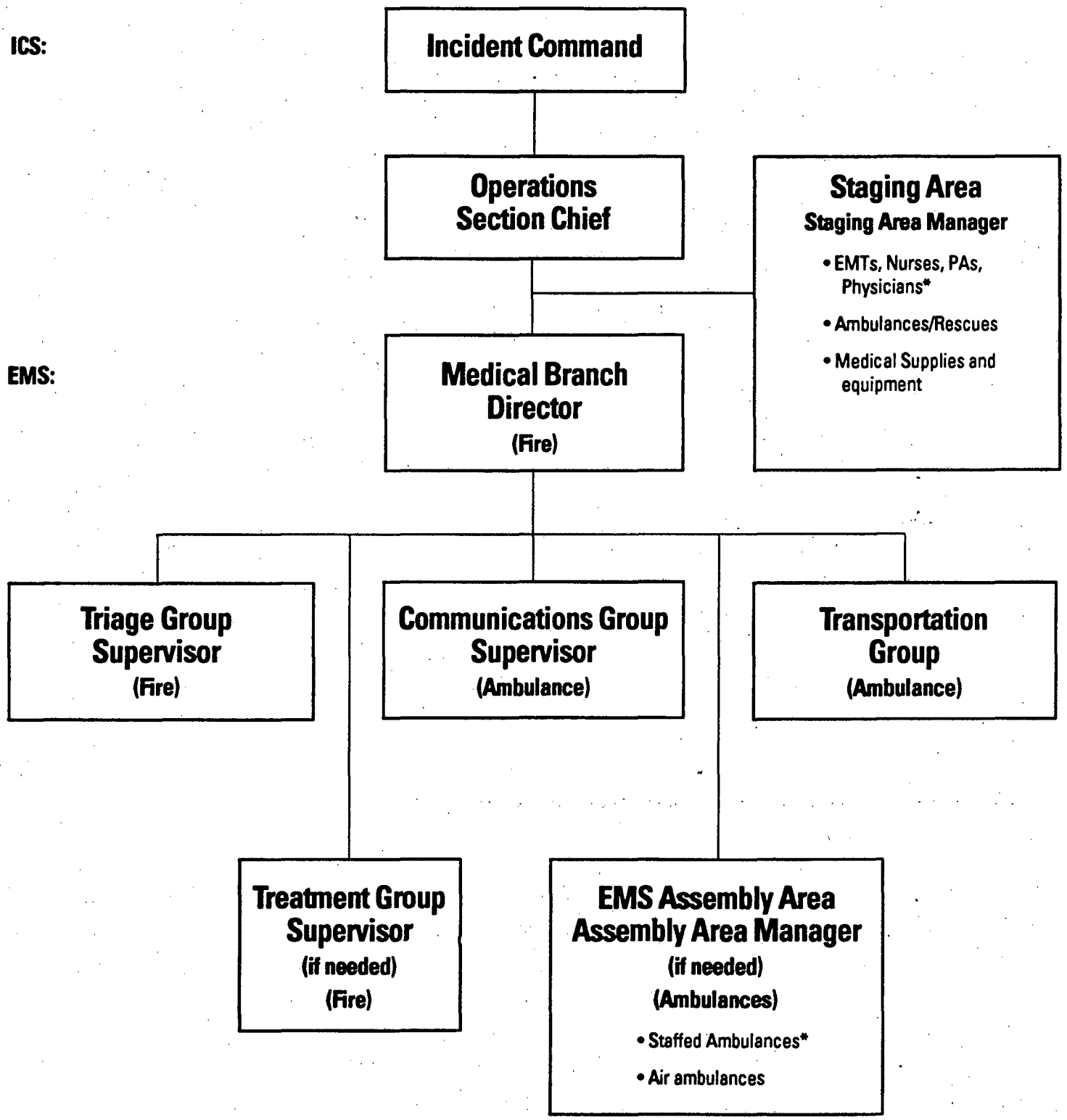
| Position | Task - In Addition to Level I |
|---|---|
| BOEC | Request out-of-county ambulances as directed by Medical Branch Director. |

C. Level III

An incident exists where the number of MCI-dedicated ALS ambulances has reduced the available ALS ambulances within Multnomah County to an EMS Coverage Level of 0.

| Position | Task - In Addition to Level II |
|---|---|
| All Agencies | Increase support according to magnitude of incident.<br><br>Coordinate arrival and dispersement of additional manpower and resources with Emergency Center and Incident Command.<br><br>Notify the City/County Emergency Management Office. |

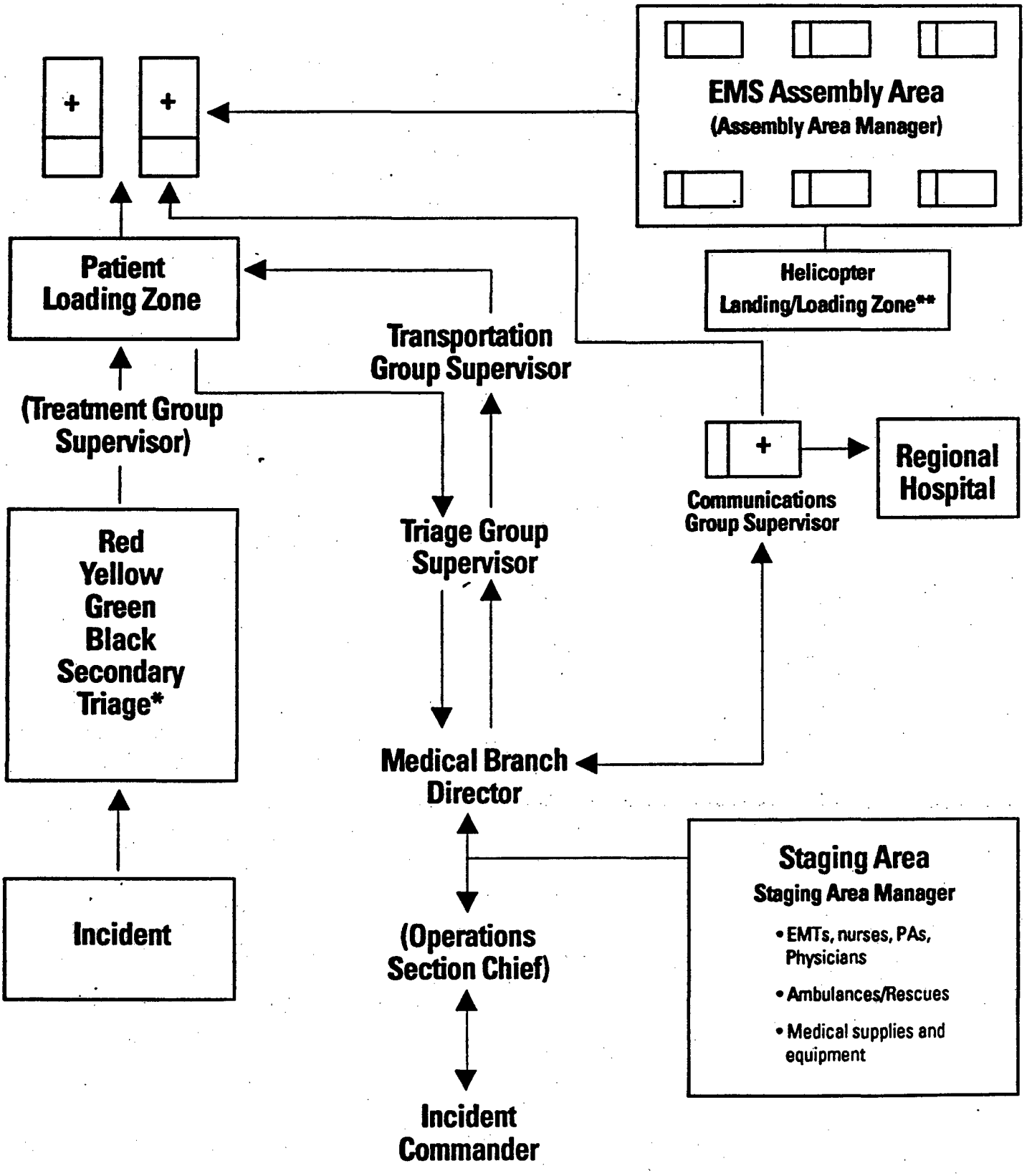
# EMS Structure




*All off-duty EMS personnel who arrive at the scene will report only to the Staging Area. If needed, they will be asked to respond to a given person and /or area by the Staging Area Manager and be given visible identification.

# Medical Branch Diagram

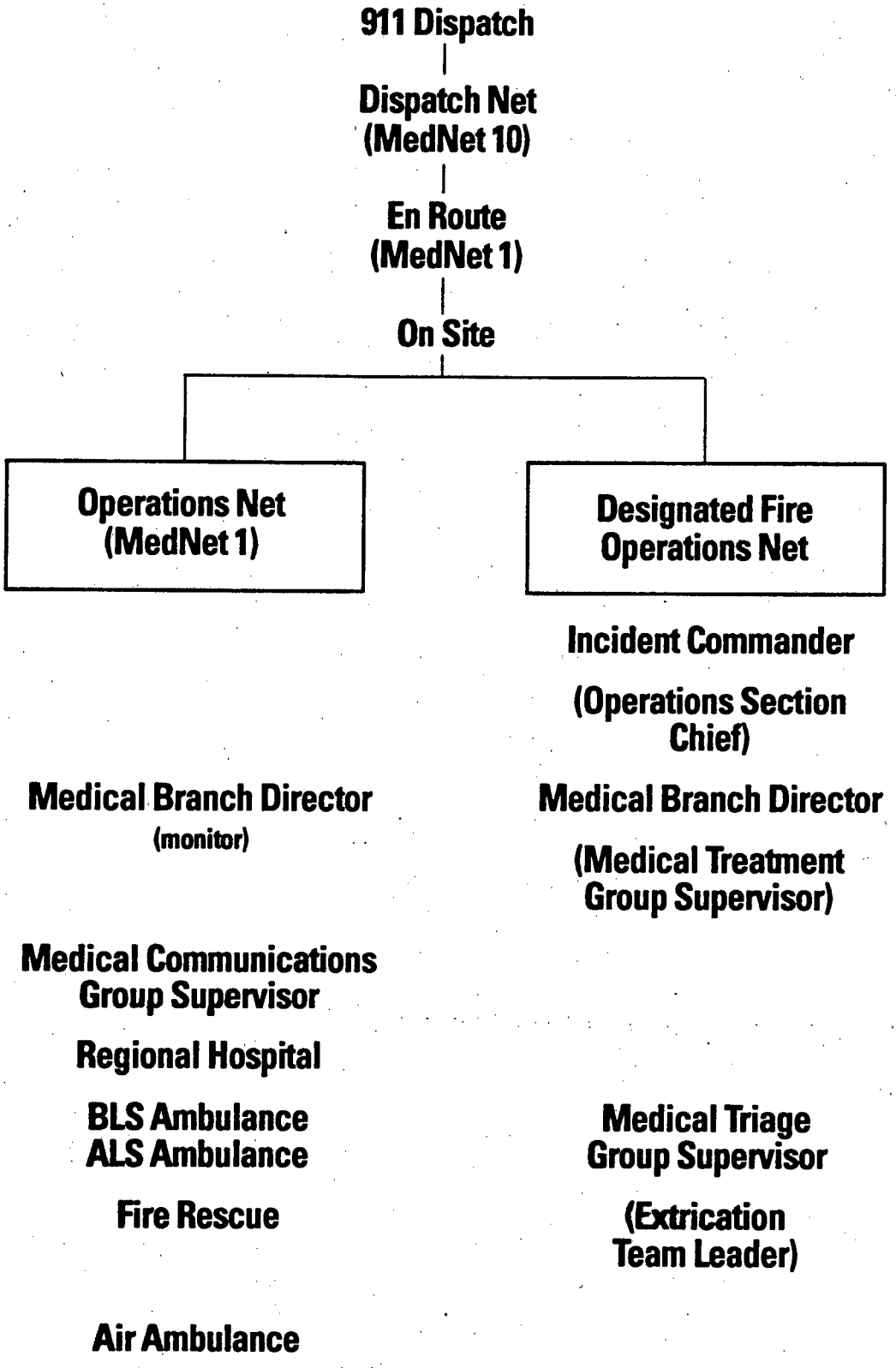
(Example)




* Diagram indicates needed triage areas. Actual designated sites will vary.

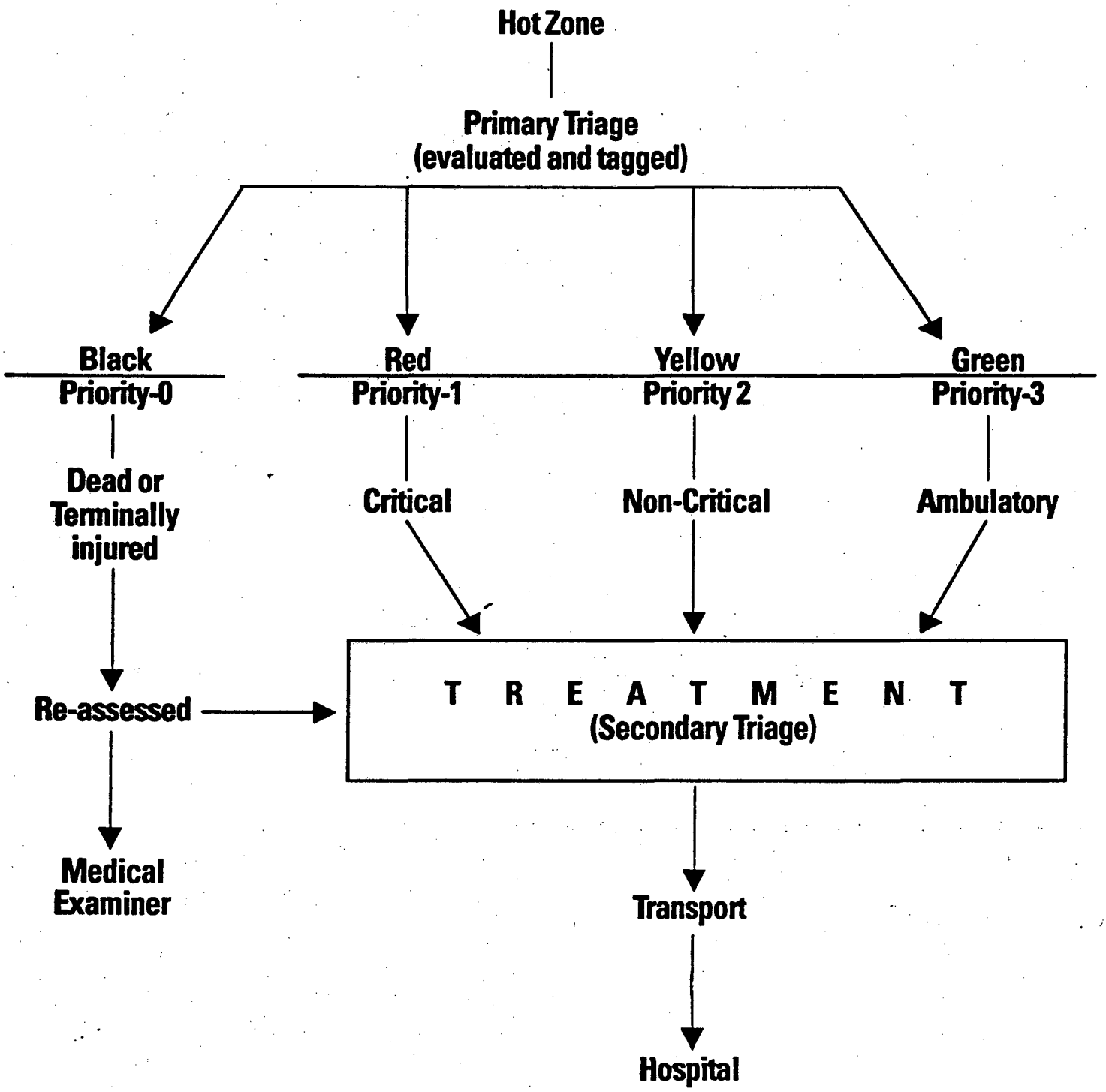
** Helicopter landing/loading zone should be placed away from areas of patient care. Actual placement will be determined by where the helicopter can land.

# Communications*



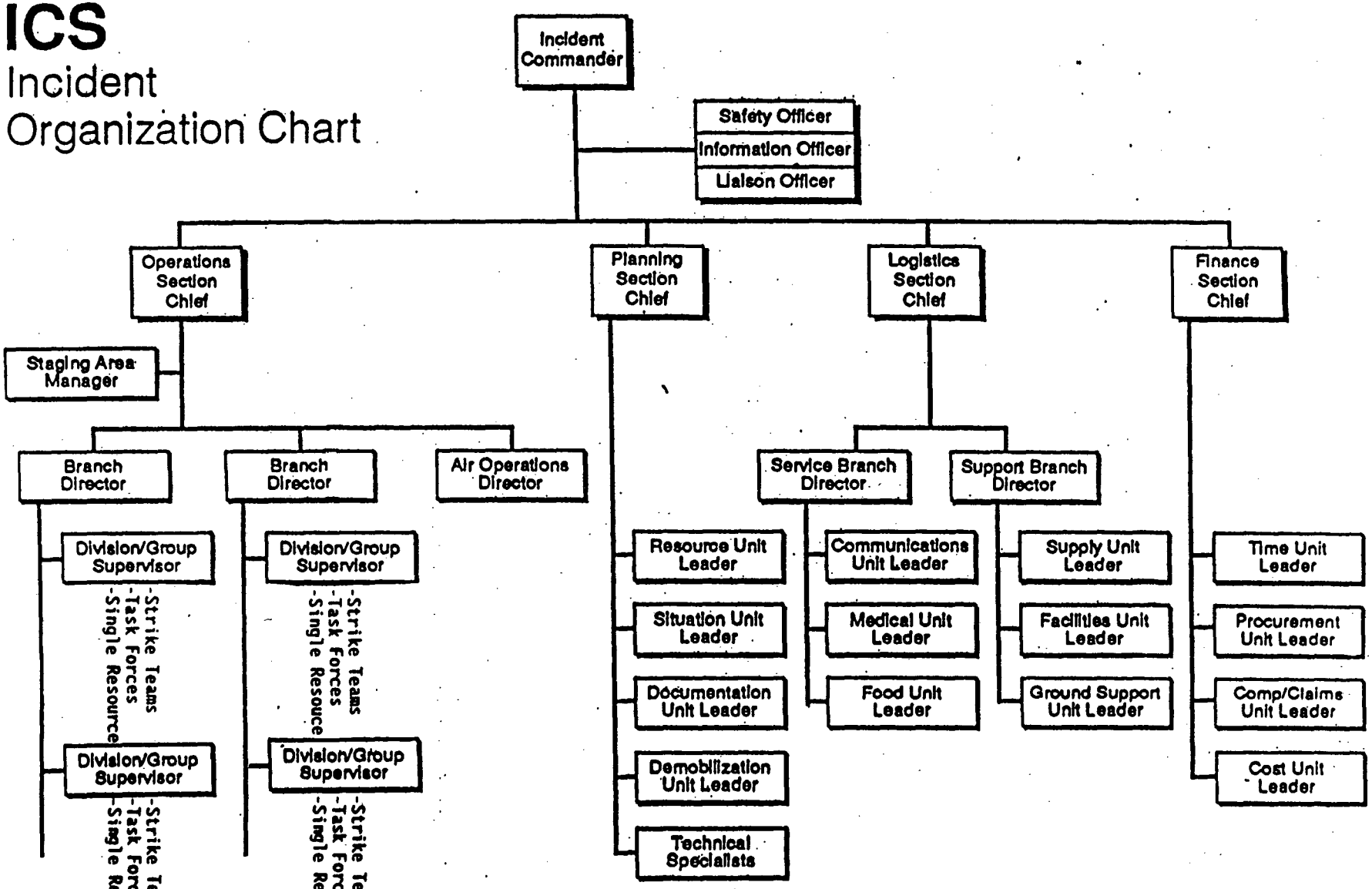

*Who has what channels.

# Patient Flow




**When a vehicle is available for transport, treatment shall shift from on-scene to treatment during transport.**
**Keeping on-scene time to a minimum consistent with good patient care is the goal.**

# ICS
## Incident Organization Chart



# ATTACHMENT I

# HAZ-MAT

# SPECIALIZED RESCUE

MAB Approved
11/10/89

# HAZARDOUS MATERIALS

Purpose:

Paramedics may be first on the scene of a hazardous materials situation because of shorter response time or no knowledge of dispatch that hazardous materials are involved. This protocol is intended to guide paramedics who do not normally function in hazardous materials scenes.

If the scene you are responding to is a known or suspected (based on information from dispatch) hazardous materials situation stage and wait for the hazardous materials personnel.

When you have arrived at the scene and find out during scene assessment that hazardous materials are involved stage and wait for the hazardous materials personnel.

All scenes (MVA, Industrial, etc.) should be considered as being a potential hazardous materials situation. The following approach procedure should be used:

Procedure:

I. Approach

A. All scenes:

1. Utilize a cautionary approach at all times.
2. The reported location may be inaccurate and response into a contaminated area might occur.
3. Approach upwind and upgrade if possible. If unable to approach from upwind/upgrade, approach at 90° to wind/grade if possible with safety in mind.
4. Position vehicle well away from problem and headed away from incident.
5. Communicate your actions or intended actions to EMS Dispatch.
6. Remember: Contaminated and/or exposed response personnel may add to the overall problem and reduce their effectiveness to help.

B. If at any time you suspect a hazardous materials situation:

1. If first-in responder, confirm that fire and police have been notified. a. The agency responsible for hazardous materials responses may respond with different levels of personnel and equipment based upon the information received. Do not always expect a hazardous materials team to respond.
2. If you are a first-in responder, first priority is scene isolation. KEEP OTHERS AWAY! KEEP UNNECESSARY EQUIPMENT FROM BECOMING CONTAMINATED.
3. If you believe that you or your vehicle are contaminated stage in an isolated area.

DRAFT

**PORTLAND BUREAU OF FIRE, RESCUE & EMERGENCY SERVICES**
**INTER-OFFICE CORRESPONDENCE**
(NOT FOR MAILING)

April 13, 1993

**TO:** Whom It May Concern

**FROM:** Lt. Dennis Gale

**SUBJECT:** Specialized Rescue/EMS Services Provided by Portland Bureau of Fire, Rescue & Emergency Services

## I. HIGH ANGLE RESCUE

High angle rescue incidents are handled by specially trained and equipped units stationed in strategic locations (Stations 1, 22, 19 & 41). In addition, all of those stations have high angle rescue trained fire fighter/paramedics that provide medical care at the incidents.

## II. CAVE IN RESCUE

Cave in incidents are handled by Squad 1 (specially trained personnel) using Trench Rescue 1 (special cave in equipment). These units are preceded by PFB 1st responders and PFB fire fighter/paramedic units knowledgeable about cave in rescue techniques.

## III. WATER RESCUE

Specialized water rescue is provided by Portland Fire's Dive Rescue Team. This specialized 30 member team is supported by PFB first responders and PFB fire fighter/paramedic units.

## IV. HAZARDOUS MATERIALS INCIDENTS

Hazardous materials incidents are handled by Haz. Mat. 23. This regional Hazardous Materials Team is assisted by specially trained Haz. Mat. paramedics from Haz. Mat. Rescue 41.

V. EXTRICATION

Extrication is normally handled by one of ten PFB truck companies stationed in strategic locations. All extrication incidents require a PFB ALS unit (medical care) and a PFB engine company (fire safety).

VI. SPECIAL POLICE OPERATIONS (S.W.A.T. TEAMS, Etc.)

Medical care at special police operations is handled by 12 specially trained fire fighter/paramedics. These "S.E.R.T./Fire Medics" received their specialized training from Portland Police Bureau's Special Emergency Response Team.

VII. SPECIAL RESCUE INCIDENTS

Special rescue incidents (elevator rescue, etc.) are normally handled by PFB Squad 1. This unit has received specialized training in these areas.

# ATTACHMENT J

# SEARCH AND RESCUE PROTOCOL

## SEARCH AND RESCUE (SAR)

Incidents that occur in "back country" or wilderness areas often involve extended response times, specialized personnel and extrication equipment; non routine procedures for dispatch of EMS resources may need to be used.

Always notify the Sheriff's Office of any incident that occurs "on a trail; during a hike or climb," or other similar outdoor events. Per ORS #401.066, the Sheriff's Office is in charge of all Search and Rescue incidents, and is responsible for notifying, organizing, and using appropriate resources, such as the RAT Team through Buck Medical Services, the 304th Air-evac unit, etc.

There is no need for an ALS ambulance to standby at a trail head waiting for a wilderness rescue team to extract a patient. An MCSO/SAR Officer at the scene may advise BOEC to have the initially dispatched ambulance go back in service until the patient is prepared for transport; at that time the MCSO/SAR Officer will request the dispatch of appropriate transport.

| **RESPONSIBILITY:** | **ACTION:** |
|---|---|
| Calltaker | 1. Process the call for medical and law enforcement response.<br><br>2. Identify the need for MCSO/SAR notification when the incident type and location is verified.<br><br>3. Attempt to ascertain any access problems or unusual incident circumstances or hazards and include in the MISC. INFO.<br><br>4. Ensure that the MCSO District Officer and the MCSO Shift Sergeant have been notified. MCSO is in command of all Search and Rescue incidents.<br><br>5. Complete the call per BOEC policy. |
| EMS Dispatcher | 1. Contact the appropriate first responder agency.<br>**NOTE:** Certain areas in East County have no EMS first responder services (unusual MSAG info should be in call MISC. INFO.)<br><br>2. Dispatch the appropriate units.<br>NOTE: The Buck Ambulance RAT team may be activated for response in Multnomah County ONLY on requested of the Sheriff's office |

3.350 5/92

| | |
|---|---|
| | 3. Advise all responders to contact the MCSO District Officer or SAR Coordinator as soon as they arrive on scene. |
| | 4. Contact or dispatch additional EMS resources when requested by the MCSO District Office or SAR Coordinator |
| Dispatch Coordinator | 1. Monitor all activities associated with the incident. |
| | 2. Advise all net dispatchers of NET-5 closure for SAR operations, as required. |
| | 3. When Search and Rescue is requested, make appropriate notifications. |
| Incident Command | 1. If "command" requests a delay in dispatching an ambulance, ground or air, (while the SAR team reaches, stabilizes, packages, and extricates the patient) command is then responsible for contacting EMS Dispatch for dispatch of an appropriate transport unit. |
| | 2. Decisions about appropriate transport units should be made in consult with available medical resources at the scene. |

# ATTACHMENT K
# DISPATCH PROCEDURES
# TRIAGE GUIDE

# MULTNOMAH COUNTY
# EMERGENCY MEDICAL SERVICES
# TRIAGE GUIDELINES
# AND
# PREARRIVAL INSTRUCTIONS

These Triage Guidelines are to be used by ALL licensees in Multnomah County. Any call for emergency medical assistance MUST be triaged by these standards. Any response other than 0, as defined herein, will be referred to EMS Central Dispatch per Rule 631.320 (Subsection B and F) and Rule 631.330 (Subsection A).

No licensee or EMS dispatch agency may downgrade the response as required by these standards.

Any request for medical assistance which requires an ambulance in thirty (30) minutes or less MUST be triaged by these standards.

When in doubt, use your judgement and upgrade the level of response.

REASONS FOR ANY DEVIATIONS IN TRIAGED RESPONSE LEVEL MUST BE DOCUMENTED.

•• *The use of the masculine or feminine pronoun, within text, is not meant to be gender specific* ••

This document available from:
Multnomah County EMS Office
426 SW Stark Street, 9th floor
Portland, Oregon 97204
(503) 248-3220

[Graphic Arts Unit]

Exhibit "C"

## KEY QUESTIONS

**CARDINAL QUESTIONS — ALWAYS ASK!**

1. What is happening ?
2. Conscious ?
3. Breathing ?
4. Age/Male or Female ?

## PRE-ARRIVAL INSTRUCTIONS

**BREATHING CHECK:** Place your ear next to his/her mouth & nose and look toward the chest. Can you feel or hear any air movement? Is there fluid, bubbles or anything else in the mouth or nose? Do you see the chest or stomach moving? Place your hand on his/her stomach. Can you feel it rising or falling?

**PULSE CHECK:** See Additional Information. *

## DISPATCH PRIORITIES

**UN 1**
-Unconscious, not breathing
-Unconscious, not known if breathing
-Unconscious, abnormal or possible agonal breathing

**UN 3**
-Unconscious, breathing normally
-Now conscious and breathing (if with difficulty, see BREATHING card)



## ADDITIONAL INFORMATION

*** PULSE CHECK:** **Child/Adult:** Place your index and middle finger into the groove next to his/her Adam's Apple. DON'T PRESS TOO HARD! Feel for a pulse for 5 seconds.

**Infant:** Place your index and middle finger over the baby's left nipple. DON'T PRESS TOO HARD! Feel for a pulse for 5 seconds.

**AGONAL BREATHING:** Gasping, ineffective breaths that often occur at the time of Cardiac Arrest. The caller may describe the person as "breathing funny, breathing weird, gasping, making funny noises, etc."

**SIGNS OF SHOCK:**

1. Confused or sleepy ? ( Key Question )

Other signs of shock are listed below and should be used as determinants when volunteered by the caller or are covered by other key questions.

2. Skin feels cool and moist
3. Pale or blue skin color
4. Nausea and/or vomiting
5. Dizzy or faint

**IF TRAUMA:** **Pre-Arrival:** "Don't move him!! If you must, try to keep his head and neck from turning or pulling, to prevent further injury."

| KEY QUESTIONS | | PRE-ARRIVAL INSTRUCTIONS |
|---|---|---|
| 1. | Chest Pain ?* | If vomiting or nausea is present, turn on side. |
| 2. | Bloody or "coffee-ground" vomitus ? | |
| 3. | Confused or sleepy ? | If signs of shock or fainting present, lay down flat and raise legs. |
| 4. | Dizzy or feeling faint ? | |
| 5. | Rectal bleeding ? Dark, tarry stool ? | No food or drink. |

## DISPATCH PRIORITIES

* Refer to Chest Pain Card

**AB 3** -Vomiting bright red blood or dark "coffee ground" substance
-Signs of Shock (confused, sleepy, dizzy, faint, etc. . .)
-Rectal bleeding/dark, tarry stool
-Any female of child-bearing age (13-50) with abdominal pain and/or bleeding

**AB 0** -All others



## ADDITIONAL INFORMATION

"Coffee ground" vomitus is partly digested blood from chronic internal bleeding.

**Life-threatening causes:**
-Ectopic Pregnancy
-Perforated or bleeding ulcer
-Ruptured spleen or liver
-Abdominal aortic aneurysm
-Myocardial Infarction (M.I.) [May simulate heartburn]

**Common causes:**
-Flu
-Appendicitis
-Pelvic Inflammatory Disease (P.I.D.)
-Bowel Obstruction
-Gastritis

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Difficulty breathing ?<br>2. Difficulty swallowing, swollen tongue ?<br>3. Confused or sleepy ?<br>4. History of allergic reaction ?<br>5. Suspected cause of symptoms ? | If signs of shock present, lay patient down and raise legs (if this does not compromise breathing).<br>If difficulty breathing, place in position of comfort.<br>If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.<br>If nausea or vomiting present, refer to Vomiting/ Nausea card. |

## DISPATCH PRIORITIES

**AL 3**
-Difficulty breathing
-Swollen tongue
-Signs of shock
-Previous history of severe reaction

**AL 9/0**
-Bites and stings with local reaction (excessive swelling at site)
-Rash and/or itching only



## ADDITIONAL INFORMATION

**Allergy signs/symptoms:**
-Rash
-Itching
-Difficulty breathing
-Anaphylactic shock
-Abdominal pain
-History of allergic reactions in the past

**Probable causes of allergic reaction:**
-Medications - Penicillin most common
-Radiology dyes
-Bee, wasp, yellow jacket or hornet stings
-Seafood (mainly shellfish)
-Nuts

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Location of bite ?<br>2. Difficulty breathing ?<br>3. Uncontrolled bleeding ?<br>4. Confused or sleepy ?<br>5. Type of animal ? Where is it ? | If signs of shock present, lay patient down and raise legs (if this does not compromise breathing).<br>If difficulty breathing, place in position of comfort.*<br>If bleeding, apply and maintain direct pressure to wound site.**<br>Try to keep the animal in sight or watch where it goes, WITHOUT ENDANGERING YOURSELF.<br>* If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.<br>** If necessary, refer to Bleeding card. |

## DISPATCH PRIORITIES

**AN 1** -Bitten on face / neck / chest

**AN 3** -Difficulty breathing
-Uncontrolled bleeding
-Signs of shock

**AN 9/0** -All others

Always notify Animal Control and, if animal still on scene, send Police.



## ADDITIONAL INFORMATION

Use your judgement, upgrade if necessary (consider what happened and current circumstances).

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Weapon or assailant still there ?<br>2. Type and location of wound ?<br>3. Difficulty or pain in breathing ?<br>4. Bleeding ?<br>5. Confused or sleepy ?<br>6. Abnormal behavior / loss of consciousness ? | If signs of shock present, lay patient down and raise legs (if this does not compromise breathing).<br>If difficulty breathing, place in position of comfort.*<br>If bleeding, apply and maintain direct pressure to wound site.**<br>* If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.<br>** If necessary, refer to Bleeding card. |

## DISPATCH PRIORITIES

If appropriate, advise medical responders to stand by until Police advise regarding scene safety.

**AS 1** -Penetrating wound, GSW, stab wound

**AS 3** -Location of wound unknown
-Difficulty breathing
-Excessive bleeding
-Signs of shock
-Blunt trauma to head or trunk with abnormal behavior or loss of consciousness

**AS 9/0** -Minor lacerations or bruises / all others

**5 ASSAULT / RAPE / GSW / STABBING** 8/92

## ADDITIONAL INFORMATION

If medical units are staging, have Police advise when scene is safe for medical entry.

Central penetrating wounds (head, neck, chest, back, abdomen ) are more serious than extremity wounds

**Crime scenes:**
Leave evidence undisturbed if possible ( weapons, tracks, etc.)

**Rape:**
Suggest that victim should not wash clothes/self before evaluation and investigation.

## KEY QUESTIONS

1. Are there any other symptoms ?
2. Recent fall or trauma ?*
3. Chest pain ?*
4. Confused or sleepy ?
5. History of similar back pain ?

## PRE-ARRIVAL INSTRUCTIONS

If traumatic cause, don't move him!! If you must, try to keep his head and neck from turning or pulling, to prevent further injury.

If signs of shock, lay down flat and raise legs (do not raise legs if pain was caused by traumatic injury).

If vomiting, refer to Vomiting/Nausea card.

## DISPATCH PRIORITIES

*Recent Fall, Trauma or Chest Pain — also refer to appropriate card

**BK 3** -Signs of shock
-Non-traumatic back pain in patients over 40

**BK 0** -All others



## ADDITIONAL INFORMATION

**Non-traumatic causes:**

-Muscle spasm
-Aneurysm
-Kidney Stones
-Kidney Infection
-Vertebral disc disease
-Pancreatitis
-Myocardial Infarction

**Traumatic causes:**

-Fracture of ribs or spine
-Strained back
-Ruptured disc

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Is patient violent? Suicidal? Any weapons ?<br>2. Medications/Possible OD/Alcohol ?<br>3. Head injury or trauma in past 24 hours ?<br>4. Headache ? (see Headache card)<br>5. History of diabetes, seizures, drug abuse or overdose ?<br>6. Past psychiatric history ? | Did you see any Medic-alert tags? (neck, wrist, ankle)<br>If first-hand (victim on phone): keep on line if possible<br>If second-hand info, tell caller to:<br>-Observe continuously.<br>-Protect victim from self (if possible to do so safely).<br>**BEWARE OF ATTACK!** |

## DISPATCH PRIORITIES

*ALWAYS SEND POLICE ON BEHAVIOR PROBLEMS**

**BE 3**

-Abnormal behavior and head injury within past 24 hours
-History of diabetes, seizures, drug abuse or overdose
(if suspected/confirmed overdose or DTs, refer to Overdose card)
-Patients over 40 with no known psychiatric history

Police to advise if:

-Violent with no obvious medical problems
-Threatening suicide (notify FAD if specialized rescue might be needed – bridge, jumper, water (also consider River Patrol)).



## ADDITIONAL INFORMATION

**Possible causes:**

-Suicide attempts / threats
-Drug abuse / withdrawal
-Alcohol abuse / withdrawal or DT's
-Emotional and/or hysterical reactions
-Psychiatric problems
-Shock (acute or delayed)
-Liver or kidney failure

**NOTE:** Serious medical problems such as insulin shock, severe hypovolemia, hypoxia, delirium tremens (DT's), overdose, etc. often cause behavioral problems.

**NOTE:** Behavior problems in persons over 40 without prior psychiatric history must be assumed to be medical in nature.

## KEY QUESTIONS

1. How injured ?
2. Area bleeding ? / Still bleeding ?
3. Spurting or flowing (oozing) ?
4. Confused or sleepy ?
5. Dizzy or feeling faint ?

## PRE-ARRIVAL INSTRUCTIONS

**If from forceful trauma, don't move him!! If you must, try to keep his head and neck from turning or pulling, to prevent further injury.**

**From extremities:** apply and maintain direct pressure to wound site, elevate limb above heart level (unless bones appear broken). If direct pressure fails, use pressure point. *

**From head/trunk:** usually can be controlled with gentle direct pressure.

**SIGNS OF SHOCK:** lay victim down, raise legs.

**Nosebleed:** Pinch nostrils, have patient lean forward (to prevent swallowing/aspirating blood)

## DISPATCH PRIORITIES

**BL 3** -Critical (see ADDITIONAL INFORMATION section)
-Possibly critical (see ADDITIONAL INFORMATION section)
-Large laceration or significant bleeding

**BL 9/0** -Not critical



## ADDITIONAL INFORMATION

**Types of bleeding:** Arterial vs. Venous
Internal vs. External

**Control:** First, direct pressure/elevation
Second, pressure points *

In most cases, external bleeding is not as serious as it may seem. Bleeding is often over-treated instead of locating and treating more serious but less obvious injuries including simple airway problems.

**AMPUTATION:** Control bleeding (direct pressure, elevation/pressure points). Locate part, wrap in clean dry cloth or plastic, keep cool. Do not place part directly on ice/in water.

| CRITICAL | POSSIBLY CRITICAL | NON-CRITICAL |
|---|---|---|
| Neck | Face | Nose |
| Groin | Abdomen | Mouth |
| Chest | Back | Hands |
| Rectal | Arms | Fingers |
| Vomiting/coughing up | Legs | Buttocks |
| Uncontrolled | Scalp | Feet |
| Spurting (At any location) | Urinary | Toes |
| Sign of shock | Vaginal ** | Tongue |

* Arms - Brachial Artery : Inside upper arm, just below armpit. PRESSURE POINTS:
Legs - Femoral Artery: Halfway between groin and hip, on crease of leg.

** During Pregnancy, refer to Pregnancy card.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Choking — can victim speak ?<br>2. Pale or blue skin color ?<br>3. Chest Pain ? (Refer to Chest Pain card) | If alert and breathing, keep in most comfortable position.<br><br>If choking or airway obstruction or blue skin color or unable to speak: refer to appropriate sequence card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**BR 1** -Choking or airway obstruction
-Inability to speak
-Blue skin color

**BR 3** -Difficulty breathing
-Known foreign body ingestion with normal breathing and difficulty swallowing

**BR 0** -All others



## ADDITIONAL INFORMATION

**Causes of breathing difficulties:**
-Foreign object obstructing airway
-Asthma
-Pulmonary Embolus (blood clot in the lungs)
-Congestive Heart Failure (CHF)
-Acute Pulmonary Edema (fluid in the lungs)
-Severe allergic reactions
-Emphysema (chronic lung disease)

**Breathing problems can be secondary to:**
-Stroke (CVA)
-Diabetic problems
-Seizures (febrile or epileptic)
-Cardiac Arrest
-Overdose
-Trauma

**9 BREATHING DIFFICULTIES / CHOKING** 8/92

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Is anything still burning ?<br>2. Cause of burn ?<br>**Chemical:** conference with FAD<br>**Electrical:** refer to Electrocution card<br>3. Extent of burn ?<br>4. Confused or sleepy ?<br>5. Difficulty breathing ? | **Make sure fire is out!!**<br>Remove burning or smoldering clothing unless it is stuck to his skin.<br>Remove victim from smoky area (IF SAFE).<br>Signs of shock : lay flat and raise legs (unless this compromises breathing).<br>Burns less than 20% in adults, 5% in children, cool with cool water.<br>Do not break burn blisters.<br>Liquid chemical burns: flush immediately with water until 1st Responder arrives.<br>Brush off dry chemicals.<br>If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**BU 3** -Electrical or chemical burn
-Greater than 20% burns for adults, 5% for children
-Difficulty breathing
-Signs of shock
-Facial Burns
-Second or third degree burns to hands/feet/joints (especially infants or children)

**USE YOUR JUDGEMENT**
**IF IN DOUBT, UPGRADE!**

**BU 4** -ALS Ambulance C-1 standby, per Fire Service request

**BU 9/0** -All others

**NOTE: IF FIRE INVOLVED, NOTIFY FAD - EVEN IF FIRE APPEARS OUT**



## ADDITIONAL INFORMATION

**Types:**
-First Degree (Sunburn)
-Second Degree ("partial thickness" = blistering of skin)
-Third Degree ("full thickness" = damage to all skin layers)

**Approximating extent:**
-"Rule of Nines" (Diagram), large areas
-Surface of victim's palm approx. 1%

**Special problems:**
-Burns of face, hands: loss of function, airway problems
-Smoke inhalation: airway problems
-Electrical Burns: electrical danger, associated fractures
-Chemical Burns: contamination/hazmat
-Radiation Burns: contamination/hazmat

**MAKE SURE FIRE IS OUT !!**

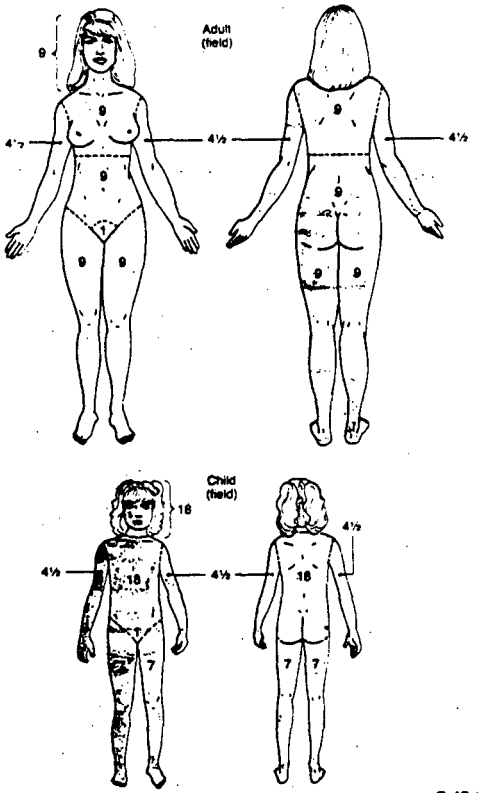



FIGURE 18-10 Rule of nines.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Chest Pain ?<br>2. Difficulty breathing ?<br>3. Pale or blue skin color ?<br>4. Nausea or Vomiting ?<br>5. Cardiac History ?<br>6. Abnormal heart rate (If volunteered) | Place victim in a comfortable position (often semi-reclining)<br>Loosen collar, necktie, etc.<br>If necessary, stay on phone with potential rescuer—CONSIDER beginning discussion of CPR<br>If nausea/vomiting, refer to Vomiting/Nausea card. |

## DISPATCH PRIORITIES

**CH 1** -Chest pain with 2 or more of the following:
- Difficulty breathing
- Pale/blue skin color
- Nausea and/or vomiting
- Cardiac history
- Abnormal heart rate

**CH 3** -Chest pain only (or with 1 of the above)
-Abnormal heart rate without chest pain

**CH 0** -All others

**11 CHEST PAIN / HEART PROBLEMS / HEART ATTACK** 8/92

## ADDITIONAL INFORMATION

**Critical problems:**
-Heart Attack (Myocardial Infarction: "M.I.")
-Ruptured thoracic aortic aneurysm

**Potentially Critical problems:**
-Pulmonary Embolus:
Blood clot in lungs
-Pneumothorax:
Air outside of the lungs within the chest cavity
-Pericarditis:
Infection of the sac around the heart
-CHF (Congestive Heart Failure:
"pump failure")

**Non-Critical:**
-Pleurisy
-Pneumonia
-Esophagitis
-Hiatal Hernia
-Hyperventilation
-Viral illnesses

**HEART ATTACK:** Substernal chest pain often described as tightness, constricting band, crushing, "like someone is sitting on my chest". Possibly radiating pain to left arm, jaw, neck, or back.
-Sweating (diaphoresis)
-Nausea, "heartburn", "indigestion"
-Angina which is unusually severe or has not abated with self-administration of Nitroglycerin.

"Heart Problems" range from old rheumatic fever to benign congestive heart failure, from angina to "heart attack" (a non-specific complaint but a common one). Try to obtain symptoms which accurately pinpoint the problem. Often victims deny or fail to recognize symptoms of real heart attack. Listen for any of the above or similar descriptions.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Alert ? (Able to talk normally ?)<br>2. Taking Insulin ? (Was it taken today ?)<br>3. Violent ? | Did you see any Medic-alert tags (neck, wrist, ankle)?<br>If patient can sit up and hold a glass alone, suggest a glass of juice, sugar water, etc.<br>If unconscious or not arousable, refer to appropriate sequence card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**DI 3** -Unconscious or confused
-Violent (send Police also)

**DI 9/0** -All others



## ADDITIONAL INFORMATION

**NOTE:** Level of consciousness is the key to determine appropriate pre-hospital response.

**NOTE:** Potential area for error is to confuse alcohol intoxication or DUII with hypoglycemia.

**INSULIN SHOCK / HYPOGLYCEMIA** (rapid onset)

Too much insulin has depleted the body's available blood sugar. Since the brain's only usable fuel is sugar, it is the first organ at risk. This is a serious medical problem if the patient is not alert. May be confused with alcohol intoxication. In insulin dependent diabetics hypoglycemia (low blood sugar) commonly occurs in late afternoon (1600 - 1700 ; peak effect if insulin taken at 0800) or midnight (if 1600 dose of insulin taken ), especially if patient has not had adequate food intake.

**DIABETIC COMA** (gradual onset)

Unconsciousness or decreased level of consciousness secondary to the body's inability to use available blood sugar for fuel when sufficient insulin is not given. Without accurate history this problem may be difficult to tell from insulin shock. (COMA is a state of unconsciousness from which the patient cannot be aroused).

**DIABETIC KETOACIDOSIS**

Pre-coma state resulting from insufficient insulin. Unable to use sugar, the body burns its own tissue (fat, muscle, etc.) The ketoacids produced (ketones) are "poisonous" to the patient, making them increasingly ill. This is not a pre-hospital emergency.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Is victim still in water ?<br>2. Time under water ?<br>3. Did victim dive into water ?<br>(If traumatic injury, refer to Traumatic Injury card for pre-arrivals) | If diving or other traumatic injuries are suspected, instruct caller to avoid moving victim: try to keep his head and neck from turning or pulling, to prevent further injury.<br>If water was very cold or victim feels very cold, suspect hypothermia. Refer to Heat/Cold card.<br>If necessary, refer to appropriate sequence card(s) for airway, breathing or CPR instructions |

## DISPATCH PRIORITIES

**DR 1** -Unconscious with any of the following:
Not breathing
Unknown if breathing
Breathing abnormally or possibly agonal breathing

**DR 3** -Still in water, precise location not verified
-Now conscious
-Unconscious, breathing normally

• • Notify appropriate law enforcement agency for possible search & rescue • •
-Notify MCSO River Patrol for river incidents



## ADDITIONAL INFORMATION

Victims of cold water drowning can remain under water for long periods of time before death or brain damage occurs. Cold water reduces the body's chemical need for oxygen and slows the heart rate and metabolism. Immediate CPR may be necessary when the victim is removed from the water.

Near-drowning in cold water is a type of hypothermia. In hypothermia , complete recovery may occur although the victim has been under water for one hour or longer. (A hypothermic victim should not be considered dead until he/she is rewarmed and is still lifeless).

**NOTE:** BE SURE TO CONSIDER TRAUMA AS POSSIBLE CAUSE/RESULT OF DROWNING.

## KEY QUESTIONS

1. Source of electrical shock ?
2. Is victim still in contact with electrical source ?
3. Fell ? From how high ?
4. Is there a burn ? (Refer to Burn card for pre-arrival instructions)

## PRE-ARRIVAL INSTRUCTIONS

**BEWARE OF ELECTRICAL HAZARDS**

**Do not move victim unless absolutely necessary. If you must, try to keep his head and neck from turning or pulling, to prevent further injury.**

Do not touch victim if still in contact with electrical source.

Turn off electrical source if possible (fuse box, circuit breakers, etc.) - DON'T TOUCH ANY WIRES.

If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.

## DISPATCH PRIORITIES

**EL 1** -Unconscious
-Status unknown

**EL 3** -Conscious



## ADDITIONAL INFORMATION

Suspect Cardiac Arrest until consciousness and breathing verified.

Associated falls — Electrocutions occurring above the ground may result in significant falls resulting in injuries more serious than those from the electrical current itself.

Electrical burns are often deceiving in appearance as regards to severity. Internal damage from passage of current through body can be substantial with few external signs of injury.

Often entry and exit wound sites.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Type of problem ?<br>2. Foreign body or impaled object ?<br>3. Any other injuries or complaints ? (also refer to appropriate card) | Lay patient down<br>If chemical: flush eye gently with water until help arrives (do not flush towards uninjured eye)<br>If trauma, do not irrigate eye<br>Abrasions: do not rub eye<br>Impaled object: do not touch or remove<br>If eyeball cut or leaking do not touch, bandage or irrigate |

## DISPATCH PRIORITIES

**EY 3** -Chemical exposure
-Impaled object, lacerations, avulsions, punctures, orbital fractures
-Violent mechanism of injury with potential for other head/neck injury

**EY 9/0** -All others



## ADDITIONAL INFORMATION

**Contusions:**
- -Orbital fractures
- -Hyphema (blood in anterior chamber of eyeball)
- -Retinal detachment.
- -Penetrating wounds of globe.

**Burns:**
- -Chemical : bases (lyes) are worse than acids
- -Arc welding
- -Flash

**Contact lens problems**
-A lens can hold a chemical in the eye even with irrigation.

## KEY QUESTIONS

1. Cause of fall ?
2. Distance fallen ?
3. Confused or sleepy ?
4. Dizzy or feeling faint ?
5. Any obvious injuries ? (also refer to Trauma card)
6. Still down ?

## PRE-ARRIVAL INSTRUCTIONS

**DON'T MOVE VICTIM!** If you must, try to keep his head and neck from turning or pulling, to prevent further injury.

Do not place pillow, etc. under victim's head.

Don't treat unless serious bleeding present (refer to Bleeding card).

## DISPATCH PRIORITIES

| | | |
|---|---|---|
| **FA** | **1** | **-Long fall ≥20 feet** |
| | | -Requires rope rescue |
| | | -Signs of shock |
| | | -Status unknown |
| | | -Still down |
| **FA** | **3** | **-Fall <20 feet** |
| | | -Signs of shock |
| | | -Status unknown |
| | | -Still down |
| **FA** | **9** | -"Invalid Assist" (Conference with FAD) |
| **FA** | **0** | -All others |

**16** **FALLS** R 8/92

## ADDITIONAL INFORMATION

"FALLS" IS NOT A SPECIFIC DIAGNOSIS. IT COVERS MANY VARIED SITUATIONS. INQUIRE FOR SPECIFIC FACTS.

Elderly patients frequently sustain hip fractures when they fall.

A "ground level" fall (when someone is standing or sitting and just falls to the ground) may have been caused by a medical condition. Consider unconscious/fainting, seizure, stroke, etc. and go to appropriate card for additional questions.

Consider the potential for difficult extrication - industrial sites with catwalks, staircases, basements, construction sites. Advise FAD of need for additional resources.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Type of injuries ?<br>2. Number of victims ? (consider MCI)<br>3. Is extrication necessary ?<br>4. Name of product ? (Spelling ?)<br>5. Are there product markings or labels ?<br>6. What is the source and quantity of product released ? | Do not touch victim or enter area unless the product is identified and appropriate protective clothing is worn.<br><br>IF NO DANGER TO RESCUER, remove victim(s) from toxic environment and keep victim(s) isolated.<br><br>Establish specific location for someone to meet and guide responding units to incident site. Advise caller that there may be more than one unit arriving. |

## DISPATCH PRIORITIES

If source is a toxic or unknown substance, do not dispatch anyone yet - CONFERENCE WITH FAD AND DISPATCH PER THEIR INSTRUCTIONS.

INFORM ALL RESPONDING PERSONNEL OF POTENTIAL DANGER, AND PROVIDE SPECIAL INSTRUCTIONS WHEN AVAILABLE - If field personnel request air ambulance, relay all HazMat info to aeromedical crew/dispatch.

**HM 1** -One or more victims

**HM 9** -All others

ADVISE ALL RESPONDERS TO STAGE UNTIL CLEARED FOR ENTRY BY HAZMAT UNIT(S)



## ADDITIONAL INFORMATION

Toxic gasses may be colorless, odorless, and tasteless (example: Carbon Monoxide). Signs/symptoms can range from headache to unconsciousness: victim can present in any state of intoxication or altered mental status.

Very small quantities of toxic substances can be fatal.

Contamination is often not visible.

Anyone who handles a contaminated victim must also be decontaminated.

***NOTE:*** Personnel on scene should:

Remove as much of contaminating substance as possible from victim before transporting.
If possible, wrap contaminated victim prior to transport - to reduce contamination spread.
Notify MRH/Poison Control of nature of product as soon as possible.
Notify receiving facility of situation and wait for their directions before transferring patient.

**NOTE:** HazMat team response or any appropriate increase in response level should be determined by FAD.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Recent trauma to head ? (refer to Trauma card)<br>2. Any periods of unconsciousness, confusion or behavioral changes ?<br>3. Sudden onset ?<br>4. Speech or motor problems ?<br>5. Changes in vision ?<br>6. Is this the worst headache you've ever had ? | Make patient comfortable.<br>Reassure and keep her as calm as possible. |

## DISPATCH PRIORITIES

**HE 3**
-Periods of unconsciousness, confusion or behavioral changes
-Sudden onset
-Severe speech or motor problems
-Changes in vision
-Worst headache

**HE 0**
-All others



## ADDITIONAL INFORMATION

**TYPES:**
-Tension
-Sinus
-Migraine
-Cluster
-Meningitis
-Subdural Hematoma
-Subarachnoid Hemorrhage

Since the brain is the organ of concern in victims with headache, changes in alertness, behavior, or speech and motor function (paralysis, weakness) all indicate a more serious underlying problem.

Sudden, severe onset may also suggest a more serious underlying cause.

| KEY QUESTIONS | | PRE-ARRIVAL INSTRUCTIONS |
|---|---|---|
| **HEAT** | 1. High temperature of victim ? | **HEAT** |
| | 2. Skin dry, face red/flushed ? | Take victim out of sunlight/hot environment. |
| | 3. Confused, acting strangely, staggering ? | Use cool cloths/wet sheets to reduce temperature. |
| | 4. Skin cold, clammy, sweaty ? | Lie victim flat and elevate feet. |
| | 5. Muscle Cramps ? | If vomiting or nauseous, refer to V/N card for instructions. |
| **COLD** | 1. Unresponsive ? | **COLD** |
| | 2. Frozen extremities ? | Give nothing by mouth |
| | 3. Confused or acting strangely ? | Avoid excessive movement |
| | 4. Length of time in cold ? | Wrap with blankets |
| | | Frostbite; minimal treatment -protect injured area |
| | | - DO NOT RUB or immerse in hot water. |

## DISPATCH PRIORITIES

**HEAT**

**HC 1** -High body temperature, skin dry or face red/flushed
-Confused, acting strangely or staggering

**HC 3** -Skin cold, clammy, sweaty
-Muscle cramps

**HC 0** -All others

**COLD**

**HC 1** -Unresponsive
-Frozen extremities

**HC 3** -Confused or acting strangely

**HC 0** -All others



## ADDITIONAL INFORMATION

**HEAT:** If temperature has been taken, a "high" reading is greater than 102° F (38.8°C).

| | Heat Exhaustion | Heat Stroke |
|---|---|---|
| Mental State------ | May be disoriented---------- | Confused or coma |
| Temperature------ | Normal or low---------- | Very high |
| Skin---------- | Cool, pale, moist---------- | Hot, red, dry |
| Pulse---------- | Rapid, weak---------- | Rapid, strong, full |
| Treatment--------- | Cooling---------- | Rapid cooling |

HEAT STROKE IS A PROFOUND EMERGENCY !!

**COLD:** Consider hypothermia in the elderly, the alcoholic and the patient found outdoors, particularly during the cold/freezing seasons. It is possible to become hypothermic in temperatures above freezing, indoors as well as outdoors. Wet and/or windy environments increase risk.

Severe Hypothermia : Skin ice cold, rigid muscles, little or no heart sounds. May appear dead. Handle very gently.

"Nobody is dead until they are warm and dead"

## KEY QUESTIONS

1. Specific traumatic injuries ?* Bleeding ?*
2. Trapped / caught in machinery ?
3. Fallen ?*
4. How many injured ?
5. Specific location of victim(s) ?

*If necessary, refer to appropriate card.

## PRE-ARRIVAL INSTRUCTIONS

**TURN OFF MACHINERY !!**

Don't move victim unless location increases danger. If you must move him, try to keep his head and neck from turning or pulling, to prevent further injury.

Assign specific location for someone to meet and guide responding units — advise caller that there may be more than one unit arriving.

## DISPATCH PRIORITIES

**TR 1** -If extrication is needed
-If more than one victim

**TR 3** -If unknown type of injuries or unknown if extrication is needed
-Any industrial/machinery accident for which specific information cannot be obtained.



## ADDITIONAL INFORMATION

Generally will be a third party caller.

It is very important to determine if extrication from machinery is needed.

It is often difficult to locate the victim in plants, warehouses, hold of ships, construction sites, etc. — **GET CLEAR DIRECTIONS**

**20 INDUSTRIAL / MACHINERY ACCIDENT** 8/92

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Difficulty breathing ?<br>2. Confused or disoriented ?<br>3. Source of toxic substance ?<br>4. How many victims ?<br><br>**NOTE:** "Sniffing" glue, etc. is an Overdose problem - see Overdose card. | **DO NOT TOUCH VICTIM OR ENTER AREA UNTIL PRODUCT IS IDENTIFIED OR UNTIL PROPER PROTECTIVE CLOTHING IS WORN.**<br><br>**IF NO DANGER TO RESCUER, REMOVE VICTIM FROM TOXIC ENVIRONMENT AND KEEP VICTIM ISOLATED**<br><br>If necessary, refer to appropriate sequence card for airway breathing or CPR instructions.<br>Assign specific location for someone to meet and guide responding units.<br>Advise caller that there may be more than one unit arriving. |

## DISPATCH PRIORITIES

•• IF SOURCE IS A TOXIC OR UNKNOWN SUBSTANCE, REFER TO HAZMAT CARD ••
•• NOTIFY ALL RESPONDING PERSONNEL OF POTENTIAL DANGER AND PROVIDE SPECIAL INSTRUCTIONS WHEN AVAILABLE ••

**IN** **1** -If patient has not been removed from toxic environment
-Unconscious or condition unknown.
-Difficulty breathing or confused

**IN** **9/0** -All others

MULTIPLE VICTIMS : Consider activation of MCI plan.

**21** **INHALATION POISONING** 8/92

## ADDITIONAL INFORMATION

Toxic gasses may be colorless, odorless and tasteless (e.g., Carbon Monoxide). Symptoms can range from headache to unconsciousness and victim can present in any state of intoxication.

Very small quantities of toxic substances can be fatal.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. What is the reason that you think he has a medical emergency ?<br>2. Did you see him fall ?<br>3. Did you see him get injured or assaulted ?<br>4. Is he bleeding ?<br>5. Is he moving ?<br>**Get a physical description of the patient**<br>MAKE EVERY ATTEMPT TO DETERMINE SPECIFIC FACTS AND REFER TO THE APPROPRIATE CARD | Did you see any medic-alert tags (neck, wrist, ankle)?<br>Look for and direct responders to the victim.<br>Inform caller that there may be a delay in response.<br>If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

MN 9 -Unknown problem

Send CHIERS (W26) if patient located within their Central City District

Send Police if patient outside W26 area or W26 is unavailable.

If specific information is discovered after the call is dispatched, inform all responders and send additional units as needed. Add new information to the incident immediately.



## ADDITIONAL INFORMATION

"MAN DOWN" IS NOT A SPECIFIC DIAGNOSIS. IT COVERS MANY VARIED SITUATIONS. INQUIRE FOR SPECIFIC FACTS.

Only one card in the Triage Guidelines asks if the caller/victim has ingested alcohol — the Overdoses/ Poisoning/Ingestion card. Information regarding a subject's state of intoxication may be offered by the caller, but this info should not be used in determining response.

The intoxicated person may also have a legitimate medical emergency — calltakers should be wary of assuming that a reportedly intoxicated person is "just a drunk". Diabetes, head injuries, and other serious medical emergencies can "mimic" inebriation.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Confused or drowsy ?<br>2. What and how much ingested ?<br>How long ago ?<br>Alcohol also ingested ?<br>3. DT's or withdrawal ? | Gather medications / pill bottles, etc.<br>If appropriate, or if caller is the patient, stay on line with caller until help arrives.<br>If necessary, refer to appropriate cards for vomiting, airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**OD 1** -Unconscious

**OD 3** -Confused or drowsy
-Alcohol taken with drugs
-Suspected or confirmed DT's or withdrawal
-Condition unknown

All other ingestions / overdoses : Conference with Poison Control Center and await their instructions.

**ALL** overdoses : refer to Police.



## ADDITIONAL INFORMATION

IF THE CALLER IS THE PATIENT, KEEP HIM/HER ON THE LINE UNTIL HELP ARRIVES !

**Overdose:** Intentional act by victim.

**Ingestion:** Denotes accidental intake

Most ingestions by children can be handled by the Oregon Poison Control Center (OPCC).

All calls referred to the Oregon Poison Control Center will be evaluated by them and necessary units dispatched per recommendation. If appropriate, stay on line with OPCC until OPCC determines no need for emergency response.

Because overdose victims have a motive for their action (suicide, attention getting, a "cry for help", etc) they often are misleading about the amount or type of medication taken. They may also exhibit violent and/or unpredictable behavior. Make sure that all responders are aware of unusual circumstances!!

DT's (Delirium Tremens) is associated with alcohol withdrawal and can cause tremors, convulsions, and hallucinations. Delirium Tremens has a mortality rate of up to 20%.

Patients who are addicted to drugs may experience a severe reaction when the drug is withdrawn. These reactions are characterized by anxiety, nausea, vomiting, convulsions, delirium, profuse sweating, rapid heart rate, hallucinations, and severe abdominal cramps.

## KEY QUESTIONS

1. Bleeding ? How much ?
2. Months pregnant ? First pregnancy ?
3. Type of pain ? (bearing down, contraction )
4. Frequency of pain ?
* 5. Mother pushing or baby's head crowning ?
* 6. If delivered, is baby conscious & breathing ?
7. Seizures ? (Refer to seizure card)

## PRE-ARRIVAL INSTRUCTIONS

**IMMINENT BIRTH:** See Childbirth Sequence Card

Do not pack anything into the vagina to control bleeding. Use pads/towels to absorb.

Do not attempt to stop delivery !

If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.

## DISPATCH PRIORITIES

**OB 1** -Excessive bleeding during 3rd trimester, before or after delivery.
-Delivery has just occurred, is occurring now, or is imminent *
-Abnormal presenting body part.
-New onset seizure activity (if seizing now, refer to seizure card pre-arrivals)

**OB 3** -Excessive bleeding during 1st or 2nd trimester.

**OB 0** -All others



## ADDITIONAL INFORMATION

* **IMMINENT:** Pains less than 2 minutes apart in first pregnancy, less than 5 minutes apart in second or more pregnancy, rapid progression of labor, head crowning or mother pushing.

In general, initial pregnancies progress through labor slower than successive pregnancies. Therefore, labor pains two minutes apart in a third pregnancy are considered more urgent than in a first pregnancy.

**Stages of pregnancy:**
1st trimester - 0 - 3 months
2nd trimester - 4 - 6 months
3rd trimester - 7 - 9 months (to delivery)

**NOTE:** Presentation of the cord, hands or feet first as baby delivers is a dire pre-hospital emergency. Often the only chance for the baby's survival is rapid transport for in-hospital care.

**Contraction** = Labor pains from contractions of the uterus.

**Bearing down** = May mean the mother is physically attempting to push the baby through the birth canal or that the mother feels that she has to move her bowels. This is caused by baby's head pressing on the mother's rectum. (birth is imminent!)

**Crowning:** Top of baby's head showing at vagina (birth is imminent!)

Bleeding and/or pain during the first or second trimester may be a sign of miscarriage/ectopic pregnancy or other problems.

Some bleeding always occurs at delivery. More than 5 blood-soaked pads is considered excessive bleeding (before or after delivery).

**REMEMBER:** After delivery there are two patients!!

If the mother tells you that "The baby is coming!" — it usually is.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Has the seizure stopped ?<br>2. More than 1 seizure in a row ?<br>* 3. Pregnant ? (Refer to Pregnancy card)<br>4. High fever ?<br>5. Any associated trauma ? (Refer to Trauma card) | No CPR on seizing patient.<br>Do not restrain patient or force objects into his / her mouth<br>Move dangerous objects away from patient.<br>Turn gently on side after seizure stops.<br>Don't let patient wander about.<br>Refer to vomiting card instructions if vomiting occurs.<br>**Instruct caller to call back if patient has another seizure.** |

## DISPATCH PRIORITIES

**SZ 3** -Still seizing
-One or more seizures
-Febrile seizure, child 5 years or younger (even if not seizing now)

**SZ 9** -Not seizing now
-If caller is patient and says he/she thinks a seizure is imminent.

**SZ 0** -All others



## ADDITIONAL INFORMATION

*Seizures during the third trimester of pregnancy (eclampsia) may indicate a serious complication of pregnancy which may be life threatening to the woman and child.

Also known as "fits" or epilepsy.

A seizure is an abnormal firing of brain cells, a "short circuit" resulting in random patterns of emotion or motion.

**Types:** Grand mal, Petit mal ("absence"), Psychomotor, Jacksonian, Focal.

**Causes:** Epilepsy, trauma, meningitis, cardiac arrest (specifically from hypoxia —lack of Oxygen to the brain), fever, DT's, many others.

**Associated problems:** Airway (patient position, secretions, vomitus ), cyanosis, oral trauma (bitten tongue or cheek), fractures (from "thrashing about"), inappropriate CPR and mouth-to-mouth, post-ictal state (patient is "spaced out"), recurrent or continuous seizures (Status Epilepticus — very serious ).

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. What is different today ?<br>2. Confused or hard to arouse ?<br>3. Dizzy or feeling faint ?<br>4. Does something hurt ?<br>5. Duration of illness ?<br>6. Suspected cause ? History ? Dialysis or Transplant patient ?<br>7. Fever ? | Make patient as comfortable as possible.<br>Monitor breathing. |

## DISPATCH PRIORITIES

**SK 3**
-Confused or hard to arouse
-Dizzy or feeling faint.
-Other signs of shock
-Dialysis patient
-Transplant patient

**SK 0**
-Unknown status
-Fever only, no emergency signs or symptoms.

**NOTE:** If vomiting the only sign or symptom, see VOMITING card.



## ADDITIONAL INFORMATION

Complaints such as Cancer, Leukemia, chronic illness, dehydration, infection, meningitis, etc. elicit an emotional response from dispatchers because the terms seem serious. Stick to obtaining signs and symptoms that can be prioritized.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Confused or hard to arouse ?<br>2. Difficulty breathing ?<br>3. Headache ?<br>4. Victim able to move both sides of body ? (weakness/paralysis on one side ?)<br>5. Slurred or difficult speech ?<br>6. Facial droop or drooling ?<br>7. History of previous stroke ? | **REASSURE VICTIM**<br>Lay patient down.<br>No pillows behind head (can cause airway problem)<br>If difficulty breathing, position of comfort (may be lying down or semi-reclining)<br>Check airway. If vomiting or drooling, turn head to side. If necessary, refer to appropriate card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**ST 3** -Confused or hard to arouse
-Any difficulty breathing
-Headache
-Weakness or paralysis of one side
-Slurred or difficult speech
-Facial droop or drooling?

**ST 0** -All others



## ADDITIONAL INFORMATION

The airway may become obstructed by the patient's tongue (due to loss of gag reflex from nerve damage).

**Definition:** Disruption of blood flow to the brain or part of the brain due to blood clot or hemorrhage. Hemorrhage also causes increased pressure within the skull. Clots are usually spontaneous while hemorrhage is either spontaneous or traumatic.
Paralysis or weakness of one side, altered level of consciousness and respiratory changes are all common symptoms. Other than supportive care there is no specific pre-hospital treatment.

**C.V.A** = CerebroVascular Accident.

**T.I.A.** = Transient Ischemic Attack ("little stroke"= stroke-like symptoms that resolve quickly)

**NOTE:** Many stroke victims are unable to talk or respond, but are very aware of everything around them. Reassurance is very important. Talking about them or their condition as if they cannot hear or understand may greatly increase their feelings of helplessness, anxiety and/or panic.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. What happened ?<br>(Refer to list in ADDITIONAL INFORMATION section)<br>2. Any injuries ?<br>3. Number of victims ?<br>4. Anyone trapped or pinned ?<br>5. Any hazards at the scene ?<br>(fire, leaking fuel, hazmat, toxic fumes, etc.) | Don't move victims unless immediate danger — (fire, leaking fuel, hazmat, toxic fumes, etc.)<br>If you must move him, try to keep his head and neck from turning or pulling, to prevent further injury.<br>Don't treat unless serious bleeding (If necessary, refer to Bleeding card.) |

## DISPATCH PRIORITIES

•• **IF HAZARDOUS MATERIALS / CARGO VEHICLES INVOLVED, *CONFERENCE WITH FAD*** ••

**TA 1** -Reported 2 or more victims (consider MCI potential)
-Victim(s) pinned in, trapped, or unconscious
-Hazards at scene with known victim(s)
-Violent Mechanism of Injury * (REFER TO LIST IN ADDITIONAL INFORMATION SECTION)

**TA 3** -Known injuries



## ADDITIONAL INFORMATION

***VIOLENT MECHANISM OF INJURY** = A type of incident which, by its very nature, significantly increases the possibility of serious injury due to the large amount of energy involved. Always a TA 1.

Examples:
- Auto vs. pedestrian
- Auto vs. bicycle
- Any motorcycle accident
- Rollover
- Any high-speed accident
- Passengers thrown from vehicle
- Vehicle on its top, off bridge, etc.
- Extensive damage to vehicle(s)

Always inform ALL responding agencies (police, fire and/or medical) if there is any possibility of hazardous materials involved and provide special instructions when available.

In single vehicle accidents (car vs. pole, car into ditch, etc.) consider medical cause, e.g. M.I., diabetic problem, fainting, etc.

Consider dispatching additional units/resources if multiple patient situation — Estimate 1 transporting unit for each 2 patients. (MCI?)

If responders at scene report no traffic accident located, notify other responding agencies.

**IF IN DOUBT, UPGRADE THE RESPONSE.**

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. What happened ?<br>2. Number of victims ? (Consider MCI)<br>3. Victim(s) trapped or pinned ?<br>4. Part(s) of body injured ?<br>5. Open fractures ? Amputation?<br>6. Difficulty breathing ?<br>7. Confused or sleepy ? | Don't move victim unless immediate danger — (fire, hazardous materials, toxic fumes, etc.)<br>If you must move victim, try to keep his head and neck from turning or pulling, to prevent further injury.<br>Don't splint<br>If bleeding, apply and maintain direct pressure to wound site.<br>If severe bleeding or amputation, refer to Bleeding card.<br>Industrial Accident: see Industrial Card |

## DISPATCH PRIORITIES

**TR 1** -CRITICAL (refer to list in ADDITIONAL INFORMATION section)
Also: -Reported two or more victims (consider MCI)
-Victim(s) pinned in, trapped or unconscious
-Hazards at scene with known victim(s)
-Violent mechanism of injury**

**TR 3** -POSSIBLY CRITICAL or NON-CRITICAL (refer to list in ADDITIONAL INFORMATION section)
--with signs of shock, excessive bleeding, open fracture or amputation.

**TR 9/0** -POSSIBLY CRITICAL or NON-CRITICAL (refer to list in ADDITIONAL INFORMATION section)
--with NO signs of shock, excessive bleeding, open fracture or amputation.

**IF IN DOUBT, UPGRADE!!**



## ADDITIONAL INFORMATION

**Types of Injuries:**

| | | |
|---|---|---|
| Fracture (break) | Contusion (bruise) | Laceration (cut) |
| Dislocation (out-of-joint) | Abrasion (scrape) | Avulsion (torn away) |

| CRITICAL | POSSIBLY CRITICAL | | NON-CRITICAL | |
|---|---|---|---|---|
| Head | Back | Clavicle | Fingers | Toes |
| Neck or Spine * | Pelvis/Hip | Shoulder | Hands | Feet |
| Chest, ribs, sternum | Femur | Genitalia | Wrist | Ankle |
| Abdomen | Arms | Tibia (shin) | Elbow | Knee |

**VIOLENT MECHANISM of INJURY: A type of incident which, by its very nature, significantly increases the possibility of serious injury due to the large amount of energy involved.

* A patient with spinal cord injuries may have one or more of the following:
1. Tingling sensation or numbness in arms or legs
2. Inability to move
3. No pain (with obviously serious injuries)

AVOID ANY UNNECESSARY MOVEMENT WITH POSSIBLE SPINAL CORD INJURIES ! !

**NOTE:** IF multiple victims with known central wounds, use your judgement in determining additional response or notifications. Consider MCI or HazMat potential.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Breathing ? (see Additional Info)<br>2. Now conscious ?<br>3. Cause / history of unconsciousness ? (What happened ?). | Did you see any medic-alert tags (neck, wrist, ankle)?<br>* BREATHING CHECK<br>** PULSE CHECK<br>If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**UN 1**
-Unconscious, not breathing
-Unconscious, not known if breathing
-Unconscious, abnormal or possible agonal breathing

**UN 3**
-Unconscious, breathing normally
-Semi-conscious (confused, hard to arouse) and breathing (if with difficulty, refer to BREATHING card)
-Now conscious and breathing (if with difficulty, refer to BREATHING card)



## ADDITIONAL INFORMATION

*** BREATHING CHECK:** Place your ear next to his/her mouth and nose and look toward the chest. Can you feel or hear any air movement? Is there fluid, bubbles or anything else in the mouth or nose? Do you see the chest or stomach moving? Place your hand on his/her stomach. Can you feel it rising or falling?

**** PULSE CHECK: Child/Adult:** Place your index and middle finger into the groove next to his/her Adam's Apple. DON'T PRESS TOO HARD! Feel for a pulse for 5 seconds.

**Infant:** Place your index and middle finger over the baby's left nipple. DON'T PRESS TOO HARD! Feel for a pulse for 5 seconds.

**AGONAL BREATHING:** Gasping, ineffective breaths that often occur at the time of Cardiac Arrest. The caller may describe the person as "breathing funny, breathing weird, gasping, making funny noises, etc."

**SIGNS OF SHOCK:** Confused/sleepy; skin cool/moist, pale/blue; nausea/vomiting; dizzy/faint.

**SOME CAUSES OF UNCONSCIOUSNESS:**

| | | |
|---|---|---|
| Cardiac Arrest (sudden onset) | Diabetic problems | Syncope (fainting) |
| Other heart problems | Respiratory problems | Head Injury (old or new) |
| Overdose, poisoning, intoxication | Seizures | Stroke (CVA) |

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. What is the reason that you think she has a medical problem ?<br>2. Does she have any known history of medical problems ?<br>3. Is she breathing normally ?<br>4. Have you spoken with her ?<br>5. Can she talk in her usual manner ?<br>6. Is she able to move ?<br>MAKE EVERY ATTEMPT TO DETERMINE SPECIFIC FACTS AND REFER TO THE APPROPRIATE CARD | Did you see any medic-alert tags (neck, wrist, ankle)?<br>Look for and direct responders to the victim.<br>If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**UK 3** -Caller indicates severe medical problem but is unable to describe specific signs or symptoms.

**UK 9** -Unverified medical alarm from a licensed alarm company.
-If patient can be seen with obvious medical problem.

NOTE: If specific information is discovered after call is dispatched, inform responders and send additional units as needed. Add new information to the incident immediately.

**31 UNKNOWN PROBLEM** 8/92

## ADDITIONAL INFORMATION

"UNKNOWN PROBLEM" IS NOT A SPECIFIC DIAGNOSIS. IT COVERS MANY VARIED SITUATIONS. INQUIRE FOR SPECIFIC FACTS.

Location of victim could suggest type of problem likely to be encountered:

Restaurant ---------- may suggest ---------- Choking
Seafood Restaurant --- may suggest ---------- Choking, severe allergic reaction
Garage ---------- may suggest ---------- Carbon Monoxide poisoning, electrocution
Bank ---------- may suggest ---------- Cardiac arrest
Park ---------- may suggest ---------- Intoxication, OD, choking, assault
Street ---------- may suggest ---------- Intoxication, cardiac arrest, seizure, OD, assault

Relay type of location and/or business name (if known) to responding units, not just address.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Any other symptoms ?<br>2. Vomiting blood or "coffee ground" type material<br>3. Level of consciousness ?<br>4. Confused or sleepy ? | **TRAUMA VICTIM:** Don't move him!! If you must, try to keep his head and neck from turning or pulling, to prevent further injury.<br>If unconscious, turn head to side or roll entire body to side. Scoop matter out of mouth.<br>If semi-conscious, make sure victim can clear own airway. If not, assist as above.<br>If patient in semi-reclining position of comfort, lean them forward or to side. Laying them down may compromise breathing.<br>**SHOCK:** Lay down, elevate legs. |

## DISPATCH PRIORITIES

| | | |
|---|---|---|
| **AB** | **3** | -Vomiting bright red blood or dark "coffee ground" substance. |
| **SK** | **3** | -Vomiting with signs of shock |
| **SK** | **0** | -Vomiting only, no other symptoms |



## ADDITIONAL INFORMATION

The biggest danger from vomiting is aspiration (inhalation) of the vomitus. Whenever a patient's state of consciousness is such that they cannot protect their own airway, steps must be taken to protect the patient from aspiration (hence turning head to side, rolling body to side, etc.). Aspiration of any petroleum-based substance can cause chemical pneumonia, which can also be fatal.

Nausea can be symptomatic of a wide range of problems, from tension/nervousness to life threatening problems like heart attack or shock.

Vomiting is a normal bodily reaction to rid the stomach of its contents. In the case of food that disagrees with the body, vomiting itself may solve the problem.

Nausea/vomiting may be one of the signs of heart attack, shock, overdose of some drugs; bloody vomitus can indicate internal bleeding from ulcer, trauma, etc. "Coffee ground" vomitus is partly digested blood from chromic internal bleeding.

## PRE-ARRIVAL SEQUENCE CARDS

Encourage caller to bring victim as close to phone as possible.

Ask the caller : "Do you or anyone else there know CPR ? ". If he knows CPR, find out if he needs assistance and tell him you can assist with telephone instruction.

Use the following statement : "Do you want to do CPR — I'll help you!!" This statement should be recited as one sentence with NO break after "CPR". Do not allow caller to say no because she doesn't know CPR. This should be a forceful and persuasive statement, but if the caller declines for any reason that is her decision and you no longer have verbal consent to proceed. Coercion should NOT be used. Callers may be physically unable to perform CPR or they might be placed in physical jeopardy by performing CPR - Allow THEM to make the decision.

Follow the sequence card exactly. Slight changes in wording can change the effectiveness of CPR. CPR is ineffective on a soft surface - ensure that the patient is on a hard surface (table or floor) before attempting chest compressions.

Reassure the caller frequently that help is on the way.

THE SEQUENCE CARDS CANNOT POSSIBLY INCLUDE THE ANSWER TO EVERY SITUATION. THE CALL-TAKER MUST MAKE DECISIONS USING JUDGEMENT AND EXPERIENCE.

The "hysteria threshold" is the point at which an operator can gain control of a seemingly hysterical or uncooperative caller, and can begin to give effective pre-arrival instructions. The calltaker must realize that this threshold exists and can be reached in almost all cases if the calltaker doesn't give up before obtaining control of the caller. "Repetitive Persistence," repeating a phrase or request over and over without changing the wording or structure, is a very effective way to reach this "hysteria threshold". Example: "You must be calm so you can help your baby" (repeat). The consistent phrase should eventually "break through" to the agitated/hysterical caller and enable the calltaker to regain control and proceed with instructions.



## AIRWAY CONSIDERATIONS

Airway control and maintenance is the most important aspect of emergency care for the critically ill or injured patient. Insuring that proper instructions are given and appropriate pre-arrival sequence cards are followed is of paramount importance. There may be some patients who are obviously breathing who need types of airway management that are not included in the sequence cards.

In all situations (except pre-arrivals, DIABETIC PROBLEMS), do not encourage or sanction the giving of any food or drink prior to the arrival of responders.

Always check for and remove loose dentures if the patient needs any type of airway support.

A pillow, blanket, etc. may have been placed under the victim's head "to make him more comfortable." HOWEVER, this action can flex the neck forward and compromise/obstruct the patient's airway and/or worsen a neck injury. CAUTION YOUR CALLER TO AVOID IT.

If unconscious and vomiting, turn patient's head to side or roll entire body to side. Scoop vomitus out of mouth.
If trauma victim, "log roll" patient to side; try to keep the head and neck from turning or pulling, to prevent further injury.

If semi-conscious, make sure patient can clear his/her own airway. If not, assist as above. Patient may bite rescuer while "scooping" vomitus out. CAUTION CALLER TO BE CAREFUL!!

If patient is in a semi-reclining position of comfort, lean him forward or to the side. Laying him down may compromise his breathing. Find position most comfortable to patient and most supportive of effective respirations.

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help your baby.
(If caller hysterical: YOU MUST BE CALM SO YOU CAN HELP YOUR BABY. [Keep repeating until calm.])
Bring the baby near the phone.
Is the baby still choking? Is the baby able to breathe?

CHOKING - NOT BREATHING

Is he coughing or wheezing ? — YES

NO

Is he able to speak or cry ?

NO — YES → Do not do anything now. Wait until EMT's arrive.

NOT CHOKING - NOW BREATHING

Check his mouth for objects. If you see something, use your finger to sweep it out of the mouth.

If unconscious, slightly tilt his head BACK to keep his throat open. STAY ON THE LINE WITH ME!

** Lay him FACE DOWN across your arm or lap with his HEAD LOWER THAN HIS BODY (Support his head).
Deliver 4 sharp blows with the heel of your hand right between his shoulder blades.
Look in his mouth. Do you see an object?

NO

Lay the baby FACE UP on hard surface

YES

Use your finger to sweep it out of his mouth. Is it out?

NO

YES

8/92

Place 2 fingers in the MIDDLE of the CHEST right BETWEEN THE NIPPLES. Make sure your FINGERS are on the CENTER of the CHEST, RIGHT BETWEEN THE NIPPLES.

PUSH with your fingertips UP AND DOWN rapidly 4 times, like you're "PUMPING" the chest.

Look in the mouth. Can you see an object? — YES

NO

Is he breathing now? — YES → If unconscious, slightly tilt his head BACK to keep his throat open. STAY ON THE LINE WITH ME!

NO

Repeat from **.

NO AGAIN

Is he breathing or moving — YES → If unconscious, slightly tilt his head BACK to keep his throat open. STAY ON THE LINE WITH ME!

NO

GO TO INFANT: MOUTH-TO-MOUTH CARD (35)

8/92

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help your baby. (If caller hysterical: YOU MUST BE CALM SO YOU CAN HELP YOUR BABY. [Keep repeating until calm.])

Bring her near the phone.

Put the baby flat on her back on a table or the floor.

Place your HAND UNDER her NECK AND SHOULDERS and SLIGHTLY TILT her HEAD BACK.

Is there vomit in her mouth? — YES

NO

VOMITING INSTRUCTIONS: Turn her HEAD to the SIDE. SCOOP MOUTH OUT (before you start Mouth-to-Mouth.).

REMEMBER: Do this any time vomiting occurs — YOU MUST BLOW THROUGH THE REMAINING FLUID.

Is she breathing now? — YES

NO

Do you or anyone else there know CPR? (If so, STAY ON THE PHONE and relay sequence to ensure they're doing it properly.)

Maintain SLIGHT HEAD TILT and check her breathing often.

I'm going to tell you how to give MOUTH-TO-MOUTH. First, tilt her head back like you did before.

** COMPLETELY COVER her MOUTH AND NOSE with your MOUTH.

I'm going to tell you how to check for the pulse.

8/92

Blow 2 SLOW BREATHS OF AIR into her LUNGS, just like you're filling up a SMALL balloon.

Watch for her chest to rise.

Go do it now and then come right back to the phone.

Did you see her CHEST RISING when you blew in the air... Did you feel the AIR GOING IN? — YES

NO

MAKE SURE HER HEAD IS TILTED BACK SLIGHTLY. (Go back to ** , repeat the sequence, and BLOW A LITTLE HARDER.) — YES - NOW

NO AGAIN

Go to INFANT: CHOKING CARD (34)

* Place your INDEX AND MIDDLE FINGER over her LEFT NIPPLE. DON'T PRESS TOO HARD. FEEL for a PULSE for 5 SECONDS.

Do you FEEL A PULSE?

YES

++ Continue Mouth-to-Mouth. Blow 1 SLOW BREATH into her ONCE EVERY 3 SECONDS. Go do this now, BUT DON'T HANG UP! KEEP THE LINE OPEN and tell me if she starts to breathe on her own...Is she breathing on her own?

NO

Continue Mouth-to-Mouth

YES

STOP Mouth-to-Mouth and monitor. If breathing stops again: Go back to * and repeat.

NO

Go to INFANT: COMPRESSIONS CARD (36)

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you what to do next.

(Bring the baby near the phone). Place him on his back on a hard surface (table or floor).

Place 2 fingers in the MIDDLE of his CHEST right BETWEEN THE NIPPLES. Make sure your FINGERS are in the CENTER of the CHEST, RIGHT BETWEEN THE NIPPLES.

PUSH with your fingertips STRAIGHT UP AND DOWN rapidly 5 times, like you're PUMPING the chest.

Then put your HAND UNDER the NECK AND SHOULDER area so that his HEAD is SLIGHTLY TILTED BACK.

Put your MOUTH over his NOSE AND MOUTH.

* Blow in 1 SLOW BREATH OF AIR and then PUMP the CHEST again rapidly 5 times.

Repeat cycle 4 times and then come right back to the phone.

** Check for a pulse:

Place your INDEX AND MIDDLE FINGER over his LEFT NIPPLE. DON'T PRESS TOO HARD. FEEL for a PULSE for 5 SECONDS.

8/92

Do you FEEL A PULSE? — YES

NO

Keep repeating *, checking for a pulse every 4th time. Make sure his head is tilted back to keep his airway open.

KEEP DOING IT UNTIL HELP CAN TAKE OVER OR UNTIL HE STARTS TO BREATHE ON HIS OWN.

If he starts breathing on his own: STOP CPR AND MONITOR CLOSELY.

If he STOPS breathing again: Go back to **.

Maintain HEAD TILT and monitor breathing often. IF NOT breathing:

Go to ++ on INFANT: AIRWAY/MOUTH-TO-MOUTH CARD (35) and give MOUTH-TO-MOUTH instructions.

| | |
|---|---|
| VOMITING INSTRUCTIONS: | Turn his HEAD to SIDE. SCOOP MOUTH OUT. YOU MUST BLOW THROUGH THE REMAINING FLUID. |
| REMEMBER: Do this anytime vomiting occurs. | |

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help your child. (If hysterical: YOU MUST BE CALM SO YOU CAN HELP YOUR CHILD. [Keep repeating until calm.])
Bring her near the phone.

Is she still choking? Is the child able to breathe?

CHOKING - NOT BREATHING

Is she coughing or wheezing? — YES → Don't do anything now. Wait until EMT's arrive.

NO

Is she able to speak or cry? — YES → Don't do anything now. Wait until EMT's arrive.

NO

** Lay her FACE UP ON THE FLOOR. Tilt her head back slightly to open her airway.

KNEEL at her FEET, Place the HEEL of your hand just above her belly button BELOW her ribs in the middle of her stomach.

Push quickly DOWN INTO her stomach 6 times.

Look in her mouth. Do you see an object? — YES → Use your finger to sweep it out of her mouth. Is it out?

NO → Repeat from **.

YES

NO

Is she breathing now? — YES → If unconscious, LIFT HER CHIN SO HER HEAD TILTS BACK to keep the throat open. STAY ON THE LINE WITH ME!

NO

Repeat from **.

NO AGAIN

Is she breathing or moving? — YES → If unconscious, tilt her head BACK to keep her throat open. STAY ON THE LINE WITH ME!

NO

GO TO CHILD: AIRWAY/MOUTH-TO-MOUTH CARD (38).

NOT CHOKING - NOW BREATHING

Check the mouth for objects. If you see something, use your finger to sweep it out of her mouth.

If unconscious, slightly tilt her head BACK to keep her throat open. STAY ON THE LINE WITH ME!

8/92

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help your child. (If hysterical: YOU MUST BE CALM SO YOU CAN HELP YOUR CHILD. [Keep repeating until calm.])

Bring the child near the phone.

Put him flat on his back on a table or on the floor.

LIFT HIS CHIN SO HIS HEAD TILTS BACK.

Is there vomit in his mouth? — YES

NO

VOMITING INSTRUCTIONS: Turn his HEAD to the SIDE. SCOOP his MOUTH OUT (before you start Mouth-to-Mouth.).

REMEMBER: Do this any time vomiting occurs — YOU MUST BLOW THROUGH THE REMAINING FLUID.

Is he breathing now? — YES

NO

Do you or anyone else there know CPR? (If so, STAY ON THE PHONE and relay sequence to ensure they're doing it properly.)

Continue lifting his chin and check his breathing often.

I'm going to tell you how to give MOUTH-TO-MOUTH.

8/92

** COMPLETELY COVER his MOUTH AND NOSE with your MOUTH. If you can't, then HOLD HIS NOSE CLOSED and COMPLETELY COVER his MOUTH with your MOUTH.

Blow 2 SLOW BREATHS into his LUNGS, just like you're filling up a SMALL balloon.

Watch for his chest to rise.
Go do it now and then come right back to the phone.

Did you see his CHEST RISING when you blew in the air...
Did you feel the AIR GOING IN? — YES

NO

MAKE SURE YOU ARE STILL LIFTING HIS CHIN.
(Go back to **, repeat the sequence, and BLOW A LITTLE HARDER.) — YES-NOW

NO AGAIN

Go to CHILD: CHOKING CARD(37)

I'm going to tell you how to check for a pulse.

* Place your INDEX AND MIDDLE FINGER into the groove next to his ADAM'S APPLE.. DON'T PRESS TOO HARD. FEEL for a PULSE for 5 SECONDS.

Do you FEEL A PULSE?

YES

++ Continue Mouth-to-Mouth. Blow 1 SLOW BREATH into him ONCE EVERY 4 SECONDS. Go do this now, BUT DON'T HANG UP! KEEP THE LINE OPEN and tell me if he starts to breathe on his own...Is he breathing on his own?

NO

Continue Mouth-to-Mouth

YES

STOP Mouth-to-Mouth and monitor. If breathing stops again: Go back to * and repeat.

NO

Go to CHILD: CHEST COMPRESSIONS CARD (39)

8/92

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you what to do next.

Bring the child near the phone. Place her on her back on a hard surface (table or floor).
Place the HEEL ONLY of ONE HAND in the MIDDLE of her CHEST right BETWEEN THE NIPPLES.
Make sure ONLY THE HEEL of one HAND is in the CENTER of her chest, RIGHT BETWEEN THE NIPPLES.

PUSH STRAIGHT UP AND DOWN with the HEEL of your hand 5 times, just like you're PUMPING the chest.
PUSH DOWN FIRMLY with the HEEL OF 1 HAND, 1 INCH. PUSH 5 times – at least 1 PUSH EVERY SECOND.

LIFT THE CHIN SO HER HEAD BENDS BACK.

COMPLETELY COVER her MOUTH AND NOSE with YOUR MOUTH. If you can't, then HOLD HER NOSE CLOSED and COMPLETELY COVER her MOUTH WITH YOUR MOUTH.

* Blow in 1 SLOW BREATH and then PUMP the CHEST again 5 times.

Repeat cycle 4 times and then come right back to the phone.

** Check for a pulse:

Slide your INDEX AND MIDDLE FINGER into the groove next to her ADAM'S APPLE. DON'T PRESS TOO HARD. FEEL for a PULSE for 5 SECONDS.

Do you FEEL A PULSE? ——— YES

NO ↓

8/92

↓

Keep repeating *, checking for a pulse every 4th time.

KEEP DOING THIS UNTIL HELP CAN TAKE OVER OR UNTIL SHE STARTS TO BREATHE ON HER OWN.

If she starts breathing on her own: STOP CPR AND MONITOR CLOSELY.

↓

If she STOPS breathing again: Go back to **.

↓

Maintain CHIN LIFT and monitor her breathing often.
IF NOT breathing:

Go to ++ on CHILD: AIRWAY/MOUTH-TO-MOUTH CARD (38) and give MOUTH-TO-MOUTH instructions.

| | |
|---|---|
| VOMITING INSTRUCTIONS: | Turn her HEAD to SIDE. SCOOP MOUTH OUT. YOU |
| REMEMBER: Do this anytime vomiting occurs. | MUST BLOW THROUGH THE REMAINING FLUID. |

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help him. (If caller hysterical: YOU MUST BE CALM SO YOU CAN HELP HIM. [Keep repeating until calm.])

Bring him near the phone

Can he stand?

**NO (victim probably unconscious or will be soon)**

Is he coughing or wheezing?

NO → Can he breathe or talk?

NO → Listen carefully. I'll tell you how to do the Heimlich Maneuver.

YES → Can he breathe or talk?

YES → Reassure him. Don't do anything now. Wait until EMT's arrive. STAY ON THE LINE WITH ME!

NO → Listen carefully. I'll tell you how to do the Heimlich Maneuver.

Listen carefully to these instructions! Then go to him and do EXACTLY as I tell you- and COME RIGHT BACK TO THE PHONE.

** Make sure he is laying FACE UP on a hard surface (table or floor). STRADDLE his HIPS. Tilt his head back slightly, to open his airway.

Place your hands, one on TOP of the other, just ABOVE his belly button. With a quick THRUST, PUSH INTO his STOMACH DOWNWARD AND TOWARD HIS HEAD using your weight. Do this 6 times and return to the phone right away.

Look into his mouth. Can you see an object?

NO → Is he breathing now?

NO → Repeat the sequence from ** and then return to the phone right away.

YES → STOP treatment.

Monitor closely.

YES → Use your FINGER to sweep it out of his MOUTH. Is it out?

NO → Repeat the sequence from ** and then return to the phone right away.

YES → Can he breathe or talk now?

NO → GO TO ADULT: AIRWAY/MOUTH-TO-MOUTH CARD (41).

YES → STOP treatment. Reassure him. Monitor closely.

**YES**

Keep him near the phone.

Is he coughing or wheezing?

YES → Can he breathe or talk?

YES → Listen carefully. I'll tell you how to do the Heimlich Maneuver.

Listen carefully to these instructions! Then go to him and do EXACTLY as I tell you- and COME RIGHT BACK TO THE PHONE.

* Move BEHIND him and put your arms around his waist.

Grasp your FIST with your other hand, just ABOVE his belly button. Be sure you are BELOW the ribs and breast bone. In a quick motion, JERK HARD, INWARD AND UP, INTO his stomach. Do this 6 times and return to the phone right away.

Is the object out and can he breathe and talk now?

YES → STOP treatment. Reassure him. Monitor closely.

NO → Repeat from * until the object is out or he loses consciousness.

If he cannot stand up any longer, go to **.

8/92



8/92

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help her. (If hysterical: YOU MUST BE CALM SO YOU CAN HELP HER. [Keep repeating until calm.])

Can you get the phone next to her? If so, do it NOW.

I'm going to tell you how to open her airway. LISTEN CAREFULLY to these instructions and do EXACTLY as I tell you. Lay her FLAT ON HER BACK. If there is a pillow under her head, REMOVE IT.

LIFT HER CHIN SO HER HEAD TILTS BACK.

Go do this now and come right back to the phone.

Is there vomit in her mouth?

NO ↓

YES → VOMITING INSTRUCTIONS: Turn her head to the SIDE. SCOOP MOUTH OUT (before you start mouth-to-mouth). YOU MUST BLOW THROUGH THE REMAINING FLUID.

REMEMBER - do this any time vomiting occurs

Is she breathing now?

NO ↓

YES → Maintain the CHIN LIFT and check her breathing often.

Do you want to do CPR - I'll help you!

YES ↓

NO → Stop giving instructions and tell caller that help is on the way.

8/92

↓

Do you or anyone else there know CPR? (If so, STAY ON THE PHONE and relay sequence to ensure they're doing it properly.)

I'm going to tell you how to give Mouth-to-Mouth.

Lift her CHIN up the way I told you before.

** Hold her NOSE CLOSED.

COMPLETELY COVER her MOUTH with your mouth. SLOWLY FORCE 2 DEEP BREATHS into her LUNGS just like you're blowing up a BIG balloon. Watch for her CHEST TO RISE.

Go do this now and come right back to the phone.

Did you see her CHEST RISING when you blew in the air?...Did you feel the air going in? — YES ↓

NO ↓

Lift the CHIN UP MORE and repeat from **.

NO AGAIN ↓

YES NOW → I want you to check for her pulse. *Slide your INDEX AND MIDDLE FINGER into the groove next to her ADAM'S APPLE. DON'T PRESS TOO HARD. FEEL for a PULSE for 5 SECONDS. Do you FEEL A PULSE? — YES ↓

Does it feel like her throat is blocked?... That the air wasn't going in? — NO ↗

YES ↓

Go to ADULT: CHOKING CARD (40)

NO ↓

Go to ADULT: CHEST COMPRESSION CARD (42).

Continue MOUTH-TO-MOUTH until person resumes breathing or help arrives. Give 1 BREATH /5 SECS. Recheck her pulse periodically. *

HELP IS ON THE WAY! LISTEN CAREFULLY and I'll tell you what to do next.
Can you get the phone next to him? If so, do it now.
Put him ON THE FLOOR OR A HARD SURFACE. DO IT NOW. Then come right back to the phone.

Put the HEEL of your HAND on the BREASTBONE in the CENTER of his CHEST, RIGHT BETWEEN THE NIPPLES.

Put YOUR OTHER HAND ON TOP OF THAT HAND.

Push DOWN FIRMLY with ONLY THE HEELS of your hands 2 INCHES.

Push with ONLY THE HEELS of your hands STRAIGHT UP AND DOWN 15 times. JUST like you're PUMPING THE CHEST. Do it 15 times, ONCE A SECOND...REMEMBER!

Now pinch his NOSE CLOSED AND LIFT THE CHIN AGAIN.

* SLOWLY BLOW IN 2 BIG BREATHS, then PUMP THE CHEST 15 more times. Make sure ONLY THE HEEL of your HAND is on the bone in the CENTER OF THE CHEST, RIGHT BETWEEN THE NIPPLES.

Repeat the cycle 4 times and come right back to the phone. I'll stay on the line.

Now check for a pulse: Slide your INDEX and MIDDLE FINGERS into the groove next to his ADAM'S APPLE. DON'T PRESS TOO HARD! FEEL for 5 SECONDS.

↓

8/92

Is there a pulse? ——— YES ———→ Keep repeating *, checking for a pulse every 4th time. Maintain CHIN LIFT and check his breathing often. If NOT breathing: Continue MOUTH-TO-MOUTH. Give 1 BREATH / 5 SECONDS. Recheck pulse periodically. (refer to ADULT: AIRWAY/MOUTH-TO-MOUTH CARD (41) if necessary)

NO
↓

KEEP DOING THIS UNTIL HELP CAN TAKE OVER OR UNTIL HE STARTS BREATHING ON HIS OWN.

If he starts breathing on his own: STOP CPR AND MONITOR CLOSELY.

If he stops breathing again:
CHECK FOR A PULSE.

Is there a pulse?

NO ——— YES

Go back to *.

↓

Continue MOUTH-TO-MOUTH. Give 1 BREATH / 5 SECONDS, until person resumes breathing or until help arrives. Recheck pulse periodically.

| VOMITING INSTRUCTIONS: Turn his HEAD to the SIDE. SCOOP MOUTH OUT (before you start Mouth-to-Mouth.) YOU MUST BLOW THROUGH THE REMAINING FLUID. |
|---|
| REMEMBER: Do this any time vomiting occurs. |

HELP IS ON THE WAY! LISTEN CAREFULLY. I'll tell you what to do.

Has she already delivered?

NO

Is the mother pushing or straining?

YES

Lay mom on her back in the center of bed or on the floor. Raise her head with pillows, but don't let her sit up and DON'T LET HER GO TO THE BATHROOM.

You will need a clean, dry cloth (washcloth OK), at least 2 clean dry towels, a blanket or extra towel and a shoelace. Go get them now - I'll stay on the phone.

With each contraction place hand against the vagina and apply firm but GENTLE pressure to keep baby's head from delivering too fast and tearing mom. As the HEAD delivers, it may turn to the side. Now clean out baby's MOUTH and NOSE with a dry cloth. As the body delivers remember BABY WILL BE SLIPPERY, BE CAREFUL!! Support baby's HEAD and SHOULDERS and hold HIPS and LEGS firmly. Wrap baby in dry towel and place on mom's stomach. If the 1st towel becomes wet, replace it with a dry towel.

CONTINUE TO CLEAN OUT THE AIRWAY AS NECESSARY - KEEP BABY WARM - COVER HEAD BUT NOT FACE.

Tie the shoelace tightly around the umbilical cord approximately 6 inches from baby. DO NOT CUT THE CORD.

Is the baby crying/breathing?

NO → REFER TO INFANT: AIRWAY/ MOUTH-TO-MOUTH CARD (35).

YES → Maintain baby AND Mom. Keep both warm.

NO

There is still some time left before delivery occurs. Calm mom, instruct her to take deep breaths between contractions.

You will need at least 2 clean dry towels, a blanket or extra towel, a clean dry cloth (washcloth OK) and a shoelace.

Go get them now. Let me know if mother begins pushing or straining with contractions.

Come right back to the phone and we'll decide what to do next.

YES

Is the baby crying/breathing?

NO

YES

BABY WILL BE SLIPPERY – BE CAREFUL! SUPPORT HIS HEAD AND SHOULDERS; HOLD HIS HIPS AND LEGS FIRMLY.

Place baby across mom's stomach.

You will need a clean, dry cloth (washcloth OK), at least 2 clean dry towels, a blanket or extra towel and a shoelace. Go get them now – I'll stay on the phone.

Clean out baby's MOUTH and NOSE with dry cloth. Dry baby off and wrap in dry towel or blanket. Cover baby's HEAD and KEEP IT WARM. DO NOT COVER FACE. Tie shoelace tightly around cord approximately 6 inches from baby. DO NOT CUT CORD.

Make sure mother is kept warm also.

INSTRUCTIONS FOR DELIVERY OF AFTERBIRTH:

When the afterbirth is delivered, (usually about 20 minutes after birth of baby) wrap it in a towel and KEEP IT. DO NOT THROW IT AWAY. The doctor will need to examine it.

8/92

# ATTACHMENT L

# CHORAL

# C.H.O.R.A.L.

## Computerized Hospital On-line Resource Allocation Link

CHORAL is a unique proprietary software system designed to establish a community-wide network that improves the allocation and efficient use of participating hospitals emergency services resources.

*The CHORAL system provides:*

- ✓ A means to manage the problem of hospital closures and ambulance diverts.
- ✓ A single consistent method of communicating divert status to EMS personnel.
- ✓ Documentation for hospitals to monitor their profile of diverts over a period of time for improved staffing assignments and financial analysis.
- ✓ Data for EMS systems planners to monitor and begin solving the problems of hospital diverts within their community.
- ✓ One step method of alerting the entire community of a hospitals closure or selective diverts.
- ✓ A way to help solve the problem of unequal distribution of the medically indigent public.

*List of Hospitals Currently Using The CHORAL System:*

In Oregon:
University Hospital, Portland
Emanuel Hospital and Health Center, Portland
Providence Medical Center, Portland
Good Samaritan Hospital & Medical Center, Portland
Portland Adventist Medical Center, Portland
Mount Hood Medical Center, Gresham
Holladay Park Medical Center, Portland
Bess Kaiser Medical Center, Portland
Kaiser Sunnyside Medical Center, Clackamas
St. Vincent Hospital, Portland
Woodland Park Hospital, Portland
Rogue Valley Medical Center, Medford
Providence Medical Center, Medford

***Quest Technologies, Inc.*** • P.O. Box 19412, Portland, Oregon 97219 • (503)245-8850 • (800)228-0790 Fax (503)245-2368

# CHORAL

## (Computerized Hospital On-line Resource Allocation Link) Information Sheet

There is a growing problem of hospitals diverting patients. This practice, well described in the August 1989 jems, (Journal of Emergency Medical Services), creates several problems. Hospitals diverting patients for financial reasons unfairly burden the ultimate receiving institution. The emergency medical services system is unable to find a suitable receiving hospital for its patients. Families who believe their loved one is being transported to one hospital arrive there to find they are at the wrong facility. While preventing hospitals from ever diverting is unlikely, there is a system recently implemented in Portland, Oregon which displays hospitals' divert status to dispatch centers, the base station, and other area hospitals allowing the system to make necessary compensations.

The system is based on an interhospital computerized communications system which was previously used to monitor the status of this area's trauma hospitals. This trauma system role is described in Jack Stout's "Interface" column in the June 1988 issue of jems. In short, the earlier system relied on computers located within the emergency departments of 14 Portland hospitals. These computers were all linked to the emergency medical services system base station which in Portland is known as Medical Resource Hospital (MRH). In that system, hospitals displayed their trauma status visually on their terminal screen and that data was transmitted to all other hospitals as well as MRH which monitored the entire system and advised paramedics which of the 14 facilities were available for trauma at any given moment.

Building on that system, the Multnomah County office of Emergency Medical Services, working with the Oregon Association of Hospitals, contracted with Richard Quest of Salem, Oregon to rewrite the software so that the system will instead monitor six hospital divert categories and display that information system wide. The 911 communications center and MRH monitor system divert status so that paramedics are advised when they start to a hospital with a patient of that hospital's status. This avoids hospital shopping. Each hospital controls its own data. No hospital nor the 911 center nor MRH can change any data displayed by the other hospitals. Facility changes, after going out to the system, are saved in each hospital's own computer memory. The system divert history is stored in the MRH computer. This database will allow the EMS system to see patterns and prevalence of diverts. We have found that widely distributing information about facilities tends to keep each honest. One would think that in this information system a hospital would be tempted to display itself as being more capable that it really is. In fact, the Multnomah County experience appears to be the opposite.

The software is designed so that a hospital can provide its own compatible hardware or purchase hardware through Quest Technologies. The software allows maximum flexibility. Future changes in the screen format can be easily accomplished using a menu driven program. This program allows system planners to add or delete data points from the display as the system evolves and different needs arise. For example, other hospitals may wish to join the system or existing hospitals may add services which they want displayed on the screen. This is easily and inexpensively accomplished.

This system allows communities to monitor the divert status of all hospitals on the system. Paramedics, dispatch centers, and the base station can quickly identify an available hospital for the ambulance if the original destination is on divert. Patients then reach care more quickly.

**Quest Technologies, Inc.** • P.O. Box 19412, Portland, Oregon 97219 • (503)245-8850 • (800)228-0790 Fax (503)245-2368

# Emergency Medical Services

**Multnomah County**

# AMBULANCE SERVICE PLANNING REPORT

# 1993

# (APPENDIX TO THE AMBULANCE SERVICE PLAN)

MULTNOMAH COUNTY EMERGENCY MEDICAL SERVICES

MULTNOMAH COUNTY HEALTH DEPARTMENT

# AMBULANCE SERVICE PLANNING REPORT

## CONTENTS


SECTION ONE - INTRODUCTION

SECTION TWO - PLANNING PROCESS

SECTION THREE - FINDINGS - WORK GROUPS AND STUDIES

SECTION FOUR - CONCLUSIONS

SECTION FIVE - OPTIONS

SECTION SIX - RECOMMENDATIONS

EXHIBITS

# 1. INTRODUCTION

Emergency Medical Services (EMS) are fundamental health services. They are part of a larger set of basic public health and safety services necessary to ensure the health and well-being of the people of our community.

The mission of the Multnomah County EMS Program is to make sure that everyone who lives, works, or visits in our community has access to appropriate prehospital care and transportation services in the event of a medical emergency. Inherent in this mission are five service delivery goals:

1. The services must be readily available;

2. To be effective, services must be timely;

3. The care provided must be of high quality;

4. The system must be financially viable and stable; and

5. Optimal use must be made of available resources.

The county's mission in EMS involves three basic activities. First, we must assess our community's needs, desires, and resources. Second, we must set goals for the nature and desired outcomes of services to be provided, and determine how these goals can be met. Finally, we must assure that these goals are actually met, whether through regulation, contracting, direct service delivery, or other mechanisms.

As is the case for other fundamental public health and safety services, government's approach to assuring the availability of emergency medical services must be developed in the context of the current legal, social, political, and resource environment, and what we can reasonably anticipate that environment will be in the future. As is also true for other services, there are many service delivery designs for providing emergency medical services that will meet service delivery and resource utilization goals in the current environment. If we assume the future environment will be very similar to the current one, any of these designs can be a good choice. The challenge comes in anticipating significant trends that may make the future environment different from the present.

To ensure that our EMS system has adequate resources to perform well over the next 5-10 years, there are two major trends that must be carefully considered.

The first is increasing pressure on scarce local government resources. This pressure is the result of increasing demand for and cost of government services in the face of clear limitations on available revenues. Unless this trend is reversed, local government resources will continue to be scarce in the coming years.

The second trend is cost containment in health care. Pressured by the public, both the state and federal governments have come to recognize the crisis in health care financing and are on the verge of taking significant steps to contain and reduce expenditures throughout the health care delivery system. While neither the state nor federal government has decided on the specifics, it is clear that health care financing reform will bring pressure to decrease the cost of health services through limiting government reimbursement, regulation, manipulation of market forces, or a combination of these and perhaps other mechanisms. At this time, there is no reason to believe that reimbursement for emergency medical services will be exempt from pressures brought about by health care financing reform.

Considering the fundamental public health and safety nature of emergency medical services, the responsible path for the county is one that creates a system most likely to assure the people of the county access to high quality emergency medical services both now and in the coming years. This system must be based on a high quality of response and care, and on funding mechanisms that are adequate and stable, and likely to remain so into the foreseeable future.

## 1.1 PLAN REQUIREMENTS

Under ORS 823.180, et seq. each county is required to develop and submit to the Oregon Health Division an Ambulance Service Plan (ASA Plan). Rules for the form and content of the plan are specified in OAR 333-28-095 through 333-28-130. (Exhibit 1)

The purpose of the planning process is to assure that the people in the county have access to appropriate emergency medical services. This is done by establishing one or more Ambulance Service Areas within the county, with each ASA having an identified transporting provider.

Ambulance service plans are submitted to the Oregon Health Division for review and approval. The plans are approved if:

The plan is certified by the governing body through a non-emergency ordinance;

Each required subject has been considered and addressed;

The governing body judges that the ambulance service areas established provide for efficient and effective provision of ambulance services; and

The County has complied with ORS 823.180(2) and (3), ORS 823.310, and existing local ordinances and rules.

The Oregon Health Division does not pass judgment on the details of the plan such as the number of ASAs, which providers are chosen, etc. In essence, the state review is aimed at ensuring an adequate planning process and development of a complete plan.

## 1.2 HISTORY

Ambulance service planning activities have been on going in the County in one form or another for more than ten years. In 1982, a plan was submitted to the state that divided the County into four service areas, each with an exclusive provider. In the mid-1980s, concerns were raised about the amount consumers were being charged for ambulance services under the four service area system. To look at this issue, the County EMS Program retained a consultant to carry out an analysis of ambulance rates. This study suggested that charges in Multnomah County were significantly higher than those in comparable communities. In December, 1986, in response to the rate study and concerns voiced by the medical community regarding quality of care, the EMS Policy Board adopted a plan calling for a single ASA
served by a single ambulance provider under the medical direction of a single physician supervisor.

In February, 1987, suit was filed by two of the County's private ambulance companies, claiming the single ASA plan was illegal. Concurrent with the litigation of this suit, the EMS Program prepared a Request for Proposal to choose the provider for the proposed single ASA system. This was adopted by the EMS Policy Board in October of 1987. In December of that year, Judge Crookham ruled on the single ASA plan suit and found that the County did not have the authority to create a single ambulance service area. This

ruling was appealed by the County, and was ultimately reversed by the Appeals Court in July, 1989. Following Judge Crookham's decision, and because of a desire to move forward with system change, the EMS Policy Board considered a plan featuring two ASAs in 1988. In the 1989 Oregon legislative session, the statute governing ASA planning was revised, clarifying counties' authority to create a single ASA. These statutory changes, and their associated rules finally became effective in May, 1990.

In September, 1990, the Board of County Commissioners (BCC) directed EMS Program staff to develop an ASA plan featuring a single ASA served by one contacted provider. A plan draft was developed in November, 1990, but was not submitted at that time to the BCC because of concerns about financial viability. In December, 1990 the then EMS Director resigned. The planning process was suspended pending selection of a new director and was resumed in the Fall of 1991.

## 1.3 PLAN STATUS

In 1982, the County submitted a plan to the Oregon Health Division. This plan was approved. However, this approval was prior to the May, 1990, effective date of changes in the statute and rules governing ASA planning. Therefore, the plan does not meet current legal requirements and is not any longer considered by the state to be in effect. No amendments or changes to that plan have been submitted since its initial submission in 1982.

This proposed plan corrects this legal deficiency and meets all of the present requirements of the Oregon Health Division administrative rules regarding Ambulance Service Area planning.

# 2. PLANNING PROCESS

## 2.0 INTRODUCTION

In the Fall of 1991, the EMS Program proposed that the planning process should be revisited, focusing on 1) development of verifiable data and findings that would speak to major issues and concerns; and 2) pursuit of consensus regarding system design. More specifically, the process was designed to answer the question *Should the County be served through a single ambulance service area or multiple service areas?* After initial interviews with interested parties it was evident that the issues and concerns were varied, there were strong opinions held by many of the interested parties, and there was little adequately derived information to address major issues.

## 2.1 IDENTIFICATION OF CONCERNS AND MAJOR ISSUES

On December 5th, 1991 an open meeting was held with 23 people involved in EMS. This group represented providers, physician supervisors, the EMS Medical Advisory Board (MAB), paramedics, the Multnomah County Medical Society (MCMS), hospitals, elected officials, EMS staff, and other interested persons. The session was facilitated by a consultant who had no affiliation with any interested party or point of view. The purpose of this meeting was to identify concerns, delineate major issues, and to find if there was immediate, overwhelming need to change the current system, especially with regard to the number of ambulance service areas and providers.

The process resulted in the following points of consensus.

The system should retain many of its existing standards, including:

Providing an all ALS ambulance response to emergency calls;

Moving toward county-wide ALS first response;

Having two paramedics on each ambulance;

Responding to at least 90% of emergency ambulance dispatches in 8 minutes or less;

Providing a first response in 4 minutes or less, 90% of the time.

The meeting also identified several areas of concern about the current system:

The current quality assurance process is inadequate to advance the system's quality of care;

The data system is inadequate to judge provider performance and to serve as a basis for quality improvement;

It is unclear that the rates charged to consumers are appropriate;

Clinical quality of care may be impaired by inconsistent compliance with protocols;

There is inadequate medical and administrative accountability in the system; and

There may be too many paramedics for the number of calls, resulting in insufficient patient care experience opportunities, and in problems in providing and maintaining a desirable level of continuing paramedic training.

The question of the number of ASAs and providers was not resolved by the group. However, in response to the question "... can you make a compelling case for a single provider and are you willing to spend 100 hours toward that goal in the next year?" there were fourteen (14) "no" answers and only four (4) "yes".

## 2.2 WORK GROUP PROCESS

Based on the points of consensus developed in the December meeting, four work groups were formed. Each group was charged with 1) determining what specific information would be needed to address that group's area of concern; 2) gathering and analyzing that information; and 3) developing findings for inclusion into the County's ASA plan. The four groups were:

### 2.2.1 MEDICAL DIRECTION AND SUPERVISION

This group was a continuation of ongoing discussions on how to best provide medical supervision and direction for Multnomah County's EMS system. The consideration of a system medical director was undertaken somewhat independently from the rest of the planning process because 1) it was anticipated that this change could be implemented before other changes in the system; and 2) there is a need

for a medical director in any system design. Further, having a medical director in place also could be extremely valuable in working through system design changes.

### 2.2.2 QUALITY ASSURANCE AND IMPROVEMENT

This work group was charged with reviewing current quality assurance (QA) activities and recommending the ASA plan's direction regarding quality assurance/quality improvement.

### 2.2.3 RATES AND COSTS

The original intent of this group was to examine the current system's rate structure and to make a determination as to whether the rates were reasonable. The group moved instead to a review aimed at developing a costing methodology that could be applied to cost analysis of differently structured systems.

### 2.2.4 SYSTEM STATUS / DISPATCH

The purpose of this work group was to determine the methodology for reviewing the community's demand for emergency medical services and to prepare a "what if" scenario to examine the potential performance of a single, county-wide ASA.

### 2.2.5 OTHER STUDIES

In addition to these work groups, several studies were carried out by the EMS office to provide additional information necessary to address other questions raised in the planning process. These studies covered:

TURNOVER. This study was based on five years of data maintained by the EMS office on EMT employment. The study looked at both private ambulance providers and fire providers.

REVENUE/CHARGES. This study was on based on provider invoice charges for 9-1-1 calls. This produced the first well documented data on emergency ambulance charges in the county since 1986.

COLLECTIONS. This review of provider records resulted in a better understanding of the availability of financial resources for EMS through examination of the nature of payors and the amounts providers are able to collect.

## 2.3 STUDIES BY OTHER AGENCIES

At the same time the EMS office has been carrying out its planning process, the two largest first responder agencies in the county, Portland Fire Bureau and Gresham Fire Department, have been re-examining their involvement and roles in EMS. The Gresham Fire report is complete and the Portland report will be submitted to the city leaders in the near future.

# 3. FINDINGS - WORK GROUPS AND STUDIES

## 3.1 MEDICAL DIRECTION AND SUPERVISION

Under Oregon law, each EMT must work under the direction of a physician supervisor who meets state criteria and who is approved by the state. In the current system, each provider employs a physician, who is responsible for the EMTs of that provider. While this is not currently the case, there could be as many as thirteen (13) physician supervisors in the County if each provider employed a different physician. This multiplicity of physician supervisors can result in serious problems with clinical care. In the past there have been problems with differing interpretation of ALS and BLS protocols on the part of physician supervisors. Physician supervisors may have differing standards for the appropriateness of EMTs' practices, resulting in inconsistencies in approach and uneven discipline.

In 1986, the Multnomah County Medical Society (MCMS), through a special task force on EMS, recommended that the county's EMS system have a single medical authority. The MCMS "White Paper" coupled a single medical authority with a single transporting ambulance provider and stated "...a single system for [ALS and BLS], accountable to a single medical authority... [who] should be the physician supervisor for the single ALS service,...responsible to the Multnomah County Health Officer." (Exhibit 2) In addition, the single medical authority concept has been endorsed by the Oregon Chapter American College of Emergency Physicians (ACEP).

In reviewing the issues surrounding medical supervision, the work group's initial finding was that a single medical authority was necessary for the EMS system and that this authority could be a single physician or an organized group with an identified Medical Director. There was general agreement on the clinically related duties of the single physician authority by all interested parties. A proposal embodying this approach was forwarded to the Medical Advisory Board (MAB) for discussion. At about the same time, the Portland Area Paramedic Alliance (PAPA), in conjunction with one member of the MAB, brought to the MAB an alternate proposal for medical direction. This proposal differed in that gave a single physician control of all aspects of the EMS system. It also called for the physician to receive program direction from the Medical Advisory Board, and report administratively directly to the Chair of the County Board of Commissioners (BCC). This proposal was adopted by the MAB.

At an informal hearing in front of the BCC, the EMS Program was instructed to prepare an ordinance change to implement medical direction through a single Physician Medical Director responsible for all medical aspects of the EMS system. This Medical Director was to be placed organizationally in the Health Department.

## 3.2 QUALITY ASSURANCE AND IMPROVEMENT

At the single meeting of this work group, there was consensus that an integrated, system-wide quality management program was necessary to improve the functioning of whatever system the county might adopt. This concept has a historical basis in the MCMS "White Paper" and was put forth in the PAPA medical supervision proposal.

Quality Assurance (QA), as practiced in many organizations, focuses on identification of problems, allocation of blame, and often times sanctions as a part of the solution. It is not a standards driven, system oriented process. Many organizations in EMS are turning to a Continuous Quality Improvement (CQI) model based on the Total Quality Management theory of W. Edwards Demming and his work with Japanese industry. As part of the planning process an educational forum was held on October 15, 1992 to provide information on the CQI model. Forty five (45) people attended, representing seventeen (17) groups involved with EMS in the tri-county area. The presenters were from Portland State University, Oregon Health Sciences University, and the Kaiser Health Plan. Following this forum a group of interested providers, paramedics, physicians, and EMS staff have met several times to begin the process of implementing a CQI model in Multnomah County and in the surrounding jurisdictions.

Critical to the success of a CQI program is the development and use of an integrated data base containing data related to patient care and outcomes. This database must be derived from a number of sources including 9-1-1 call records, dispatch center records, pre-hospital patient care reports, and hospital care and discharge data. The Oregon Health Division EMS Program is in the process of developing a data base specification and associated computer software that will be useful in providing data for the CQI process.

In addition to the new CQI effort, the group found that case reviews, complaint resolution, and peer review should continue. These activities can serve as additional data sources for the CQI process as well as fulfilling their own objectives in system management.

## 3.3 SYSTEM STATUS PLANNING

The primary question that has permeated the county's ASA planning effort for several years is: *Should there be a single ASA or multiple ASAs?* Most other considerations have seemed secondary to this question.

While past planning results have put forth proposals featuring both one and two ASAs, the rationale behind these proposals has been largely intuitive or theoretic, and not based on specific information. In an attempt to address this question more objectively, the system status work group decided to develop a county-wide ambulance service model, basing its technique on a method known as system status planning. This technique involves several essential steps carried out in two phases.

Phase one consists of two steps leading to development of a preliminary ambulance deployment plan based on the distribution of demand for emergency services over time. The first step is determining how the demand is distributed across the days of week and the hours of each day. Second, applying certain well-established rules of thumb to the data, a preliminary ambulance deployment plan is developed to match ambulance availability to demand.

The second phase of system status planning determines optimal geographic placement of ambulances to ensure that the system can respond to the locations where service is needed and meet response time requirements.

System status planning utilizes a combination of data on call location, call volume, and travel times, as well as the experience of the provider crews in determining the best locations for ambulance placement. After an initial plan is developed, it is "fine tuned" through trial and error.

The resources necessary to support a deployment plan can be quantitatively described. The unit of measurement is the "unit-hour". Each unit-hour represents one fully staffed and equipped ambulance deployed for one hour. The cost of producing a unit-hour can be derived from its component costs, e.g., paramedic salaries, vehicle costs, etc. Therefore, the cost of a given deployment plan can be calculated once the number of unit-hours deployed is determined.

In attempting to set up a model, it became evident that it would be impossible to compare the current system's demand and deployment directly to a single county-wide system. This difficulty arose from the current system's practice of allowing providers to remove units from "9-1-1 available" status to run private, non-emergency calls when

there are sufficient available units in the system. In addition, while any "9-1-1 available" unit can run one of these calls, some of the calls are run by additional units not available to the 9-1-1 system. Thus the system's current demand is a blend of 9-1-1 emergency calls and non-emergency call demand and some of the system's non-emergency call demand. Ambulance deployment strategies in the current system are based on this blended demand. To develop a single county-wide emergency demand, all private calls were excluded. Thus, the county-wide demand model is for 9-1-1 calls only.

The demand model used most commonly used for system status planning looks at the number of calls by hour of day and by day of week. The system status planning exercise used a twenty-eight week sample period with 19,084 calls. Four measures of demand for each hour of the day and day of the week can be calculated . The planning exercise used a measure called the average peak demand. In brief, this measure represents the average of the highest demands seen in each of four seven week periods.

There was concern voiced in the work group that the above methodology could result in an inappropriately low number of ambulances in the initial deployment plan. Therefore, demand data were also statistically analyzed. The group examined the frequency distribution of all calls for each day and hour of day to determine the 85th, 90th, and 95th percentiles. This revealed that the 95th percentile and the average peak demands were equivalent. The group then proceeded to construct a demand model using the average peak demand data.

Initial ambulance deployment plans are usually based on the average peak demand, adjusted to accommodate the requirement to schedule reasonable working shifts. This is the method that has been used by the private providers in Multnomah County to date, and was the method used in the planning exercise.

A problem with the above methodology is that the resulting deployment plan could not be tested and fine tuned "on the street" to see whether the plan matched the geographic distribution of calls and met response time requirements. To solve this problem EMS worked with the University of Washington school of Civil Engineering to develop and carry out a computer simulation of the single ASA system. The simulation utilized the Emergency Medical Services Information and Mapping System (EMSIMS). This program has been used successfully to plan and refine ambulance deployment in King County, Washington. This program utilizes a database that has information on number

of calls, call location, transportation system, travel times, hospital locations, and potential ambulance locations. The program provides coverage patterns, expressed in travel time from any given location. It also shows overlaps in coverage and areas not covered. Finally, it provides a "best fit" for ambulance locations, given any specific number of units deployed.

The results of the group's system status planning study shows that 39,208 unit-hours could be saved each year by switching to a single ASA system. This means that the system could meet its response goals for 9-1-1 calls with roughly three to four fewer ambulances on the street at most times during the day. One caveat is that these savings could vary, depending upon the actual schedule implemented. However, the variance would likely be small and would not effect projected savings in any substantial way. Also this model, as explained earlier, does not allow for private, non-emergency calls to be run by the "9-1-1 available" units.

Table one (1) summarizes detailed demand data.

Exhibit 3 shows the detail of the demand analysis.

## 3.4 RATES AND COSTS

### 3.4.1 UNIT HOUR COSTS

The initial discussions of this work group were aimed at determining what information would be most helpful in delineating the costs of both the current system and of any proposed alternative system structures. The group agreed that determining the unit-hour cost of the current system would provide the most appropriate basis for evaluating cost savings or increases resulting from the change from a multiple to a single ASA system. For this exercise, a unit-hour was defined as one fully equipped ambulance, staffed with two paramedics, deployed for one hour. The group's methods were not intended to compare costs between ambulance companies. Therefore, a composite of company costs was used, resulting in an average unit-hour cost for the County. The data were combined using a weighted average to allow for the differing workloads experienced by each provider in the current system. Cost components that varied according to the number of unit-hours deployed were classified as variable. Costs that did not vary substantially within a given range of unit-hour deployment were classified as fixed.

Each ambulance company was requested to provide cost information in a set format. This format was not based on the accounting format used by any of the companies. So that the data from all the companies was similar in content and

DEMAND SUMMARY

| | CURRENT DEPLOYMENT | | PROPOSED | |
|---|---|---|---|---|
| | DAY | YEAR | DAY | YEAR |
| SUNDAY | 338 | 17,576 | 229 | 11,908 |
| MONDAY | 352 | 18,304 | 238 | 12,376 |
| TUESDAY | 349 | 18,148 | 219 | 11,388 |
| WEDNESDAY | 347 | 18,044 | 230 | 11,960 |
| THURSDAY | 347 | 18,044 | 241 | 12,532 |
| FRIDAY | 347 | 18,044 | 267 | 13,884 |
| SATURDAY | 337 | 17,524 | 239 | 12,428 |
| | 2,417 | 125,684 | 1,663 | 86,476 |
| UNIT HOUR SAVINGS | | | | 39,208 |

This schedule shows savings derived from a demand analysis of "911" calls.

Current deployment is compiled from data submitted by providers. Refer to Table 2 for current deployment breakout.

TABLE ONE

format, the providers were asked to allocate costs into the categories listed below. Data was self-reported and the county did not perform any audits to substantiate reported costs.

FORMAT

| COST CENTER | COST BASE |
|---|---|
| Paramedics | FTE/month |
| Includes wages, benefits, taxes. This cost is directly dependent upon the number of unit-hours deployed. | |
| Salaried Employees | Per/month |
| Includes supervisors, training officer, incremental $ paid to paramedics(FTO). This cost would not vary until sufficient unit-hours were reduced to necessitate less supervision and training. | |
| Administration | Per/month |
| Includes middle and upper management. | |
| Supplies | Per/transport |
| Billing and collection | Per/transport |
| Medical supervision | Per/contract |
| Control Center | Per/month |
| Training/education | Per/month |
| There is a certain fixed base cost, however, the per FTE cost will vary. | |
| Vehicle/equipment | Per/month |
| Includes all costs and equipment in the ambulance. Small adjustments to the unit-hours will not vary this cost. Permanent reduction in ambulance need will vary the cost. | |
| Fees/license | Per/month |

General overhead Per/month

Includes all other allocated costs.

This cost study computed costs on monthly, annual, and per unit-hour basis. The unit-hour costs are based on the current deployment of 125,684 unit-hours.

Table two (2) shows the current deployment of unit-hours used in the study.

The analysis revealed an average current cost of $75.45 per unit-hour. Since there is a basic cost associated with "doing business," much of the hourly cost represents fixed expenditures. Buildings, management, and billing are examples of costs that do not vary substantially with moderate changes in unit-hour deployment. The variable portions of the costs due to unit-hour deployment identified in this process were:

Paramedic salaries and benefits - $26.83 per unit-hour.

Other salaries and benefits - $3.63 per unit-hour.

Training and education - $.91 per unit-hour.

Vehicles and equipment - $5.55 per unit-hour.

All other costs are essentially fixed when the only system factor that changes is the number of unit-hours deployed. Except for paramedic costs, other variable costs can only be determined by an allocation only after unit-hour deployment is established.

Paramedic salaries and benefits represent 36% of the allocated cost. This percentage can be applied to calculating cost changes related to any change in unit-hour deployment.

Table three (3) shows details of the analysis. In addition to the information above, the table shows the number of transports, based upon the monthly average from BOEC, and number of paramedic FTEs, compiled from the provider data.

### 3.4.2 DUPLICATED COSTS

The previous discussion looked at the cost as a function of unit-hour deployment. This cost is essentially independent of the number of transporting ambulance providers. The remaining costs allocated to the system

## CURRENT UNIT HOUR DEPLOYMENT

| | SUN | MON | TUES | WED | THUR | FRI | SAT | WEEK | MONTH | YEAR |
|---|---|---|---|---|---|---|---|---|---|---|
| AA | 97 | 101 | 98 | 96 | 96 | 96 | 96 | 680 | 2,947 | 35,360 |
| BUCK | 144 | 154 | 154 | 154 | 154 | 154 | 144 | 1,058 | 4,585 | 55,016 |
| CARE | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 679 | 2,942 | 35,308 |
| TOTAL | 338 | 352 | 349 | 347 | 347 | 347 | 337 | 2,417 | 10,474 | 125,684 |

This table shows current field deployment by day of the week. Data used in this table has been submitted by providers.

TABLE TWO

COST SUMMARY AND SAVINGS PROJECTION (taken from 1992 data)

| | MONTH | ANNUAL |
|---|---|---|
| UNIT HOURS | 10,474 | 125,688 |
| TRANSPORTERS | 2,143 | 25,716 |
| UNIT HR RATIO | 20.5% | 20.5% |
| PARAMEDIC/FTE (FTE=106) | 2,648 | 31,776 |

| COMPILED COSTS | | CURRENT COST | | | | PROJECTED SAVINGS | |
|---|---|---|---|---|---|---|---|
| | MONTH | ANNUAL | UNIT HR | % Total | ANNUAL | % Saved |
| Paramedic | $284,462 | $3,413,544 | 26.83 | 36% | $1,051,951 | 11% |
| Salaried | 37,997 | 455,964 | 3.63 | 5% | | |
| Vehicle/equipment | 58,151 | 697,812 | 5.55 | 7% | | |
| Tranining/ED | 9,486 | 113,832 | 0.91 | 1% | | |
| Total variable costs | 390,096 | 4,681,152 | 36.92 | 49% | 1,051,951 | 11% |
| Administrative | 49,383 | 592,596 | 4.72 | 6% | 296,298 | 3% |
| Supplies | 27,879 | 334,548 | 2.66 | 4% | | |
| Billing | 43,680 | 524,160 | 4.17 | 6% | | |
| MD supervision | 8,509 | 102,108 | 0.81 | 1% | | |
| Control center | 49,583 | 594,996 | 4.73 | 6% | 594,996 | 6% |
| Fee & license | 19,717 | 236,604 | 1.88 | 2% | | |
| General overhead | 204,947 | 2,459,364 | 19.57 | 26% | 1,229,682 | 13% |
| Total fixed costs | 403,698 | 4,844,376 | 38.54 | 51% | 2,120,976 | 22% |
| Total costs | $793,794 | $9,525,528 | 75.46 | 100% | $3,172,927 | 33% |

This table shows current cost breakdowns from information submitted by local providers. The projected columns illusrate possible cost savings generated by a reduction in paramedic hours (Table 1) and the elimination of duplicated costs.

TABLE THREE

depend on the number of calls in the system and on system design. The costs associated with supplies and billing are depend on the number of calls in the system and would not change with changes in system design. However, it could be argued that if there is a change from three providers to one, the costs associated with administration and general overhead could be reduced by as much as two thirds. These costs represent expenditures duplicated by each provider. Assuming that these duplicated costs could be reduced by one-half, rather than two-thirds, there could be a savings in administration and overhead of up to $1,525,980. Further, the EMS Program maintains a dispatch center at BOEC for all 9-1-1 calls. Provider control centers exist primarily for other purposes, e.g. dispatch of non-emergency calls. The current system therefore inappropriately allocates the $594,996 cost of the private control centers to emergency calls. This amount could be saved through implementation of a single provider ASA with appropriately allocated costs.

Finally, there could also be additional cost reductions through the elimination of other duplicated resources, e.g., training officers, billing supervisors, etc. The amount of these cost reductions would depend on how service is organized and staffed in the new system.

### 3.4.3 RATES (CHARGES)

Under current EMS regulations, the county does not control the rates charged to consumers for emergency medical services. Each provider is required to post with the EMS office a list of charges for ambulance and pre-hospital care services. The EMS office has authority to review individual bills to insure that charges are in compliance with posted rates.

The work group on rates did not attempt to determine if the rates charged by providers in the current system were appropriate. In previous rate discussions it has been suggested that rates in Multnomah County must be compared to those in other areas to determine if our rates are appropriate. This methodology does not provide much useful information because systems and their finances are inherently difficult to compare. There are differences in service standards, population, geography, transportation networks and other factors. Further, the rates may or may not reflect a subsidy. If it exists, a subsidy may be direct and readily quantifiable, or indirect and difficult to quantify. EMS therefore did not undertake this type of comparison. The rate charged to consumers in Multnomah County should reflect what is being purchased. Charges should be based on the cost to provide required services under a given system design. The rates should take into

consideration any subsidy, direct or indirect, that may be available.

Citizen input on rates comes primarily from complaints. The EMS office receives an average of three (3) complaints about charges per month. In 1992, with 21,700 transports, there were 36 complaints, representing 0.15% of the patients transported by the system. This low rate of complaints about charges does not show that the rates being charged in the system are appropriate, only that individual consumers do not seem to be highly motivated to express their concerns about ambulance charges.

## 3.5 TURNOVER

One of the issues that has been raised during the current system planning effort is the longevity of employment of paramedics working in the system. This issue is important because it may directly impact quality of care. Increasing a paramedic's experience in the system should result in an improved understanding of and compliance with medical protocols and standards. It should also lead to better knowledge of the community's geography and street patterns, resulting in lowered response times.

To determine the extent of turnover in the current system, the EMS program reviewed its records of EMT employment. Both ambulance and first response providers are required to provide the EMS office with a listing of all EMTs employed for each one year licensing period. Our review looked at each provider's information and determined:

The number of EMT-Paramedics employed.

The number that were new to that provider since the previous year; and

The number that left that employer during the year.

The study methodology did not account for movement of paramedics between providers, nor did it account for paramedics that leave the system and subsequently return after one or more years. Therefore, the analysis represents a worst case scenario.

For private ambulance providers, the study revealed that an average of 30% (range: 20% - 40%) of paramedics are new to private providers each year. Further, an average of 30% of the paramedics (range 14% - 55%) leave the providers each year.

For fire providers, an average of 13% (range 5% - 33%) of paramedics are new each year, with most of these new paramedics being due to increases in staff size. Only 4% (range 1% - 9%) of fire paramedics leave their employer each year.

Because of the wide range of the turnover data, we also looked at longevity of service by provider. Again, this did not take into account paramedics that move among providers within the system. The average years of service for a paramedic working for an ambulance provider is 2.6 years. After five years only 6.7% were still working as paramedics with the ambulance provider they were employed by at the start of the five year study period. In contrast, the average length of service for fire paramedics in the study period was 4.4 years. After five years 49% were still employed as paramedics.

Table four (4) summarizes the results of the turnover study.

Table five (5) shows the detailed results of the longevity analysis. Each column is discrete (not cumulative).

## TURNOVER - FIVE YEAR STUDY

| | | 1987 | | 1988 | | 1989 | | 1990 | | 1991 | | 1992 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | STAFF | % | STAFF | % | STAFF | % | STAFF | % | STAFF | % | STAFF | % |
| AA | EMT-4 | 43 | | 36 | | 38 | | 40 | | 43 | | 37 | |
| | NEW | n/a | | 19 | 53% | 13 | 34% | 9 | 23% | 14 | 33% | 12 | 32% |
| | LEFT | 26 | 60% | 9 | 25% | 8 | 21% | 11 | 28% | 18 | 42% | n/a | |
| BUCK | EMT-4 | 81 | | 96 | | 95 | | 108 | | 127 | | | |
| | NEW | n/a | | 32 | 33% | 12 | 13% | 23 | 21% | 33 | 26% | | |
| | LEFT | 17 | 21% | 19 | 20% | 6 | 6% | 15 | 14% | 84 | 66% | n/a | |
| CARE | EMT-4 | 46 | | 54 | | 46 | | 59 | | 80 | | 60 | |
| | NEW | n/a | | 23 | 43% | 10 | 22% | 23 | 39% | 29 | 36% | 16 | 27% |
| | LEFT | 15 | 33% | 18 | 33% | 11 | 24% | 8 | 14% | 36 | 45% | n/a | |
| Total Providers | EMT-4 | 170 | | 186 | | 179 | | 207 | | 250 | | 97 | |
| | NEW | n/a | | 74 | 40% | 35 | 20% | 55 | 27% | 76 | 30% | 28 | 29% |
| | LEFT | 58 | 34% | 46 | 25% | 25 | 14% | 34 | 16% | 138 | 55% | n/a | |
| PFB | EMT-3/4 | 55 | | 60 | | 69 | | 73 | | 70 | | 72 | |
| | NEW | n/a | | 10 | 17% | 10 | 14% | 5 | 7% | 5 | 7% | 4 | 6% |
| | LEFT | 5 | 9% | 1 | 2% | 1 | 1% | 6 | 8% | 2 | 3% | n/a | |
| GRESH | EMT-3/4 | 4 | | 6 | | 9 | | 12 | | 17 | | 25 | |
| | NEW | n/a | | 2 | 33% | 3 | 33% | 3 | 25% | 5 | 29% | 8 | 32% |
| | LEFT | | | | | | | | | 1 | 6% | n/a | |
| Provider & FD Total | | 229 | | 252 | | 257 | | 292 | | 337 | | 194 | |

This table has been prepared from provider license information. Each box shows the reported total EMT staff with a break out of new staff and staff that have left.

TABLE FOUR

STAFF TURNOVER - YEARS OF YEARVICE - FIVE YEAR STUDY

| | SIX | FIVE | FOUR | THREE | TWO | ONE | 5 yr Total | AVERAGE RETENTION |
|---|---|---|---|---|---|---|---|---|
| AA | 6 | 7 | 10 | 11 | 19 | 56 | 109 | 2.2 YRS |
| | 5.50% | 6.42% | 9.17% | 10.09% | 17.43% | 51.38% | 100.00% | |
| BUCK | 10 | 42 | 24 | 15 | 45 | 48 | 184 | 3 YRS |
| | 5.43% | 22.83% | 13.04% | 8.15% | 24.46% | 26.09% | 100.00% | |
| CARE | 13 | 10 | 11 | 17 | 31 | 59 | 141 | 2.4 YRS |
| | 9.22% | 7.09% | 7.80% | 12.06% | 21.99% | 41.84% | 100.00% | |
| Provider total | 29 | 59 | 45 | 43 | 95 | 163 | 434 | 2.6 YRS |
| | 6.68% | 13.59% | 10.37% | 9.91% | 21.89% | 37.56% | 100.00% | |
| PFB | 44 | 10 | 14 | 1 | 5 | 16 | 90 | 4.4 YRS |
| | 48.89% | 11.11% | 15.56% | 1.11% | 5.56% | 17.78% | 100.00% | |
| GRESH | 4 | 2 | 3 | 3 | 5 | 8 | 25 | 2.9 YRS |
| | 16.00% | 8.00% | 12.00% | 12.00% | 20.00% | 32.00% | 100.00% | |
| Total 5 yr base | 77 | 71 | 62 | 47 | 105 | 187 | 549 | |
| | 14.03% | 12.93% | 11.29% | 8.56% | 19.13% | 34.06% | 100.00% | |

This table is compiled from provider license information. It allocates the full 5 year EMT employee history into the number of years employed by the provider, i.e. the column headed "SIX" shows all employees retained six or more years, the column headed "FIVE" shows all employees retained five to six years, etc.

TABLE FIVE

## 3.6 REVENUE

In order to asses the fiscal viability of a system proposal it is necessary to determine the current revenue applicable to the 9-1-1 calls. This requires determining the average charge for service, the mix of payors for the people served, and the collection percentage for each type of payor and for all payors combined.

### 3.6.1 CHARGES

To determine the average charge for 9-1-1 calls, we reviewed fifteen (15) days' worth of invoices obtained from the three current providers. During the period studied, all providers were charging on an "all inclusive" basis for either ALS or BLS service. Each invoice showed a service charge and a mileage charge. We compiled the aggregate charges and determined an average charge per 9-1-1 call. The average charge during the study period was $588.00. Table six(6) shows the detail of the review.

### 3.6.2 PAYER DISTRIBUTION AND COLLECTIONS

As part of rule making for user fees, EMS was required to conduct a study to a reasonable method for allocating EMS user fees among the transporting providers. This study, using provider collection data, distributed patients into four (4) payor classes with the following estimated collection rates:

Medicaid - 11%

Medicare - 75%

All payors except above - 90%

No payor - 25%

For calls that could not be classified into one of the above categories, a collection rate of 60%, based on weighted average collection estimates, was applied.

Table seven (7) shows the collection detail by provider.

These rates were then applied to the 21,700 transports for 1992. The estimated gross revenue (charges) for that year was $12,759,600. The estimated net collected revenue was $7,141,165. This is a system collection rate of 56%. Table eight (8) shows the details of these estimates.

AVERAGE CHARGES - JUNE 1-JUNE 15, 1992

| | INVOICES | CHARGES | AVERAGE |
|---|---|---|---|
| ALS | 723 | $394,481 | $546 |
| BLS | 184 | $86,311 | $469 |
| EMERGENCY | 28 | $17,707 | $632 |
| AID | 5 | $625 | $125 |
| TOTAL BASE | 940 | $499,124 | $531 |
| MILEAGE CHARGES | 940 | $53,563 | $57 |
| INVOICE TOTAL | 940 | $552,687 | $588 |

Data for this table has been submitted by providers. The table shows the number of invoices counted during the time period, the gross charges, and an average charge per invoice.

TABLE SIX

DISTRIBUTION BY PAYER

COLLECTION RATES

| | AA | BUCK | CARE/TVA |
|---|---|---|---|
| MEDICAID @ 11 % | 16% | 20% | 10% |
| MEDICARE @ 75 % | 13% | 9% | 20% |
| ALL PAYERS EXCEPT ABOVE @ 90 % | 38% | 41% | 44% |
| NO PAYER @ 25 % | 33% | 30% | 26% |
| TOTAL CHARGES | 100% | 100% | 100% |
| WEIGHTED COLLECTION RATE | 53.90% | 53.40% | 62.10% |

This information is based on provider data from 4/1/91 to 7/1/91. The table profiles the percentage of provider charges by source. The table then calculates a weighted collection rate for each provider based on estimated collection weight percentages of each source.

TABLE SEVEN

ESTIMATED REVENUE STUDY

| | TRANSPORTS | | | | | | Gross Charges | Collection % | Estimated Revenues |
|---|---|---|---|---|---|---|---|---|---|
| | AA | BUCK | CARE | OTHER | Total | % of Total | | | |
| MEDICAID | 1,042 | 1,823 | 564 | | 3,429 | 16% | $2,016,017 | 11.00% | $221,762 |
| MEDICARE | 846 | 820 | 1,129 | | 2,795 | 13% | $1,643,436 | 75.00% | $1,232,577 |
| OTHER PAYERS | 2,474 | 3,737 | 2,482 | | 8,693 | 40% | $5,111,496 | 90.00% | $4,600,346 |
| NO PAYERS | 2,148 | 2,734 | 1,467 | | 6,349 | 29% | $3,733,459 | 25.00% | $933,365 |
| ALL PAYERS | | | | 434 | 434 | 2% | $255,192 | 60.00% | $153,115 |
| COLUMN TOTALS | 6,510 | 9,114 | 5,642 | 434 | 21,700 | 100% | $12,759,600 | 56.00% | $7,141,165 |

This table estimates revenues based on workload information taken from BOEC. Gross charges are calculated by multiplying the number of transports by the average charge per invoice (Table 6). The estimated revenues are calculated by multiplying gross charges by the estimated collection percentage (Table 7). Revenues estimated under this method are believed to be conservative.

TABLE 8

# 4. CONCLUSIONS

## 4.1 SYSTEM GOALS

To reiterate, there are five basic goals for the County's EMS system:

1. Services must be readily available;
2. To be effective, services must be timely;
3. The care provided must be of high quality;
4. The system must be financially viable and stable; and
5. Optimal use must be made of available resources.

The choice of an EMS system design must be based on the ability of that design to meet the community's service goals, and on the strengths of that design in meeting the challenges presented by changes in the political, social, and fiscal environment over time.

## 4.2 AMBULANCE SERVICE AREAS

The information and data collected and analyzed in the planning process leads to an inescapable conclusion; there is no reasonable basis for maintaining the current multiple ambulance service area system in Multnomah County.

The primary reason for this conclusion is the excessive cost of the current system design. Given the increasing fiscal pressures that EMS will face in the future, a financially inefficient EMS system is something we cannot afford now, and certainly will not be able to afford in the future.

The single ASA system plan model presented above shows that the 9-1-1 service demand can be met through deploying substantially fewer unit-hours than are now attributed to meeting that demand. This will result in a lower cost for service. In addition, a reduction in the number of providers could further reduce costs. Applying only the paramedic cost of $26.83 per unit-hour, deploying an estimated 39,208 fewer unit-hours, will result in a savings of $1,051,951, i.e., an 11% reduction in the total system cost. The cost study identified additional savings of up to $1,525,980 in duplicated costs of administration and general overhead. This represents 16% of current costs. Ambulance company dispatch/control center costs of $594,996 represent another

6% cost reduction. These reductions could result in a total savings of up to 33%. This savings represents the change in the unit-hours deployed and in the number of providers in the system. All else remaining the same.

It must be noted that these projected savings apply to 9-1-1 emergency services only. In our analysis, these costs were allocated by providers to these services. It may be necessary to reallocate portions of these costs to non-emergency services. This could increase the cost and charges for non-emergency ambulance service. However, emergency service revenues should not subsidize non-emergency ambulance service and its payors.

A second reason to abandon the current multiple ASA system is improving medical control and uniformity of service. While there are no hard data on this point, it is reasonable to assume that a single, well-integrated system will result in improved uniformity of care and more efficient use of medical direction and supervision resources.

Finally, operation of the system according to an integrated County-wide plan will improve the efficiency and effectiveness of the regulatory and coordination efforts of the EMS Program. This will allow for more effort within current resource limitations to be applied to improving service effectiveness and quality of patient care.

There are a number of options for implementing a single ASA. These will be discussed later in Section 5.

## 4.3 MEDICAL DIRECTION AND SUPERVISION

A single EMS Medical Director, employed by the county, and serving as the physician supervisor for all EMTs will best meet the medical direction goals spelled out through the planning process. The EMS Medical Director must be responsible for all medical aspects of the EMS system. Because of the anticipated workload, there maybe a need for other medically trained individuals to carry out some duties of the Medical Director. The details of any such arrangements must be developed by the Medical Director and must occur under his or her direct supervision.

## 4.4 QUALITY ASSURANCE AND IMPROVEMENT

Multnomah County EMS needs to develop a county-wide, integrated quality management program. It should be a data driven, Continuous Quality Improvement (CQI) process with input from all relevant sources. The sole purpose of this process must be the improvement of the EMS system.

Participation in the process must occur in all components of the system, and must be focused on problem solving at the source of the problem.

An integrated data base must be developed to implement the CQI process. Multnomah County should adopt the State EMS data requirements as the basis for data collection.

As part of the CQI process the EMS office will continue to address and resolve complaints, and monitor compliance with system requirements. These activities will provide additional information to the CQI process.

## 4.5 RATES (CHARGES)

While the current rates are excessive to some, they do not seem to present a major problem in blocking users' access to the system. However, rates are higher than they could be because of the current system design.

Appropriate rates for ambulance services under any proposed system must be determined in light of system costs and any subsidy that may be available. There should be a formal rate-setting process, and rates should be controlled through contracts and agreements.

In addition to supporting transporting ambulance services, a portion of the rate should be identified for the partial support of the first response program to offset expenses for supplies, equipment, and training. This can be accomplished while still achieving a reduction in current ambulance charges.

## 4.6 REVENUE

The actual amount of fee revenue available to support the EMS system depends on the level of charges for service and the collectability of those charges. It is safe to conclude that in the current environment the collectable percentage should be between 55% and 60% of the gross charges. This amount is currently $7,141,000 per year. This amount may decrease with reimbursement changes brought about by health care financing reform.

## 4.7 TURNOVER

Using turnover as one indicator of stability, the current workforce for the transporting providers does not represent a very stable resource. With thirty (30) percent of the paramedics changing each year, compliance with patient care protocols and familiarity with the EMS system

and the geography of the community are potential problems. Unless turnover is reduced, these problems will continue.

## 4.8 NUMBER OF PARAMEDICS IN THE SYSTEM

Data from the turnover study showed an annual average of 250 EMT-Paramedics and EMT-3s (181 private and 69 fire) working in the Multnomah County EMS system. There are no accepted standards as to the number and type of annual patient encounters paramedics should experience to insure that they remain proficient. Assuming that both transporting paramedics are directly involved in the care of the patient, each private paramedic experiences an average of 4.6 patient encounters per week. From the data, an average of 1.5 fire medics are involved in each first response call. This represents an average of 8.9 patient encounters per week for fire paramedics. These calculations are intended to provide only a very rough view of the situation. It is obvious that some paramedics have a greater than average number of encounters while other have fewer. While this plan does not attempt to set a standard for numbers of paramedic encounters, consideration needs to be given to a system design that reduces the current number of paramedics.

# 5. OPTIONS

## 5.0 INTRODUCTION

The findings of the work groups and studies conducted by the EMS Office and the conclusions drawn from this information support the position that there should be only one Ambulance Service Area in Multnomah County. There is however, more than one service delivery option that could meet this criterion. This section presents outlines of three service delivery options that speak to the issues identified in this report. The options have similar requirements for medical direction and supervision, a quality improvement program, and data support. These components have been discussed in the previous section.

The options are presented in order of preference. As this document is a plan, the descriptions are summary in nature; a more detailed system design and implementation plan will be developed for the option approved by the Board of County Commissioners.

## 5.1 OPTION #1: PUBLIC-PRIVATE SYSTEM

The system design that best fits the goals, findings, and conclusions of the ASA planning process is a tiered response system with the following major components:

Fire department first response with EMT-Paramedic and/or EMT-Basic capability;

Fire EMT-Paramedic ("fire medic") transport capability for patients needing critical, paramedic level services; and

Private ambulance transport for patients in need of less critical emergency transportation.

### 5.1.1 FIRST RESPONSE

All current fire agencies would continue to provide first response service. The ability of non-paramedic first responders to provide EMT-Basic level of service and automatic cardiac defibrillation would be required and phased in over time.

### 5.1.2 AMBULANCE RESPONSE

This system would use the current and augmented

resources of the Portland Fire Bureau for critical emergency ambulance response and transport. A single private ambulance provider will be contracted for the remaining emergency transports. Transport decisions will be governed by triage and treatment protocols. Fire medic units will transport patients in need of critical care as defined by the protocols. This will allow fire medic units to return to service at the earliest opportunity in order to maximize this resource. All other patients will be transported by private contract ambulances. Inter-facility transfers and all non-emergency transport will be provided by private ambulances.

### 5.1.3 RESPONSE TIME REQUIREMENTS

First responders will respond to at least 90% of medical calls in four (4) minutes or less. Rural volunteer responders may not be able to meet this standard.

ALS fire medic ambulances will be required to respond to at least 90% of medical calls in eight (8) minutes or less.

Contract ambulances will be required to respond to at least 90% of medical calls in 12 minutes or less.

### 5.1.4 DISPATCH

All dispatch for 9-1-1 calls will be made through EMS Central dispatch at BOEC. Dispatch of units will be based on a county-wide system status plan. All move-ups for system coverage will be dispatched by BOEC. Fire first response and all ambulances will be dispatched by the same dispatcher. All calls will receive first response. Depending on the triage and dispatch protocols, a fire medic unit may be simultaneously dispatched. Fire medic units will be "canceled enroute" when the first responder's evaluation reveals that the patient's condition would allow for contract ambulance transport.

Contract units will be dispatched at the request of first responders or fire medic units and in accordance with the dispatch protocols. Fire medic units will not respond as first responders. No "dual" response involving both fire medic and contract ambulances will be required, except in defined circumstances involving multiple patients.

### 5.1.5 STAFFING

First Responders will have one or more individuals on the responding unit trained to at least the EMT-Basic level. Portland and Gresham Fire units will have one individual at

the EMT-Paramedic level. The EMT-Basic level of training may not initially be practical for the rural protection districts and will be phased in over time.

Fire medic units will be staffed with two (2) EMT-Paramedics.

Contract Ambulance units will be staffed with one EMT-Paramedic and one other person trained to at least the EMT-Basic level.

Staffing requirements for non-emergency ambulances will be developed and may vary from those of contract emergency ambulances.

### 5.1.6 RATES

Rates charged to patients will be developed based on the costs that must be recovered by the providers to adequately support the system. It is anticipated that the fire service cost recovery will be based on the incremental expenditures identified with EMS delivery. The contract ambulance rate will also be based on recovery of necessary costs, but will not exceed the fire service rate. In both cases the rates will be less than the current rate because of relaxed response time requirements for contract ambulances, and the use of current fire resources. Rates will be uniform for all 9-1-1 calls and no contractual "discounts" will be allowed.

Charges for non-emergency ambulance service provided by private companies will not be regulated.

### 5.1.7 AIR AMBULANCE SERVICE

Air ambulance service will remain as provided in the current system. Rates will be independent of the ground ambulance rates and set by the air ambulance provider.

### 5.1.8 RELATIONSHIPS

All first responders, transporting ambulance providers, and air ambulance providers will be required to enter into either intergovernmental agreements or contracts with the Multnomah County EMS Program. These agreements will specify performance requirements, system design, component responsibilities, rates, and monitoring and compliance criteria.

### 5.1.9 DISCUSSION

The reasons that the Public-Private System is the first preference among system design options are 1) this design has proven itself to provide excellent response and quality of care; and 2) the mix of public (tax) and fee support will provide a stable resource base into the foreseeable future.

Many communities around the country have adopted this system design and have found it to provide excellent service. In the Pacific Northwest, the most notable example is the Seattle-King County system.

The Public-Private tiered system will address many of the operational and quality of care concerns that have been raised about the current system. First, it will concentrate experience in managing critically ill and injured patients in a relatively small number of paramedics. Second, it will address the problem of turnover. As discussed above, local fire providers have decidedly lower rates of paramedic turnover than do private providers. Third, this design will allow medical direction and training resources to be better focused on the paramedics performing the highest volume of critical patient care. Finally, by utilizing paramedics in the second tier of contracting ambulances, patients whose condition deteriorates during transport will still be cared for by EMT- Paramedics, not EMT- Basics.

From a resource utilization perspective, this design is superior in a number of ways. First, it recognizes local fire agencies' commitment to EMS, and takes maximum advantage of the existing public resources that this commitment has produced. Portland and Gresham fire have already developed an extensive infrastructure to support EMS, including paramedic staff, supervisory and training capabilities, and equipment. The investment required to make these agencies capable of transporting the required number of patients would be modest in comparison with other designs. Second, this system design continues to utilize patient fee revenues in a highly effective way. It should be capable of adequately supporting the services provided by the contracting private ambulance provider. It also has the potential to provide an offset to fire agencies' current requirements for local tax support. Third, by better matching the system's response to the patient's level of need, the proposed system will use resources more efficiently. This is in contrast to the current system's requirements to provide first response and an eight minute ALS ambulance response, regardless of the patient's need. Finally, because of its efficient use of resources, the Public-Private system should result in a substantial reduction in patient charges.

## 5.2 OPTION #2: SINGLE CONTRACTED PROVIDER

This option will require all 9-1-1 ambulance response and transport to be provided by a single ambulance provider under an exclusive franchise contract with the County. This provider will be chosen by a competitive bid process open to public and private providers. The ambulances assigned to 9-1-1 emergency response will be dedicated to that service. Private ambulance companies will provide inter-facility transfers and non-emergency services in an open competitive market.

### 5.2.1 FIRST RESPONSE

First response to 9-1-1 emergency calls will continue to be provided by the fire services within the county. Non-paramedic responders will be required to provide EMT-Basic level of service and automatic cardiac defibrillation. Portland and Gresham Fire will be encouraged to provide ALS (paramedic) first response to all calls in their jurisdiction.

### 5.2.2 AMBULANCE RESPONSE

ALS contract ambulances will respond to all 9-1-1 calls throughout the county. These units will provide only emergency response services and will not be used for inter-facility transports or non-emergency calls.

### 5.2.3 RESPONSE TIME REQUIREMENTS

First responders will respond to at least 90% of medical calls in four (4) minutes or less. Rural volunteer responders may not be able to meet this standard.

Contract ambulances will be required to respond to at least 90% of medical calls in eight (8) minutes or less.

### 5.2.4 DISPATCH

Dispatch of first responders and ambulances will be made through EMS Central dispatch at BOEC. There will be a single response area and BOEC will dispatch all move-ups for system coverage. First response and ambulance dispatch will be performed by the same dispatcher. All calls will receive first response and ambulance services in accordance with the triage and dispatch protocols.

### 5.2.5 STAFFING

First Responders will have one or more individuals on the responding unit trained to at least the EMT-Basic level. Portland and Gresham Fire units will have one individual at the EMT-Paramedic level. The EMT-Basic level of training may not initially be practical for the rural protection districts and will be phased in over time.

ALS contract ambulances will be staffed with two (2) EMT-Paramedics.

Standards for non-emergency ambulance staffing will be developed and may vary from the ALS contract staffing requirements.

### 5.2.6 RATES

Rates to be charged to patients will be determined through the bid process. Through the evaluation of RFPs, rates will be carefully scrutinized to ensure they are based on sound cost information. The rate will include support for certain first responder expenses including supplies, equipment, and training. Based on the cost study described in Section three (3) of this report, rates should be less than those in the current system. Rates will be uniform for all 9-1-1 calls and no contractual "discounts" will be allowed.

Charges for non-emergency ambulance service will not be regulated.

### 5.2.7 AIR AMBULANCE SERVICE

Air ambulance service will continue to be provided as it is in the current system. Rates will be independent of the ground ambulance rates.

### 5.2.8 RELATIONSHIPS

First responders will be required to enter into intergovernmental agreements with Multnomah County EMS.

The ambulance contractor will execute a performance contract with EMS that will delineate service provision requirements, system design, provider responsibilities, rates, and monitoring and compliance requirements.

5.2.9 DISCUSSION

This option features many of the advantages of the Public-Private option.

Contracted single provider systems have proven themselves to produce excellent response and quality of care in many communities across the United States. There are many excellent private contracted systems around the country, with Pinellas County, Florida, often being cited as a high-performance system.

The Single Contracted Provider design concentrates experience in managing critical cases in a relatively small number of paramedics. It should also address the problem of turnover. Systems of this design have clear incentives to recruit and retain high quality paramedic staff. Anecdotal evidence suggests that these systems tend to respond positively to this incentive. This design also allows medical direction and training resources to be focused. In fact, it is probably somewhat superior to the Public-Private design in this regard because it keeps all transporting paramedics within one agency. Finally, this design has no hand-off feature, assuring continuous paramedic level service throughout field treatment and transport. This is at least a theoretic advantage over the Public-Private design.

In terms of resource utilization, the Single Contracted Provider model would be an improvement over the County's current system, but has significant disadvantages compared to the Public-Private option.

First, the Single Contracted Provider design does not take optimal advantage of existing public resources. This design must depend either entirely on fee revenues, or on a combination of fees and explicit government subsidies. Across the country, a minority of systems of this design are unsubsidized. While private providers are usually more effective than public providers in collecting patient fees, dependence on fee revenue is likely to be a disadvantage in the long run because of the anticipated effects of health care financing reform. Thus in the future, under this design, the County is more likely to be confronted with choosing between a significant degradation of services or providing an operating subsidy to the contracted provider.

Second, this design does not optimize the match between patient need and system response. All patients receive services provided by units capable of the highest level of response, regardless of the patient's need for that level of service. That is, this design provides a uniformly high level of response. Charges must reflect the costs associated with this level of service and are likely to be

higher than those of the Public-Private design. It is theoretically possible that charges for emergency calls could be lowered by allowing emergency ambulances to also respond to non-emergency calls. However, this would require deployment of more ALS ambulances in the system. Any change in system design in this direction should be considered only after careful evaluation for its effects on both service and cost performance.

Thus, while the single contracted provider design has some operational and financial advantages, on balance it is a design that is more vulnerable to future financial instability because it depends more heavily on user fees.

## 5.3 OPTION #3: PUBLIC AMBULANCE SERVICE (COUNTY)

This option is essentially the same service design as the single contractor option with the major difference being that the transporting ambulance will be provided by a county operated ambulance service. The county service would respond to all 9-1-1 calls and transport all patients. Inter-facility transfers would be provided by private ambulances.

### 5.3.1. DISCUSSION

The Public Ambulance Service falls under a system design model generally known as a "third public safety service" or simply "third service". Police and fire services are the first two public safety services. Third service EMS systems have been successfully implemented in many communities, particularly larger urban areas. The nearest example of a good sized third service system is in San Francisco, CA.

This system design offers some of the operational advantages of both the Public-Private and Single Contracted Provider designs. First, this system design would limit the number of paramedics and concentrate the care of critical patients within this workforce. This design's ability to do this is roughly comparable to that of the single contract provider design. Second, the design allows for appropriate concentration of medical direction and training resources. Again, it is similar to the single contract provider in this regard. Third, like the Public-Private design, the third service model should result in lower EMT turnover and improved longevity. Finally, because it is an integrated, direct government service, coordination and regulation are relatively straight forward.

Unfortunately, the third service design has several disadvantages in resource utilization. These disadvantages make the model particularly problematic in light of the

future anticipated state of local government revenue and health care financing environment.

The third service design would incorporate the same advantages as a single contract provider model in having a dedicated response, fewer paramedics, and focused use of medical direction resources. On the down side, the third service makes poor use of existing government resources. On the contrary, this model would require development of a separate infrastructure for staff, supervision, billing, and other operational support. It would also require a substantial investment in vehicles, equipment, and supplies. This would require an initial commitment of capitol. Second, given future anticipated reductions in governmental and other third party reimbursement for medical services, this design is financially risky. The combination of typical increases in the cost to provide services, coupled with declining reimbursement, could force the County to choose between degrading service or providing an ongoing operating subsidy. In this regard the third service and contract provider designs are similar. However, the third service design is arguably more vulnerable in light of governments history of increases in costs to do business and its poorer success in fee collection. The net results of this situation could be direct competition between EMS and other County programs for scarce general fund revenues. Finally, this design ignores and fails to take advantage of the substantial expertise and resource base that exists among private sector providers. In effect, it displaces private business resources and replaces them with County resources.

On balance, these disadvantages make the Public / Third Service a distant third choice behind the Public-Private and Single Contract Provider options.

# 6. RECOMMENDATIONS

Multnomah County EMS, based on the findings, conclusions, and system design options discussed in this planning report, make the following recommendations for an EMS system design to be incorporated into the Ambulance Service Area Plan.

1. Multnomah County should comprise a single Ambulance Service Area.

2. First response to medical calls should be provided by fire districts at the service level utilizing either defibrillator trained EMT-Basic or EMT-Paramedic personnel.

3. Ground ambulance transport service for emergency calls should be provided by fire paramedic units for critical patients and by private ambulances of a single, contracted provider for urgent, but non- critical patients.

4. All other ambulance service should be provided by private, non-emergency ambulances.

5. Air ambulance services should be provided by private helicopter and airplane providers.

6. Fire medic units will be staffed by two EMT-Paramedics. Contract ambulances should be staffed by one EMT-Paramedic and one EMT-Basic.

7. Dispatch for all 9-1-1 calls and ambulance move up should be provided by the City of Portland, Bureau of Electronic Communications (BOEC).

8. Primary radio communications will be on the 800Mhz system. Mobile Data Terminals (MDT) will be used for dispatch and CAD communications.

9. Medical direction and supervision must be provided through a single EMS Medical Director employed by the county.

10. The Health Department EMS Program Office should continue to administer the EMS system in Multnomah County.

11. EMS will maintain a pre-hospital patient care, dispatch, and hospital disposition data base.

# Emergency Medical Services

**Multnomah County**

Oregonian
Extra

PROPOSED

MULTNOMAH COUNTY, OREGON

AMBULANCE SERVICE PLAN

1993

RECOMMENDED BY

MULTNOMAH COUNTY EMERGENCY MEDICAL SERVICES

OF THE

MULTNOMAH COUNTY HEALTH DEPARTMENT

# PROPOSED
# MULTNOMAH COUNTY, OREGON
# AMBULANCE SERVICE PLAN
# CONTENTS


PLAN SUMMARY

1. CERTIFICATION BY THE GOVERNING BODY OF THE COUNTY AMBULANCE SERVICE PLAN

2. OVERVIEW OF COUNTY

    2.1. GEOGRAPHY

    2.2. POPULATION

    2.3. POPULATION CHARACTERISTICS

    2.4. EMS RESOURCES

3. DEFINITIONS

4. AMBULANCE SERVICE AREA BOUNDARIES

    4.1. ASA NARRATIVE DESCRIPTION

    4.2. ALTERNATIVES CONSIDERED TO REDUCE RESPONSE TIMES

5. SYSTEM ELEMENTS

    5.1. RESPONSE TIMES

        5.1.1. DISPATCH

        5.1.2. STANDARDS

    5.2. LEVEL OF CARE

    5.3. PERSONNEL

        5.3.1. FIRST RESPONSE

        5.3.2. AMBULANCE

    5.4. MEDICAL SUPERVISION

5.4.1. EMS MEDICAL DIRECTOR

5.4.2. ON-LINE MEDICAL CONTROL

5.4.3. RETROSPECTIVE MEDICAL CONTROL

5.5. PATIENT CARE EQUIPMENT

5.5.1 FIRST RESPONDERS

5.5.2 AMBULANCES

5.6. VEHICLES

5.6.1 FIRST RESPONDERS

5.6.2 AMBULANCES

5.7. TRAINING

5.7.1. TECHNICIANS

5.7.2. CONTINUING EDUCATION

5.8. QUALITY ASSURANCE

5.8.1 STRUCTURE

5.8.2 PROCESS AND PROBLEM RESOLUTION

5.8.3 SANCTIONS

6. COORDINATION

6.1. THE ENTITY THAT WILL ADMINISTER AND REVISE THE ASA PLAN

6.1.1. PLANNING

6.1.2. RATE DETERMINATION

6.1.3. EMS ADMINISTRATION

6.2. COMPLAINT REVIEW

6.3. MUTUAL AID AGREEMENTS

6.3.1. ROUTINE EMS SERVICE

6.3.2. UNUSUAL CIRCUMSTANCES

6.4. DISASTER RESPONSE

6.4.1 MASS CASUALTY INCIDENT

6.4.2 DISASTERS

6.5. PERSONNEL AND EQUIPMENT RESOURCES

6.5.1 HAZARDOUS MATERIALS

6.5.2 SEARCH AND RESCUE

6.5.3. SPECIAL EMERGENCY RESPONSE TEAM (SERT)

6.5.4. SPECIALIZED RESCUE AND EXTRICATION

6.6. EMERGENCY COMMUNICATIONS AND SYSTEM ACCESS

6.6.1. TELEPHONE

6.6.2. DISPATCH

6.6.3. RADIO COMMUNICATIONS

6.6.4. HOSPITAL AVAILABILITY

6.6.5. EMERGENCY MEDICAL SERVICES DISPATCHER TRAINING

7. PROVIDER SELECTION

7.1. INITIAL ASSIGNMENT

7.2. REASSIGNMENT

7.3. APPLICATION FOR AN ASA

7.4. NOTIFICATION OF VACATING AN ASA

7.5. MAINTENANCE OF LEVEL OF SERVICE

8. COUNTY ORDINANCES AND RULES

# AMBULANCE SERVICE PLAN
## SUMMARY

The Multnomah County Board of County Commissioners, based on the findings, conclusions, and system design options and recommendations identified in the Health Department EMS planning report, have approved the following plan:

1. Multnomah County will comprise a single Ambulance Service Area.

2. First response to 9-1-1 medical calls will be provided by fire districts at the service level goal of defibrillator trained EMT-Basic or EMT-Paramedics.

3. Ground ambulance transport for 9-1-1 emergency calls will be by fire EMT-Paramedic units (fire medic units) for critical patients and by private emergency ambulances for non-critical emergency patients.

4. All other ambulance service will be provided by private, non-emergency ambulances.

5. Air ambulance services will be provided by private helicopter and airplane providers.

6. Fire medic ambulances will be staffed by two EMT-Paramedics. Contract ambulances will be staffed by one EMT-Paramedic and one EMT-Basic.

7. Dispatch for all 9-1-1 calls and ambulance move-ups will be provided by the City of Portland, Bureau of Emergency Communications (BOEC).

8. Primary radio communications will be on the 800Mhz system. Mobile Data Terminals (MDT) will be used for dispatch and communications with the BOEC dispatch computer.

9. Medical direction and supervision will be provided by an EMS Medical Director employed by the county.

10. The EMS Program Office in the Health Department will administer the ASA and the EMS system in Multnomah County.

11. EMS will maintain a pre-hospital patient care, dispatch, and hospital disposition data base for the use in monitoring performance.

12. The EMS system will use the Continuous Quality Improvement process to ensure the quality and improvement of patient care.

13. The cost of transport by fire services, contract ambulances, and the EMS Medical Director and EMS Program Office will be financed by fees charged to people receiving care through the 9-1-1 medical response system.

14. Multnomah County will work with other jurisdictions to move toward a regional approach to EMS.

CERTIFICATION
OF THE
MULTNOMAH COUNTY
AMBULANCE SERVICE PLAN

The undersigned certify that pursuant to Oregon Administrative Rules 333-28-095 through 333-28-130 that:

Each ambulance service plan element contained in these rules has been addressed and considered in the adoption of this plan by the Board of County Commissioners and,

In the Board's judgment, the ambulance service area established in the plan provides for the efficient and effective provision of ambulance services and,

To the extent they are applicable, the County has complied with ORS 823.180(2)(3) and 823.310 and existing local ordinances and rules.

Dated at Multnomah County,----------.

Hank Miggins
Chair, County Board of Commissioners

Approved:

Laurence Kressel
County Counsel

# 2. OVERVIEW OF MULTNOMAH COUNTY

## 2.1 GEOGRAPHY.

Multnomah County is the most densely populated county in Oregon It is a predominately urban area with approximately 97% of the population residing within the urban growth boundary established by METRO. The County extends from the junction of the Willamette and Columbia Rivers on the west to the foothills of the Cascade Mountains on the east. The County covers 465 square miles.

Because of the hills in various areas of the county snow and ice can cause problems with emergency response.

The large park, forest, and watershed areas in the county may be a barrier to access by emergency vehicles and special rescue resources may be needed. While these areas are hard to reach, fortunately there are few calls for service in these areas.

## 2.2 POPULATION.

1990 Census data shows the following populations:

| Jurisdiction | Population | Per cent of county population |
|---|---|---|
| City of Portland | 437,398 | 74.9 |
| City of Gresham | 68,235 | 11.7 |
| City of Troutdale | 7,852 | 1.3 |
| City of Wood Village | 2,814 | 0.5 |
| City of Fairview | 2,391 | 0.4 |
| City of Maywood Park | 794 | 0.1 |
| Unincorporated Areas (by subtraction) | 64,403 | 11.0 |
| Total County | 583,887 | 100.0 |

In addition to the population living in Multnomah County, a large influx of people occurs during the working day increasing the population by up to 25%.

## 2.3 RACIAL AND ETHNIC CHARACTERISTICS.

| | |
|---|---|
| Caucasian | 86.9% |
| African American | 6.0% |
| Asian | 4.7% |
| Native American | 1.2% |
| Other | 1.2% |
| Total | 100.0% |

## 2.4 EMERGENCY MEDICAL RESOURCES

Organizations within Multnomah County currently providing emergency medical services include:

Fire Departments - 3- with paramedics
- 5 -BLS only

Ambulance Companies - 5

Hospitals - 9 - emergency medical services
- 1 - psychiatric emergency services only

Air Ambulance - 1

Fire Departments are the first response providers for the entire county. They respond on essentially all of the 9-1-1 medical calls.

Four of the five ambulance companies provide response for 9-1-1 emergency calls. They, and the additional fifth company provide a variety of non-emergency ambulance and medical transport services. All ambulances are licensed by Multnomah County EMS.

All hospitals, with the exception of one, provide emergency services and serve as receiving hospitals for the emergency ambulance services. There are two level-one trauma hospitals in the County. In addition, some patients are transported to hospitals in Washington County, Clackamas County, and Southwest Washington.

## 3. DEFINITIONS

"Advanced Life Support" (ALS) means those medical services that may be provided within the scope of practice of a person certified as an EMT-Paramedic as defined in ORS Chapter 823.

"Ambulance Service Area" (ASA) means a geographic area which is served by one ambulance service system and may include all or a portion of one or more counties.

"Ambulance Service Plan" means a written document which outlines a process for establishing a county emergency medical system.

"Basic Life Support" (BLS) means those medical services that may be provided within the scope of practice of a person certified as an EMT-Basic as defined in ORS Chapter 823.

"Bureau of Emergency Communications" (BOEC) means the Bureau within the City of Portland that maintains the "9-1-1" telephone answering system and the dispatch service for police and EMS for the County.

"CHORAL" means the on-line computer link among all of the receiving hospitals within Multnomah County that provides information on the status of those hospitals for receiving ambulance transports.

"County" means Multnomah County, Oregon.

"Emergency Medical Dispatcher" (EMD) means a person who is certified by the Board on Public Safety Standards and Training as defined in ORS 401.735.

"Emergency" means a non-hospital occurrence or situation involving illness, injury, or disability requiring immediate medical services, wherein delay of such services is likely to aggravate the condition and endanger personal health or safety.

"Emergency Medical Services" (EMS) means those prehospital functions and services whose purpose is to prepare for and respond to medical emergencies.

"Emergency Medical Services Medical Director" (EMSMD) means a physician employed by the County to provide medical direction to the EMS system and medical supervision to EMTs providing emergency services within the County.

"EMS Program Office" means that organizational division within the County Health Department responsible for the administration of the EMS system in the County.

"Emergency Medical Technician" (EMT) means a person certified at one of the levels of practice defined in ORS Chapter 823.

"Fire Medic Ambulance" means an ambulance, operated by the Portland Fire bureau, licensed for ALS service, that responds to emergency medical calls.

"First Responder" means an organization that provides fast response to emergency medical calls by EMTs prior to the arrival of an ambulance. These organizations are fire departments throughout the County.

"HEAR" means the radio frequency used for ambulance to hospital and hospital to hospital radio communications.

"Medical Advisory Board" means the advisory committee appointed by the Multnomah County Board of Commissioners as defined in MCC 6.32.

"MCC 6.32" means the Multnomah County Code cited as the Multnomah County Emergency Medical Services Code.

"Mass Casualty Incident" (MCI) means an emergency medical incident with a sufficient number of injured or ill persons to meet the requirements for scene and medical management as defined in the EMS Administrative Rules, MCI Plan.

"MED NET" means those radio frequencies used for EMS dispatch, on-line medical control, and MCI communications.

"Medical Resource Hospital" (MRH) means that hospital, contracted to EMS, to provide on-line medical advice and control to EMTs.

"Non-Emergency Ambulance" means an ambulance, licensed by the County, that provides routine transportation to patients who do not require emergency response. The level of care is dependent upon the patient's need.

"On-line Medical Advice (Control)" means medical direction and advice given to an EMT, by a physician, via radio or telephone as a supplement to the written patient care protocols.

"Private Emergency Ambulance" means an ambulance, operated by a private company, and licensed by the County to respond to emergency medical calls.

"Public Safety, Answering Point" (PSAP)/ 9-1-1 means the organization that answers calls for police, fire, and emergency medical assistance that are received from persons dialing 9-1-1. This service is provided by BOEC.

# 4. AMBULANCE SERVICE AREA BOUNDARIES

## 4.1 DESCRIPTION.

All of Multnomah County (see Section 2) comprises a single ambulance service area. The response time standard is currently uniform throughout the county. There is concern that the portions of the county that are rural in nature and have a low population density cannot support the ground response time standard and that it should be changed to reflect a more realistic requirement.

The use of the Urban Growth Boundary, developed by METRO, as a demarcation between urban and rural ambulance response time areas in the County will provide for a more realistic application of response time standards (Attachment A )

## 4.2 ALTERNATIVES FOR RESPONSE TIME REDUCTION. (INTERGOVERNMENTAL AGREEMENTS)

Because of the need to provide the most efficient service to citizens within Multnomah County, certain areas of the County have been deemed better served by agencies responding from outside the County. Intergovernmental agreements specify the details of service for each of these areas. (Attachment B) The areas affected are:

The far East portion of the Columbia Gorge.

The community of Dunthorpe.

The Skyline area in the Northwest portion of the County.

The area adjacent to Columbia County served by Highway 30.

In addition Multnomah County EMS serves areas in other jurisdictions by similar agreements. These areas are:

The North end of Sauvie Island.

Portions of the City of Portland located in Washington County.

The more organized use of helicopter response in the rural areas will help diminish the possible effects of the longer ground response. Identifying area where the use of the helicopter is considered the first choice of transport can speed the arrival time of the aircraft.

It is the intent of this plan to foster regional approaches to ambulance service area planning and management in order to reduce any negative effects due to political boundaries.

A maps showing the fire districts for first response, and city boundaries is included in Attachment C.

# 5.SYSTEM ELEMENTS

## 5.1 RESPONSE TIMES.

### 5.1.1 DISPATCH.

At least ninety (90) per cent of responses to medical calls received by the Public Safety Answering Point (PSAP - 9-1-1) will be dispatched within eighty(80) seconds. The BOEC fire/EMS dispatch will dispatch both fire first response and ambulances.

Medical call-taking and dispatch will be governed through a performance contract between Multnomah County EMS and BOEC. This contract specifies the procedures to be used for dispatch, the triage requirements for calls, pre-arrival instructions to be given to callers and the review process to be used for the medical dispatch function. The development of these criteria is the responsibility of the EMS Medical Director.(Attachment D)

### 5.1.2 STANDARDS.

Response time will be measured from the time of the dispatched unit's acknowledgment of the call notification by BOEC until the time that unit reports arrival at the scene of the emergency. The following response time standards apply only to emergency calls. Non-emergency calls dispatched by BOEC, or turned over to non-emergency ambulances, will be run in an expeditious manner.

First Responders will respond to at least ninety (90) per cent of medical calls in four (4) minutes, zero (0) seconds or less.

Rural First responders will respond in an expeditious manner.

Within the Urban Growth Boundary:

Fire medic ambulances will respond to at least ninety (90) per cent of medical calls in eight (8) minutes, zero (0) seconds or less.

Private ambulances will respond to ninety (90) per cent of medical calls in twelve (12) minutes, zero (0) seconds or less.

Outside the Urban Growth Boundary:

Fire medic ambulances will respond to at least ninety (90) per cent of medical calls in twenty (20) minutes, zero (0) seconds or less.

Private ambulances will respond to at least ninety (90) per cent of medical calls in twenty (20) minutes, zero (0) seconds or less.

## 5.2 LEVEL OF CARE.
(MEDICAL CALL RESPONSE DESIGN)

Multnomah County's emergency medical services will be provided using a "tiered" system of response. All emergency medical calls will receive either a BLS or ALS first response. Based on the priority dispatch triage criteria employed by EMS Dispatch, a fire medic ambulance or a private ambulance will be dispatched to the incident. Upon the arrival of the first responder, (or fire medic ambulance if first at the scene), a determination will be made as to the necessity and level of transport required. Fire medic ambulances will transport those patients in need of critical care as defined in the treatment protocols and triage guide. All other patients will be transported by private ambulances. First responders will remain at the scene when a contract ambulance is requested. Fire medic ambulances will return to service at the earliest opportunity, including those "canceled enroute", in order to maximize their availability and minimize emergency response resource requirements.

Transport triage criteria will be developed by the EMS Medical Director. It is estimated that up to twenty five(25) percent of 9-1-1 patients will be transported by fire medic units in Multnomah County.

## 5.3 PERSONNEL

### 5.3.1 FIRST RESPONSE

It is the goal of this system to have all first responders trained to the EMT-Basic level. It is recognized that because of the size and the volunteer nature of the Rural Fire Protection Districts serving Multnomah County, this training level may not be feasible in the near future.

Portland Fire and Gresham Fire currently have all response personnel trained to the EMT Basic level and provide ALS first response with some units with at least one (1) EMT-Paramedic responding.

### 5.3.2 AMBULANCES

Fire Medic ambulances will be staffed with two (2) EMT-Paramedics.

Private Emergency ambulances will be staffed with one (1) EMT-Paramedic and one (1) EMT-Basic

Ambulances providing non-emergency services and facility transfers will meet the staffing requirements necessary for the level services to be provided: BLS - two (2) EMT-Basic, ALS - one (1) (EMT-Paramedic and one (1) EMT-Basic. Additional standards may be set by the EMS Medical Director for critical care transfers or other specialized services.

Ambulances providing transport services to hospital-based transport teams, but not providing direct patient care with the ambulance crew members, must meet the BLS standards.

## 5.4 MEDICAL SUPERVISION

### 5.4.1 EMS MEDICAL DIRECTOR

Multnomah County will employ an EMS Medical Director (EMSMD) who will be the physician supervisor for all EMTs providing emergency medical services in the County. The EMSMD will provide medical input to all aspects of the EMS system and will have specific authority to set uniform standards of patient care for the County. These standards will include, but not be limited to:

Dispatch and pre-arrival protocols;

Transport triage criteria and protocols;

County specific EMT requirements;

Approved equipment, supplies and drugs;

Patient care protocols;

Medical criteria for response times; and

Patient transfer criteria.

The EMSMD will create policies for limiting the practice of EMTs if necessary and will ensure that these policies are carried out with adequate due process protections. The EMSMD will also set specific standards for training and education for EMTs and EMDs.

The EMSMD will ensure that all providers within the system participate in a quality management program designed to provide for the continuous quality improvement in patient care and all other aspects of emergency medical services. This process will provide the basis for changes in medical care protocols and the educational and training standards set forth by the EMSMD.

An EMS Medical Advisory Board will provide advice to the EMSMD. Other committees and groups may be formed to provide specific advice to the EMSMD or the EMS program.

(see Attachment E - EMSMD position description)

### 5.4.2 ON-LINE MEDICAL CONTROL

On-line medical control will be provided by the Medical Resource Hospital (MRH). Standards for on-line medical control and MRH operations will be set forth by the EMSMD and implemented through a performance contract with the hospital. The EMSMD will monitor the execution of that contract. (Attachment F )

### 5.4.3 RETROSPECTIVE MEDICAL CONTROL

(SEE QUALITY ASSURANCE, SECTION 5.8)

## 5.5 PATIENT CARE EQUIPMENT

Requirements for equipment and supplies will be determined by the level of service (ALS, BLS, emergency, non-emergency) provided.

### 5.5.1 FIRST RESPONDERS

All first response vehicles will be required to carry equipment and supplies appropriate to their level of service.

### 5.5.2 AMBULANCES

All ambulances will be required to maintain equipment, supplies, and drugs appropriate for their level of service (ALS, BLS) as required under OAR 333-28-050 and as required by the EMSMD. Ambulances will be inspected on a regular basis to determine compliance with these requirements. (Attachment G )

## 5.6 VEHICLES

### 5.6.1 FIRST RESPONDERS

First response vehicle standards are the responsibility of the agency that operates them.

### 5.6.2 AMBULANCES

Ambulances will meet all relevant State and Federal statutes and rules and will be required to meet any County requirements that are more stringent.

## 5.7 TRAINING AND EDUCATION.

### 5.7.1 EMERGENCY MEDICAL TECHNICIANS (EMT) LEVELS

Training and certification required for those technicians providing ALS care will be the level of EMT-Paramedic. In addition to the requirements for State certification, the EMSMD may require additional training or education.

Training and certification for other EMTs will be at least the level of EMT-Basic. In addition to the requirements for State certification, the EMSMD may require additional training or education.

It is the intent of this plan to require at a minimum, EMT-Basic training and certification for all 9-1-1 medical call first responders in the future.

### 5.7.2 CONTINUING EDUCATION.

At a minimum the EMS Program will provide for an annual inservice to introduce changes in patient care protocols, administrative rules, State requirements and other pertinent information. All EMT-Paramedics will be required to attend in order to maintain their credentials, approved by the EMSMD. In addition, a series of continuing education conferences will be coordinated through MRH.

The EMSMD may require additional training and education. Provider agencies may offer training and education to their employees, however this training and/or education must be approved by the EMSMD. Coordination of offerings between providers will be strongly encouraged. The training and education criteria set forth by the EMSMD will

be based on the needs identified in the quality improvement process.

## 5.8 QUALITY ASSURANCE AND IMPROVEMENT

### 5.8.1 STRUCTURE

The basis for quality assurance in the County will be a Continuous Quality Improvement (CQI) process. This model, based on the Total Quality Management theory espoused by W. Edwards Deming, is currently employed in a number of service industries, including hospitals. The focus of this process is the identification of potential problems through a statistical analysis of data representing various aspects of system performance (e.g. dispatch, EMT patient care). Specific indicators and benchmarks are used in the problem identification process. When problems are identified, their resolution is accomplished within the involved system components through participation by the people responsible for the operation of these components. The process employed may utilize peer review, a problem solving group, or other methods. Problems are addressed at the appropriate level within the organization. The end result is improved service.

The central point for the CQI process will be the System Quality Management Committee, chaired by the EMSMD, with representation from all components in the system. The committee will coordinate the process and make recommendations, based on data reviews and problem solving outcomes.

### 5.8.2 PROCESS AND PROBLEM RESOLUTION

The CQI process will analyze data on all aspects of the EMS system including dispatch, response times, medical supervision and control, patient care, EMT and EMD performance, and other components. The data will come from computer databases, patient care reviews, complaint patterns, patient outcomes, and other relevant sources. The outcomes of the process are information, problem solving, and system improvement. These outcomes will serve as the basis for system change.

The EMS office will provide staff support for the CQI process. The CQI process is *not* oriented on fixing blame for mistakes, but on learning from the analysis and resolution of identified problems.

### 5.8.3 SANCTIONS

It is not the purpose of the CQI process to apply sanctions or other remedies to non-compliant providers. Any remedies employed will be identified in the contract or agreement with the provider. Any remedies directed to individual EMTs will be the responsibility of the EMSMD.

# 6. COORDINATION

## 6.1 ASA PLANNING AND ADMINISTRATION

### 6.1.1 PLANNING

MCC 6.32 establishes the authority by the Board of County Commissioners (BCC) to develop, approve, and administer the ambulance service plan. MCC 6.32 further defines the administration of the EMS system and the license requirements for ambulances providers (emergency and non-emergency) and first responder agencies.

Input into the planning process and into EMS system operations was received from the Medical Advisory Board (MAB) and the Provider Board as provided for in MCC 6.32. In addition, all interested parties were invited to participate in work groups that provided specific input and technical advice for the planning process.

### 6.1.2 RATE DETERMINATION AND CONTROLS

Rates for emergency response ambulance service will be set as part of the agreement and contracting process. A committee, comprised of EMS providers, business experts, and service users, will serve as a rate review body to hear and recommend action concerning initial rate proposals and any subsequent requests for rate adjustments. Formulas may be applied to the rate adjustment process such as the Consumer Price Index and will be specified in the contract. The committee recommendations will be made to the EMS Program and the BCC as part of the contract approval process.

Non-emergency ambulances will not be subject to the rate determination process. Fees charged for their services will be driven by the market for such services.

### 6.1.3 EMS ADMINISTRATION

Administration of the ambulance service plan and the EMS system will reside with the Multnomah County Health Department, EMS Program Office. All medical care components of the system will be under the authority of the EMS Medical Director.

Specific relationships with first responders and emergency ambulance providers will be delineated in intergovernmental agreements and service contracts These

documents will be performance oriented and specify the duties, responsibilities, compensation, remedies, and other aspects of the relationship between the County and the provider.

The EMS program Office will administer and monitor these agreements and make recommendations to the BCC on the continuance, renewal, or termination of the agreements.

Non-emergency ambulances will be regulated by ordinance and no agreements will be executed.

## 6.2 COMPLAINT REVIEW AND RESOLUTION

Complaints regarding EMS provider actions or services will be received by the EMS Program Office from any source. All information relevant to the complaint will be collected and reviewed by EMS staff. The information may include dispatch records, patient care reports, invoices for service, incident reports, hospital records, interviews, and other documents. Complaints will be resolved through three mechanisms:

1. Medical care complaints will be referred to the Quality Assurance Case Review for impartial review and recommendations. Disposition of these complaints will be handled by the EMS Medical Director.

2. Dispatch and system response complaints will be initially reviewed by EMS staff. Some complaints may be referred to the Dispatch Committee for review and recommendation. Individual case dispositions will be handled by the EMS Program Office.

3. Complaints about ambulance charges and other non-medical, provider-related complaints will be reviewed by the EMS Program staff who will be responsible for the disposition of each case.

All complaints that include medical or other sensitive information about identifiable patients will be considered a function of the Quality Assurance process. Confidentiality will be protected as required by relevant statutes.

All complaints and their resolutions will constitute a data source available to the Quality Improvement process. In addition, all complaint information will be available to the EMS Medical Director for use in the medical supervision of EMTs.

## 6.3 MUTUAL AID AGREEMENTS.

### 6.3.1 ROUTINE EMS SERVICES (AMBULANCE AND FIRST RESPONSE)

For certain portions of Multnomah County, intergovernmental agreements will allow for response from agencies outside of the County. Multnomah County agencies will respond into other jurisdictions under similar agreements. The areas are described in Section 4.2.

### 6.3.2 UNUSUAL CIRCUMSTANCES (MCI, DISASTER )

Fire District mutual aid agreements are in place for events that overtax the resources of a given fire district. These will apply for EMS services in a disaster or other major incident.

Similar agreements will be executed to allow ambulances from outside the County to respond at the request of EMS Dispatch.

In addition, all ambulance licensed in Multnomah County are required to respond to disasters and MCI when requested to do so by the EMS Office.

## 6.4 DISASTER RESPONSE.

### 6.4.1 MASS CASUALTY INCIDENT.

The County's Mass Casualty Incident (MCI) plan is developed by a multi-disciplinary, tri-county committee and adopted under County Ordinance (MCC 6.32). This plan, and similarly adopted plans used by the counties surrounding Multnomah County provide the direction for the organization and use of resources in the event of a MCI. This plan is also incorporated as an annex in the emergency management disaster plans of the County and other local jurisdictions.(Attachment H)

In an MCI, medical communication and patient destination is the responsibility of the Regional Hospital which maintains the HEAR radio network.

In the event that resources exceeding those normally available for EMS service to the County are needed, additional ALS and BLS ambulances and other resources within the County may be used. The EMS Administrator (or BOEC, per protocol) may request the use of out-of-county resources through those jurisdiction's emergency managers. A resource list is maintained at BOEC.

### 6.4.2 DISASTERS

Planning has started that will identify how medical resources will be used in the event of a disaster. For purposes of this planning, disasters are events that disrupt the normal infrastructure that is relied upon to provide daily EMS services. These could include earthquakes, floods, or other events that cause failure of communications, roads, power, medical care sites, overwhelming numbers of ill or injured, or similar problems. The plan will include initial assumptions on the availability of emergency medical care, immediate operations, and recovery from the event. This planning is a cooperative regional activity.

## 6.5 SPECIAL PERSONNEL AND EQUIPMENT.

### 6.5.1 HAZARDOUS MATERIAL RESPONSE (HAZ-MAT)

HAZ-MAT response is the responsibility of the fire districts within Multnomah County. HAZ-MAT response plans include the determination of the hazard, its effect on people, and the appropriate neutralization, decontamination and medical care actions to take in the pre-hospital and hospital settings. (Attachment I)

Transport and receiving hospital standards for exposed patients and care givers are under development.

### 6.5.2 SEARCH AND RESCUE

Search and rescue operations are the responsibility of the Multnomah County Sheriff. The Sheriff's Office serves as incident commander for search and rescue operations. EMS and fire responders provide resources as required by the incident commander. In addition to the governmental and associated volunteer resources, there is a specialized team (Reach and Treat) available from one licensee.(Attachment J)

### 6.5.3 SPECIAL EMERGENCY RESPONSE TEAM (SERT)

In addition to the standard EMS response, specialized paramedics from the fire services provide emergency medical service to the Police SERT team members. This is a function controlled by the police and not part of the normal EMS response.

### 6.5.4 SPECIALIZED RESCUE

Multnomah County, through the fire districts, has the following specialized rescue abilities:

Extrication

High Angle Rescue

Trench Rescue

Dive rescue

There is no specialized medical component to these rescue services. Medical care is provided by Fire EMTs assigned to the rescue team.(Attachment I)

## 6.6 EMERGENCY COMMUNICATIONS AND SYSTEM ACCESS.

### 6.6.1 TELEPHONE

All of Multnomah County is served through a single Public Safety Answering Point (PSAP, 9-1-1 center) accessible by callers through Enhanced 9-1-1. (Note: the Port of Portland Airport is considered a secondary answering point). EMS contracts with the Portland City Bureau of Emergency Communications (BOEC) for emergency call answering, medical triage and pre-arrival instructions, and emergency ambulance dispatch. In addition BOEC provides the same service for all police departments in the county and will soon provide similar services for the fire departments. All personnel are trained to meet Emergency Medical Dispatch (EMD) standards as prescribed by the State. In addition, under County rules, if a person calls an ambulance company and needs emergency care, the company must triage that request using the same triage guide that is used at BOEC and then pass call information to BOEC.

### 6.6.2 AMBULANCE AND FIRST RESPONSE DISPATCH

Current EMS call-taking and dispatch is governed by a set of protocols and procedures, developed by a committee of dispatchers, first responders, EMTs, providers, and physicians. With the proposed changes in the system, "criteria based dispatch" protocols and procedures will be recommended to the EMS Medical Director and promulgated as formal County EMS administrative rules. EMS Dispatch at BOEC is required to use these protocols and procedures. (Attachment K -Current protocols)

BOEC will dispatch all first responders and emergency ambulances.

9-1-1 medical calls are initially processed by call-takers who use the EMS approved call triage guide to determine the nature of the call and the level of emergency or non-emergency response required.

Call information is then sent (via computer) to the dispatcher. Through a computer aided dispatch system (CAD)under development, the status of all fire units and ambulances is available to the dispatcher. The dispatcher sends fire and ambulance units as appropriate, depending on the nature and location of the call.

As dispatch is under way, the call-taker (who has remained on the line) may provide the caller with pre-arrival instructions for patient care as specified by the protocol.

Depending upon the location of the call and the availability of ambulances, an out-of-county unit may be dispatched. This is accomplished via direct radio contact or by telephone to the appropriate dispatch center.

### 6.6.3 RADIO COMMUNICATIONS

Current:

All dispatch is done on (UHF) MED NET 9 (462.950).

Medical direction from MRH is communicated on (UHF) MED NET 4 (463.075).

Ambulance to receiving hospital patient information is communicated on (VHF) HEAR (155.340 MHz)

MCI communication is done on (UHF) MED NET 1 (463.000)

Effective January 1, 1994:

All of the above communications will be done utilizing a "800 MHz trunked" radio system now being installed through out the County by the City of Portland. In addition each emergency unit will be equipped with a mobile data terminal (MDT) for communication with EMS dispatch and the CAD system. The ability to use the HEAR system will be maintained.

### 6.6.4 HOSPITAL AVAILABILITY

The availability of hospitals to receive ambulance patients is communicated on a computer network (CHORAL). This system displays a number of hospital status conditions that may result in the diversion of ambulances. (Attachment L)

### 6.6.5 EMERGENCY MEDICAL DISPATCHER TRAINING

All dispatchers and call takers at both BOEC and at the ambulance companies are trained to meet Emergency Medical Dispatcher EMD standards set forth by the State Board on Public Safety Standards and Training (BPSST). The EMS Medical Director is responsible for the medical protocols used by these dispatchers and for the medical supervision of their performance and may set forth additional requirements.

# 7. PROVIDER SELECTION

## 7.1 INITIAL ASSIGNMENT

The initial assignment of providers will involve two processes:

The fire transport service will be assigned to the Portland Fire Bureau (PFB) through an intergovernmental agreement. PFB will provide service to all of Multnomah County and will execute any necessary agreements with other fire districts that may be required. These agreements will require County approval.

The private ambulance service will be awarded through a competitive bid process or by other methods carried out in accordance with approved County procedures. If bid, the EMS Program will develop a request for proposal (RFP) document to solicit proposals from interested parties. The County will appoint a committee of independent reviewers with no interest in the award to accept the proposals, review them according to pre-determined criteria, and select the provider that best meets those criteria. The committee will recommend that provider to the Board of County Commissioners for award of the contract.

## 7.2 REASSIGNMENT

Should the PFB resign its interest in providing transport services, or should the County terminate the agreement for service, the contracting process described in the initial assignment process will be used to select a single private provider for all emergency ambulance services.

Should the initially selected private provider resign its interest in the ASA or should the County terminate its agreement for service, the contracting process identified in the initial assignment process will be used to select a replacement ambulance service.

## 7.3 APPLICATION FOR AN ASA

Applications from prospective ambulance providers will be accepted in accordance with the provisions of the RFP.

## 7.4 NOTIFICATION OF VACATING AN ASA

A notice of resignation of its interest in the ASA by either the PFB or the private ambulance provider will be required in accordance with the provisions of the initial service agreement or contract.

## 7.5 MAINTENANCE OF LEVEL OF SERVICE

In order to insure that emergency medical services are uninterrupted should a provider vacate the ASA, a one year notice will be required in the intergovernmental agreement between PFB and the County. This will allow the County sufficient time to select another provider. A similar six month notice will be required in the agreement with the private ambulance provider. Penalties for insufficient notice will be made part of the contract.

# Emergency Medical Services

**Multnomah County**

ATTACHMENTS

TO THE

MULTNOMAH COUNTY

AMBULANCE SERVICE PLAN

1993

## ATTACHMENTS

A. ASA AND RESPONSE TIME ZONES

B. INTERGOVERNMENTAL AGREEMENT
RESPONSE TO MEDICAL CALLS

C. 9-1-1 FIRE DISTRICTS CITIES

D. BOEC CONTRACT

E. EMS MEDICAL DIRECTOR
POSITION DESCRIPTION

F. MEDICAL RESOURCE HOSPITAL CONTRACT

G. AMBULANCE EQUIPMENT
ALS
BLS

H. MASS CASUALTY INCIDENT PLAN

I. HAZ-MAT
SPECIALIZED RESCUE

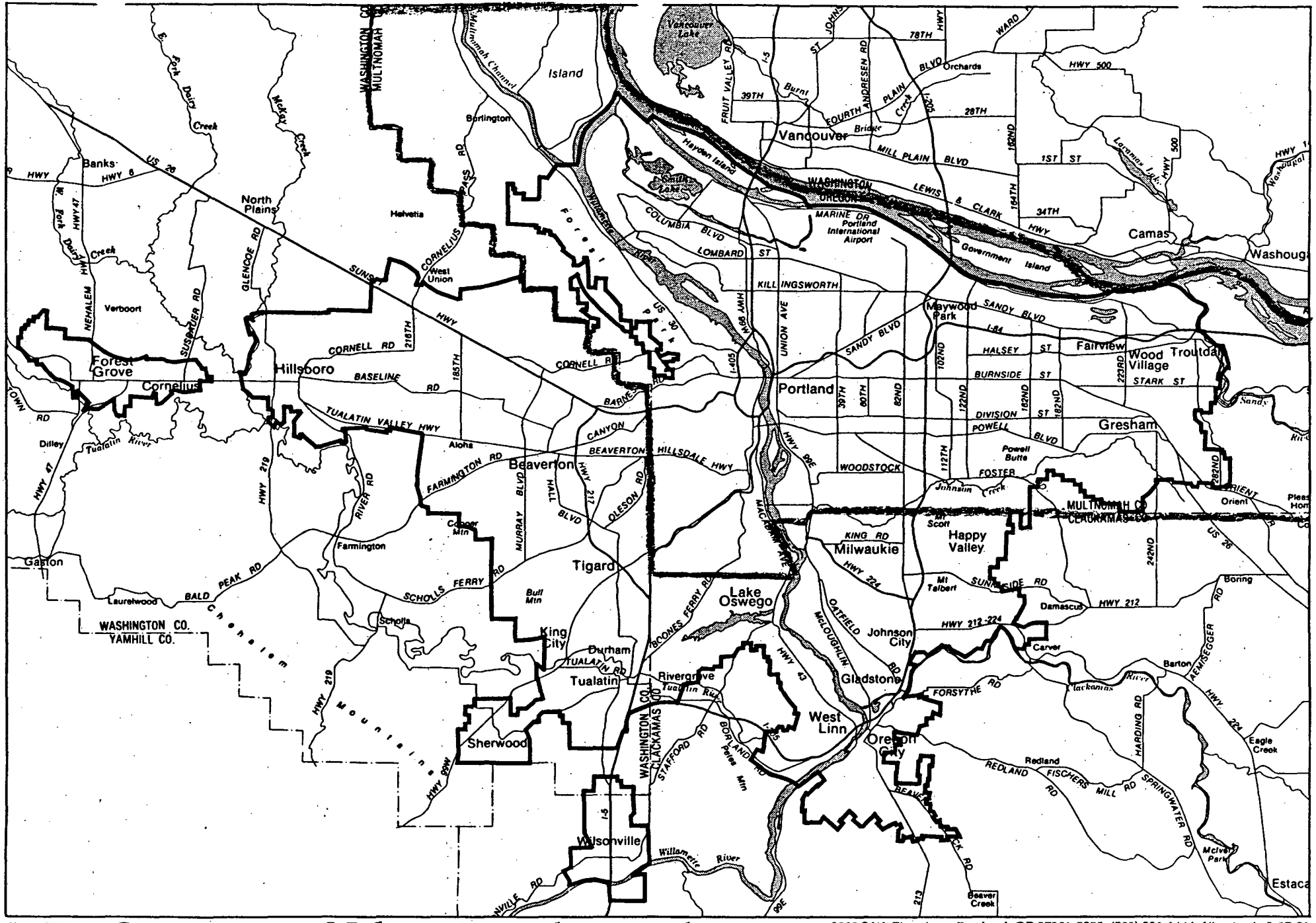
J. SEARCH AND RESCUE PROTOCOL

K. DISPATCH PROCEDURES
TRIAGE GUIDE

L. CHORAL

# ATTACHMENT A

# ASA MAP AND RESPONSE TIME ZONES




**METRO**

# *Urban Growth Boundary*

2000 S.W. First Ave., Portland, OR 97201-5398, (503) 221-1646, 1" = 4 mi., 3-87-01

# ATTACHMENT B

# INTERGOVERNMENTAL AGREEMENT

# RESPONSE TO MEDICAL CALLS

# (EXAMPLE)

INTERGOVERNMENTAL AGREEMENT
Between
MULTNOMAH COUNTY
and
WASHINGTON COUNTY

Multnomah County and Washington County enter into this agreement pursuant to the authority granted in Oregon Revised Statutes 190.010 in order for Multnomah County to administer the regulation of emergency medical and ambulance services under the Multnomah County Code in the area of Washington County that is within the city limits of the City of Portland. Multnomah County is a political subdivision of the State of Oregon, organized and existing under the laws and Constitution of the State of Oregon. Washington County is a political subdivision of the State of Oregon, organized and existing under the laws and Constitution of the State of Oregon.

THE PARTIES AGREE THAT:

1. Effective upon passage of this agreement by both counties, Multnomah County shall administer the regulation of emergency medical and ambulance services under the Multnomah County Code in the area of Washington County that is within the city limits of the City of Portland.

2. Multnomah County shall comply with all applicable state and federal laws, rules and regulations that are now in effect regarding emergency medical and ambulance services.

3. Multnomah County shall defend, save harmless, and indemnify Washington County and any of its officers, employees, and agents to the extent obligated by the Oregon Tort Claims Act, where applicable, against any and all claims or demands arising out of any and all alleged acts or omissions by Multnomah County or any of its Officers, employees, or agents occurring during administration of emergency medical and ambulance services in the area of Washington County that is within the city limits of the City of Portland.

4. Washington County shall have no responsibility for the cost of administering emergency medical and ambulance services in the area covered by this agreement, and shall receive no portion of the franchise fees, if any, adopted and collected by Multnomah County.

5. This agreement shall continue indefinitely but may be terminated by either party with sixty (60) days written notice to the other party.

RATIFIED
Multnomah County Board
of Commissioners
11/30/89

Bonnie L. Hays
Chairman
Washington County
Board of Commissioners

10-30-89
Date

Attest:

Pam Bisbart
Recording Secretary

Approved as to form:

Washington County Counsel

Gladys McCoy
Chair
Multnomah County
Board of Commissioners

12/4/89
Date

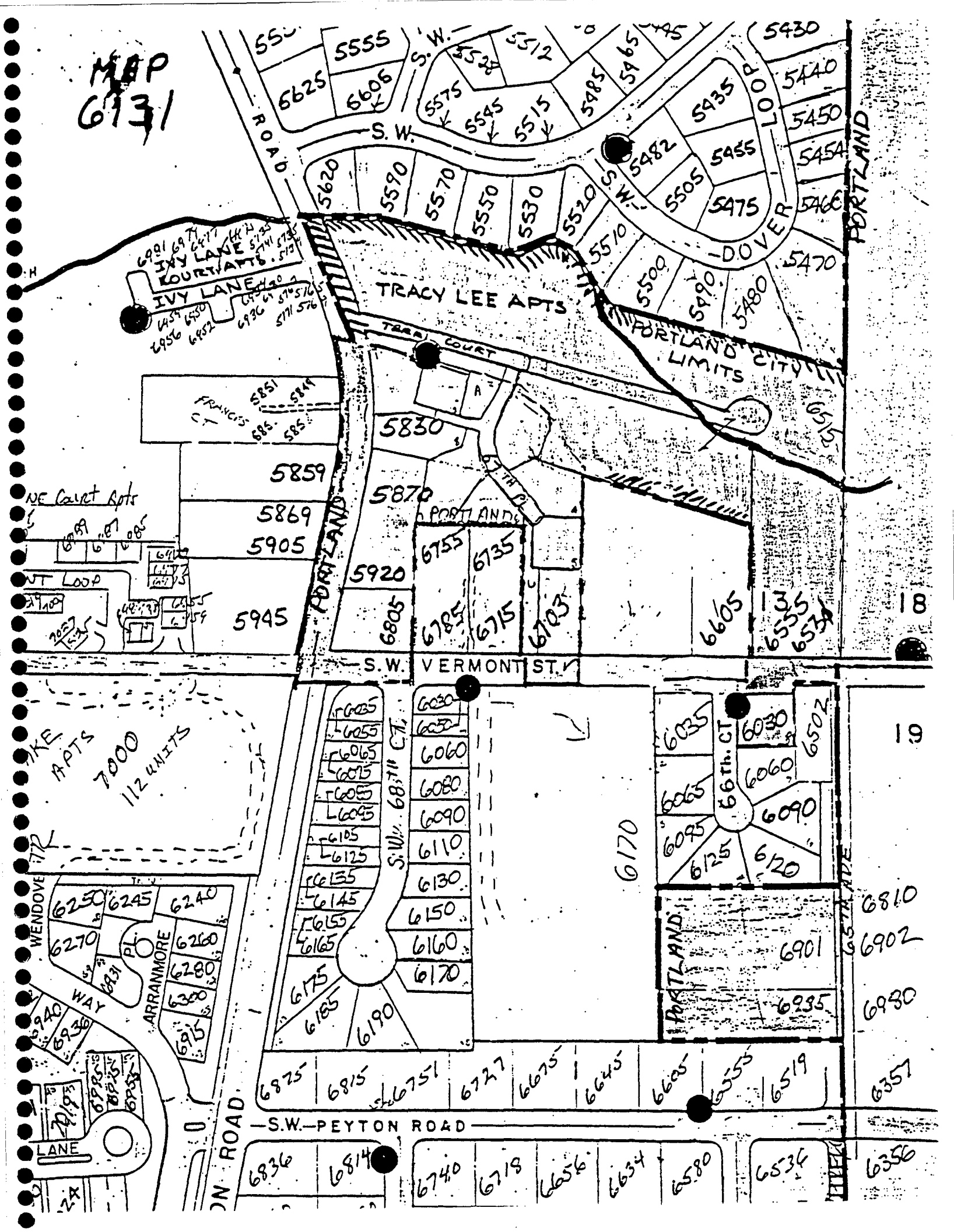
Attest:

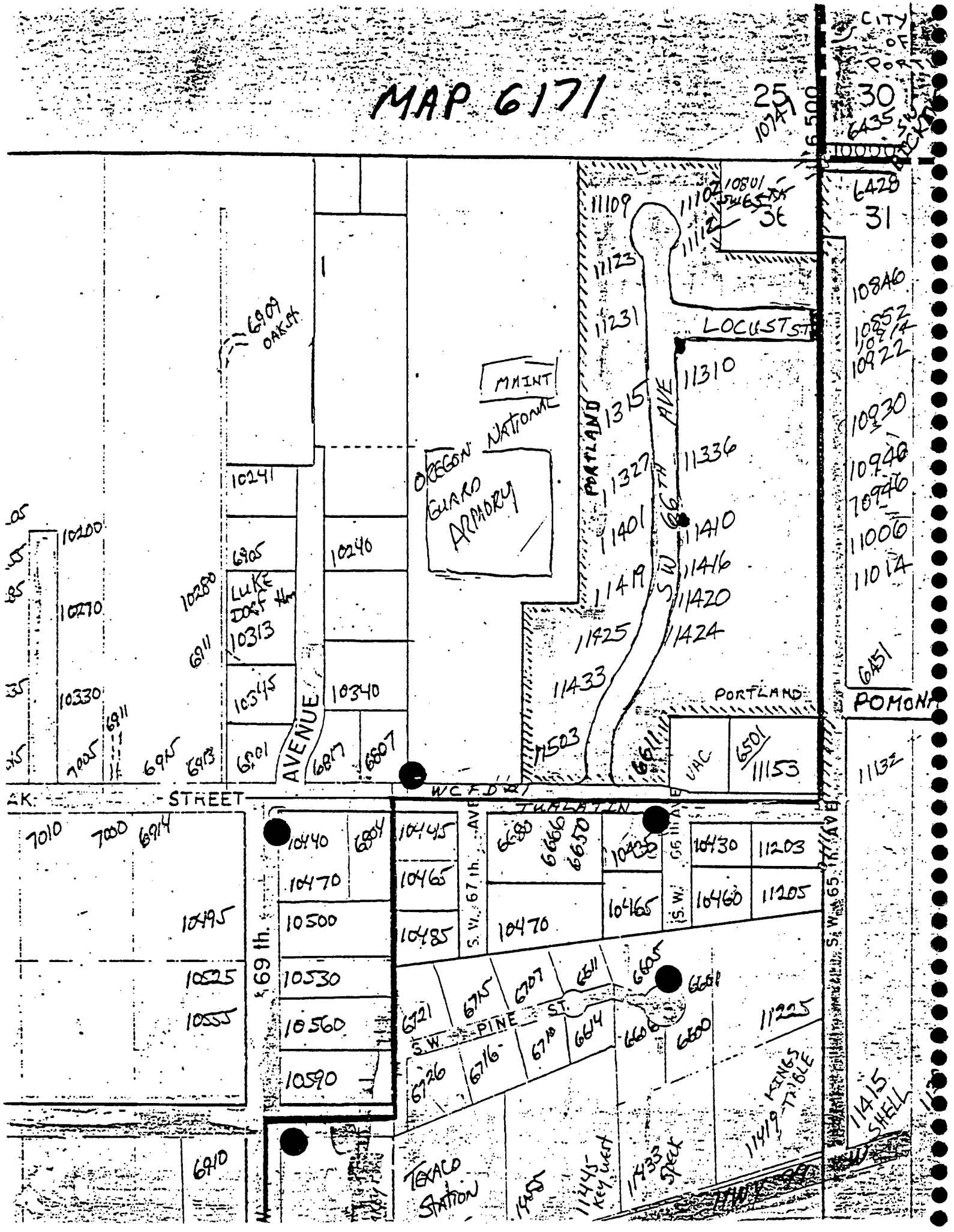
Anne McGarvin
Recording Secretary

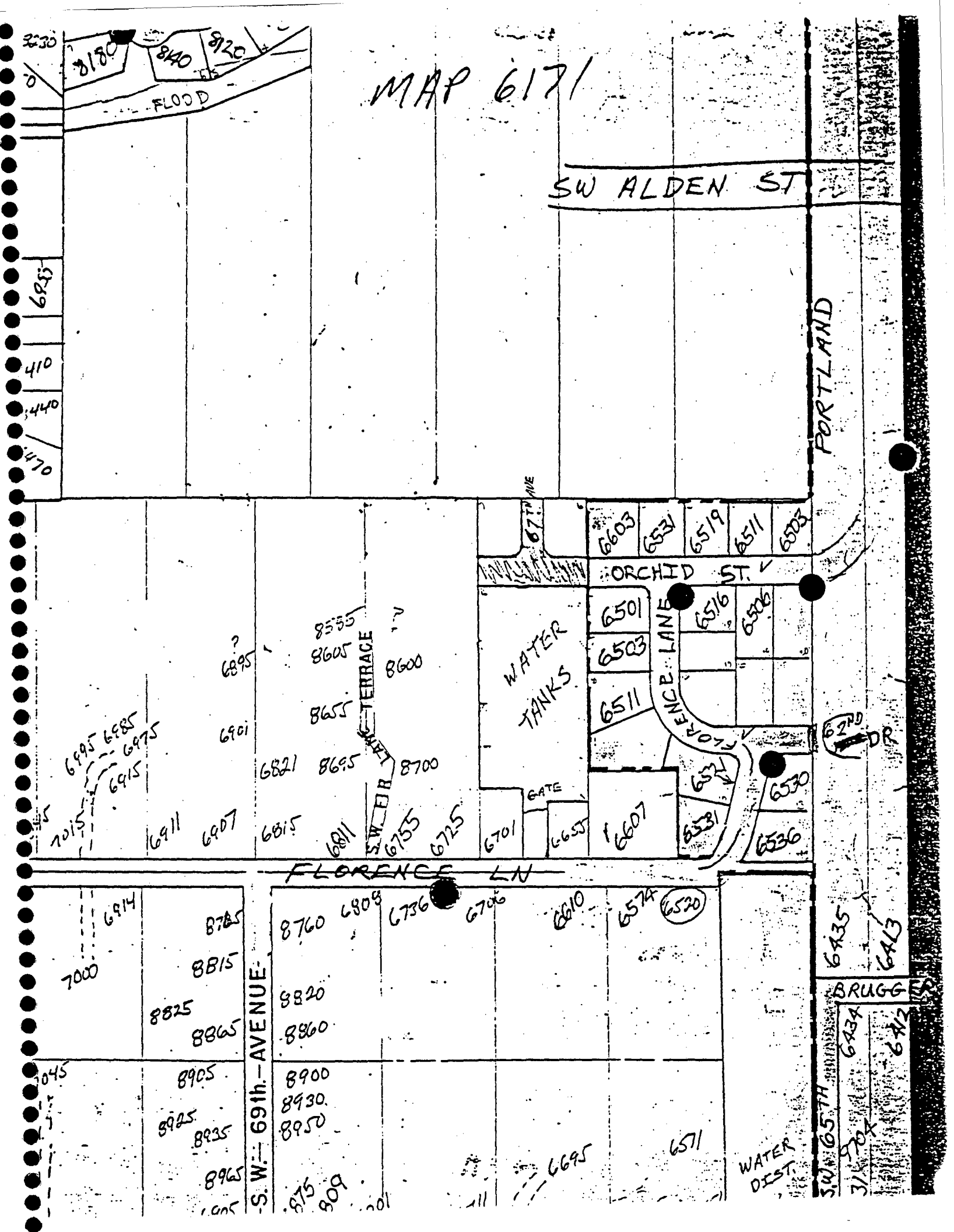
Approved as to form:

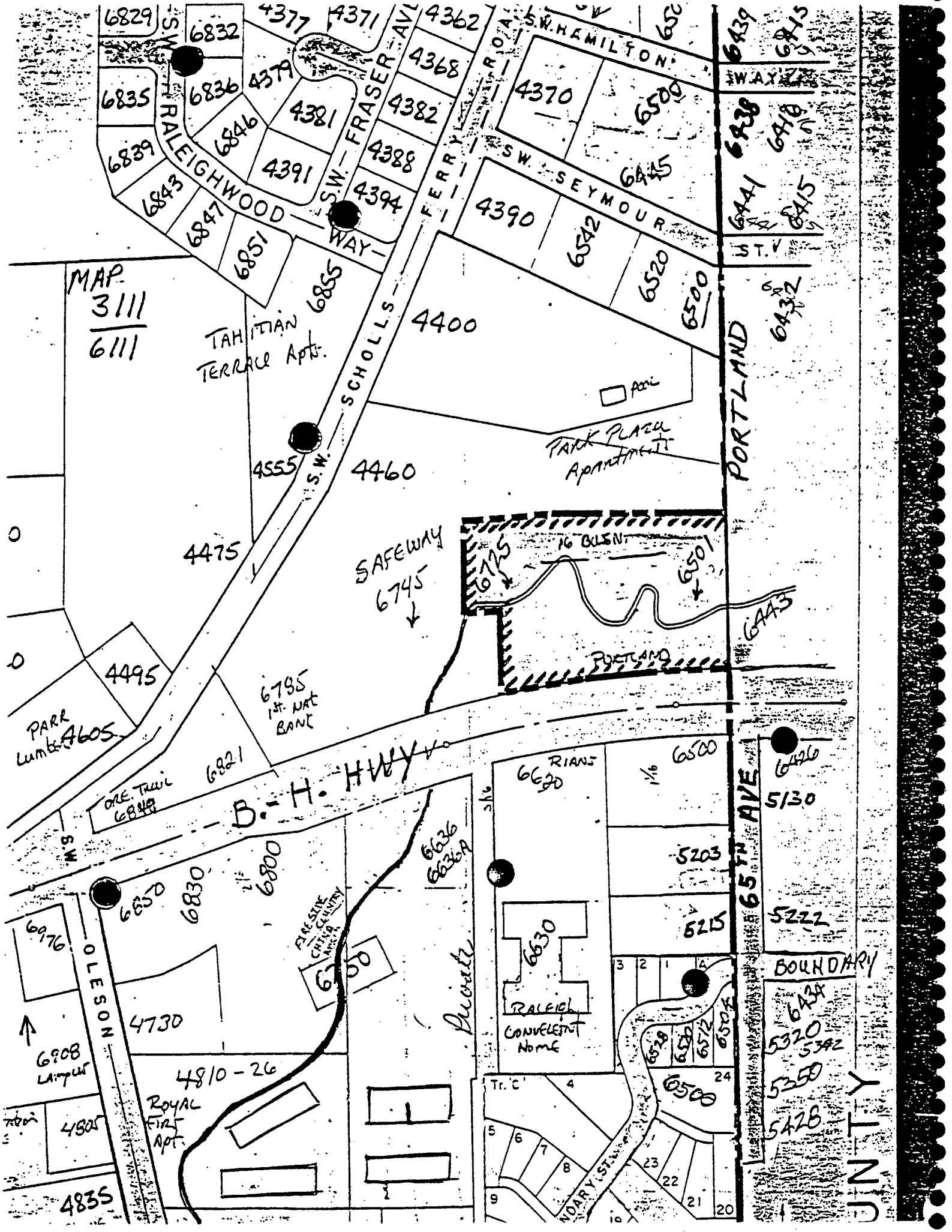
Multnomah County Counsel

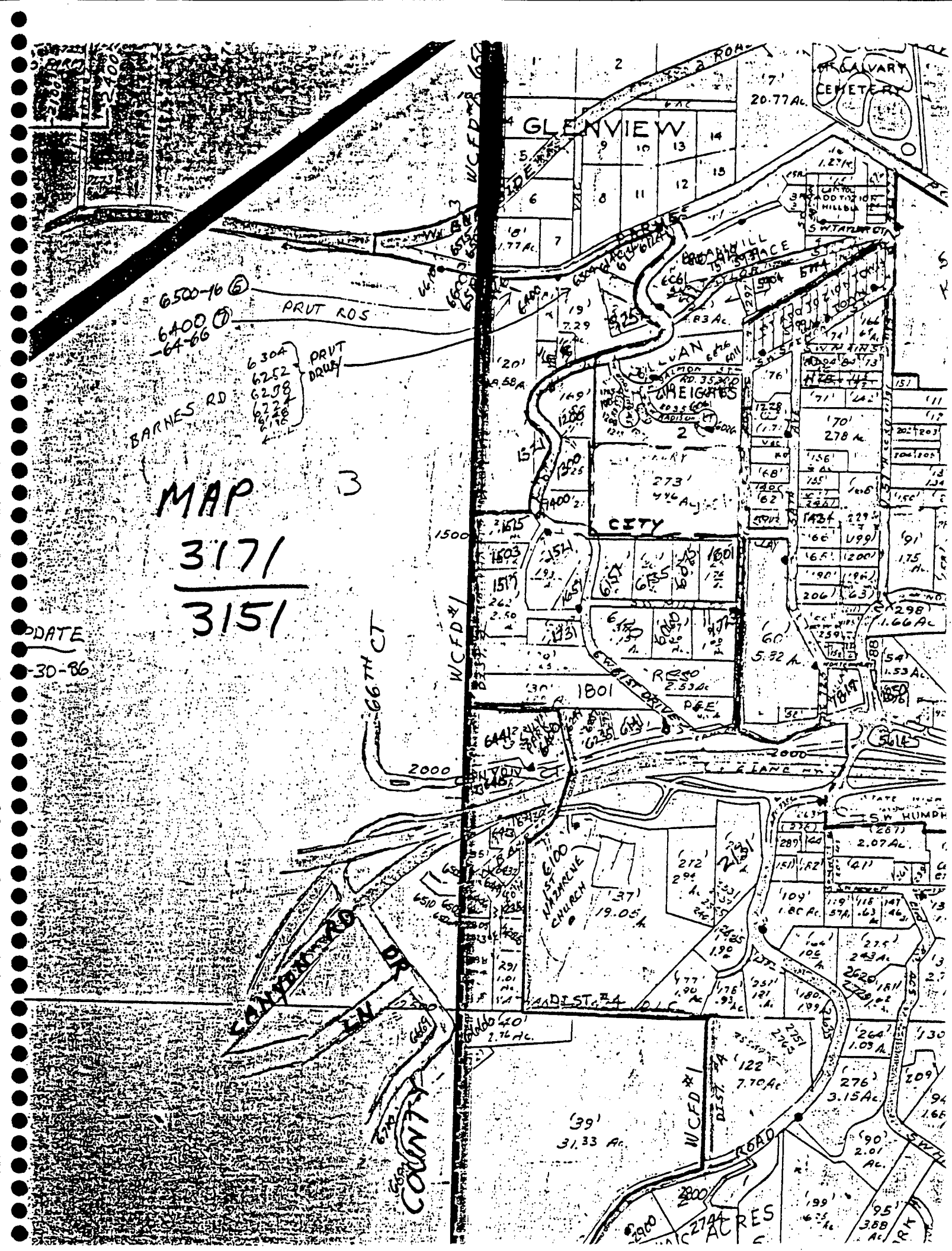
APPROVED WASHINGTON COUNTY
BOARD OF COMMISSIONERS
MINUTE ORDER # 89-285
DATE 8-8-89

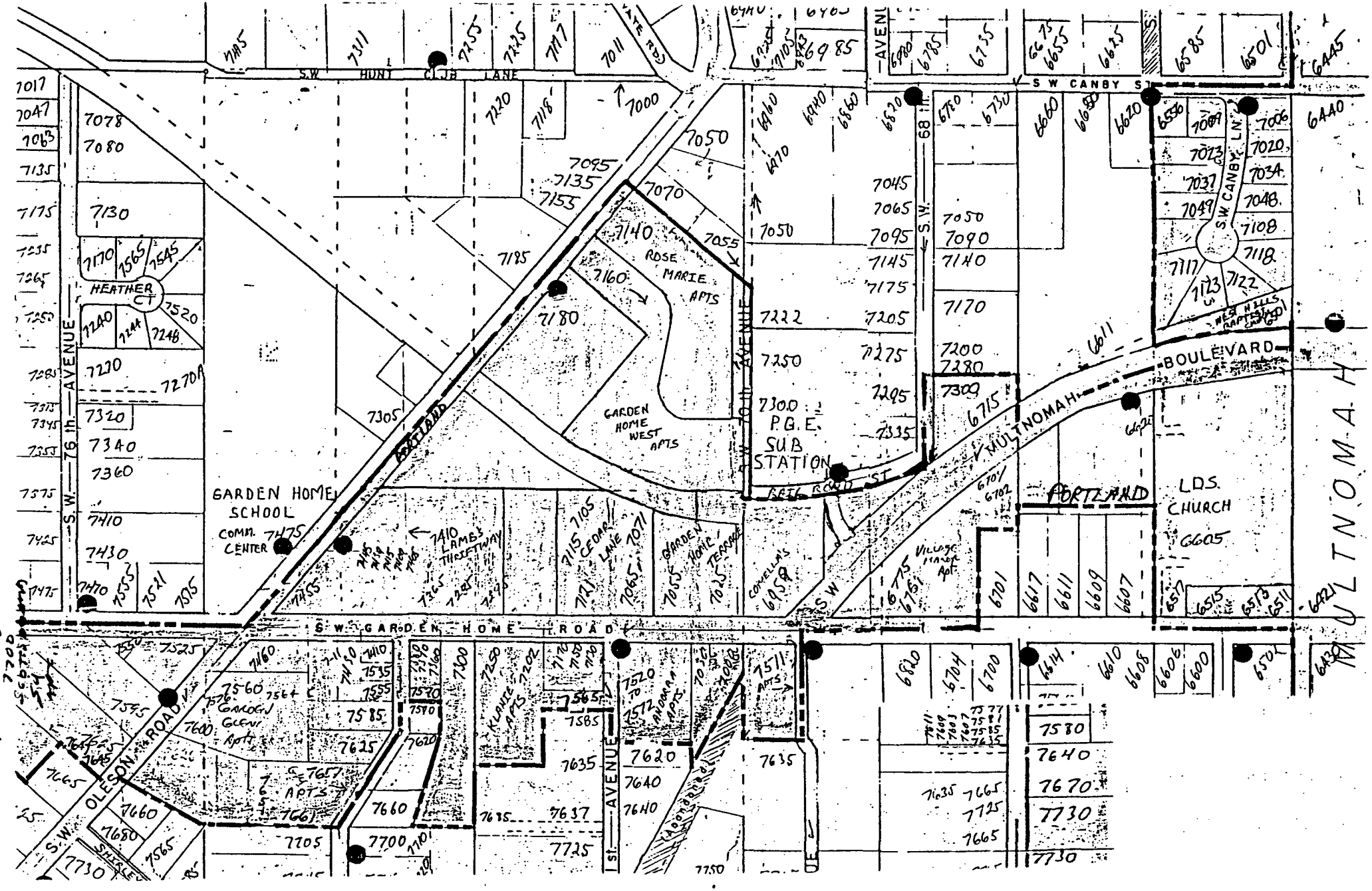

MAP 6131
S.W.
ROAD
5555
6625
6606
5512
5485
5430
5440
5450
5454
5466
5435
5455
5475
5505
5482
LOOP
DOVER
PORTLAND
5620
5590
5570
5550
5530
5520
5510
5500
5490
5480
5470
IVY LANE COURT APTS.
IVY LANE
TRACY LEE APTS
TERR
COURT
PORTLAND CITY LIMITS
5851
5849
5830
5859
5870
5869
5905
5920
5945
NE Court Apts
6755
6735
6785
6715
6703
6605
6555
6539
18
S.W. VERMONT ST.
6805
7000
112 UNITS
APTS
S.W. 68TH CT.
6030
6035
6060
6080
6090
6110
6130
6150
6160
6170
6175
6185
6190
6145
6165
6105
6125
6155
6170
66th. CT
6035
6030
6060
6065
6090
6095
6125
6120
6502
19
6810
6902
6930
6901
6935
PORTLAND
WENDOVE
6250
6245
6240
6270
6260
6280
6300
6915
6831
PL.
ARRANMORE
WAY
6940
6936
LANE
ROAD
6875
6815
6751
6727
6675
6645
6605
6555
6519
6357
S.W. PEYTON ROAD
6836
6814
6740
6718
6656
6634
6580
6536
6356


MAP 6171
25
1014
CITY OF PORT
30
6435
6428
31
3E
10801
11109
11112
11123
11231
LOCUST ST
10846
10852
10914
10922
10930
10946
10946
11006
11014
11310
11336
11410
11416
11420
11424
11433
11523
11532
6451
POMONA
PORTLAND
MAINT
OREGON NATIONAL GUARD ARMORY
1315
1327
1401
1419
11425
6909 OAK ST
10241
10200
10270
10280
10313
10330
10340
10345
6905
6911
6913
6915
7005
6901
6807
6607
AVENUE
PORTLAND AVE
S.W. 69TH
S.W. 67th AVE
S.W. 65th AVE
WCFD #1
TUALATIN
VAC
6501
11153
OAK STREET
7010
7000
6914
10440
6904
10470
10495
10500
10525
10530
10555
10560
10590
6910
10445
10465
10485
6680
6666
6650
10435
10430
11203
10460
11205
6721
6715
6707
6611
6605
6601
6726
6716
6710
6664
6660
6600
11225
PINE ST.
S.W.
TEXACO STATION
11445
KEY WEST
11433
SPEEDY
11419
KINGS TABLE
11415
SHELL


MAP 6171
SW ALDEN ST
PORTLAND
ORCHID ST.
FLORENCE LN
SW 67TH AVE
SW TERRACE
FLORENCE LANE
62ND DR
WATER TANKS
GATE
S.W. 69th AVENUE
BRUGG
SW 65TH
WATER DIST.
FLOOD
8230
8180
8140
8120
6955
410
440
470
6603
6531
6519
6511
6503
6501
6516
6506
6503
6511
6531
6530
6536
6533
6607
6655
6701
6725
6755
6811
6815
6907
6911
6915
6901
6821
6865
8700
8655
8605
8600
8555
6895
6985
6975
6995
7015
6914
7000
8785
8815
8825
8865
8760
8820
8860
6908
6736
6706
6610
6574
6520
6435
6413
6434
6412
6404
8905
8925
8935
8965
8900
8930
8950
6695
6571
909
875


MAP 3111 6111
TAHITIAN TERRACE Apts.
PARK PLAZA Apartments
SAFEWAY 6745
PARR Lumber 4605
1st. NAT BANK 6795
ORE. TRAIL 6849
B.-H.-HWY
RALEIGHWOOD WAY
S.W. FRASER AVE
S.W. SCHOLLS-FERRY ROAD
S.W. HAMILTON
S.W. SEYMOUR
PORTLAND
65TH AVE
BOUNDARY
RALEIGH CONVALESCENT Home
ROYAL FIR Apt.
OLESON
Tr. C'
4370
4371
4377
4379
4381
4382
4388
4390
4391
4394
4400
4460
4475
4495
4555
4730
4810-26
4835
6500
6501
6520
6542
6615
6620
6630
6636
6800
6830
6850
6855
6900
6908
6976
5130
5203
5222
5320
5342
5350
5426
6215
6432
6443
6445
6448
6441
6439
6438
6425
6415
6413
6418
6829
6832
6835
6836
6839
6843
6846
6847
6851
6821


GLENVIEW
MT CALVARY CEMETERY
20.77 Ac.
WCFD #1
6500-16
6400
-64-66
PRVT ROS
6304
6252
6258
6224
6218
PRVT DRWY
BARNES RD
MAP
3171
3151
DDATE
-30-86
CITY
1500
1801
2000
66TH CT
WCFD #1
SANDYWOOD DR
COUNTY
ROAD
6100
1ST NAZARENE CHURCH
19.05 Ac.
31.33 Ac.
7.70 Ac.
3.15 Ac.
2.07 Ac.
1.66 Ac.
5.32 Ac.
2.53 Ac.
2.76 Ac.
278 Ac.
1.80 Ac.
2.01 Ac.
1.53 Ac.
1.75 Ac.
2744 ACRES


S.W. HUNT CLUB LANE
S.W. CANBY ST
S.W. 68th AVENUE
S.W. 70th AVENUE
S.W. 76th AVENUE
S.W. 1st AVENUE
S.W. GARDEN HOME ROAD
S.W. OLESON ROAD
S.W. BOULEVARD
MULTNOMAH
PORTLAND
HEATHER CT
SW CANBY LN
ROSE MARIE APTS
GARDEN HOME WEST APTS
P.G.E. SUB STATION
GARDEN HOME SCHOOL
COMM. CENTER
LAMB'S THRIFTWAY
CEDAR LANE
GARDEN HOME TERRACE
CONELLA'S
VILLAGE MINOR APTS
L.D.S. CHURCH
KLAMATH APTS
ANDORA APTS
7511 APTS
GLENN APTS
WEST HILLS BAPTIST CHURCH
SHASTA

INTERGOVERNMENTAL AGREEMENT
Between
MULTNOMAH COUNTY
and
WASHINGTON COUNTY

Multnomah County and Washington County enter into this agreement pursuant to the authority granted in Oregon Revised Statutes 190.010 in order for Multnomah County to administer the regulation of emergency medical and ambulance services under the Multnomah County Code in the area of Washington County that is within the city limits of the City of Portland. Multnomah County is a political subdivision of the State of Oregon, organized and existing under the laws and Constitution of the State of Oregon. Washington County is a political subdivision of the State of Oregon, organized and existing under the laws and Constitution of the State of Oregon.

THE PARTIES AGREE THAT:

1. Effective upon passage of this agreement by both counties, Multnomah County shall administer the regulation of emergency medical and ambulance services under the Multnomah County Code in the area of Washington County that is within the city limits of the City of Portland.

2. Multnomah County shall comply with all applicable state and federal laws, rules and regulations that are now in effect regarding emergency medical and ambulance services.

3. Multnomah County shall defend, save harmless, and indemnify Washington County and any of its officers, employees, and agents to the extent obligated by the Oregon Tort Claims Act, where applicable, against any and all claims or demands arising out of any and all alleged acts or omissions by Multnomah County or any of its Officers, employees, or agents occurring during administration of emergency medical and ambulance services in the area of Washington County that is within the city limits of the City of Portland.

4. Washington County shall have no responsibility for the cost of administering emergency medical and ambulance services in the area covered by this agreement, and shall receive no portion of the franchise fees, if any, adopted and collected by Multnomah County.

5. This agreement shall continue indefinitely but may be terminated by either party with sixty (60) days written notice to the other party.

Bonnie L. Hays
Chairman
Washington County
Board of Commissioners

8-8-89
Date

Attest:

Pam Pyhant
Recording Secretary

Approved as to form:

[signature] 8/2/89
Washington County Counsel

Chairman
Multnomah County
Board of Commissioners

Date

Attest:

Recording Secretary

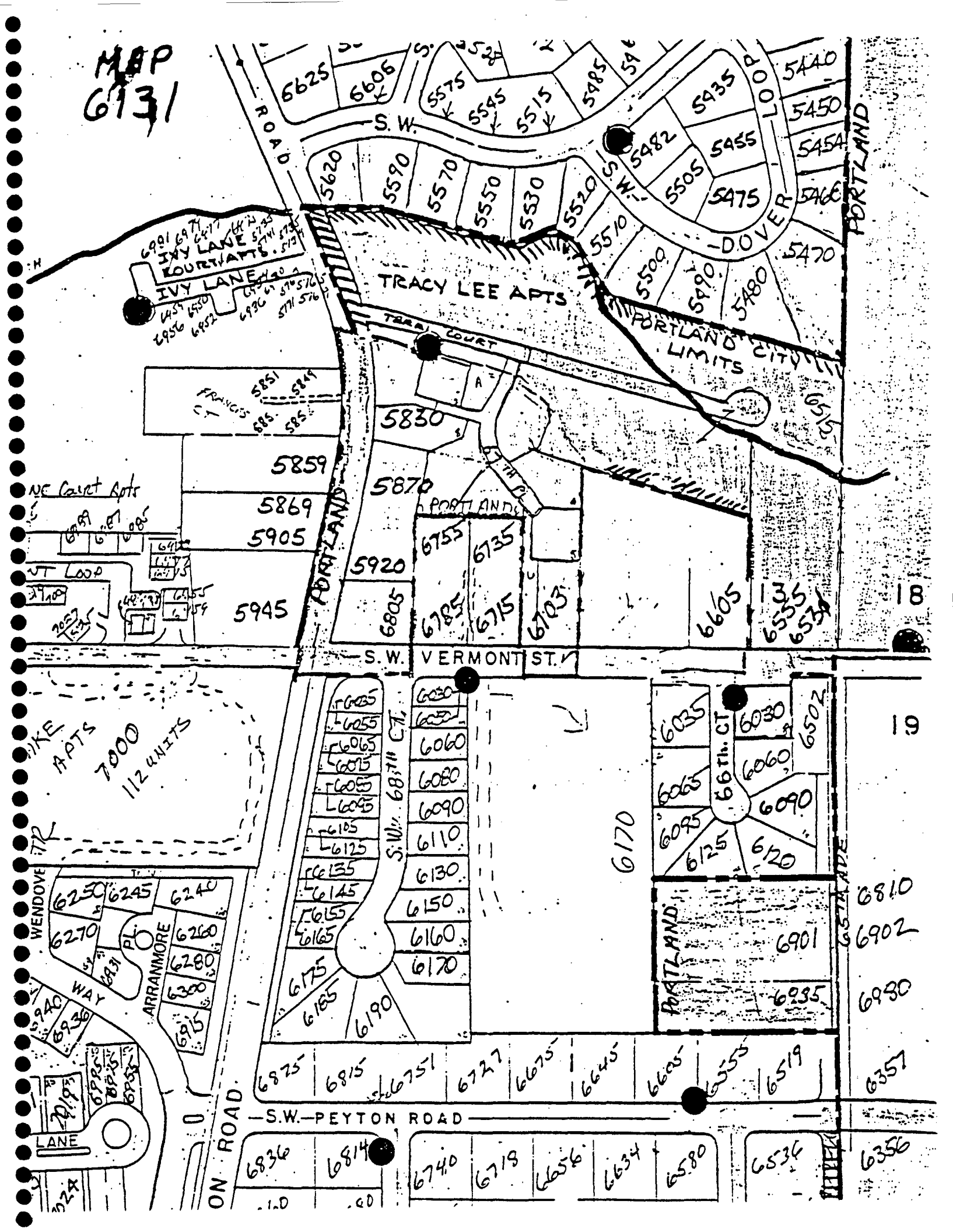
Approved as to form:

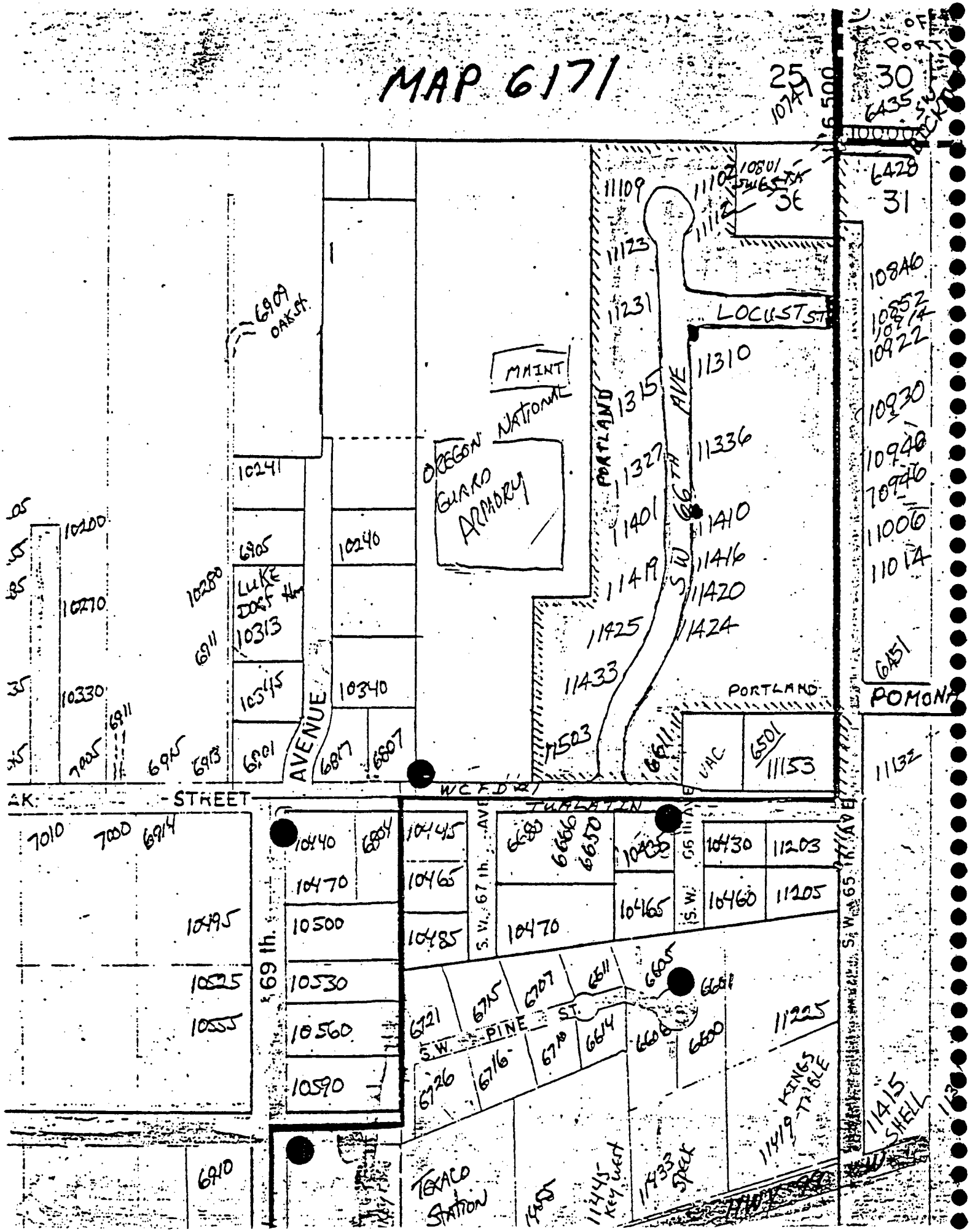
Multnomah County Counsel

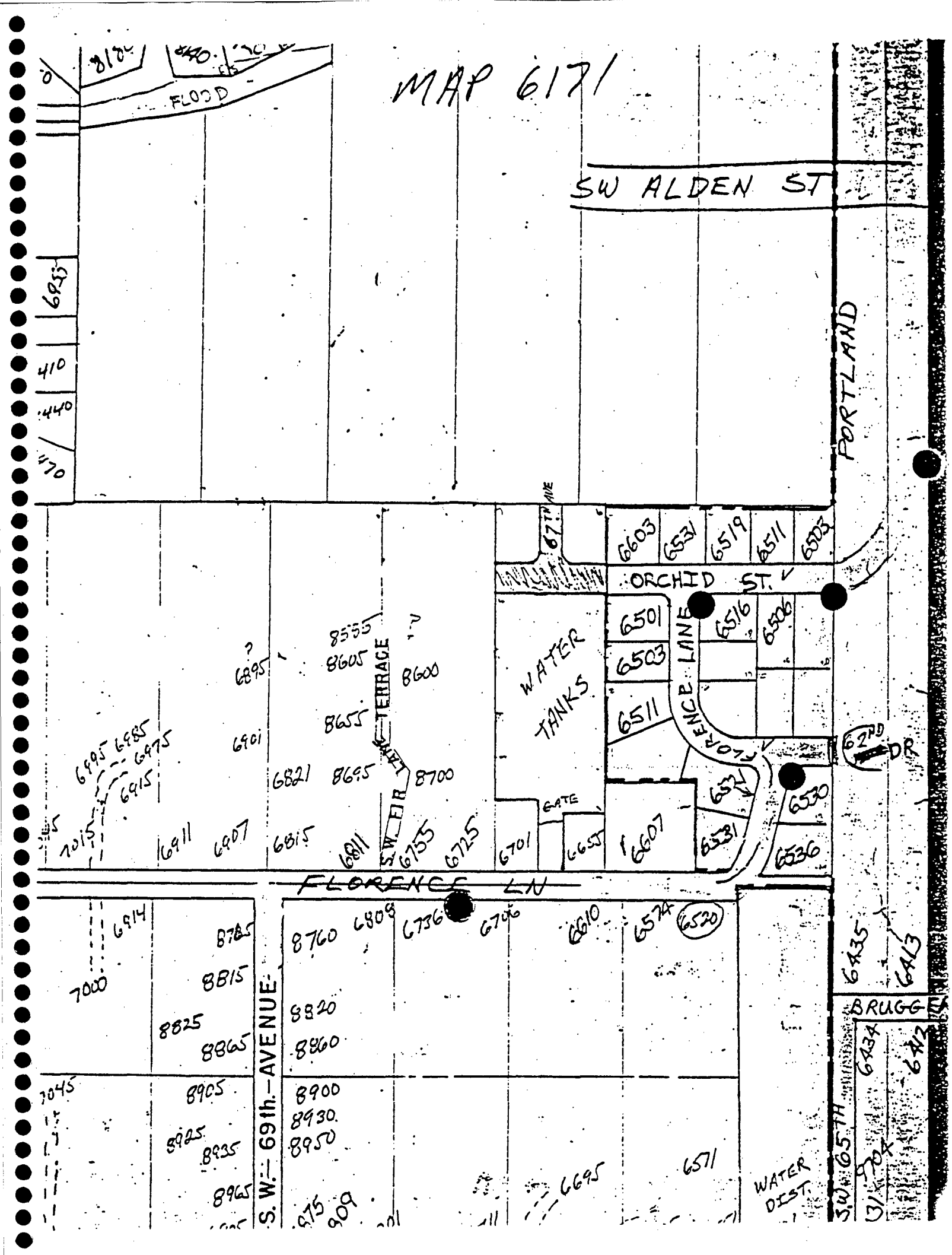
APPROVED WASHINGTON COUNTY
BOARD OF COMMISSIONERS
MINUTE ORDER # 89-285
DATE 8-8-89

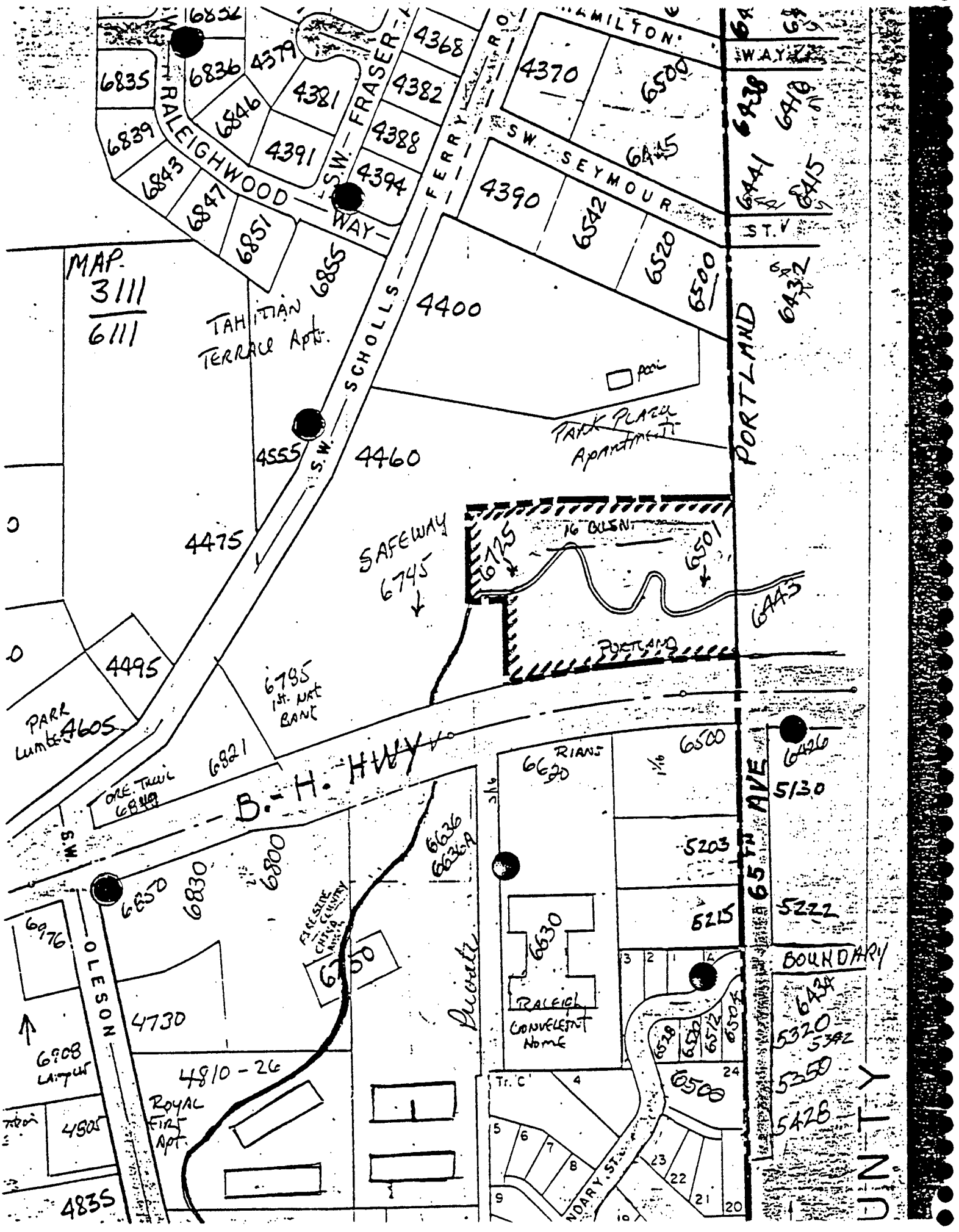


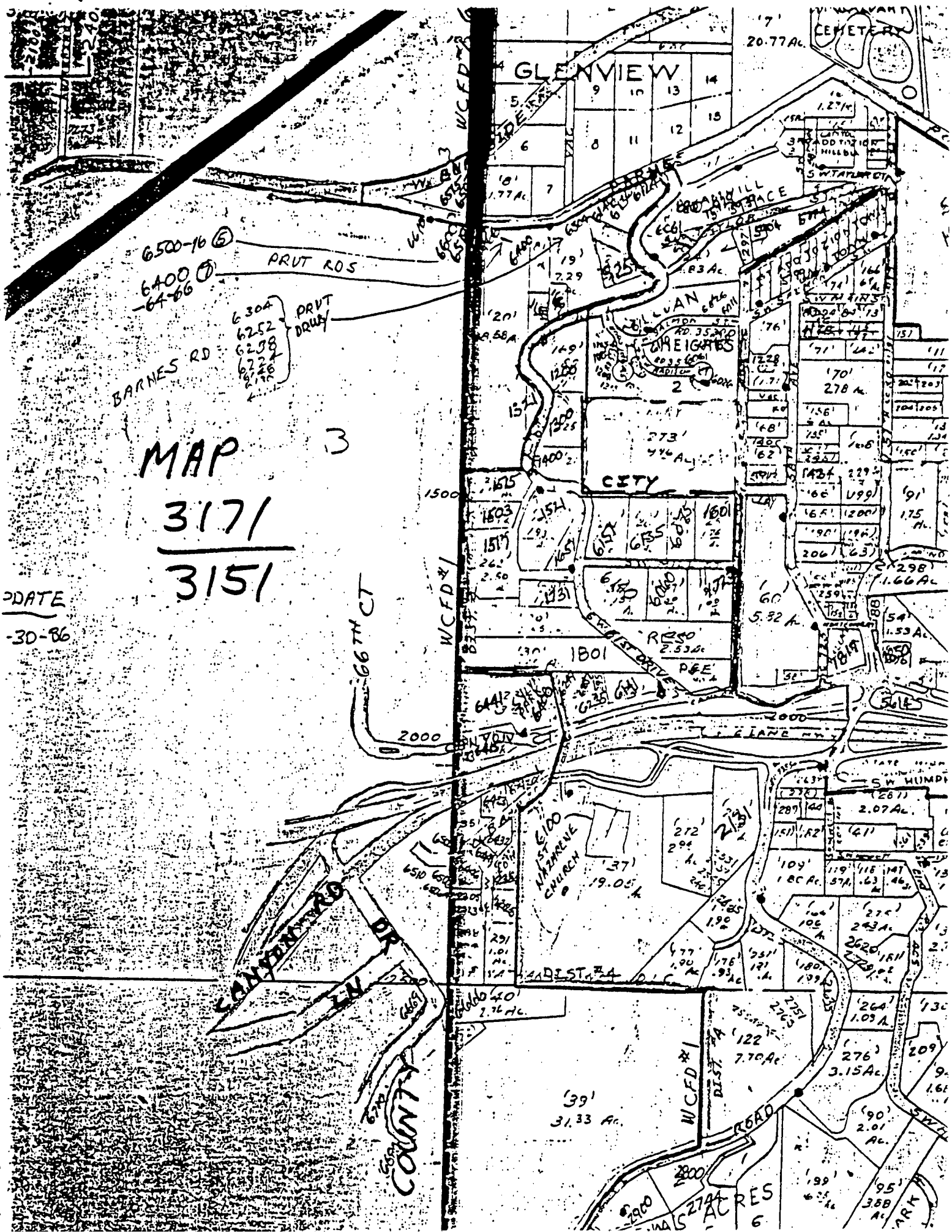
CC:BB:0050c:01/30/89

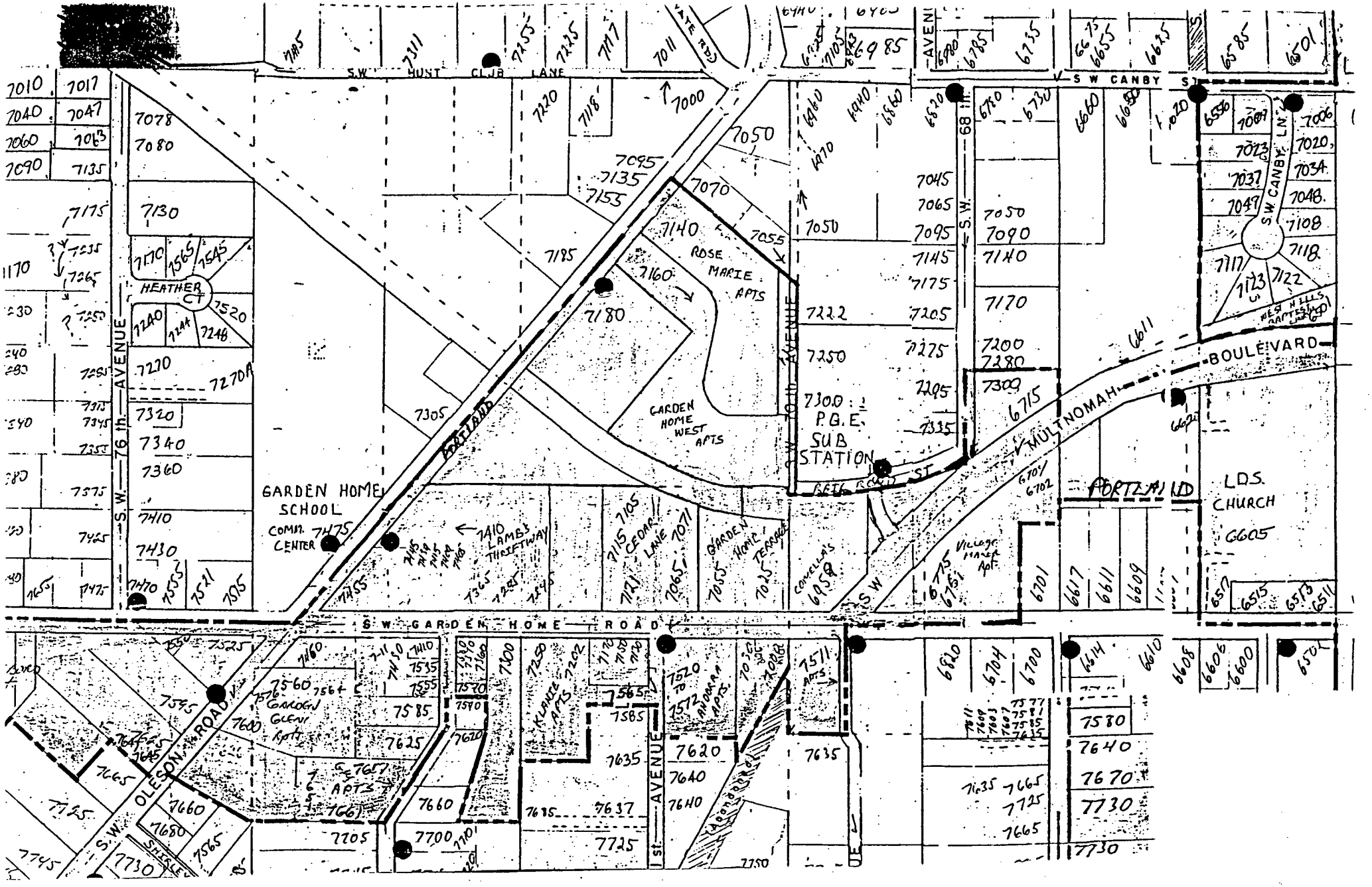

MAP 6131
S.W. ROAD
S.W. DOVER LOOP
PORTLAND
TRACY LEE APTS
IVY LANE COURT APTS.
IVY LANE
TERA COURT
PORTLAND CITY LIMITS
NE Court Apts
VT Loop
PORTLAND
S.W. VERMONT ST.
IKE APTS 7000 112 UNITS
S.W. 68TH CT.
66TH. CT
PORTLAND
WENDOVE
ARRANMORE PL.
WAY
LANE
ON ROAD
S.W. PEYTON ROAD
5440
5450
5454
5466
5470
5480
5490
5500
5510
5520
5530
5550
5570
5590
5620
5625
6606
5575
5545
5515
5485
5435
5455
5475
5482
5505
5851
5849
5830
5859
5869
5870
5905
5920
5945
6755
6735
6805
6785
6715
6703
6605
6555
6535
6515
18
19
6635
6030
6502
6060
6080
6090
6110
6130
6150
6160
6170
6175
6190
6165
6145
6125
6105
6085
6065
6045
6025
6005
6120
6810
6902
6901
6930
6935
6250
6245
6240
6270
6260
6280
6300
6915
6940
6936
6931
6875
6815
6751
6727
6675
6645
6605
6555
6519
6351
6836
6814
6740
6719
6656
6634
6580
6536
6356


MAP 6171
25
30
POR
6435
6428
31
6500
10747
10801
11102
11112
11109
11123
11231
LOCUST ST
10846
10852
10914
10922
10930
10940
10946
11006
11014
11310
11315
11327
11336
11401
11410
11416
11419
11420
11425
11424
11433
11503
11523
11153
11132
6451
6501
VAC
MAINT
OREGON NATIONAL GUARD ARMORY
PORTLAND AVE
S.W. 66TH AVE
PORTLAND
POMONA
6909 OAK ST
10241
10200
10270
10280
10313
10315
10330
10340
6905
6911
6913
6901
6807
6811
LUKE DOCK
AVENUE
OAK STREET
WCRR
TUALATIN
7010
7000
6914
10440
10445
10465
10470
10485
10495
10500
10525
10530
10555
10560
10590
6804
6810
6680
6666
6650
10435
10430
10460
11203
11205
S.W. 67th AVE
S.W. 69th
S.W. 65th AVE
6721
6715
6707
6611
6605
6601
6626
6616
6710
6664
6660
6600
11225
S.W. PINE ST.
KINGS TABLE
11415 SHELL
TEXACO STATION
11445 Key West
11433 Speck
1455


MAP 6171
SW ALDEN ST
PORTLAND
67TH AVE
ORCHID ST.
6603
6531
6519
6511
6503
6501
6516
6506
6503
6511
WATER TANKS
FENCE LINE
62ND DR
6537
6530
6536
6531
6607
6537
6701
6725
6755
6811
6815
6907
6911
7015
6915
6975
6985
6995
6901
6821
6895
8555
8605
8600
8655
8695
8700
SW TERRACE LANE
GATE
FLORENCE LN
6914
7000
8785
8815
8825
8865
7045
8905
8925
8935
8965
8760
8820
8860
8900
8930
8950
6809
6736
6706
6610
6574
6520
6435
6413
BRUGG
6434
6412
SW 65TH
S.W. 69th AVENUE
6695
6571
WATER DIST.
975
909


MAP 3111 6111
TAHITIAN TERRACE Apts.
PARK PLACE II Apartments
SAFEWAY
PARK Lumber
ORE. TWIN
1st. NAT BANK
RIANS
RALEIGH CONVALESCENT Home
ROYAL FIRE Apt.
PORTLAND
HAMILTON
SW SEYMOUR
SW SCHOLLS FERRY RD
SW FRAZER
SW RALEIGHWOOD WAY
SW OLESON
B. - H. HWY
65TH AVE
BOUNDARY
4555
4460
4475
4495
4400
4390
4370
4730
4810 - 26
4835
6835
6836
6839
6843
6847
6851
6855
6821
6795
6745
6725
6501
6500
6520
6542
6630
6636
6636A
6650
6830
6800
6976
6908
5130
5203
5215
5222
5320
5350
5428
6426
6432
6438
6441
6445
6448
6465
6443
6525
6528
6532
6512
6508
6500
4379
4381
4382
4388
4391
4394
4368
Tr. C
BOUNDARY ST.


GLENVIEW
CEMETERY
20.77 Ac.
6500-16
6400-64-66
PRVT RDS
6304
6252
6298
6222
6226
PRVT DRWY
BARNES RD
MAP
3171
3151
3
DATE
-30-86
WCFD#1
66TH CT
CITY
1801
RIST DRIVE
2000
CANTERBURY DR
COUNTY
ROAD
WCFD#1
39'
31.33 Ac.
27 ACRES
6


S.W. HUNT CLUB LANE
S W CANBY ST
S.W. 76th AVENUE
HEATHER CT
ROSE MARIE APTS
S.W. 70th AVENUE
PORTLAND
GARDEN HOME WEST APTS
P.G.E. SUB STATION
BELL ROAD ST
MULTNOMAH BOULEVARD
GARDEN HOME SCHOOL
COMM. CENTER
LAMB'S THRIFTWAY
CEDAR LANE
GARDEN HOME TERRACE
CONCLAVE
VILLAGE MANOR APTS
PORTLAND LDS CHURCH
S W GARDEN HOME ROAD
OLESON ROAD
GARDEN GLEN APTS
KLANE APTS
ANDORRA APTS
1st AVENUE
SHALE

**EMERGENCY MEDICAL SERVICE MUTUAL ASSISTANCE AGREEMENT**

**AMBULANCE COVERAGE FOR DUNTHORPE AREA**

This Agreement defines response districts of Ambulance Companies in the area commonly referred to as the Dunthorpe Area.

Dunthorpe area is from Radcliff Street at the north; west to Frank Street (or Portland City limits); south to Multnomah County line; east to Willamette River.

When a medical emergency occurs in the Dunthorpe Area, the coverage responsibilities have been defined as follows:

If an ambulance company is unable to send a unit to a call in its designated area, the closest unit from an adjoining district will be dispatched.

All providers must be in and remain in compliance with all applicable State, County, and other governmental laws, ordinances, reules, and regulations when providing service. Each provider will be solely responsible for any losses, injuries or other damages it may cause or sustain.

This document shall become effective upon Agreement by all parties of its content and shall remain in effect until thirty days written notice is given of intent to withdraw.

Metro West Ambulance
METRO WEST AMBULANCE

J.D. Fuiten

Date: 3/9/90

Tualatin Valley Ambulance
CARE AMBULANCE
TUALATIN VALLEY AMBULANCE

Mark Drake

Date: March 2, 1990

EMS ISSUES : DUNTHORPE / LAKE OSWEGO

1. First Responder agency serving area
   - Identify specific agency(s)
   - Mutual aid agreements
   - Written contracts
   - Review and correct MSAG

2. Notification of First Responder agency
   - Whose responsibility ?
   - Technical capabilities / procedures
     - Selective routing
     - BOEC / FAD CAD link

3. ALS Ambulance Service serving area
   - Identify specific Service —
   - Mutual aid agreements —
   - Written contracts ?
   - Review and correct MSAG —

4. Notification of ALS Ambulance Service
   - Whose responsibility ?
   - Technical capabilities / procedures
     - Selective routing
     - Conference call (ensure proper unit assignment)

5. Data collection and call review
   - Who desires / requires it ?
   - Response time monitoring

DUNTHORPE : SPECIFIC QUESTIONS

1. MetroWest

   - Staffing levels

     - Units must be ALS

     - What is level currently ? Is every ambulance consistent ?

   - Radio (Units responding into Multnomah County must contact BOEC on MedNet 9 and check CHORAL system on 9 or 4[MRH]).

   - Vehicle licensing in Multnomah County (refer : 2/21/90 letter)

     - Must be done now if not accomplished already

2. Current Mutual Aid agreements -- documents filed ?

   - SW Ambulance (TVA) / MetroWest

   - Portland Fire Bureau / Lake Oswego Fire Department

   - BOEC / LOCOM

3. US West Selective Routing

   - Technical capability

   - Implementation agreement

4. BOEC SOP

   - First Responder notification procedure / responsibility

   - ALS Ambulance notification procedure / responsibility

   - BOEC / LOCOM conferencing for response information sharing

# DUNTHORPE / RIVERDALE

MetroWest / CareTVA Mutual Aid

Detail reference : Thomas Brothers map pages 364,365,355

PFB map book pages O-8 thru O-14m N-13, N-14

This SOP defines response districts of Fire Departments and Ambulance Companies in the West Hills Skyline area (Skyline Blvd. from Barnes Road intersection to the Columbia County Line, bordered on the West by Highway 26 and on the East by Highway 30).

RESPONSIBILITY ACTION

EMS DISPATCHER — If the call is in the Skyline area :

1. Notify FAD for First Responder.
2. Notify FireCom regarding ambulances --
   A. Inform them if BOEC is dispatching AA or Care/TVA per guidelines outlined below, OR:
   B. Request that they dispatch Metro-West Ambulance.

METRO WEST AMBULANCE — All area on and West (Hwy 26 side) of Skyline Blvd. from Sunset Highway (26) to the borders of Washington and Columbia Counties, including the roads that branch from Skyline in this section.

AA AMBULANCE — All area and roads East (Hwy 30 side) of but not including Skyline Blvd.
NOTE : AA coverage on Hwy 30 extends East to RR bridge (6800 block) and includes roads branching from Hwy 30.

NOTE : There are two "Springville Lane"s --
- one intersects Hwy 30 (AA area)
- one intersects NW Springville Road (MetroWest area)

CARE/TVA AMBULANCE — The area on NW Cornell Road from the East approach to the Skyline/Cornell intersection, continuing North on Skyline from Cornell to Thompson, and all roads branching from this "loop" section (see map following).

IF AN AMBULANCE COMPANY IS UNABLE TO SEND A UNIT TO A CALL IN ITS DESIGNATED AREA, DISPATCH THE CLOSEST UNIT.

NOTE : Any call in this area should be conferenced with FireCom to inform them of responses from Multnomah County. FireCom will inform BOEC of responses from their agencies.

NOTE : Certain sections of the Skyline area do not have any dedicated First Responder services -- FAD will determine the uncovered sections upon call notification and inform BOEC at that time.

# EMERGENCY MEDICAL SERVICE MUTUAL ASSISTANCE AGREEMENT

## AMBULANCE COVERAGE FOR SKYLINE AREA

This agreement defines response districts of Ambulance Companies in the West Hills, commonly known as the Skyline Area (Skyline Blvd. from Barnes Road intersection to the Columbia county Line, bordered on the West by Highway 26 and on the East by Highway 30).

When a medical emergency occurs in the Skyline Area, the coverage responsibilities have been defined as follows :

| | |
|---|---|
| METRO WEST AMBULANCE | ALL area on and West (Highway 26 side) of Skyline Blvd. from Sunset Highway to the borders of Washington and Columbia Counties, including the roads that branch from Skyline in this section. |
| AA AMBULANCE | All area and roads East (Hwy 30 side) of Skyline Blvd.<br><br>NOTE : AA coverage on Highway 30 extends East to RR bridge (6800 block) and includes roads branching from Highway 30. |
| CARE/TVA AMBULANCE | The area on NW Cornell Road from East approach to Skyline/Cornell intersection, continuing North on Skyline from Cornell to Thompson, and all roads branching from this "loop" section. (see map) |

NOTE: There are two "Springville Lane"s --
- one intersects Highway 30 (AA area)
- one intersects NW Springville Road (MetroWest area)

If an ambulance company is unable to send a unit to a call in its designated area, the closest unit from an adjoining district will be dispatched.

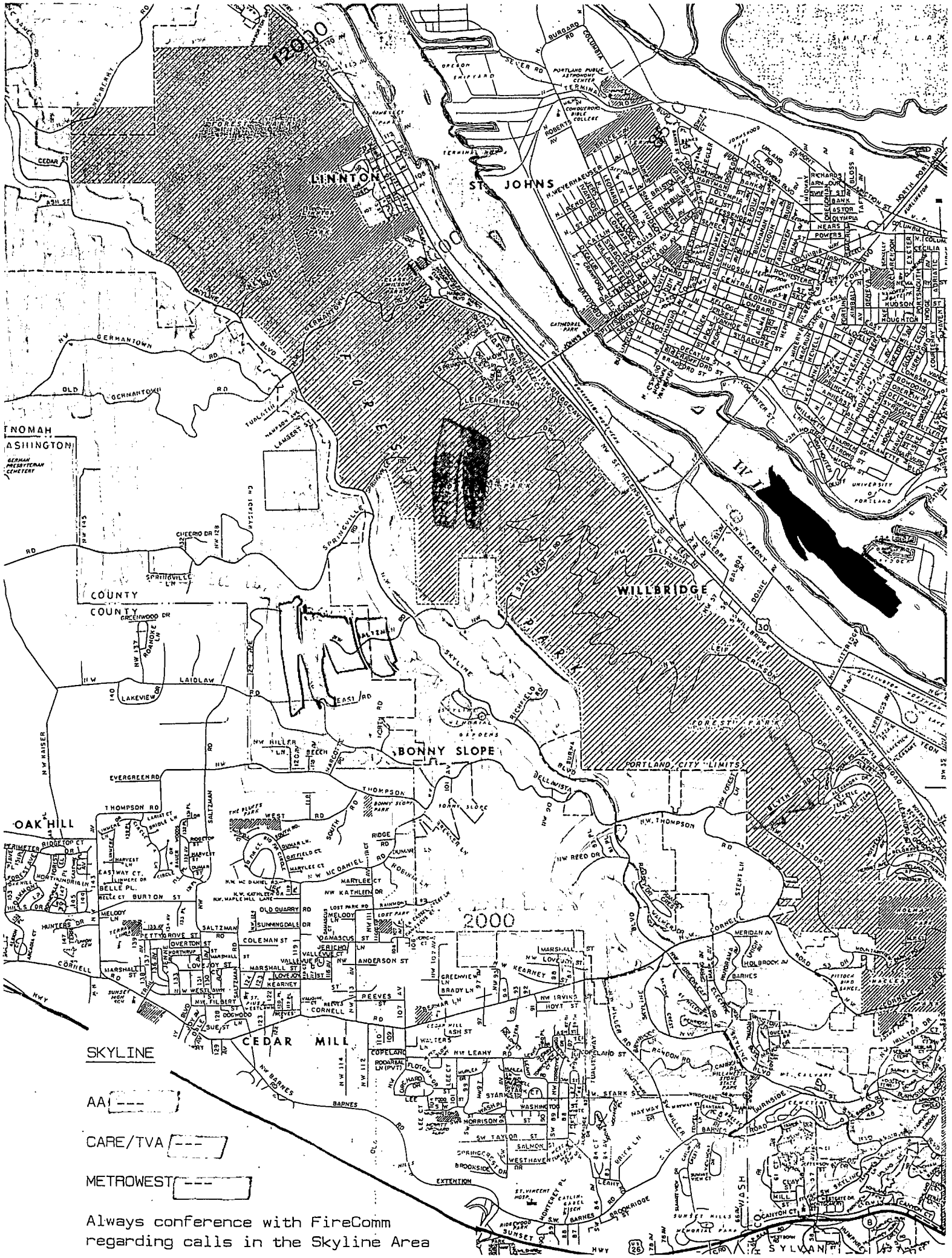
All providers must be in and remain in compliance with all applicable State, County and other governmental laws,ordinances, rules and regulations when providing service. Each provider will be solely responsible for any losses, injuries or other damages it may cause or sustain.

This document shall become effective upon agreement by all parties of its content and shall remain in effect until thirty days written notice is given of intent to withdraw.

| | | |
|---|---|---|
| AA AMBULANCE | CARE AMBULANCE | METRO WEST AMBULANCE |
| Pete Robedeau | Mark Drake | J.D. Fuiten |

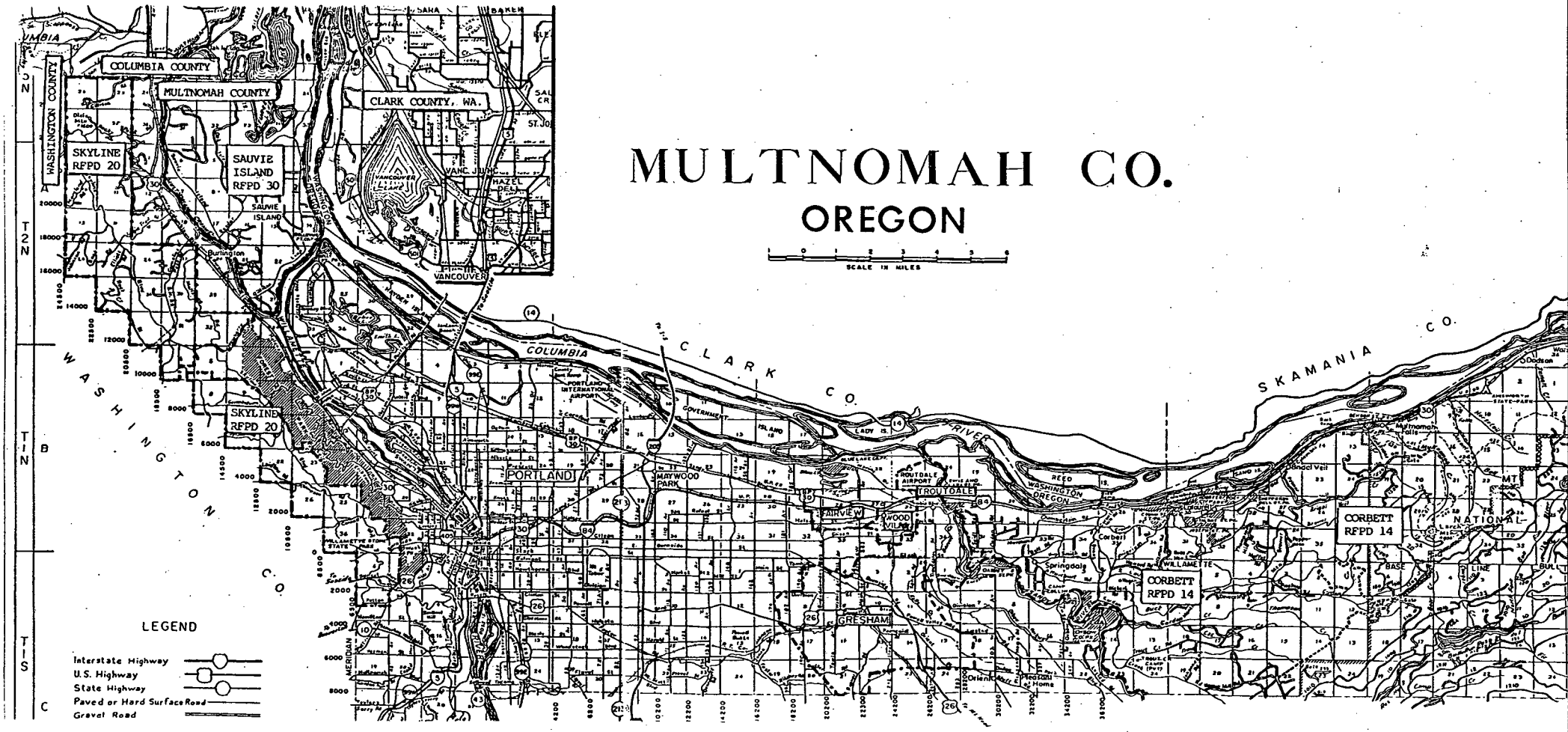
10/88

Rev. 6/89


SKYLINE
AA
CARE/TVA
METROWEST
Always conference with FireComm
regarding calls in the Skyline Area

# ATTACHMENT C

# 9-1-1 FIRE DISTRICTS CITIES




# FIRE DISTRICTS AND CITIES

# ATTACHMENT D

# BOEC CONTRACT

21789

EMS

Exhibit D

OCT 29 1984

# PERFORMANCE AGREEMENT

## BUREAU OF EMERGENCY COMMUNICATIONS

The City of Portland, hereinafter referred to as City, through its Bureau of Emergency Communications, hereinafter referred to as BOEC, and the City-County Emergency Medical Services, hereinafter referred to as EMS, agree as follows:

1. General Scope:

   City agrees to perform call receipt, dispatch, information, associated services and management of the City-County Emergency Communications/Operation Center, hereinafter referred to as Center.

2. Administrative Responsibility:

   The parties hereby agree that the City shall possess and exercise administrative authority and responsibility to manage and maintain the Center, and nothing in this Agreement shall change title to, ownership of, or access to the Center, any of its equipment or any other real and personal property of the parties.

3. Reports and Files:

   EMS shall have access at all times to all of BOEC's manual and automated records and files except that summary reports produced for a specific user agency shall not be disclosed

without written permission of that user. EMS shall have the right to review all computer programs written for or by the BOEC.

City and EMS agree to share with other user agencies all non user-specific information on operational data pertaining to incidents received for or dispatched as part of its periodic information processing requirements. The Center is not prohibited from using user-generated data for annual reporting and budgetary purposes. These shall be in the form of Computer Assisted Dispatch (CAD) and Mobile Data Terminals (MDT) transaction history printouts.

4. Monthly Reports:

During the period of this Agreement, City shall continue to submit monthly management reports to EMS in accordance with a mutually agreed upon format.

5. Data Retention and Dissemination:

All CAD and MDT magnetically recorded data shall be retained for a period of at least twelve months unless an extension is specifically requested. Audio tapes shall be retained for at least seven months unless EMS requests that specific audio tapes be retained for an additional period of time. Any additional costs incurred by City in the storage of CAD and MDT magnetically recorded data and audio tapes beyond the agreed upon time shall be paid by EMS.

6. Special Reports:

Special requests for nonroutine data, not readily retrievable from the CAD system shall be honored when authorized by the chief liaison with BOEC or his designee. Special requests shall be made through the Director or the Operations Manager and shall not exceed 50 cumulative hours per year of staff time, excluding requests for investigation of official complaints and incident information requested during the shift when it occurred, and shall not require the use of resources which are unbudgeted.

7. Security and Privacy:

The confidentiality and privacy of BOEC records and tapes shall be protected under a mutually agreed upon security and privacy plan consistent with relevant laws and regulations. The concerned user agency shall be consulted and give authorization prior to the release of records that are sensitive or otherwise non-routine in nature.

8. Requests for Service:

A. All citizen requests for, or complaints about EMS service, the action taken, and the ultimate disposition of said requests for service will be sent to EMS on a monthly basis.

B. Complaints received by BOEC from citizens concerning EMS members' performance will be referred directly to EMS.

Complaints from citizens about BOEC services received by EMS will be referred directly to BOEC administration.

9. System Maintenance:

Routine maintenance that will interfere with the operation of the primary system shall not be permitted unless a backup system is in place so that there is no change in service to field units. In the event that routine maintenance will require an interruption or significant reduction of service to field units, scheduling of such routine maintenance must receive prior written approval of EMS.

10. Air Time:

Air time usage and procedures on each channel will conform to all applicable Federal and State regulations. The radio log and summaries of hourly traffic shall be available on request. Operational channels will be kept open to ensure the maximum effective air time usage possible.

11. Levels of Service:

A. BOEC shall maintain and support all operations, including computer programs and software, required to provide EMS with highest level of communications service. EMS will be notified in writing at least 30 days before the implementation of any change in the BOEC's level of service or operation procedures which may impact EMS operations. Any such changes which

affect EMS operations will not be implemented without prior EMS approval.

B. EMS agrees to accept the below listed performance specifications, Net 8 service information standards, and response time requirements.

1) Police Communications Telephone Performance Specifications:

(a) "A" System Performance Specification: Overall four week (28) day average - no more than 5.5% of the calls will be delayed more than 20 seconds during any one 28 day reporting period.

(b) "B" System Performance Specifications: During periods of heavy call volume, a "B" telephone answering group may be employed to process non-emergency calls. City will report "B" system statistics regularly to EMS.

C. Response Time:

| Type of Call | Monthly Average |
|---|---|
| Hot Incident & Priority 1 Calls (Code 3) | |
| Create to Send | = 1 minute (Goal) |
| Priority 2 (Code 1) | |
| Create to Send | 1.8 minutes (Goal) |

City agrees to attempt to reduce Priority 2 create to dispatch time average to absolute minimum.

D. Changes which have a major operational or budgetary impact on BOEC shall be implemented upon appropriate consultation with those users who are so impacted and the Commissioner-in-Charge of BOEC. Unanticipated major changes will be subject to a separate service charge mutually agreed upon prior to implementation. However, this in no way implies that the BOEC has the authority to prohibit changes in the operational policy of EMS.

E. When in the opinion of a field supervisor, an incident requires the exclusive use of a radio net, a dispatcher staffed and dedicated channel will be provided.

12. Sworn Personnel:

The maximum number of sworn law enforcement personnel assigned to BOEC on a full-time basis for all user agencies shall not exceed eight (8) sworn personnel assigned by the Portland Police Bureau, and four (4) sworn personnel assigned by Multnomah County. Assignment and transfers of sworn personnel to and from the Center will be arrived at by mutual consultation and agreement between the appropriate parties.

13. Charges for Services:

A. Charges for communications delivered by BOEC to EMS pursuant to this Agreement, unless otherwise provided herein, shall be based upon the proportion of EMS' calls for service dispatched relative to the total number of calls for law enforcement and emergency medical services

dispatched by BOEC on the basis of total dispatches over the 12 month period ending December 31st preceding the budgeted year. EMS reserves the right to verify all Center statistics and computer programs used to generate Center data.

B. Whenever additional users are added to and affect the communications system, charges will reflect the proportion set forth in Paragraph 13A, based on comparable, actual, or estimated data during the initial year and actual BOEC generated data thereafter.

C. Charges for separately contracted Multnomah County services provided to BOEC such as micowave, sworn personnel overtime and background investigations shall be set off against BOEC service charges to sheriff.

14. Billings:

Billings will be sent to EMS every 28 days beginning July 1, 1984. Payments will be due the City of Portland 30 days thereafter. Computations shall be based on statistics from thirteen 28-day periods ending on or about the previous December 31.

A. Penalty:

A penalty on late payments will be assessed at the rate of 1 per cent per month or as otherwise prescribed by the Portland City Code for late payments.

B. Reconciliation:

Reconciliation to actual user costs shall be made quarterly using the most recent previous quarter.

15. Budget and Contract Review:

EMS will have an opportunity to review and comment upon the Center's annual budget prior to its submission to City Council no later than March 31st. EMS will also have the opportunity to comment on any possible amendments to this contract at that time.

16. Report Takers:

EMS shall be responsible for setting its own policy and developing its own procedures regarding the taking of reports in lieu of dispatching field units.

17. Liability:

The City shall defend against any and all claims brought or actions filed against the Center or any of its employees, shall hold County and user agencies harmless from any and all claims of whatever nature which result from any activity of the Center not undertaken at the direction of the County or user agencies or its officers, employees or agents, and shall indemnify the County or user agencies and hold it harmless from any and all liability, loss or damage the County or user agencies may suffer as a result of claims, demands, costs or judgments against the County as a result of any Center activity so undertaken, pursuant to ORS 30.260 et seq. The County or user agencies agree to promptly notify the Center and the City's Bureau of Risk Management of any claims or demands made against the County as a result of any activity of the Center.

18. Term of Agreement:

City and EMS agree that this Performance Agreement shall take effect upon its execution and shall be retroactive to July 1, 1984 and shall continue thereafter indefinitely, but it shall be subject to modification or amendment by the parties as they may mutually agree in writing. It may be cancelled by either party at the end of the preceding fiscal year upon 90 days prior written notice.

19. Notices:

All notices pursuant to the terms of this Agreement shall be addressed as follows:

Notice to City of Portland:

Director
Bureau of Emergency Communications
2960 SE 103rd Drive
Portland, Oregon 97266

Notice to Emergency Medical Services:

Director
Emergency Medical Services
426 SW Stark Street
Portland, Oregon 97204

IN WITNESS WHEREOF, the County acting by and through its County Executive, and the City, acting by and through its Commissioner in Charge of BOEC and Auditor and pursuant to Ordinance No. _____, have caused this agreement to be executed on the dates noted below.

MULTNOMAH COUNTY, OREGON

By Dennis Buchanan
Dennis Buchanan,
County Executive

Date: 10-1-84

APPROVED AS TO FORM:

Peter Kasting
John B. Leahy
County Counsel

CITY OF PORTLAND, OREGON

By _____
Commissioner Mildred A. Schwab

Date: _____

APPROVED AS TO FORM:

SIGNED

_____
Christopher P. Thomas
City Attorney

By SIGNED
Auditor Jewel Lansing

Date: _____

156695

Contract #: 21480

162448

26339

EXHIBIT "A"

BUREAU OF EMERGENCY COMMUNICATIONS
INTERGOVERNMENTAL AGREEMENT

JUL 10 1990

THIS AGREEMENT is made and entered into by and between the CITY OF PORTLAND, party as a municipal corporation of the State of Oregon, hereinafter referred to as "City," MULTNOMAH COUNTY, a political subdivision of the State of Oregon, hereinafter referred to as "County," the CITY OF GRESHAM a municipal corporation of the State of Oregon, and the CITY OF TROUTDALE, a municipal corporation of the State of Oregon, pursuant to the authority granted in Chapter 190 of Oregon Revised Statutes.

W I T N E S S E T H:

RECITALS

WHEREAS, the City of Portland and the County have established a combined City-County emergency call receiving, dispatch and operations center at Kelly Butte known as the BUREAU OF EMERGENCY COMMUNICATIONS, hereinafter referred to as the "Center;" and

WHEREAS, the Center was equipped by, and the Microwave System purchased through, federal grants and the expenditure of City and County monies, resulting in both City and County having a proprietary interest in it, and was developed as a joint and consolidated City-County venture; and

WHEREAS, it is in the public interest to continue to own the Center jointly; and

WHEREAS, agencies of the City of Gresham and the City of Troutdale have used the services of the Center but the cities themselves have not been parties to this agreement; and

WHEREAS, it is desirable that the Cities of Gresham and Troutdale should be parties to this enabling agreement; and

WHEREAS, the City and other user jurisdictions have agreed that the Center will carry out its service functions to the community without regard to the geographical boundaries of the respective parties; and

WHEREAS, the City, and other user jurisdictions must provide for the management, operation and maintenance of the Center and have agreed that the City will control such functions on a day-to-day basis; and

WHEREAS, the City, and other user jurisdictions have agreed that the operations of the Center shall be carried out by nonsworn personnel; and

WHEREAS, Emergency Medical Dispatching was added to the Center as a new function December 9, 1980; and

WHEREAS, County-wide emergency telephone call ("911") receipt and processing for fire, police and ambulance services was implemented in the Center November 9, 1981; and

WHEREAS, ORS 401.710, et seq. (HB 3178, 1981) has, as of January 1, 1982, preempted and replaced the Multnomah County telephone tax which provided the financing base for these 911 services; and

WHEREAS, the orderly continuation of these 911 services and their financial support from state telephone tax revenues is in the mutual best interest of the City, County, and other user jurisdictions; and

WHEREAS, the Center's equipment and other personal property which makes possible the operation of the Center is purchased with monies collected for charges for service; and

WHEREAS, for executive and administrative purposes the Center will function as a bureau within the City;

NOW, THEREFORE, with the Center operating as generally indicated in the foregoing RECITALS and in consideration of the terms, conditions and convenants contained hereinbelow, the parties hereto agree as follows:

1. MISSION STATEMENT

The mission of the Center is to receive and process emergency telephone calls from the citizens of the City, and other user jurisdictions, to dispatch emergency services, and to provide quarters and facilities for command during emergency operations. For purposes of this agreement, the term "Users" means agencies of the jurisdictions that are parties to this agreement. Users shall have performance agreements as provided in Section 5 of this Agreement. The Center shall function as the Emergency Telephone system as defined in ORS 401.710, et seq., and, as such, shall:

a. Receive, process and dispatch calls for law enforcement services utilizing equipment, procedures and staffing levels to ensure the shortest response time and maximum safety to citizens consistent with effective law enforcement management.

b. Receive, process and dispatch calls for emergency medical response in support of the aims and intent of the County's Emergency Medical Services Code and rules and City Ordinance 150180.

c. Receive and process calls for Fire Service to Portland Fire Alarm Dispatch.

Subject to the conditions that there is no reduction or change in service levels and there is no increase in cost to the parties to this agreement thereby, the same or similar emergency services may be performed for other government agencies pursuant to other agreements between the City and other user agencies.

2. User-City Relationships

The Center is a joint User-City operation, the day-to-day management, operation and fiscal control of the Center is the responsibility of the City. The Center and Center's manual and automated records and files shall be accessible as provided in respective performance agremeents to authorized representatives of the City and user jurisdictions. The day-to-day administration of the Center will be the responsibility of a Civilian Director who is chosen by the City in consultation with the user agencies. Consultation shall include, but not be limited to, the following: system users shall develop a job description for the Civilian Director to be forwarded to the Director of the Portland Bureau of Personnel. At least one member of the interview panel to choose a Civilian Director will be chosen from among the non-City members of the User Board. When a civil service list is established for a Civilian Director, such list will be shared with user jurisdictions for review and comment. The Director shall report to the City but may not be dismissed without consultation with the User Board.

3. User Board

A user board, the organization and membership of which will be provided for in the performance agreements adopted by jurisdictions which are parties to this agreement is established. The user board will review proposed policy changes and advise the Center Director and/or the Commissioner in charge of the Bureau and the Executive authorities of jurisdictions with participating user agencies regarding policy changes and other matters which may be under consideration by the jurisdictions board.

4. Emergency Operations

The City, and other users shall have access to the Center to direct and dispatch such emergency operations as circumstances may require. Although the City has the administrative responsibility and authority for the management of the Center, the parties shall prepare, agree upon and abide by such procedures and protocols necessary for the joint emergency management use of the Center during emergencies. The City's emergency manager shall have the responsibility for the development of the protocols. The protocols shall include coordination with the Center's director.

5. Performance Agreement(s)

The City and the jurisdictions shall negotiate separate performance agreement(s) relating to the provision of various types of emergency telephone call processing services (911) and other services by the City to the Jurisdictions. These performance agreement(s) will contain a description of the specific types of service to be provided by the Center to the Jurisdictions, including, but not limited to, systems management, service levels, management information reports, data request processing, system and data security and privacy, service costs, and data retention and dissemination.

6. Center Personnel

The Center shall operate with nonsworn personnel. All nonsworn personnel performing emergency call processing and communication services shall be employees of the City. The parties agree that the Director of the Center shall possess and exercise administrative and management authority over all nonsworn personnel assigned to the Center.

7. Budget

(a) The City and Jurisdictions who are parties to this agreement, through their budget processes, will provide adequate resources consistent with the Center's mission. The Center shall be an appropriation unit of the City and funds necessary to operate the Center shall be appropriated by the City. The Jurisdictions reserve

the right to participate in the Center's budget process. Prior to submission for City budget review, the user jurisdictions shall receive copies of all documents relating to the Center's budget in sufficient time to review and comment upon said documents. The user jurisdictions will pay their agreed-upon proportionate share of the expenses of operating the Center as noted in the performance agreement(s) referred to in Part 5, then in effect between the parties. The performance agreements shall stipulate a formula used to determine costs to each party. The formula shall be uniformly applied to all user agencies. In the event the parties cannot agree to a budget for the Center, the City or other user jurisdictions shall have the right to terminate this agreement insofar as it regulates and provides for a relationship between the City and a user jurisdiction as provided in section 13 of this agreement.

The Center's budget will reflect the total costs incurred as a result of the Center's operation, including the use and maintenance of the County's Microwave System. The budget will provide a detailed cost analysis of those costs to be incurred in the planning, installation, operation and improvement of the emergency telephone system (911).

The costs incurred by the County for the Center's use and the County's maintenance of the County's Microwave shall be reflected in the Center's quarterly billing in accordance with the agreed-upon formula in the performance agreement then in effect between the parties. Each quarter, the County shall submit to the Director a report of all costs incurred by the County in support of the center.

8. Property Settlement Upon Termination

a) In the event this agreement is terminated, the City and Users shall mutually agree upon a monetary settlement that will compensate Users for their interests in Center equipment.

b) In recognition of City's proprietary interest in the County's microwave system, the County will, in the event of termination, provide the City with the continued use of the microwave system on a contractual basis. Charges for the City's use of the County's microwave system shall be based on the City's proportionate share of the system's operation and maintenance cost. If the County discontinues use of the microwave system, the City shall have first right to purchase the system at its fair market value.

c) If the parties cannot agree upon a monetary settlement for any such Center equipment that compensates the user jurisdictions for their interests therein, then the matter of the respective interests in such equipment or the fair market value thereof shall be determined pursuant to ORS 190.710 et seq. in consideration of the provisions of this section (number 8) of this agreement.

9. Liability

The City shall defend against any and all claims brought or

actions filed against the Center or any of its employees, shall hold Jurisdictions harmless from any and all claims of whatever nature which result from any activity of the Center not undertaken at the direction of a user or its officers, employees or agents, and shall indemnify the User and hold it harmless from any and all liability, loss or damage the User may suffer as a result of claims, demands, costs or judgments against the User as a result of any Center activity so undertaken, pursuant to ORS 30.260 et seq. Each Jurisdiction agrees to promptly notify the Center and the City's Bureau of Risk Management of any claims or demands made against any user as a result of any activity of the Center.

10. Limitations

Nothing contained in this Agreement shall be construed as a grant of any legislative power by either the City, the County, or other users, to any party or to the Center.

11. Construction

This Agreement shall be liberally construed to effect the purposes expressed herein.

12. Termination of Previous Agreements

The City and County executed the "Emergency

Communications/Operations Center Agreement" on December 19, 1974, and amending agreements on September 4, 1975, November 16, 1976, August 16, 1979, and December 15, 1983 which agreements established a combined City-County emergency call receiving, dispatch and operations center at Kelly Butte (hereinafter referred to as "Agreements"). Because the parties consider it to be in their mutual interest for said Agreements to be terminated, it is agreed between the parties that said Agreements are terminated as of the date hereof and only those rights, convenants, obligations, duties and responsibilities concerning the Center that are incorporated into this Agreement are in effect between the parties.

13. Term, Modification and Review of Contract

a) This Agreement shall take effect on the last day of signature by the authorized representatives of the parties here to, and shall continue thereafter indefinitely, but it shall be subject to modification or amendment as they may mutually agree in writing as provided in subsection d) of this section.

b) This contract may be terminated by mutual consent of the parties.

c) Any party may cease to participate in this Agreement by providing all other parties with written notice at least six (6) months

prior to July 1st of the year in which the party wishes to cease participating.

d) Any party wishing to amend the Agreement shall notify each of the other parties by providing a statement of issues and provisions which the notifying party wishes to modify and a date for the initiation of negotiation not sooner than 30 days not later than 90 days after the date of notification.

e) This Agreement shall be reviewed by the parties to this Agreement at least once every three years beginning with the date of execution of this agreement.

14. Nonassignment

Neither the City nor the County nor any other user jurisdictions may assign any function, responsibility or asset of the Center to any other governmental agency nor to any person or entity without the written consent of the other parties.

15. Notices

All notices pursuant to the terms of this Agreement shall be addressed as follows:

Notices to City - Commissioner in Charge
1220 S. W. Fifth Avenue
Portland, Oregon 97204

Notices to County -

1. Director, Emergency Medical Services
426 S. W. Stark, Second Floor
Portland, Oregon 97204

2. Sheriff, Multnomah County
Hansen Building
12240 N. E. Glisan
Portland, Oregon 97230

3. County Chair
Room 134 Multnomah County Courthouse
1021 S. W. 4th Avenue
Portland, Oregon 97204

Notices to City of Gresham- Gresham City Manager
1333 N. W. Eastman Parkway
Gresham, Oregon 97030

Notices to City of Troutdale Troutdale City Manager
104 S. E. Kibling
Troutdale, Oregon 97060

IN WITNESS WHEREOF, the County, acting by and through its County Executive, the City of Gresham, acting by and through its Mayor, and the

City of Troutdale, acting by and through its Mayor, and the City of Portland, acting by and through its Commissioner in charge of the Center and Auditor and pursuant to Ordinance No. _____, have caused this Agreement to be executed on the dates noted below.

MULTNOMAH COUNTY, OREGON

By Gladys McCoy
Gladys McCoy, County Chair

Date: 6/26/90

REVIEWED:

By
Laurence Kressel, County Counsel

By Bob Skipper
Bob Skipper, Sheriff

Date: May 24, 1990

CITY OF PORTLAND, OREGON

By Mick Kopf
Commissioner

APPROVED AS TO FORM:

By R. William Scott
City Attorney

Date: 7-6-90

By Barbara Clark
City Auditor

Date: 7/10/90

CITY OF TROUTDALE, OREGON

By _____
Mayor

APPROVED AS TO FORM:

By _____
Jim Jennings, City Attorney

Date: 6-28-90

By _____
City Manager

Date: 6-28-90

CITY OF GRESHAM, OREGON

By _____
Mayor

APPROVED AS TO FORM:

By _____
Thomas Sponsler, City Attorney

Date: 7/2/90

By _____
City Manager

Date: 6/29/90

21480

162448

ORDINANCE NO. 162448

*Authorize an intergovernmental agreement between the City, Multnomah County, Gresham and Troutdale for the provision of emergency dispatch and related services by the Bureau of Emergency Communications. (Ordinance)

The City of Portland ordains:

Section 1. The Council finds:

1. The Bureau of Emergency Communications (BOEC) provides emergency dispatch and related services to the County and other cities within Multnomah County.

2. The users of BOEC services currently contract with the City based on a Performance Agreement entered into in 1987 and subsequently amended in 1988. This agreement deals with operating policies, reporting requirements and billing methodology and procedures.

3. Broader policy issues including personnel policies, role of a user's committee, and management responsibilities are not adequately addressed in the Performance Agreements.

4. The intergovernmental agreement attached to this ordinance and marked Exhibit A addresses the broad policy issues pertaining to the operation of BOEC.

5. Multnomah County and the cities of Gresham and Troutdale have already ratified this agreement through their elected, legislative bodies.

6. Such agreements are authorized pursuant to Chapter 190 of Oregon Revised Statutes and Section 2-105(a) 4 of the Charter of the City of Portland.

21480

162448

# ORDINANCE No.

NOW, THEREFORE, the Council directs:

a. The Commissioner of Public Safety and the City Auditor to execute an intergovernmental agreement with Multnomah County, and the cities of Gresham and Troutdale for the provision of emergency dispatch and related services substantially in the form of the attached Exhibit A.

Section 2. The Council declares that an emergency exists in order to immediately protect and preserve the public health, safety and welfare by insuring the continuity of emergency dispatch and related services within the Portland area; therefore, this Ordinance shall be in force and effect from and after its passage by Council.

Passed by the Council, OCT 12 1989

BARBARA CLARK
Auditor of the City of Portland
By Mary Flanagan Deputy

Commissioner Dick Bogle
David Logsdon:ug
October 5, 1989

# ATTACHMENT E
# EMS MEDICAL DIRECTOR
# POSITION DESCRIPTION

March 5, 1993

# EMS MEDICAL DIRECTOR
(Exempt/Unclassified)

## DEFINITION

To provide medical supervision for all emergency medical technicians providing pre-hospital patient care within the County, and to provide medical direction to all components of the emergency medical services system.

## SUPERVISION RECEIVED AND EXERCISED

Receives administrative direction from the Director, Health Department.

Exercises technical supervision over emergency medical technicians.

**EXAMPLES OF DUTIES** - Duties may include, but are not limited to, the following:

Develop uniform standards of emergency care within the County; solicit input regarding standards from physicians, nurses, emergency medical technicians, ambulance providers, first responder providers, hospitals, government agencies, and other interested organizations and individuals.

Accompany emergency medical technicians during the performance of medical duties for the purpose of supervision, education, and system evaluation.

Promulgate and revise, as necessary, medical care standards for: priority dispatch/pre-arrival instructions; ALS and BLS patient care protocols; hospital destination criteria; accreditation requirements for pre-hospital care personnel beyond State standards; staffing, equipment, supplies, and operational criteria for first response vehicles, ground ambulances, air ambulances, specialized critical care and mobile intensive care ambulances, and non-emergency patient transport vehicles for incorporation into licensing requirements; response times for first responders and transporting emergency ambulances; the transferring of patients between hospitals; and the provision of medical services in areas of public assembly.

Set standards for the provision of on-line medical control.

Develop and supervise a quality management program to ensure continuous improvement of all levels of care within the emergency medical services delivery systems.

Set standards and objectives, and participate in the continuing education and training of pre-hospital care personnel.

Approve emergency medical technicians for practice in the County. Establish policies and due process for the limiting of practice of emergency medical technicians, including probation, suspension, or revocation of physician orders.

Perform related duties as assigned.

## QUALIFICATIONS

Knowledge of:

Principles, practices, and procedures of emergency medicine.

Principles, practices, and procedures of pre-hospital patient care.

Principles, practices, and procedures of public health.

**QUALIFICATIONS** (Continued)

Knowledge of: (Continued)

Federal, state, and local laws and regulations governing the practice of emergency medicine and pre-hospital emergency medical services.

Principles of supervision, training, and performance evaluation.

Ability to:

Effectively administer a variety of emergency medical care activities.

Interpret and apply applicable federal, state, and local laws, rules, regulations, and policies governing emergency medical services.

Establish and maintain cooperative working relationships with those contacted in the course of work.

Communicate clearly and concisely, both orally and in writing.

Gain cooperation through discussion and persuasion.

Supervise, train, and evaluate assigned staff.

Experience and Training Guidelines:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Three years of increasingly responsible emergency medical services experience, including system medical direction and emergency medical technician supervision.

**AND**

Training:

Graduation from an accredited medical school and completion of an emergency medicine residency.

License or Certificate:

Possession of, or ability to obtain, an appropriate and valid license to practice medicine in the State of Oregon.

Board certification in emergency medicine.

# ATTACHMENT F

# MEDICAL RESOURCE HOSPITAL

# CONTRACT

MULTNOMAH COUNTY
AND
OREGON HEALTH SCIENCES UNIVERSITY
EMERGENCY MEDICAL SERVICE AGREEMENT

THIS INTERGOVERNMENTAL AGREEMENT is made and entered into this 29 day of June, 1992, by and between MULTNOMAH COUNTY, a political subdivision of the State of Oregon (hereinafter referred as "COUNTY"), and the OREGON HEALTH SCIENCES UNIVERSITY, acting by and through the Oregon State Board of Higher Education on behalf of the State of Oregon (hereinafter referred to as "STATE"),

WITNESSETH:

WHEREAS, COUNTY's Health Department requires services which Contractor is capable of providing, under terms and conditions hereinafter described, and

WHEREAS, STATE is able and prepared to provide such services as COUNTY does hereinafter require, under those terms and conditions set forth; now, and

WHEREAS, Multnomah County Code (MCC) and Emergency Medical Services (EMS) rules require a single medical direction point, a single point of data collection, and research, therefore

IN CONSIDERATION of those mutual promises and the terms and conditions set forth hereafter, the parties agree as follows:

1. Term.

The term of this Agreement shall be from July 1, 1992, to and including June 30, 1993, unless sooner terminated under the provisions hereof.

2. Services.

A. STATE shall furnish on-line medical direction and comply with the following performance indicators:

1) All calls requesting on-line medical direction must be answered by the appropriate physician in fifty-five (55) seconds at least ninety percent (90%) of the time.

2) STATE must provide a process to assure that staff physicians are knowledgeable of the protocols. This process may include but not be limited to: educational sessions, tests, and inservice for protocol updates. The process must be approved by COUNTY.

3) STATE will develop a process for Standard Operating Procedures (SOP) adoption which governs on-line medical direction. COUNTY will review operating procedures prior to their implementation. STATE will adhere to the SOPs at all times. Failure to provide these SOP's for COUNTY review is a breach of Contract.

4) A plan must be developed and approved by the COUNTY which details a problem solving process for any complaint or issues presented to the STATE's medical director or communications coordinator. This plan must assure a complaint resolution which will be furnished to the COUNTY no more than thirty (30) days from date of complaint filing.

5) The STATE will implement a quality assurance/quality improvement process that reviews standards, operations, and performance, identifying problems and their solutions. This process will allow for input from COUNTY, and will report summary data and findings to the Medical Advisory Board Quality Assurance Subcommittee on a quarterly basis.

6) The STATE will participate in the COUNTY's quality assurance process by providing a staff member, when requested, and by providing medical resource hospital data and information on a timely basis as requested by the Quality Assurance Committee.

7) The Medical Resource Hospital medical director shall meet with the Multnomah County physician supervisors at their regularly scheduled meetings to discuss online medical control issues and exchange information.

B. The STATE shall provide trauma communications coordination and comply with the following performance indicators. The trauma communications coordination function is being provided at the request of the Area Trauma Advisory Board (ATAB I).

1) All trauma communication coordination requests must be answered within ten (10) seconds ninety percent (90%) of the time.

2) The STATE must develop a process which allows for Standard Operating Procedures (SOP) adoption and includes the Area Trauma Advisory Board and COUNTY review prior to implementation. The STATE will adhere to the SOPs at all times.

3) The STATE must provide a plan which details a problem solving process for any complaint. The plan must assure that the STATE has an outcome from the complaint which will be furnished to the COUNTY no more than thirty (30) days from the date of complaint filing.

C. The state will assist in provision of inservice training to emergency medical technicians in Multnomah County and comply with the following performance indicators:

1) The number of inservices which will be offered in each year is twelve (12), but is adjustable to more or fewer at COUNTY and STATE discussion.

2) The coordination of those courses will be carried out through a joint arrangement with the STATE, COUNTY, and other hospitals in Multnomah County.

3) STATE services required are that cases and case summary for case review will be provided. One MRH physician will be in attendance to provide the case review.

D. STATE shall be responsible for central data collection for medical direction and trauma communication coordination activities. STATE shall comply with the following performance indicators:

1) STATE is to collect this data from Emergency Medical Technicians at the time that they contact STATE for on-line medical direction or Trauma Communications Coordination (TCC) functions.

2) The specific data points to be collected are referenced in appendix A.

3) Raw data points are to be provided to COUNTY for monthly periods. These will be in the form of diskettes in dBase 3 form, provided no later than the 30th of the following month.

4) The data points as described in appendix A may be modified upon the concurrence of COUNTY and STATE.

5) STATE shall provide a trauma communications center monthly report which complies with the format in appendix B.

6) The data (voice tapes, written reports, and all data points collected) is the sole property of COUNTY, which has the sole authority for release of the data. COUNTY shall prescribe guidelines to be used for the release of the data and STATE must follow these guidelines. It is the intent of guidelines that they facilitate and not impede academic research (see appendix C).

7) STATE shall also provide COUNTY proof of Joint Commission of American Hospitals (JCAH) accreditation and that it meets or exceeds all requirements of MCC 6.31.060 (A-6) and rules adopted pursuant thereto.

3. Compensation.

A. COUNTY agrees to pay STATE $10,200 based on the following terms:

1) COUNTY agrees to maintain MRH radio base station, six UHF portable radios, and the multichannel recorder used to provide MRH communications.

2) One quarter advance of the total amount upon execution of this Agreement, balance payable in three (3) quarterly installments upon receipt of billings from STATE.

3) Expenditure reports are to be sent to the EMS Director, Health Department, 426 SW Stark, 9th Floor, Portland, Oregon 97204.

B. COUNTY certifies that either federal, state or local funds are available and authorized to finance the costs of this Agreement. In the event that funds cease to be available to COUNTY in the amounts anticipated, COUNTY may terminate or reduce Agreement funding accordingly. COUNTY will notify STATE as soon as it receives notification from funding source. Reduction or termination will not effect payment for accountable expenses prior to the effective date of such action.

C. All final billings affecting Agreement payments must be received within thirty (30) days after the end of the Agreement period. Agreement payments not triggered or billed within this specified time period will be the sole responsibility of STATE.

4. Contractor is Independent Contractor

A. STATE is an independent contractor and is solely responsible for the conduct of its programs. STATE, its employees and agents shall not be deemed employees or agents of COUNTY.

B. STATE shall defend, hold and save harmless COUNTY, its officers, agents, and employees from damages arising out of the tortious acts of STATE, or its officers, agents, and employees acting within the scope of their employment and duties in performance of this Agreement subject to the limitations and conditions of the Oregon Tort Claims Act, ORS 30.260 through 30.300, and any applicable provisions of the Oregon Constitution.

C. COUNTY shall defend, hold and save harmless STATE, its officers, agents, and employees from damages arising out of the tortious acts of COUNTY, or its officers, agents, and employees acting within the scope of their employment and duties in performance of this Agreement subject to the limitations and conditions of the Oregon Tort Claims Act, ORS 30.260 through 30.300, and any applicable provisions of the Oregon Constitution.

5. Workers Compensation

A. STATE shall maintain Workers' Compensation insurance coverage for all non-exempt workers, employees, and subcontractors either as a carrier insured employer or a self-insured employer as provided in Chapter 656 of Oregon Revised Statutes.

6. Contractor Identification

STATE shall furnish to COUNTY its employer identification number, as designated by the Internal Revenue Service.

7. Subcontracts and Assignment

STATE shall neither subcontract with others for any of the work prescribed herein, nor assign any of STATE'S rights acquired hereunder without obtaining prior written approval from COUNTY. COUNTY by this Agreement incurs no liability to third persons for payment of any compensation provided herein to STATE.

8. Access to Records

A. STATE agrees to permit authorized representatives of COUNTY, and/or the applicable Federal or State government audit agency to make such review of the records of the STATE as COUNTY or auditor may deem necessary to satisfy audit and/or program evaluation purposes. STATE shall permit authorized representatives of COUNTY Health Department to site visit all programs covered by this Agreement. Agreement costs disallowed as the result of such audits, review or site visits will be the sole responsibility of STATE. If a Agreement cost is disallowed after reimbursement has occurred, STATE will make prompt repayment of such costs.

9. Waiver of Default.

Waiver of a default shall not be deemed to be a waiver of any subsequent default. Waiver of breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the provisions of this Agreement.

10. Adherence to Law

A. STATE shall adhere to all applicable laws governing its relationship with its employees, including but not limited to laws, rules, regulations and policies concerning workers' compensation, and minimum and prevailing wage requirements.

B. STATE shall not unlawfully discriminate against any individual with respect to hiring, compensation, terms, conditions or privileges or employment, nor shall any person be excluded from participation in, be denied the benefits or, or be subjected to discrimination under any program or activity because of such individual's race, color, religion, sex, national origin, age or handicap. In that regard, STATE must comply with all applicable provisions of Executive Order Number 11246 as amended by Executive Order Number 11375 of the President of the United States dated September 24, 1965, Title VI of the Civil Rights Act of 1964 (42 U.S.C. §2000(d)) and Section 504 of the Rehabilitation Act of 1973 as implemented by 45 C.F.R. 84.4. STATE will also comply with all applicable rules, regulations and orders of the Secretary of Labor concerning equal opportunity in employment and the provisions of ORS Chapter 659.

11. Modification

A. In the event that COUNTY's Agreement obligation is amended by a federal or state initiated change, COUNTY shall amend this Agreement through written notification of changes sent to STATE by mail. STATE shall sign the amendment and return to COUNTY within twenty (20) working days of receipt of COUNTY's notification document.

B. Any other amendments to the provisions of this Agreement, whether COUNTY or STATE initiated, shall be reduced to writing and signed by both parties.

12. Integration

This Agreement contains the entire Agreement between the parties and supersedes all prior written or oral discussions or Agreements.

13. Record Confidentiality

STATE agrees to keep all client records confidential in accordance with State and Federal statutes and rules governing confidentiality.

14. Early Termination

A. Violation of any of the rules, procedures, attachments, or conditions of this Agreement may, at the option of either party, be cause for termination of the Agreement and, unless and until corrected, of funding support by COUNTY and services by STATE, or be cause for placing conditions on said funding and/or services, which may include withholding of funds. Waiver

by either party of any violation of this Agreement shall not prevent said party from invoking the remedies of this paragraph for any succeeding violations of this Agreement.

B. This Agreement may be terminated by either party by sixty (60) days written notice to the other party.

C. Immediate termination or amendment by COUNTY may occur under any of the following conditions; or

1) Upon notice of denial, revocation, suspension or nonrenewal of any license or certificate required by law or regulation to be held by STATE to provide a service under this Agreement.

2) Upon notice if STATE fails to start-up services on the date specified in this Agreement, or if STATE fails to continue to provide service for the entire Agreement period.

3) Upon notice to COUNTY of evidence that STATE has endangered or is endangering the health and safety of clients/residents, staff, or the public.

D. Payment to STATE will include all services provided through the day of termination and shall be in full satisfaction of all claims by STATE against COUNTY under this Agreement.

E. Termination under any provision of this section shall not affect any right, obligation or liability of STATE or COUNTY which accrued prior to such termination.

15. Litigation.

A. STATE shall give COUNTY immediate notice in writing of any action or suit filed or any claim made against STATE or any subcontractor of which STATE may be aware of which may result in litigation related in any way to this Agreement.

16. Oregon Law and Forum

This Agreement shall be construed according to the law of the state of Oregon.

17. Certification Regarding Lobbying

A. No federal appropriated funds can be or will be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or an employee of any agency, a member of congress, an officer or employee of congress, or an employee of a member of congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

B. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of congress, an officer or employee of congress, or an employee of a member of congress in connection with this contract, the contractor shall complete and submit Standard Form-111, "Disclosure Form to Report Lobbying," in accordance with its instructions.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly appointed officers the date first written above.

OREGON HEALTH SCIENCES UNIVERSITY

By David C. Bunnell
for William C. Neland
Associate Vice President
for Administration

Date 6/29/92

93-6001786W
Federal I.D. Number

MULTNOMAH COUNTY, OREGON

By Gladys McCoy
Gladys McCoy
Multnomah County Chair

Date 6/11/92

HEALTH DEPARTMENT

By: Billi Odegaard
Billi Odegaard, Director

Date: 5/19/92

EMERGENCY MEDICAL SERVICES

By:
William Collins, Director

Date: 5-8-92

REVIEWED:

LAURENCE KRESSEL, County Counsel
for Multnomah County, Oregon

By:

Date: 6-1-92

**RATIFIED**
Multnomah County Board
of Commissioners

C-8 June 11, 1992

# ATTACHMENT G

# AMBULANCE EQUIPMENT

# ALS

# BLS

# Emergency Medical Services

**Multnomah County**

## Ambulance Inspection Form
## 1992-1993

Agency _____ Unit Number _____ Vehicle _____

Inspected By _____ At _____ Date _____

Service Level: ( ) ALS ( ) ALS/BLS ( ) BLS

Crew 1 _____ Certification Number _____

ODL: ( ) current ACLS: ( ) current BCLS: ( ) current

Crew 2 _____ Certification Number _____

ODL: ( ) current ACLS: ( ) current BCLS: ( ) current

Cultures: ( ) No ( ) Yes Source: _____

**Multnomah County Required Equipment**

| | | Minimum Required* | Critical* | On Board* |
|---|---|---|---|---|
| 1 | Adult long backboard with 4 restraining devices | 2 | 1 | |
| 2 | Extremity restraining devices; (e.g., Flexcuffs) | 8 | 4 | |
| 3 | Adult intubation stylettes | 2 | 1 | |
| 4 | Pediatric intubation stylettes | 2 | 1 | |
| 5 | Chest decompression kit | 2 | 1 | |
| 6 | Tracheal lumen airway device, Pertrach OR Nutrake | 1 | 1 | |
| 7 | Adult resuscitation bag with reservoir, disposable | 2 | 1 | |
| 8 | Infant resuscitation bag with reservoir, disposable | 2 | 1 | |
| 9 | Endotracheal tubes; ____2.5, ____3.0, ____3.5, ____4.0, ____4.5, ____5.0, ____5.5, ____6.5, ____9.0 | 2 ea. | 1 ea. | |
| 10 | Endotracheal tubes; ____7.0, ____7.5, ____8.0, ____8.5 | 3 ea. | 1 ea. | |

**Health Department**
**426 S.W. Stark Street—9th Floor · Portland, Oregon 97204 · 248-3220 · Fax 248-5453**

AN EQUAL OPPORTUNITY EMPLOYER

| | | Minimum Required* | Critical* | On Board* |
|---|---|---|---|---|
| 11 | Nasopharyngeal airways; ____26, ____28, ____32 (or equivalent sizes) | 2 ea. | 1 ea. | |
| 12 | Adult ECG monitoring electrode sets | 12 | 4 | |
| 13 | Pediatric ECG monitoring electrode sets | 4 | 2 | |
| 14 | Pediatric defibrillation paddles | 1 | 1 | |
| 15 | Conductive gel<br>OR Conductive pads (Defib pads) | 2 tube<br>6 sets | 1<br>3 | |
| 16 | Pacing patches<br>AND Pacing cables; IF PACE CAPABLE | 3 sets<br>2 | 1<br>1 | |
| 17 | 60 cc syringe with catheter tip | 2 | 0 | |
| 18 | Nasogastric tubes; ____14 Fr, ____18 Fr | 2 each | 0 | |
| 19 | Syringes, sterile; ____1 cc, ____3 cc, ____6 cc, ____12 cc, ____20 cc | 5 each | 2 each | |
| 20 | Needles, sterile; ____Vacuum tube, ____20 Ga, ____18 Ga, ____18 Ga FILTER | 5 each | 2 each | |
| 21 | 2" Adhesive type tape, rolls | 2 | 1 | |
| 22 | Cold Packs, chemical | 4 | 0 | |
| 23 | OB kits, disposable | 2 | 1 | |
| 24 | Adult 3-chambered Pneumatic Anti-Shock Garment | 1 | 0 | |
| 25 | Triangular Bandages | 4 | 0 | |
| 26 | K-Y® type lubricant<br>OR Unit dose K-Y® type lubricant | 2<br>10 | 1<br>4 | |
| 27 | Exam gloves, latex OR vinyl; each<br>____Large, ____Medium, ____Small | 1 box | 15 pr. | |
| 28 | Blood glucose meter device; (e.g., Exactech®) AND<br>Blood glucose meter strips | 1<br>10 | 1<br>2 | |
| 29 | Waterless antiseptic hand cleaner | 2 | 1 | |
| 30 | Balanced salt solution, plastic containers;<br>____500 cc, ____1000 cc | 10 each | 4 | |
| 31 | Micro drip administration sets | 10 | 4 | |

| | | Minimum Required* | Critical* | On Board* |
|---|---|---|---|---|
| 32 | Regular administration sets | 10 | 4 | |
| 33 | Blood pump administration sets | 4 | 1 | |
| 34 | Intravenous control devices, (e.g., Soluset® or Dial-a-flow®) | 4 | 2 | |
| 35 | Intravenous catheter needles; ____24 Ga, ____20 Ga, ____18 Ga, ____16 Ga, ____14 Ga | 10 each | 4 each | |
| 36 | Intravenous catheter needles; ____10 Ga, OR ____12 Ga | 2 | 1 | |
| 37 | Butterfly needles; ____25 Ga, ____23 Ga | 2 each | 0 | |
| 38 | Needles for Intraosseous access | 2 | 1 | |
| 39 | Adult tourniquets, disposable | 3 | 2 | |
| 40 | Pediatric tourniquets, disposable | 2 | 1 | |
| 41 | Vacuum tubes (red top) | 5 | 2 | |
| 42 | Vacuum tube holders | 3 | 0 | |
| 43 | Skin cleansing pads (e.g., Alcohol pads OR Betadine® pads) | 50 | 10 | |
| 44 | Betadine® type ointment<br>OR Unit dose Betadine® type ointment | 2 tube<br>10 pks | 0<br>0 | |
| 45 | Male adapter plugs | 10 | 0 | |
| 46 | Sodium Chloride injectable preloads | 10 | 0 | |
| 47 | Sharps disposal unit (must be in kit) | 1 | 1 | |
| | | | | |
| | | | | |
| | | | | |

## Multnomah County Required Medications

| | | Dose | Minimum Required* | Critical Level* | On Board* | Earliest Exp. Date |
|---|---|---|---|---|---|---|
| 1 | Activated Charcoal | 50 gm | 4 | 2 | | |
| 2 | Adenosine | 6 mg | 5 | 5 | | |
| 3 | Albuterol | 2.5 mg | 10 | 4 | | |
| 4 | Atropine Sulfate | 1 mg | 10 | 2 | | |
| 5 | Bretylium | 500 mg | 6 | 5 | | |
| 6 | Dextrose | | | | | |
| A | 50% | 50 cc | 6 | 2 | | |
| B | Liquid | 10 gm | 4 | 2 | | |
| 7 | **DIAZEPAM** | 10 mg | 4 | 2 | | |
| 8 | Diphenhydramine | 50 mg | 4 | 1 | | |
| 9 | Dopamine | 400 mg | 2 | 1 | | |
| 10 | Epinephrine | | | | | |
| A | 1:1000 MDV | 50 cc | 2 | 1 | | |
| B | 1:1000 | 1 cc/1 mg | 2 | 1 | | |
| C | 1:10000 | 10 cc/1 mg | 10 | 5 | | |
| 11 | Furosemide | 40 mg | 4 | 3 | | |
| 12 | Glucagon | 1 mg | 2 | 1 | | |
| 13 | Inapsine | 2.5 mg/16 cc | 6 | 2 | | |
| 14 | Ipecac Syrup | 1 fl oz. | 2 | 1 | | |
| 15 | Lidocaine | | | | | |
| A | 2% | 100 mg | 6 | 3 | | |

| | | Dose | Minimum Required* | Critical Level* | On Board* | Earliest Exp. Date |
|---|---|---|---|---|---|---|
| B | 20% | 2 Gm | 2 | 1 | | |
| 16 | **MORPHINE** | 10 mg | 3 | 1 | | |
| 17 | Naloxone | 2 mg | 6 | 3 | | |
| 18 | Nitroglycerine spray or tablets | 0.4 mg | 2 units | 1 unit | | |
| 19 | Sodium Bicarbonate | 50 mEq | 3 | 3 | | |
| 20 | Thiamine | 100 mg | 4 | 1 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

**Medications In "BOLD" must be inventoried and locked**

* MINIMUM REQUIRED = the minimum quantity that MUST be on the unit to be placed in service and available to respond to a dispatch order.

* CRITICAL LEVEL = the minimum quantity that MUST be on the unit to remain in service. A quantity less than specified in this column will require the unit to be removed from all service and restocked to minimum level before being returned to service and available to respond to a dispatch order.

* ON BOARD = the actual quantity of items physically on the unit.

earliest expiration date = self explanatory

Equipment on advanced life support (ALS) vehicles. Each ALS vehicle (ambulance/rescue) shall, unless otherwise provided for, carry as a minimum, the supplies and equipment listed on the Oregon Health Division inspection form and the Multnomah County EMS inspection form (Exhibit J).

# Oregon Health Division
# Emergency Medical Services & Trauma Systems Section
# Ground Ambulance Inspection Form

☐ Initial ☐ Reinspection

Date: _____ Time: _____

Business Name: _____

Ambulance Location: _____

Non-Emergency Tel. #: _____

Contact Person: _____

Type of Organization: ☐ Fire Department ☐ Hospital Operated ☐ Private
☐ Industrial ☐ Municipal ☐ Volunteer

Level of Care: ☐ BLS ☐ BLS/ALS ☐ ALS

Vehicle Availability: ☐ On-line ☐ Reserve

Make of Vehicle: _____ Year of Manufacture: ____ License#: _____

Vehicle Identification Number: _____

Model: ☐ Type I ☐ Type II ☐ Type III ☐ Other _____

Mileage: _____

# Oregon Health Division
# Emergency Medical Services & Trauma Systems Section
# Ground Ambulance Inspection Form

☐ Initial ☐ Reinspection

Vehicle License# _____ Vehicle Mileage _____

**Inspection Codes:**
1 = Present and in good working order.
2 = Item placed on vehicle at time of inspection.
3 = Item not present or not in good working order.

**Rating Categories:**
CRITICAL EQUIPMENT IS IN BOLD AND CAPS
Equipment in this category that is either missing or not in good working order shall result in the immediate suspension of the license to operate until corrected.

---

## Mechanical Equipment

☐ Horn, one dual electric.
☐ Siren, electronic with two speakers mounted in grille. Control functions - manual, wail and yelp.
NOTE: "Hi-Lo" sound is not allowed. Lighting, Refer to KKK-A-1822B or C diagram for Type I, II, and III requirements:
☐ **I II III HEADLAMPS, white - 2 with dim/bright switch**
☐ I II III Front side marker lamps, amber - 2
☐ I II III Front side reflectors, amber - 2
☐ I II III Front turn signals, amber (including vehicular hazard warning signal flasher) - 2
☐ I III Front identification lamps, amber - 3
☐ I III Front clearance lamps, amber - 2
☐ I II III Rear side marker lamps, red - 2
☐ I II III Rear side reflectors, red - 2
☐ I II III Rear reflectors, red - 2
☐ I III Rear identification lamps, red - 3
☐ I III Rear clearance lamps, red - 2
☐ **I II III REAR STOP, tail & turn signal lamp, red (turn signal section may be amber) - 2**
☐ I II III Rear backup lamp, white - 1
☐ I II III Rear license plate lamp, white - 1
☐ I II III Front warning light, red - 1
☐ I II III Front warning light, white - 1
☐ I II III Rear warning lights, red - 2
☐ I II III Rear warning light, amber - 1
☐ I II III Side warning lights, red - 2 per side
☐ I II III Grille lights, red - 2
☐ I II III Intersection lights - 1 per side
☐ I II III Side floodlights - 1 per side
☐ I II III Rear floodlight - 1
☐ I II III Spotlight hand-held OR roof mounted - 1
☐ **SEAT BELTS with retractor devices - 1 each seat**

*Brake System*
☐ Main brakes
☐ Parking brake
☐ Backup alert alarm

*IRES and tire changing equipment*
☐ **FRONT, minimum tread of 3/32" (even wear)**
☐ **REAR, minimum tread of 3/32" (even wear)**
☐ Spare, minimum tread of 3/32" (even wear)
☐ Jack with handle
☐ Lug wrench

*Windows, window cleaning equipment and mirrors*
☐ Windshield, # of rock chips _____, # of cracks _____, length _____.
☐ **WINDSHIELD WIPER (dual, electric, multi-speed)**
☐ Windshield washer
☐ Water level ☐ OK ☐ Low
☐ Windshield defroster
☐ Windows (side and rear) # of cracks _____, length of cracks _____.
☐ Window between driver and patient compartment for type II and III vehicles
☐ Outside mirrors; Right side - 1 and Left side - 1

☐ Engine oil level, ☐ OK ☐ Low
☐ Transmission oil level, ☐ OK ☐ Low
☐ Fan belts
☐ Starter
☐ Electrical system, with all lights on, amp meter read (+)
☐ Battery system, dual 12 volt system with labeled selector device
☐ Shock absorbers ☐ front ☐ rear
☐ Exhaust system
☐ Tailpipe(s) discharge to side of ambulance
☐ **HEATER**
☐ Front
☐ **REAR**
☐ Air conditioner
☐ Front
☐ Rear

## Patient Care Equipment

**OXYGEN (MEDICAL)**
*Installed system,*
☐ Compartment ventilated to outside.
☐ No other equipment stored in cabinet.
☐ Tank has at least 3000 liter capacity and contains at least 500 liters.
☐ **FLOWMETER TEST RESULTS.**
☐ **PORTABLE SYSTEM, tank has at least 300 liter capacity. Must have one full spare tank.**
☐ **FLOWMETER TEST RESULTS.**
☐ **TANKS PROPERLY SECURED.**
☐ All tanks must be inspected and have a hydrostatic pressure test by a qualified person, tanks stamped with a date followed by a *, +, or star are good for 10 years, all other markings after a date are good for 5 years.

**OXYGEN NON-REBREATHER MASKS WITH TUBING**
- ☐ **PEDIATRIC - 3**
- ☐ **ADULT - 3**
- ☐ Oxygen Nasal Cannulas with tubing, adult - 3
- ☐ Mouth-to-Mask Ventilation Devices with one-way valve, adult - 2

**OROPHARYNGEAL AIRWAYS (PLASTIC OR RUBBER)**
- ☐ **INFANT - 2**
- ☐ **CHILD - 2**
- ☐ **SMALL ADULT - 2**
- ☐ **MEDIUM ADULT - 2**
- ☐ **LARGE ADULT - 2**
- ☐ **EXTRA LARGE ADULT - 2**

**BAG-VALVE-MASK VENTILATION DEVICES (each mask must be transparent and semi-rigid)**
- ☐ **ADULT / CHILD, BAG - 1**
- ☐ **TEST RESULTS**
- ☐ **INFANT, BAG - 1**
- ☐ **TEST RESULTS**
- ☐ **MASK SIZES, 0, 1, 2, 3, 4, 5 - 1 ea.**

**SUCTION ASPIRATOR**
- ☐ Installed (independent of oxygen supply), 1000 ml collection bottle
- ☐ **TEST RESULTS**
- ☐ **PORTABLE (may be either battery, oxygen or manually powered)**
- ☐ **TEST RESULTS**
- ☐ Water for rinsing, 8 ounces.
- ☐ **SUCTION CATHETERS (Assorted sizes, neonatal to adult) _____, #_____**

*Litters, fasteners and anchorages*
- ☐ **WHEELED COT, w/mattress, and three restraining devices (chest, hip and knee) at least 2" with a quick release buckle - 1**
- ☐ **SIDE OR CENTER cot fastener with quick release feature - 1**
- ☐ Folding stretcher(s) with three restraining devices (chest, hip and knee), at least 2" wide with a quick release buckle. Number required is based on the litter-carrying capacity of the ambulance, number _____

**BACKBOARDS (HAVE NECESSARY RESTRAINING DEVICES)**
- ☐ **SHORT or equivalent; i.e. KED - 1**
- ☐ **LONG - 1**
- ☐ **PEDIATRIC, a modified short or long backboard is acceptable - 1**
- ☐ Scoop stretcher -1

*Splinting materials*

**EXTRICATION COLLARS (soft foam rubber cervical collars are NOT allowed)**
- ☐ **SMALL - 1**
- ☐ **MEDIUM - 2**
- ☐ **LARGE - 1**
- ☐ **HEAD IMMOBILIZERS - 2**
- ☐ Extremity splints, upper - 3
- ☐ Extremity splints, lower - 3

*Traction splints*
- ☐ Adult - 1
- ☐ Child - 1, OR
- ☐ Adult/Child combination - 1

*Bandaging and dressing materials*
- ☐ Elastic gauze bandages; Kling OR Kerlix type - 12
- ☐ Gauze 4" X 4" sterile sponges - 24

*Sterile bulk dressings*
- ☐ 8" X 30" - 4, OR
- ☐ 7" X 8" - 8
- ☐ Non-porous 4" X 4" sterile dressings - 4
- ☐ Adhesive OR hypo-allergenic 1" tape - 3 rolls
- ☐ Bandage shears - 2

*Other patient care equipment*
- ☐ **OBSTETRICAL Kit, disposable - 1**
- ☐ Hypothermia thermometer in protective case - 1
- ☐ **GLOVES, disposable - 15 pair**
- ☐ **FACE MASKS, disposable - 6**
- ☐ **PROTECTIVE EYEWEAR - 2**
- ☐ Hand cleaning solution - 16 oz. OR cloths - 8
- ☐ Cleaning disinfectant - 8 oz
- ☐ **CONTAINER(S) for used needles, each kit - 1, #_____**
- ☐ **CONTAINER for contaminated gloves, masks, etc.**
- ☐ Rigid eye shields - 2
- ☐ Emesis container - 1 two-liter container with plastic liners - 2
- ☐ **STETHOSCOPE - 1 adult**

**ANEROID SPHYGMOMANOMETER**
- ☐ **ADULT - 1**
- ☐ Extra Large Adult - 1
- ☐ Department of Transportation Emergency Response Guide Book (Initial Response to Hazardous Material Incidents), 1987 or newer, or equivalent - 1
- ☐ Triage tags - 25

*Medications, fluids and cardiac care equipment for a BLS ambulance*
- ☐ **EPINEPHRINE 1:1000 - 2 ampules**
  **Exp. Date _____/_____/_____**
- ☐ Syrup of Ipecac - 1
  Exp. Date _____/_____/_____
- ☐ Activated Charcoal - 1
  Exp. Date _____/_____/_____
- ☐ Glucose, liquid - 1
  Exp. Date _____/_____/_____
- ☐ Irrigation fluid 1000 cc
  Exp. Date _____/_____/_____

*Participating in an approved EMT-D Program*
- ☐ Defibrillator, auto or semi-auto - 1
- ☐ Patient cables - 2
- ☐ Contact gel - 1 tube OR
- ☐ Pre-gelled defib pads - 3 sets
- ☐ Monitoring electrodes - 12
- ☐ ECG paper - 3 rolls
  (if not a tape recording device)

**MEDICATIONS, FLUIDS AND PATIENT CARE EQUIPMENT FOR AN ALS AMBULANCE**
- ☐ **MONITOR/Defibrillator/Write-out portable with adult paddles - 1**
- ☐ **PATIENT CABLES - 2**
- ☐ **CONTACT GEL - 1 tube, or**
- ☐ **Pre-gelled defib pads - 3 sets**
- ☐ Monitoring electrodes - 12
- ☐ ECG paper - 3 rolls
- ☐ **LARYNGOSCOPE HANDLE - 1**
  Extra batteries - 2
- ☐ **LARYNGOSCOPE BLADES**
- ☐ **Sizes 0, 1, 2, 3, 4 - 1 ea.**
- ☐ Extra bulbs - 2

☐ **INTUBATION TUBES - 2 ea., 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0 and 8.0 mm**
☐ **INTRAVENOUS FLUIDS, STERILE, ASSORTED.**
**Exp. dates: ☐ good ☐ bad**
**VASCULAR ACCESS DEVICES**
☐ **butterfly devices 23 & 25 gauge - 2 ea.**
☐ **over-the-needle 14, 16, 18, 20, 22 & 24 gauge - 2 ea.**
☐ **intraosseous needle - 1**
☐ **INTRAVENOUS MEDICATIONS, STERILE, ASSORTED.**
**Exp. dates: ☐ good ☐ bad**
**COPY OF STANDING ORDERS:**
☐ **BLS**
☐ **EMT-D**
☐ **ALS**
☐ Signed by supervising physician.
Name of physician:

_____

Date standing orders were last signed:
_____/_____/_____

NOTE: Standing orders must be reviewed and signed annually.

Ambulance carrying controlled substances must have:
☐ A locked box that is attached to the inside of a locked cabinet.
☐ Keys to each of the locks (the same key cannot be used for both locks).
☐ Sign in/out log for each controlled substance.
☐ ALL DEVICES AND EQUIPMENT NOT STORED IN CABINETS MUST BE PROPERLY FASTENED TO PREVENT ITEMS FROM MOVING ABOUT WHILE THE VEHICLE IS IN MOTION OR IF INVOLVED IN AN ACCIDENT.

## Linen Supplies

☐ Pillows with plastic covering - 1 for each stretcher, total #_____
☐ Pillow cases (may be either cloth or paper) - 3
☐ Cot sheets (may be either cloth or paper) - 6
☐ **Blankets - 1 for each stretcher, total #_____**

## Security and Rescue Equipment

☐ **FIRE EXTINGUISHER, 5 lb., type 2A-10BC (must be accessible from either the patient or driver's compartment) - 1**
☐ Flashlight - 1
☐ Batteries: ☐ good ☐ bad
☐ Bulbs: ☐ good ☐ bad
☐ Extra set of packaged and dated batteries,
Exp. Date _____/_____/_____
☐ Road flares = 180 min.
Exp. Date _____/_____/_____
☐ Leather gloves - 2 pair
☐ Crowbar, 24" - 1
☐ Wrecking bar, 51" - 1
NOTE: A pry-ax type tool may be substituted for the crowbar and wrecking bar.

## Communication Equipment and Records

☐ RADIO ☐ VHF ☐ UHF ☐ Other
radio frequencies: _____

**PATIENT CARE REPORT FORM**
☐ Using own form
☐ Using the state-approved form
☐ Ambulance usages records (i.e. dispatch records) kept in office.
☐ Maintenance records, kept in office.

## Patient Compartment Dimensions

*Patient compartment*
☐ Length; must be at least 116" (B) and 122" (C) from the front partition to the inside surface of the rear door at the floor. Actual _____"
☐ Distance; must be at least 25" and not more than 30" of unobstructed space at the head of the primary patient stretcher (measure from backrest of EMT seat to forward edge of stretcher). Actual _____"
☐ Distance; must be at least 10" from the end of the stretcher to the inside surface of the rear door. Actual _____"
☐ Width; must be 18" + - 6" clear isle way between primary stretcher and squad bench. Actual _____"
☐ Height; must be at least 60." Actual _____"

*Doors*
☐ "Door-Open" warning device
Right forward side, must be at least:
☐ 30" wide. Actual _____"
☐ 42" high for a type II. Actual _____"
☐ 54" high for a type I and III. Actual _____"
Rear loading, must be at least:
☐ 44" wide. Actual _____"
☐ 46" high. Actual _____"
Between driver and patient compartment for Type II and III, must be at least:
☐ 17" wide. Actual _____"
☐ 46" high. Actual _____"
☐ 150 sq. inches of window. Actual _____"

## Emblems and Markings

*Front:*
☐ Word "AMBULANCE" in 4 inch high blue block letters in mirror image, centered above the grille, on an orange or white background.
☐ "Star of Life" a 3 inch blue emblem located to both the left and right of the word "AMBULANCE."

*Sides:*
☐ Word "AMBULANCE" in 6 inch high blue block letters on each side.
☐ "Star of Life" 16 inch blue emblem on each side.

*Rear:*
☐ Word "AMBULANCE" in 6 inch high blue block letters.
☐ "Star-of-Life" 12 inch blue emblem on each rear door.

*Top:*
☐ "Star of Life" in a 32 inch high blue emblem.

## Ambulance Exterior

Need of body work ☐ Yes ☐ No
Need of painting ☐ Yes ☐ No
Cleanliness: ☐ excellent ☐ good ☐ fair ☐ poor ☐ very poor

## Ambulance Interior

Need of upholstery work ☐ Yes ☐ No
Equipment stored in a neat and organized manner ☐ Yes ☐ No
Cleanliness: ☐ excellent ☐ good ☐ fair ☐ poor ☐ very poor

## Displaying Signs, Licenses & Certificates

☐ "Star of Life" Ambulance 1822B or 1822C Sticker/Decal

Location: _____

*"NO SMOKING" Signs*
☐ Driver's Compartment
☐ Patient Compartment
☐ Health Division Ambulance License

Location: _____

☐ DEA License filed in ambulance business office.

## Inspection Finding and Disposition

Can the person assisting in the inspection locate the equipment in a timely manner? ☐ Yes ☐ No

☐ Initial inspection acceptable.
*☐ INITIAL INSPECTION NOT ACCEPTABLE. THE INSPECTION REVEALS VIOLATIONS THAT CONSTITUTE AN IMMEDIATE DANGER OR THREAT TO THE PUBLIC. THE LICENSE FOR THIS VEHICLE IS HEREBY SUSPENDED AND SHALL REMAIN SUSPENDED UNTIL THE VIOLATIONS HAVE BEEN CORRECTED.
*☐ Initial inspection NOT acceptable. The inspection reveals violations that do not constitute an immediate danger or threat to the public. Notify the Division in writing that the non-critical violations have been corrected by:
Date: _____/_____/_____, Time:_____
☐ Reinspection acceptable.
*☐ Reinspection NOT acceptable. Remit a check in the amount of $50 made payable to the "**Oregon Health Division.**"
☐ Copy of the ambulance inspection form given to the ambulance service representative.

Ambulance Service Representative:

_____

Signature Time

*County Health Dept. Representative notified:

_____

Signature Time

*County Ambulance Service Plan Administrator notified:

_____

Signature Time

Inspection completed by:

_____

Signature Time

# ATTACHMENT H

# MASS CASUALTY INCIDENT PLAN

# Multnomah County

# Emergency Medical Services

# Mass Casualty Incident Plan

1993

MULTNOMAH COUNTY

EMERGENCY MEDICAL SERVICES

MASS CASUALTY INCIDENT PLAN

TABLE OF CONTENTS


I. GENERAL

A. Purpose

B. Information

C. Definitions

D. Legal Authority

E. Policy

II. LEVELS OF ACTIVITY

III. ACTIVATION

IV. COMMUNICATIONS

V. DOCUMENTATION

VI. DEMOBILIZATION

VII. ACTIVITY CHECKLISTS

A. Level I

B. Level II

C. Level III

MULTNOMAH COUNTY

EMERGENCY MEDICAL SERVICES

MASS CASUALTY INCIDENT PLAN

## I. GENERAL

A. Purpose:
The Mass Casualty Incident Plan outlines the response policies and procedures for emergency medical services providers and agencies in Multnomah County to be implemented in the event of a Mass Casualty Incident (MCI).

B. Information:
The following titles of the National Interagency Incident Management System (NIIMS) Incident Command System (ICS) are used:

| NIIMS | ICS |
|---|---|
| Emergency Center | |
| EMS Assembly Area | |
| Medical Branch Director | |
| Medical Communications Group Supervisor | |
| Medical Transportation Group Supervisor | |
| Triage Group Supervisor | |
| Treatment Group Supervisor | |

C. Definitions:

State Advanced Life Support (ALS) Unit: A unit staffed by at least two persons: one state-certified at or above the EMT 1 level and one state-certified at or above the EMT 3 level, or an RN, PA or physician trained in prehospital emergencies as defined in OAR 333-23-050 2 (a), (A) and (B).

Multnomah County ALS Ambulance: An ambulance staffed, according to Multnomah County Administrative Rule, by at least two Oregon Certified EMT 4s.

All-Call: An interhospital survey conducted on the Hospital Emergency Administrative Radio (HEAR) System to determine the number of critical and/or noncritical patients each facility can handle.

Ambulance Staging Area: Area where arriving ambulances and personnel can be assembled in close proximity to the incident.

Basic Life Support (BLS) Unit: A unit staffed by at least two persons: one state-certified at or above the EMT 1 level or an RN, PA or physician trained in prehospital emergencies.

Bureau of Emergency Communications (BOEC): A city of Portland bureau responsible for management of the Multnomah County Public Safety Answering Point (PSAP) located at Kelly Butte. This bureau coordinates 9-1-1 communications for Emergency Medical Services, Law Enforcement and Fire Services throughout Multnomah County including the cities of Portland, Gresham, Troutdale, Wood Village, and Fairview.

Critical Incident Stress Debriefing (CISD): A confidential discussion organized and performed by a Critical Response Team (CRT) composed of responders, peers, and mental health professionals. [The Critical Response Team responds to any situation faced by emergency services personnel that causes them to experience unusually strong emotional reactions which may potentially interfere with their ability to function either at the scene or later.]

Emergency Center: A facility established and equipped to perform coordination in support of a large scale emergency or disaster.

EMS Assembly Area: Area where arriving ambulances and personnel can be assembled in close proximity to the incident.

EMS Assembly Area Manager: Individual designated to manage the EMS Assembly Area(s).

EMS Dispatch: An integral part of the Bureau of Emergency Communications. EMS Dispatch functions as a central point for 9-1-1/medical call taking and dispatch. During a Mass Casualty incident, EMS Dispatch will monitor the operations frequency, assign additional requested resources, and ensure sufficient medical coverage for other EMS incidents.

Fire Alarm Dispatch (FAD): Communications center for fire services in Multnomah County.

Fire Command: Senior Fire Officer on-scene.

Fire Rescue: A fire service unit which has medical capability.

Hospital Emergency Administrative Radio (HEAR): VHF radio system coordinated by Regional Hospital during a Mass Casualty incident--used to ascertain and assemble information regarding hospital resources.

Immediate Danger Zone: Area surrounding an incident in which there is a potential danger to life. Incident Command will determine its boundaries.

Incident Command ("Command"): Radio designation and "title" of person or persons responsible for overall direction of the incident.

Incident Commander: Person designated by the public safety agency in charge to command the scene.

Jurisdiction: Multnomah County and those jurisdictions within Multnomah County.

Landing Zone (LZ): A well-marked area, 100 ft. x 100 ft., designated and secured by fire or law enforcement personnel for helicopter landing.

Medical Branch Director: An EMT 4 who coordinates all on-scene emergency medical services activities.

Medical Communications Group Supervisor: An EMT 4 who coordinates Regional Hospital communications and patient destinations with transporting ambulance assignments.

Medical Examiner: is responsible for removal of deceased from area and coordinates morgue activities.

Medical Resource Hospital (MRH): Acts as back-up to Regional Hospital in the event of Regional Hospital communications failure.

MedNets: UHF radio frequencies designated for Emergency Medical Services communications.

Morgue: Temporary area initially designated by the Medical Branch Director and Transportation Group Supervisor, where deceased victims will be taken--location may be changed by Medical Examiner.

Patient Loading Zone: Designated area adjacent to the patient treatment area, where transporting units receive and load patients.

Patient Treatment Area: Designated area where patients are brought, reassessed, and treated after initial triage and tagging by a Triage Team member. Treatment priority sections will be marked, corresponding with colors of triage tags.

Regional Hospital: Facility coordinating patient destinations with hospital resources.

Staging Area: Area where arriving fire service equipment, other vehicles and personnel stage to be in close proximity to the incident.

Transportation Group Supervisor: An EMT 4 who establishes treatment areas and supervises patient loading into transport units.

Treatment Group Supervisor: An EMT 4 who coordinates all activities in the treatment areas.

Triage: Process of sorting patients by severity of injury.

Triage Group Supervisor: An EMT 4 who coordinates triage, patient assessment, and tagging.

Triage Tag: Multicolored tie-on tag used to indicate condition and treatment priority of patients.

Triage Priority Colors:

Red - Priority 1 - Critical
Life threatening medical emergencies, i.e., airway, breathing and/or circulation problems.

Yellow - Priority 2 - Noncritical
Not as seriously injured as Priority 1 patients, but possibility exists for rapid deterioration of physical condition.

Green - Priority 3 - Ambulatory
Require treatment, but can wait for transportation without immediate threat to life.

Black - Priority 0
Expired or mortal injuries.

Triage Tagging: Method used to categorize condition of patients, according to severity of injuries. A triage team member will assign tags corresponding in color with treatment priority areas: red - priority 1; yellow - priority 2; green - priority 3; black - priority 0. The triage tag shall stay with the patient through hospital admittance.

D. Legal Authority:

Oregon Revised Statutes:

ORS 431.607 Emergency Medical Services and Trauma System

ORS 823.00 Ambulances and Emergency Personnel

ORS 823.180 County plan for ambulance and Emergency Medical Services

Oregon Administrative Rules:

| | |
|---|---|
| 333-28-000 through 333-28-063 | Ambulances and Emergency Medical Technicians - October 17, 1991. |
| 333-28-095 through 333-28-130 | County Ambulance Service Area Plans - May 7, 1990. |
| 333-200-000 through 333-200 090 | Emergency Medical Services and Trauma Centers - June 26, 1987; Amendments October 9, 1987. |
| 333-205-000 through 333-205-060 | Trauma System Hospital Identification in Trauma Area #1 - June 26, 1987; Additions April 28, 1988. |

Multnomah County Code:

| | |
|---|---|
| MCC 6.32 | Ambulance Services |

Multnomah County EMS Administrative Rules:
Permanent and Emergency Rules

Other:
State Trauma Advisory Board Plan

Area Trauma Advisory Board I Plan - April 4, 1988

E. Policy:
The Mass Casualty Incident (MCI) Protocol will be used to coordinate incidents involving ten or more total patients.

During a mass casualty incident, emergency medical services providers and agencies will conduct operations to provide immediate resources, to minimize the loss of life through prompt medical treatment in the field, and to coordinate field medical services and activities with existing medical facilities and other support services and resources.

It is an EMS policy that agencies having the responsibility to provide needed emergency services be notified of an impending or actual incident as soon as appropriate in order to initiate preparedness or response activities.

**The Trauma System is NOT used for mass casualty incidents.**

On-scene personnel will have authority to act in a timely manner within the incident command system at the scene.

If the first units responding to an incident are BLS or ALS staffed with only one EMT 4:

A. Medical Branch Director shall order ALS units as needed to fill the EMT 4 positions.

B. Designated BLS personnel shall perform MCI tasks normally assigned to EMT 4s until relieved.

## II. LEVELS OF ACTIVITY

Level I:
An incident exists involving ten or more total patients or the potential for 10 or more patients.

Level II:
An incident exists where the number of MCI-dedicated ALS ambulances has reduced the available ALS ambulances within Multnomah County to a Minimum Coverage Level of 3 or below.

Level III:
An incident exists where the number of MCI-dedicated ALS ambulances has reduced the available ALS ambulances within Multnomah County to a potential EMS Coverage Level of 0.

## III. ACTIVATION

The first arriving Advanced Life Support unit on the scene shall identify itself and advise EMS Dispatch of the following:
1. The exact location of the incident.

2. The type of incident (transportation accident, fire, explosion, etc.).
3. Environmental conditions (hazardous materials, extreme weather, etc.).
4. Number of ALS ambulances needed.
5. Immediate danger zone.
6. Assembly area.
7. Recommended routes to and from the scene.
8. Approximate number of patients.

First Fire ALS Unit:

- Provides personnel to perform duties of the Medical Branch Director and Triage Group Supervisor.

- Provides the identification vests, task cards, and triage area tarps.

  (If the first arriving Fire Unit is not ALS staffed, the Triage Group Supervisor's duties may be assigned to ALS Ambulance personnel and the Transportation Group Supervisor's duties assigned to BLS fire personnel until relieved by fire ALS personnel.)

First ALS Ambulance Unit:

- Provides personnel to perform duties of the Transportation Group Supervisor and Communications Group Supervisor.

## IV. COMMUNICATIONS

Field units SHOULD NOT use the HEAR system -- it is reserved for interhospital traffic. Units transporting patients should not give receiving hospitals updates or patient care reports.

MedNet 1 is the dedicated MCI channel for on-site coordination, communication with Regional Hospital and the request/direction of additional medical personnel through EMS Dispatch.

If MedNet 1 is disabled, MetNet 4 will be used. (MRH will continue to function for medical direction and non-MCI trauma communications on MedNet 4).

MCI Medical Operations:

MedNet 1 (UHF):
Medical Sector Coordinator; Communications Group Supervisor; Transportation Group Supervisor; Triage Group Supervisor; ALS Ambulances; LifeFlight; EMS Dispatch; Fire Rescues, dedicated BOEC MCI operator.

Interhospital Coordination:

HEAR System (VHF):
Regional Hospital and Area Hospitals.

Primary EMS Dispatch:

MedNet 9 (UHF):
Routine EMS Operations.
Initial assignment of units to MCI.
Reassignment of units after transport.

## V. DOCUMENTATION

The Communications Group Supervisor will fill out and maintain the Mass Casualty Incident Log.

**All MCI operations documents will be copied and forwarded to the Multnomah County Emergency Medical Services office within five working days.**

An accounting of the expense of the Multnomah County Emergency Services Agencies may be kept and made available upon request to the Multnomah County/city Office of Emergency Management for the purpose of compiling and reporting to the county.

## VI. DEMOBILIZATION

1. Appropriate callbacks will be made by agencies who made initial contacts, at the direction of the Incident Commander, 9-1-1 center will cancel units, agencies will cancel personnel.

2. Personnel-on-scene will check with Incident Command before clearing scene.

3. All agencies should consider contacting a Critical Response Team (CRT) which performs Critical Incident Stress Debriefing (CISD) for their personnel. Requests for the Oregon Critical Response Team (OCRT) may be made through Medical Resource Hospital.

## VII. ACTIVITY CHECKLIST

A. Level I

An incident exists involving ten or more total patients.

| Position | Task |
|---|---|
| Emergency Medical Services Dispatch | Verify Mass Casualty Incident and its location, dispatch initially requested units.<br><br>If EMS Dispatch is advised that hazardous materials are involved in the incident, IMMEDIATELY notify all responding agencies.<br><br>Notify BOEC supervisors, adjust staffing pattern, inform law enforcement dispatch. |

| Position | Task |
|---|---|
| | Relay incident information to Regional Hospital. |
| | Broadcast incident and frequency information to all on-line EMS units. |
| | Put air ambulance services on standby. |
| | Call all ground ambulance companies and have them put all available units on the air for potential response. |
| | Notify the EMS Office. |
| | Monitor the operations frequency and dispatch additional EMS units per request of the Medical Branch Director or Incident Commander. |
| | Cancel ground and air ambulances per request of Medical Branch Director or Incident Commander. |
| First arriving ALS Unit _____ | Advise Emergency Medical Services Dispatch of the following: |
| | This is an MCI. |
| | The exact location of the incident. |
| | The type of incident (transportation accident, fire, explosion, etc.). |
| | Environmental conditions (hazardous materials, extreme weather, etc.). |
| | Number of ALS ambulances needed. |
| | Immediate danger zone. |
| | Assembly area. |
| | Recommended routes to and from the scene. |
| | Approximate number of patients. |

| Position | Task |
|---|---|
| First Fire ALS Unit | Provide the Medical Branch Director and Triage Group Supervisor. |
| | Distribute the identification vests and task cards to the Transportation Group Supervisor, Communication Group Supervisor, Triage Group Supervisor, and Medical Branch Director. |
| | Provide triage tags. |
| | Provide color coded tarps or markers for treatment areas. |
| Medical Branch Director | Coordinate ALL on-scene EMS activity. |
| | Ensure that EMS Dispatch gets pertinent incident information. |
| | Appoint Triage Group Supervisor. |
| | Order ambulances, as needed, per Communications Group Supervisor. |
| | Coordinate all EMS activities with Incident Command. |
| | Order additional resources for Medical Branch (manpower, buses, medical supplies, Red Cross, Medical Examiner, etc.). |
| | Delegate establishment of air ambulance Landing Zone (LZ). |
| | Constantly assess performance of group supervisors and make personnel changes if necessary. |
| Triage Group Supervisor | Perform rapid triage. |
| | Estimate number of patients and type of injuries, i.e., Head, peds, OB, Chest, Burns, Radiation, HazMat. |

| Position | Task |
| --- | --- |
| | Give this information to the Medical Branch Director and the Communications Group Supervisor. |
| | Go back, start "tagging" patients. |
| | Confer with Medical Branch Director to establish extrication teams. |
| | Ensure that no unnecessary equipment is brought into scene where patients are located. |
| | Move patients to treatment areas as soon as possible. |
| First ALS Ambulance | Provide EMT 4 Transportation Group Supervisor and EMT 4 Communications Group Supervisor. |
| Medical Communications Group Supervisor | Establish communications with Regional Hospital on Mednet 1. |
| | Designate the Ambulance Assembly area. Relay location to Medical Branch Director. |
| | Start MCI log, using information from the Triage Group Supervisor. |
| | If necessary, designate a communications assistant to assure an organized flow of information from scene to Regional Hospital. |
| | Request additional ambulances, including BLS ambulances, if needed, via the Medical Branch Director. |
| | Keep a unit ready for loading in the Loading Zone at all times. |
| | As soon as a unit is ready to transport, tell Regional Hospital the number and type of patients on board. Regional will determine unit destination. |

| Position | Task |
| --- | --- |
| | Inform loaded ambulance of its destination, ensure its safe departure, and immediately request another ambulance to move in from the staging area to the loading zone. |
| Medical Transportation Group Supervisor____ | Establish patient treatment areas after conferring with the Medical Branch Director regarding location.<br><br>Establish patient loading zone. Consider proximity to treatment area and ambulance approach and exit routes.<br><br>Assign patients from treatment area to ambulances.<br><br>Supervise the number and priority of loading of patients.<br><br>As soon as patients have been loaded, tell the Communications Group Supervisor the ambulance unit and number/type of patients on board. (Head, Peds, OB, Chest, Burns, Radiation, HazMat, etc.)<br><br>If extra medical equipment is needed, request from the Medical Branch Director.<br><br>Do not allow patients to "stack up" in the loading zone.<br><br>If necessary, delegate the loading of ambulatory patients into buses. |
| Treatment Group Supervisor_____ | Coordinate all activities in the treatment area with the Transportation Group Supervisor.<br><br>Organize treatment areas and order additional medical equipment and manpower through the Medical Branch Director.<br><br>Maintain contact with Triage Group Supervisor. Accept patients into treatment areas. |

| Position | Task |
| --- | --- |
| | Provide BLS care to patients. ALS care may be possible later in the incident when resources allow.<br><br>Identify the order in which patients are to be transported.<br><br>Keep the treatment area as secure as possible.<br><br>If ambulatory patients are loaded onto buses or grouped together in one location, attempt to provide secure access and egress points (so patients or their parents do not leave the scene). All patients triaged must be accounted for! |
| Additional Arriving Ambulances_____ | Go to the EMS Assembly Area and remain with your vehicle.<br><br>Report your arrival to the Communications Group Supervisor. (EMS Assembly Area Manager if one has been designated.)<br><br>Load patients as assigned by Transportation Group Supervisor.<br><br>Transport to medical facility as assigned by Communications Group Supervisor and provide patient care enroute. |
| Additional Arriving Rescues_____ | Respond to Staging Area.<br><br>Report arrival to the Staging Area Manager; wait for assignment.<br><br>If assigned as an ambulance, report to EMS assembly area and remain with your vehicle. On arrival, inform Communication Group Supervisor (EMS Assembly Area Manager if one has been designated.) |
| Air Ambulances_____ | Switch to predesignated operations net for instructions and landing zone location and remain with your aircraft after landing.<br><br>Load patients as assigned by Transportation Group Supervisor. |

| Position | Task |
|---|---|
| | Transport to medical facility as assigned by Communications Group Supervisor. |
| Regional Hospital | Establish contact with Communications Group Supervisor. |
| | Initiate HEAR System "All-Call" and relay information to others on emergency notification list. |
| | Coordinate patient information between field personnel and receiving hospitals. |
| | Coordinate transportation assignments from incident site to hospitals. |
| | Upon request, provide medical direction in case Medical Resource Hospital communications fail. |
| Medical Examiner | Direct tagging of possessions and preserve conditions at the scene for investigative agencies. |
| | Direct removal of the deceased from the area, and coordinate morgue activities. |
| Incident Commander | Oversee and manage all on-scene incident operations. |
| Law Enforcement | Coordinate with Incident Command. |
| | Perform on-scene operations and tasks according to agency procedures and Incident Command Directives. |
| Fire Service | Coordinate with Incident Command. |
| | Perform on-scene operations and tasks according to agency procedures and Incident Command directives. |

B. Level II

An incident exists where the number or MCI-dedicated ALS ambulances has reduced the available ALS ambulances within Multnomah county to the minimum coverage level 3 established by Multnomah County Administrative Rules.

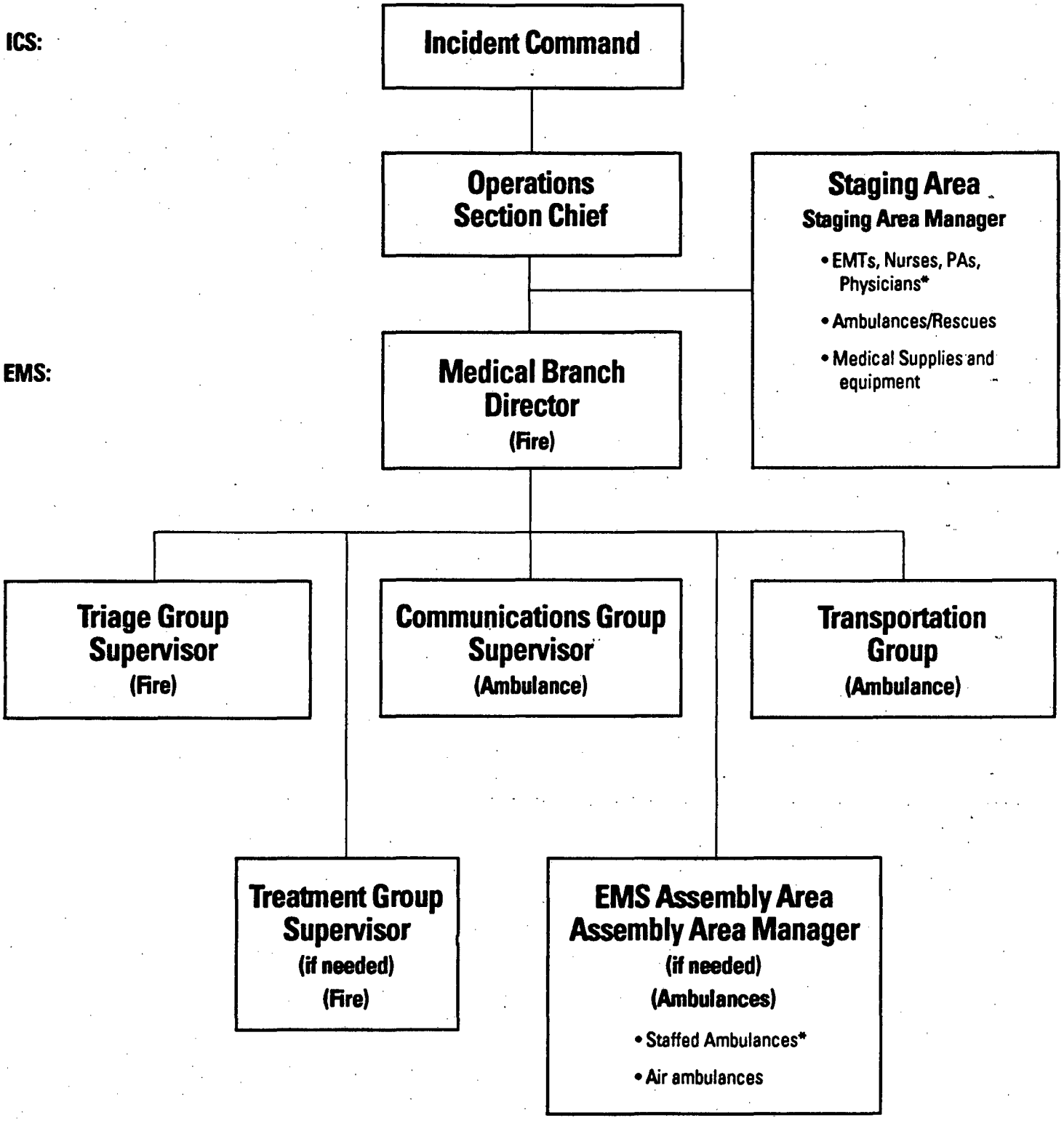
| Position | Task - In Addition to Level I |
|---|---|
| BOEC | Request out-of-county ambulances as directed by Medical Branch Director. |

C. Level III

An incident exists where the number of MCI-dedicated ALS ambulances has reduced the available ALS ambulances within Multnomah County to an EMS Coverage Level of 0.

| Position | Task - In Addition to Level II |
|---|---|
| All Agencies | Increase support according to magnitude of incident.<br><br>Coordinate arrival and dispersement of additional manpower and resources with Emergency Center and Incident Command.<br><br>Notify the City/County Emergency Management Office. |

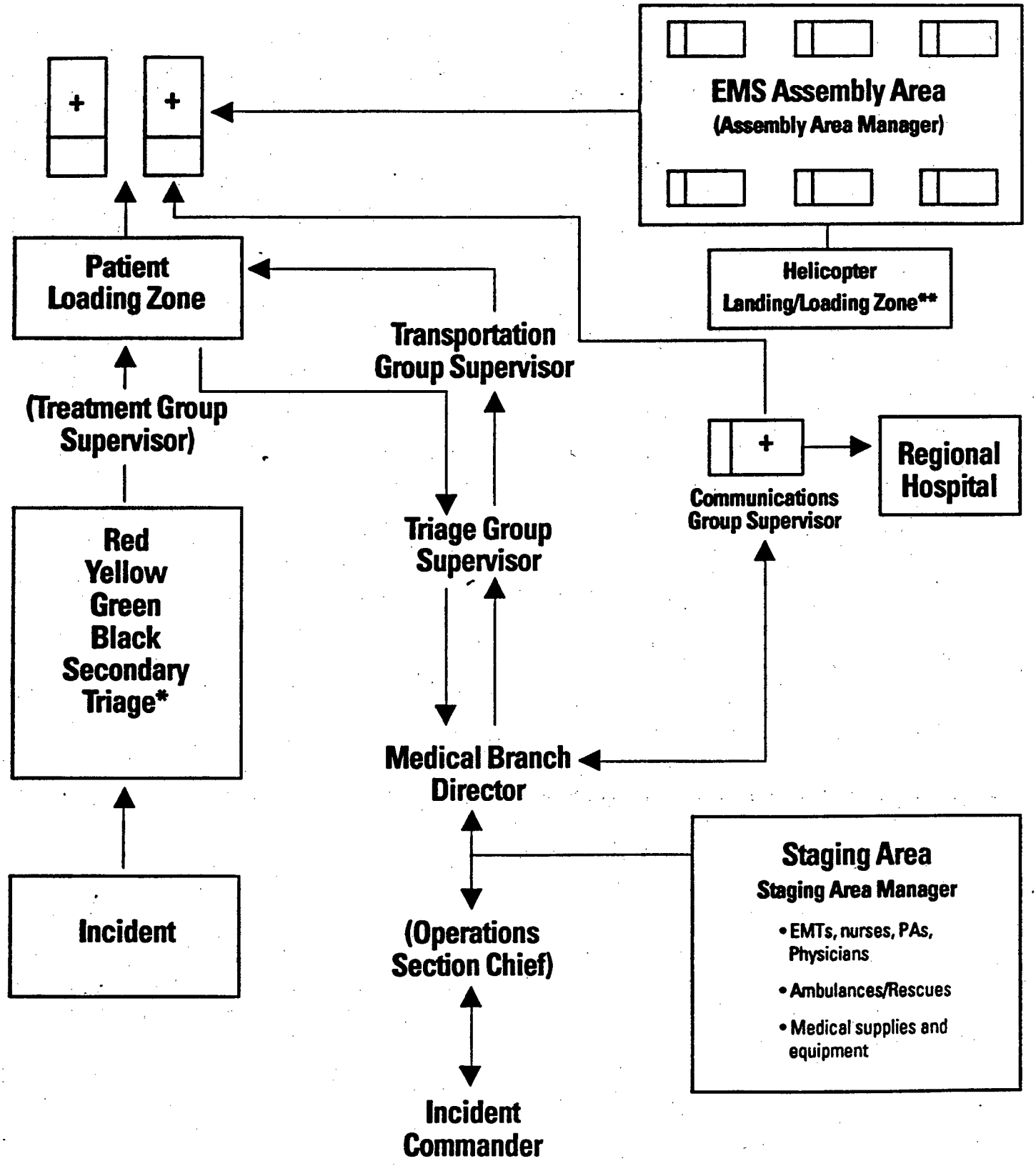
# EMS Structure




*All off-duty EMS personnel who arrive at the scene will report only to the Staging Area. If needed, they will be asked to respond to a given person and /or area by the Staging Area Manager and be given visible identification.

# Medical Branch Diagram

(Example)




* Diagram indicates needed triage areas. Actual designated sites will vary.

** Helicopter landing/loading zone should be placed away from areas of patient care. Actual placement will be determined by where the helicopter can land.

# Communications*

911 Dispatch

Dispatch Net
(MedNet 10)

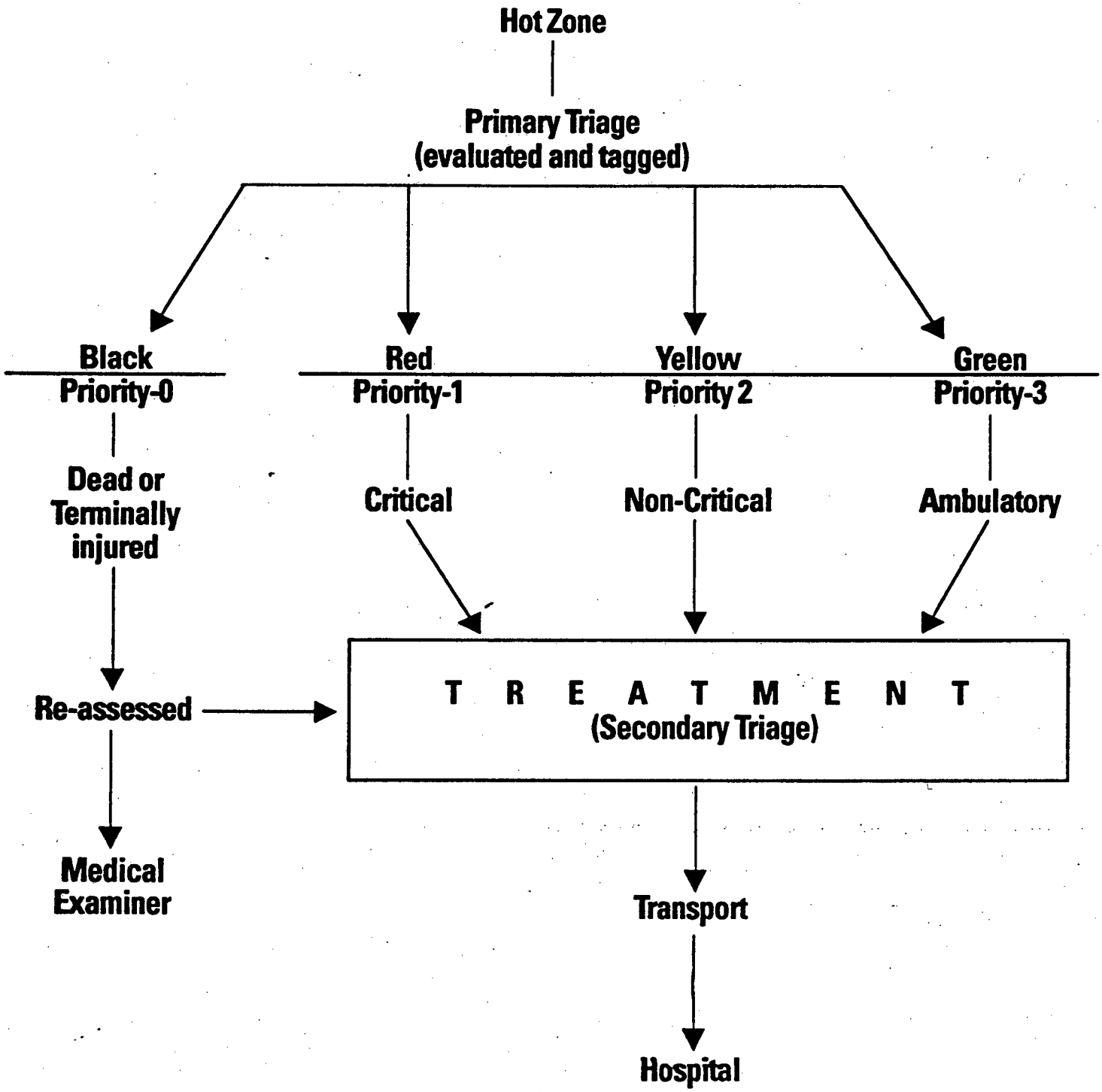
En Route
(MedNet 1)

On Site

| Operations Net (MedNet 1) | Designated Fire Operations Net |
|---|---|
| | Incident Commander |
| | (Operations Section Chief) |
| Medical Branch Director (monitor) | Medical Branch Director |
| | (Medical Treatment Group Supervisor) |
| Medical Communications Group Supervisor | |
| Regional Hospital | |
| BLS Ambulance<br>ALS Ambulance | Medical Triage Group Supervisor |
| Fire Rescue | (Extrication Team Leader) |
| Air Ambulance | |

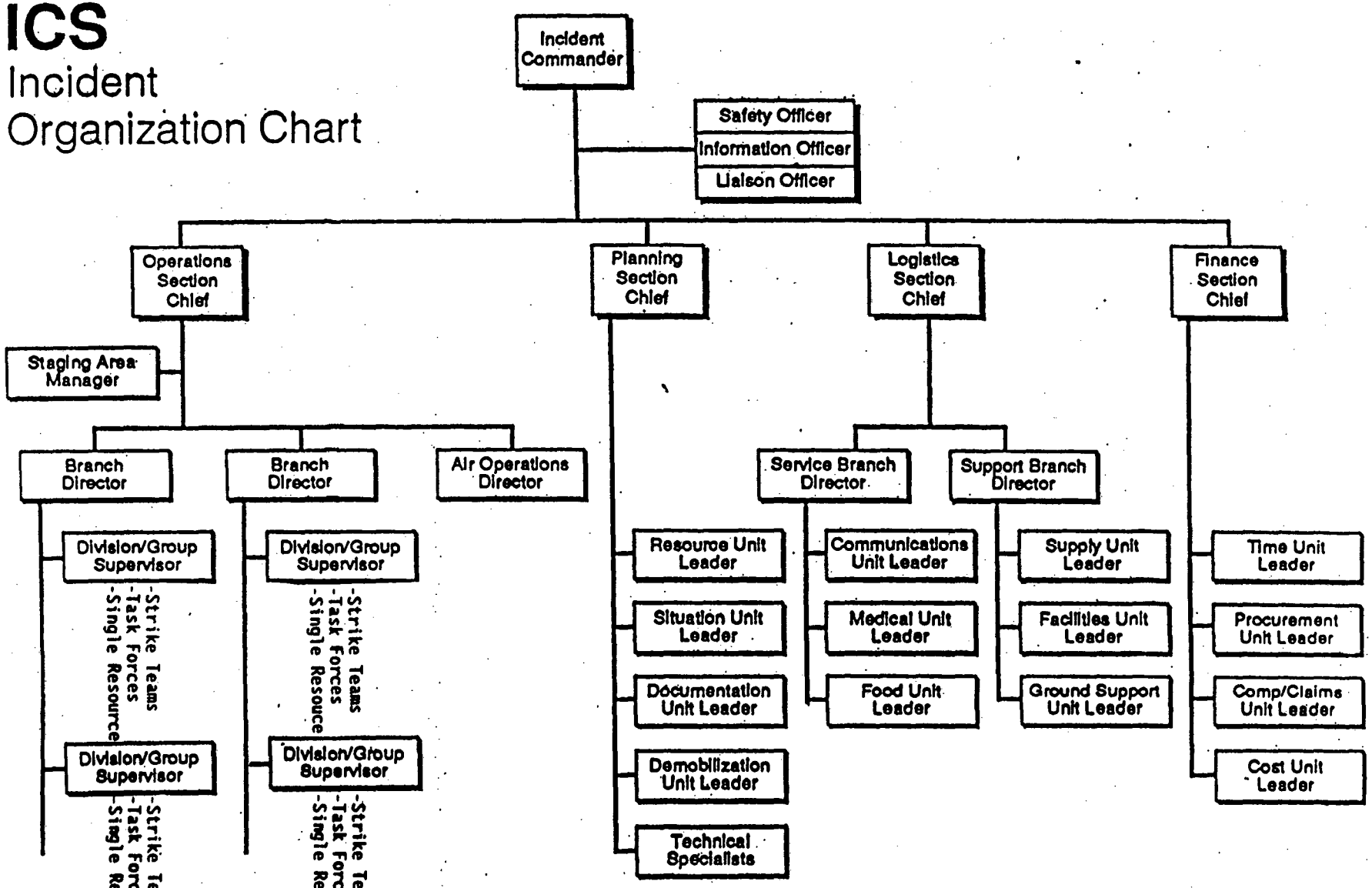
*Who has what channels.

# Patient Flow




**When a vehicle is available for transport, treatment shall shift from on-scene to treatment during transport.**
**Keeping on-scene time to a minimum consistent with good patient care is the goal.**

# ICS
## Incident Organization Chart



# ATTACHMENT I

# HAZ-MAT

# SPECIALIZED RESCUE

MAB Approved
11/10/89

# HAZARDOUS MATERIALS

Purpose:

Paramedics may be first on the scene of a hazardous materials situation because of shorter response time or no knowledge of dispatch that hazardous materials are involved. This protocol is intended to guide paramedics who do not normally function in hazardous materials scenes.

If the scene you are responding to is a known or suspected (based on information from dispatch) hazardous materials situation stage and wait for the hazardous materials personnel.

When you have arrived at the scene and find out during scene assessment that hazardous materials are involved stage and wait for the hazardous materials personnel.

All scenes (MVA, Industrial, etc.) should be considered as being a potential hazardous materials situation. The following approach procedure should be used:

Procedure:

I. Approach

A. All scenes:

1. Utilize a cautionary approach at all times.
2. The reported location may be inaccurate and response into a contaminated area might occur.
3. Approach upwind and upgrade if possible. If unable to approach from upwind/upgrade, approach at 90° to wind/grade if possible with safety in mind.
4. Position vehicle well away from problem and headed away from incident.
5. Communicate your actions or intended actions to EMS Dispatch.
6. Remember: Contaminated and/or exposed response personnel may add to the overall problem and reduce their effectiveness to help.

B. If at any time you suspect a hazardous materials situation:

1. If first-in responder, confirm that fire and police have been notified. a. The agency responsible for hazardous materials responses may respond with different levels of personnel and equipment based upon the information received. Do not always expect a hazardous materials team to respond.
2. If you are a first-in responder, first priority is scene isolation. KEEP OTHERS AWAY! KEEP UNNECESSARY EQUIPMENT FROM BECOMING CONTAMINATED.
3. If you believe that you or your vehicle are contaminated stage in an isolated area.

DRAFT

**PORTLAND BUREAU OF FIRE, RESCUE & EMERGENCY SERVICES**
**INTER-OFFICE CORRESPONDENCE**
(NOT FOR MAILING)

April 13, 1993

**TO:** Whom It May Concern

**FROM:** Lt. Dennis Gale

**SUBJECT:** Specialized Rescue/EMS Services Provided by Portland Bureau of Fire, Rescue & Emergency Services

## I. HIGH ANGLE RESCUE

High angle rescue incidents are handled by specially trained and equipped units stationed in strategic locations (Stations 1, 22, 19 & 41). In addition, all of those stations have high angle rescue trained fire fighter/paramedics that provide medical care at the incidents.

## II. CAVE IN RESCUE

Cave in incidents are handled by Squad 1 (specially trained personnel) using Trench Rescue 1 (special cave in equipment). These units are preceded by PFB 1st responders and PFB fire fighter/paramedic units knowledgeable about cave in rescue techniques.

## III. WATER RESCUE

Specialized water rescue is provided by Portland Fire's Dive Rescue Team. This specialized 30 member team is supported by PFB first responders and PFB fire fighter/paramedic units.

## IV. HAZARDOUS MATERIALS INCIDENTS

Hazardous materials incidents are handled by Haz. Mat. 23. This regional Hazardous Materials Team is assisted by specially trained Haz. Mat. paramedics from Haz. Mat. Rescue 41.

V. EXTRICATION

Extrication is normally handled by one of ten PFB truck companies stationed in strategic locations. All extrication incidents require a PFB ALS unit (medical care) and a PFB engine company (fire safety).

VI. SPECIAL POLICE OPERATIONS (S.W.A.T. TEAMS, Etc.)

Medical care at special police operations is handled by 12 specially trained fire fighter/paramedics. These "S.E.R.T./Fire Medics" received their specialized training from Portland Police Bureau's Special Emergency Response Team.

VII. SPECIAL RESCUE INCIDENTS

Special rescue incidents (elevator rescue, etc.) are normally handled by PFB Squad 1. This unit has received specialized training in these areas.

# ATTACHMENT J

# SEARCH AND RESCUE PROTOCOL

## SEARCH AND RESCUE (SAR)

Incidents that occur in "back country" or wilderness areas often involve extended response times, specialized personnel and extrication equipment; non routine procedures for dispatch of EMS resources may need to be used.

Always notify the Sheriff's Office of any incident that occurs "on a trail; during a hike or climb," or other similar outdoor events. Per ORS #401.066, the Sheriff's Office is in charge of all Search and Rescue incidents, and is responsible for notifying, organizing, and using appropriate resources, such as the RAT Team through Buck Medical Services, the 304th Air-evac unit, etc.

There is no need for an ALS ambulance to standby at a trail head waiting for a wilderness rescue team to extract a patient. An MCSO/SAR Officer at the scene may advise BOEC to have the initially dispatched ambulance go back in service until the patient is prepared for transport; at that time the MCSO/SAR Officer will request the dispatch of appropriate transport.

| **RESPONSIBILITY:** | **ACTION:** |
|---|---|
| Calltaker | 1. Process the call for medical and law enforcement response.<br><br>2. Identify the need for MCSO/SAR notification when the incident type and location is verified.<br><br>3. Attempt to ascertain any access problems or unusual incident circumstances or hazards and include in the MISC. INFO.<br><br>4. Ensure that the MCSO District Officer and the MCSO Shift Sergeant have been notified. MCSO is in command of all Search and Rescue incidents.<br><br>5. Complete the call per BOEC policy. |
| EMS Dispatcher | 1. Contact the appropriate first responder agency.<br>**NOTE:** Certain areas in East County have no EMS first responder services (unusual MSAG info should be in call MISC. INFO.)<br><br>2. Dispatch the appropriate units.<br>NOTE: The Buck Ambulance RAT team may be activated for response in Multnomah County ONLY on requested of the Sheriff's office |

3.350 5/92

| | |
|---|---|
| | 3. Advise all responders to contact the MCSO District Officer or SAR Coordinator as soon as they arrive on scene. |
| | 4. Contact or dispatch additional EMS resources when requested by the MCSO District Office or SAR Coordinator |
| Dispatch Coordinator | 1. Monitor all activities associated with the incident. |
| | 2. Advise all net dispatchers of NET-5 closure for SAR operations, as required. |
| | 3. When Search and Rescue is requested, make appropriate notifications. |
| Incident Command | 1. If "command" requests a delay in dispatching an ambulance, ground or air, (while the SAR team reaches, stabilizes, packages, and extricates the patient) command is then responsible for contacting EMS Dispatch for dispatch of an appropriate transport unit. |
| | 2. Decisions about appropriate transport units should be made in consult with available medical resources at the scene. |

# ATTACHMENT K
# DISPATCH PROCEDURES
# TRIAGE GUIDE

# MULTNOMAH COUNTY
# EMERGENCY MEDICAL SERVICES
# TRIAGE GUIDELINES
# AND
# PREARRIVAL INSTRUCTIONS

These Triage Guidelines are to be used by ALL licensees in Multnomah County. Any call for emergency medical assistance MUST be triaged by these standards. Any response other than 0, as defined herein, will be referred to EMS Central Dispatch per Rule 631.320 (Subsection B and F) and Rule 631.330 (Subsection A).

No licensee or EMS dispatch agency may downgrade the response as required by these standards.

Any request for medical assistance which requires an ambulance in thirty (30) minutes or less MUST be triaged by these standards.

When in doubt, use your judgement and upgrade the level of response.

REASONS FOR ANY DEVIATIONS IN TRIAGED RESPONSE LEVEL MUST BE DOCUMENTED.

•• *The use of the masculine or feminine pronoun, within text, is not meant to be gender specific* ••

This document available from:
Multnomah County EMS Office
426 SW Stark Street, 9th floor
Portland, Oregon 97204
(503) 248-3220

[Graphic Arts Unit]

Exhibit "C"

## KEY QUESTIONS

### CARDINAL QUESTIONS — ALWAYS ASK!

1. What is happening ?
2. Conscious ?
3. Breathing ?
4. Age/Male or Female ?

## PRE-ARRIVAL INSTRUCTIONS

**BREATHING CHECK:** Place your ear next to his/her mouth & nose and look toward the chest. Can you feel or hear any air movement? Is there fluid, bubbles or anything else in the mouth or nose? Do you see the chest or stomach moving? Place your hand on his/her stomach. Can you feel it rising or falling?

**PULSE CHECK:** See Additional Information. *

## DISPATCH PRIORITIES

**UN 1**
-Unconscious, not breathing
-Unconscious, not known if breathing
-Unconscious, abnormal or possible agonal breathing

**UN 3**
-Unconscious, breathing normally
-Now conscious and breathing (if with difficulty, see BREATHING card)



## ADDITIONAL INFORMATION

*** PULSE CHECK: Child/Adult:** Place your index and middle finger into the groove next to his/her Adam's Apple. DON'T PRESS TOO HARD! Feel for a pulse for 5 seconds.

**Infant:** Place your index and middle finger over the baby's left nipple. DON'T PRESS TOO HARD! Feel for a pulse for 5 seconds.

**AGONAL BREATHING:** Gasping, ineffective breaths that often occur at the time of Cardiac Arrest. The caller may describe the person as "breathing funny, breathing weird, gasping, making funny noises, etc."

**SIGNS OF SHOCK:**

1. Confused or sleepy ? ( Key Question )

Other signs of shock are listed below and should be used as determinants when volunteered by the caller or are covered by other key questions.

2. Skin feels cool and moist
3. Pale or blue skin color
4. Nausea and/or vomiting
5. Dizzy or faint

**IF TRAUMA: Pre-Arrival:** "Don't move him!! If you must, try to keep his head and neck from turning or pulling, to prevent further injury."

| KEY QUESTIONS | | PRE-ARRIVAL INSTRUCTIONS |
|---|---|---|
| 1. | Chest Pain ?* | If vomiting or nausea is present, turn on side. |
| 2. | Bloody or "coffee-ground" vomitus ? | |
| 3. | Confused or sleepy ? | If signs of shock or fainting present, lay down flat and raise legs. |
| 4. | Dizzy or feeling faint ? | |
| 5. | Rectal bleeding ? Dark, tarry stool ? | No food or drink. |

## DISPATCH PRIORITIES

* Refer to Chest Pain Card

**AB 3** -Vomiting bright red blood or dark "coffee ground" substance
-Signs of Shock (confused, sleepy, dizzy, faint, etc. . .)
-Rectal bleeding/dark, tarry stool
-Any female of child-bearing age (13-50) with abdominal pain and/or bleeding

**AB 0** -All others



## ADDITIONAL INFORMATION

"Coffee ground" vomitus is partly digested blood from chronic internal bleeding.

**Life-threatening causes:**
-Ectopic Pregnancy
-Perforated or bleeding ulcer
-Ruptured spleen or liver
-Abdominal aortic aneurysm
-Myocardial Infarction (M.I.) [May simulate heartburn]

**Common causes:**
-Flu
-Appendicitis
-Pelvic Inflammatory Disease (P.I.D.)
-Bowel Obstruction
-Gastritis

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Difficulty breathing ?<br>2. Difficulty swallowing, swollen tongue ?<br>3. Confused or sleepy ?<br>4. History of allergic reaction ?<br>5. Suspected cause of symptoms ? | If signs of shock present, lay patient down and raise legs (if this does not compromise breathing).<br>If difficulty breathing, place in position of comfort.<br>If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.<br>If nausea or vomiting present, refer to Vomiting/ Nausea card. |

## DISPATCH PRIORITIES

**AL 3**
-Difficulty breathing
-Swollen tongue
-Signs of shock
-Previous history of severe reaction

**AL 9/0**
-Bites and stings with local reaction (excessive swelling at site)
-Rash and/or itching only



## ADDITIONAL INFORMATION

**Allergy signs/symptoms:**
-Rash
-Itching
-Difficulty breathing
-Anaphylactic shock
-Abdominal pain
-History of allergic reactions in the past

**Probable causes of allergic reaction:**
-Medications - Penicillin most common
-Radiology dyes
-Bee, wasp, yellow jacket or hornet stings
-Seafood (mainly shellfish)
-Nuts

## KEY QUESTIONS

1. Location of bite ?
2. Difficulty breathing ?
3. Uncontrolled bleeding ?
4. Confused or sleepy ?
5. Type of animal ? Where is it ?

## PRE-ARRIVAL INSTRUCTIONS

If signs of shock present, lay patient down and raise legs (if this does not compromise breathing).

If difficulty breathing, place in position of comfort.*

If bleeding, apply and maintain direct pressure to wound site.**

Try to keep the animal in sight or watch where it goes, WITHOUT ENDANGERING YOURSELF.

* If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.

** If necessary, refer to Bleeding card.

## DISPATCH PRIORITIES

**AN 1** -Bitten on face / neck / chest

**AN 3** -Difficulty breathing
-Uncontrolled bleeding
-Signs of shock

**AN 9/0** -All others

Always notify Animal Control and, if animal still on scene, send Police.



## ADDITIONAL INFORMATION

Use your judgement, upgrade if necessary (consider what happened and current circumstances).

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Weapon or assailant still there ?<br>2. Type and location of wound ?<br>3. Difficulty or pain in breathing ?<br>4. Bleeding ?<br>5. Confused or sleepy ?<br>6. Abnormal behavior / loss of consciousness ? | If signs of shock present, lay patient down and raise legs (if this does not compromise breathing).<br>If difficulty breathing, place in position of comfort.*<br>If bleeding, apply and maintain direct pressure to wound site.**<br>* If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.<br>** If necessary, refer to Bleeding card. |

## DISPATCH PRIORITIES

If appropriate, advise medical responders to stand by until Police advise regarding scene safety.

**AS 1** -Penetrating wound, GSW, stab wound

**AS 3** -Location of wound unknown
-Difficulty breathing
-Excessive bleeding
-Signs of shock
-Blunt trauma to head or trunk with abnormal behavior or loss of consciousness

**AS 9/0** -Minor lacerations or bruises / all others



## ADDITIONAL INFORMATION

If medical units are staging, have Police advise when scene is safe for medical entry.

Central penetrating wounds (head, neck, chest, back, abdomen ) are more serious than extremity wounds

**Crime scenes:**
Leave evidence undisturbed if possible ( weapons, tracks, etc.)

**Rape:**
Suggest that victim should not wash clothes/self before evaluation and investigation.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Are there any other symptoms ?<br>2. Recent fall or trauma ?*<br>3. Chest pain ?*<br>4. Confused or sleepy ?<br>5. History of similar back pain ? | If traumatic cause, don't move him!! If you must, try to keep his head and neck from turning or pulling, to prevent further injury.<br>If signs of shock, lay down flat and raise legs (do not raise legs if pain was caused by traumatic injury).<br>If vomiting, refer to Vomiting/Nausea card. |

## DISPATCH PRIORITIES

*Recent Fall, Trauma or Chest Pain — also refer to appropriate card

**BK 3** -Signs of shock
-Non-traumatic back pain in patients over 40

**BK 0** -All others



## ADDITIONAL INFORMATION

**Non-traumatic causes:**
-Muscle spasm
-Aneurysm
-Kidney Stones
-Kidney Infection
-Vertebral disc disease
-Pancreatitis
-Myocardial Infarction

**Traumatic causes:**
-Fracture of ribs or spine
-Strained back
-Ruptured disc

## KEY QUESTIONS

1. Is patient violent? Suicidal? Any weapons ?
2. Medications/Possible OD/Alcohol ?
3. Head injury or trauma in past 24 hours ?
4. Headache ? (see Headache card)
5. History of diabetes, seizures, drug abuse or overdose ?
6. Past psychiatric history ?

## PRE-ARRIVAL INSTRUCTIONS

Did you see any Medic-alert tags? (neck, wrist, ankle)

If first-hand (victim on phone): keep on line if possible

If second-hand info, tell caller to:
-Observe continuously.
-Protect victim from self (if possible to do so safely).

**BEWARE OF ATTACK!**

## DISPATCH PRIORITIES

*ALWAYS SEND POLICE ON BEHAVIOR PROBLEMS**

**BE 3**

-Abnormal behavior and head injury within past 24 hours
-History of diabetes, seizures, drug abuse or overdose
(if suspected/confirmed overdose or DTs, refer to Overdose card)
-Patients over 40 with no known psychiatric history

Police to advise if:
-Violent with no obvious medical problems
-Threatening suicide (notify FAD if specialized rescue might be needed – bridge, jumper, water (also consider River Patrol)).

**7 BEHAVIOR PROBLEMS** 8/92

## ADDITIONAL INFORMATION

**Possible causes:**

-Suicide attempts / threats
-Drug abuse / withdrawal
-Alcohol abuse / withdrawal or DT's
-Emotional and/or hysterical reactions
-Psychiatric problems
-Shock (acute or delayed)
-Liver or kidney failure

**NOTE:** Serious medical problems such as insulin shock, severe hypovolemia, hypoxia, delirium tremens (DT's), overdose, etc. often cause behavioral problems.

**NOTE:** Behavior problems in persons over 40 without prior psychiatric history must be assumed to be medical in nature.

## KEY QUESTIONS

1. How injured ?
2. Area bleeding ? / Still bleeding ?
3. Spurting or flowing (oozing) ?
4. Confused or sleepy ?
5. Dizzy or feeling faint ?

## PRE-ARRIVAL INSTRUCTIONS

**If from forceful trauma, don't move him!! If you must, try to keep his head and neck from turning or pulling, to prevent further injury.**

**From extremities:** apply and maintain direct pressure to wound site, elevate limb above heart level (unless bones appear broken). If direct pressure fails, use pressure point. *

**From head/trunk:** usually can be controlled with gentle direct pressure.

**SIGNS OF SHOCK:** lay victim down, raise legs.

**Nosebleed:** Pinch nostrils, have patient lean forward (to prevent swallowing/aspirating blood)

## DISPATCH PRIORITIES

**BL 3** -Critical (see ADDITIONAL INFORMATION section)
-Possibly critical (see ADDITIONAL INFORMATION section)
-Large laceration or significant bleeding

**BL 9/0** -Not critical



## ADDITIONAL INFORMATION

**Types of bleeding:** Arterial vs. Venous
Internal vs. External

**Control:** First, direct pressure/elevation
Second, pressure points *

In most cases, external bleeding is not as serious as it may seem. Bleeding is often over-treated instead of locating and treating more serious but less obvious injuries including simple airway problems.

**AMPUTATION:** Control bleeding (direct pressure, elevation/pressure points). Locate part, wrap in clean dry cloth or plastic, keep cool. Do not place part directly on ice/in water.

| CRITICAL | POSSIBLY CRITICAL | NON-CRITICAL |
|---|---|---|
| Neck | Face | Nose |
| Groin | Abdomen | Mouth |
| Chest | Back | Hands |
| Rectal | Arms | Fingers |
| Vomiting/coughing up | Legs | Buttocks |
| Uncontrolled | Scalp | Feet |
| Spurting (At any location) | Urinary | Toes |
| Sign of shock | Vaginal ** | Tongue |

* Arms - Brachial Artery : Inside upper arm, just below armpit. PRESSURE POINTS:
Legs - Femoral Artery: Halfway between groin and hip, on crease of leg.

** During Pregnancy, refer to Pregnancy card.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Choking — can victim speak ?<br>2. Pale or blue skin color ?<br>3. Chest Pain ? (Refer to Chest Pain card) | If alert and breathing, keep in most comfortable position.<br><br>If choking or airway obstruction or blue skin color or unable to speak: refer to appropriate sequence card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**BR 1** -Choking or airway obstruction
-Inability to speak
-Blue skin color

**BR 3** -Difficulty breathing
-Known foreign body ingestion with normal breathing and difficulty swallowing

**BR 0** -All others



## ADDITIONAL INFORMATION

**Causes of breathing difficulties:**

-Foreign object obstructing airway
-Asthma
-Pulmonary Embolus (blood clot in the lungs)
-Congestive Heart Failure (CHF)
-Acute Pulmonary Edema (fluid in the lungs)
-Severe allergic reactions
-Emphysema (chronic lung disease)

**Breathing problems can be secondary to:**

-Stroke (CVA)
-Diabetic problems
-Seizures (febrile or epileptic)
-Cardiac Arrest
-Overdose
-Trauma

**9 BREATHING DIFFICULTIES / CHOKING** 8/92

## KEY QUESTIONS

1. Is anything still burning ?
2. Cause of burn ?
   - **Chemical:** conference with FAD
   - **Electrical:** refer to Electrocution card
3. Extent of burn ?
4. Confused or sleepy ?
5. Difficulty breathing ?

## PRE-ARRIVAL INSTRUCTIONS

**Make sure fire is out!!**
Remove burning or smoldering clothing unless it is stuck to his skin.
Remove victim from smoky area (IF SAFE).
Signs of shock : lay flat and raise legs (unless this compromises breathing).
Burns less than 20% in adults, 5% in children, cool with cool water.
Do not break burn blisters.
Liquid chemical burns: flush immediately with water until 1st Responder arrives.
Brush off dry chemicals.
If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.

## DISPATCH PRIORITIES

**BU 3** -Electrical or chemical burn
-Greater than 20% burns for adults, 5% for children
-Difficulty breathing
-Signs of shock
-Facial Burns
-Second or third degree burns to hands/feet/joints (especially infants or children)

**USE YOUR JUDGEMENT**
**IF IN DOUBT, UPGRADE!**

**BU 4** -ALS Ambulance C-1 standby, per Fire Service request

**BU 9/0** -All others

**NOTE: IF FIRE INVOLVED, NOTIFY FAD - EVEN IF FIRE APPEARS OUT**



## ADDITIONAL INFORMATION

**Types:**
- -First Degree (Sunburn)
- -Second Degree ("partial thickness" = blistering of skin)
- -Third Degree ("full thickness" = damage to all skin layers)

**Approximating extent:**
- -"Rule of Nines" (Diagram), large areas
- -Surface of victim's palm approx. 1%

**Special problems:**
- -Burns of face, hands: loss of function, airway problems
- -Smoke inhalation: airway problems
- -Electrical Burns: electrical danger, associated fractures
- -Chemical Burns: contamination/hazmat
- -Radiation Burns: contamination/hazmat

**MAKE SURE FIRE IS OUT !!**

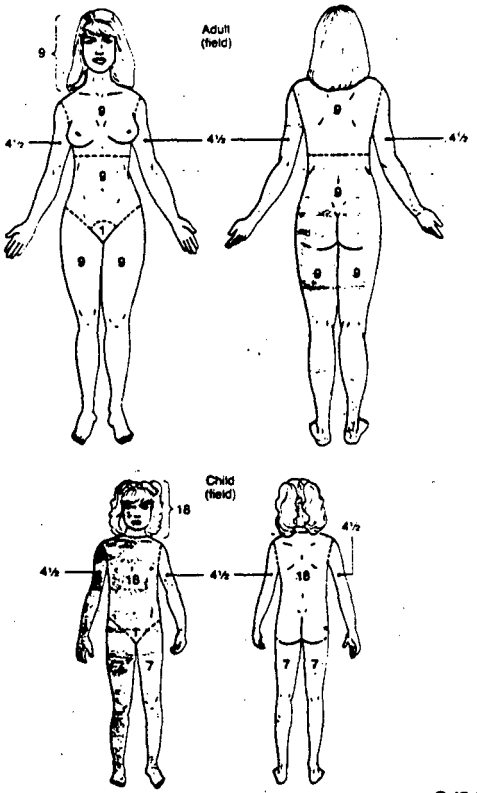



FIGURE 18-10 Rule of nines.

## KEY QUESTIONS

1. Chest Pain ?
2. Difficulty breathing ?
3. Pale or blue skin color ?
4. Nausea or Vomiting ?
5. Cardiac History ?
6. Abnormal heart rate (If volunteered)

## PRE-ARRIVAL INSTRUCTIONS

Place victim in a comfortable position (often semi-reclining)

Loosen collar, necktie, etc.

If necessary, stay on phone with potential rescuer—CONSIDER beginning discussion of CPR

If nausea/vomiting, refer to Vomiting/Nausea card.

## DISPATCH PRIORITIES

**CH 1** -Chest pain with 2 or more of the following:
- Difficulty breathing
- Pale/blue skin color
- Nausea and/or vomiting
- Cardiac history
- Abnormal heart rate

**CH 3** -Chest pain only (or with 1 of the above)
-Abnormal heart rate without chest pain

**CH 0** -All others

**11 CHEST PAIN / HEART PROBLEMS / HEART ATTACK** 8/92

## ADDITIONAL INFORMATION

**Critical problems:**
-Heart Attack (Myocardial Infarction: "M.I.")
-Ruptured thoracic aortic aneurysm

**Potentially Critical problems:**
-Pulmonary Embolus:
Blood clot in lungs
-Pneumothorax:
Air outside of the lungs within the chest cavity
-Pericarditis:
Infection of the sac around the heart
-CHF (Congestive Heart Failure:
"pump failure")

**Non-Critical:**
-Pleurisy
-Pneumonia
-Esophagitis
-Hiatal Hernia
-Hyperventilation
-Viral illnesses

**HEART ATTACK:** Substernal chest pain often described as tightness, constricting band, crushing, "like someone is sitting on my chest". Possibly radiating pain to left arm, jaw, neck, or back.
-Sweating (diaphoresis)
-Nausea, "heartburn", "indigestion"
-Angina which is unusually severe or has not abated with self-administration of Nitroglycerin.

"Heart Problems" range from old rheumatic fever to benign congestive heart failure, from angina to "heart attack" (a non-specific complaint but a common one). Try to obtain symptoms which accurately pinpoint the problem. Often victims deny or fail to recognize symptoms of real heart attack. Listen for any of the above or similar descriptions.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Alert ? (Able to talk normally ?)<br>2. Taking Insulin ? (Was it taken today ?)<br>3. Violent ? | Did you see any Medic-alert tags (neck, wrist, ankle)?<br>If patient can sit up and hold a glass alone, suggest a glass of juice, sugar water, etc.<br>If unconscious or not arousable, refer to appropriate sequence card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**DI 3** -Unconscious or confused
-Violent (send Police also)

**DI 9/0** -All others



## ADDITIONAL INFORMATION

**NOTE:** Level of consciousness is the key to determine appropriate pre-hospital response.

**NOTE:** Potential area for error is to confuse alcohol intoxication or DUII with hypoglycemia.

**INSULIN SHOCK / HYPOGLYCEMIA** (rapid onset)

Too much insulin has depleted the body's available blood sugar. Since the brain's only usable fuel is sugar, it is the first organ at risk. This is a serious medical problem if the patient is not alert. May be confused with alcohol intoxication. In insulin dependent diabetics hypoglycemia (low blood sugar) commonly occurs in late afternoon (1600 - 1700 ; peak effect if insulin taken at 0800) or midnight (if 1600 dose of insulin taken ), especially if patient has not had adequate food intake.

**DIABETIC COMA** (gradual onset)

Unconsciousness or decreased level of consciousness secondary to the body's inability to use available blood sugar for fuel when sufficient insulin is not given. Without accurate history this problem may be difficult to tell from insulin shock. (COMA is a state of unconsciousness from which the patient cannot be aroused).

**DIABETIC KETOACIDOSIS**

Pre-coma state resulting from insufficient insulin. Unable to use sugar, the body burns its own tissue (fat, muscle, etc.) The ketoacids produced (ketones) are "poisonous" to the patient, making them increasingly ill. This is not a pre-hospital emergency.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Is victim still in water ?<br>2. Time under water ?<br>3. Did victim dive into water ?<br>(If traumatic injury, refer to Traumatic Injury card for pre-arrivals) | If diving or other traumatic injuries are suspected, instruct caller to avoid moving victim: try to keep his head and neck from turning or pulling, to prevent further injury.<br>If water was very cold or victim feels very cold, suspect hypothermia. Refer to Heat/Cold card.<br>If necessary, refer to appropriate sequence card(s) for airway, breathing or CPR instructions |

## DISPATCH PRIORITIES

**DR 1** -Unconscious with any of the following:
Not breathing
Unknown if breathing
Breathing abnormally or possibly agonal breathing

**DR 3** -Still in water, precise location not verified
-Now conscious
-Unconscious, breathing normally

• • Notify appropriate law enforcement agency for possible search & rescue • •
-Notify MCSO River Patrol for river incidents



## ADDITIONAL INFORMATION

Victims of cold water drowning can remain under water for long periods of time before death or brain damage occurs. Cold water reduces the body's chemical need for oxygen and slows the heart rate and metabolism. Immediate CPR may be necessary when the victim is removed from the water.

Near-drowning in cold water is a type of hypothermia. In hypothermia , complete recovery may occur although the victim has been under water for one hour or longer. (A hypothermic victim should not be considered dead until he/she is rewarmed and is still lifeless).

**NOTE:** BE SURE TO CONSIDER TRAUMA AS POSSIBLE CAUSE/RESULT OF DROWNING.

## KEY QUESTIONS

1. Source of electrical shock ?
2. Is victim still in contact with electrical source ?
3. Fell ? From how high ?
4. Is there a burn ? (Refer to Burn card for pre-arrival instructions)

## PRE-ARRIVAL INSTRUCTIONS

**BEWARE OF ELECTRICAL HAZARDS**

**Do not move victim unless absolutely necessary. If you must, try to keep his head and neck from turning or pulling, to prevent further injury.**

Do not touch victim if still in contact with electrical source.

Turn off electrical source if possible (fuse box, circuit breakers, etc.) - DON'T TOUCH ANY WIRES.

If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.

## DISPATCH PRIORITIES

**EL 1** -Unconscious
-Status unknown

**EL 3** -Conscious



## ADDITIONAL INFORMATION

Suspect Cardiac Arrest until consciousness and breathing verified.

Associated falls — Electrocutions occurring above the ground may result in significant falls resulting in injuries more serious than those from the electrical current itself.

Electrical burns are often deceiving in appearance as regards to severity. Internal damage from passage of current through body can be substantial with few external signs of injury.

Often entry and exit wound sites.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Type of problem ?<br>2. Foreign body or impaled object ?<br>3. Any other injuries or complaints ? (also refer to appropriate card) | Lay patient down<br>If chemical: flush eye gently with water until help arrives (do not flush towards uninjured eye)<br>If trauma, do not irrigate eye<br>Abrasions: do not rub eye<br>Impaled object: do not touch or remove<br>If eyeball cut or leaking do not touch, bandage or irrigate |

## DISPATCH PRIORITIES

**EY 3** -Chemical exposure
-Impaled object, lacerations, avulsions, punctures, orbital fractures
-Violent mechanism of injury with potential for other head/neck injury

**EY 9/0** -All others



## ADDITIONAL INFORMATION

**Contusions:**
-Orbital fractures
-Hyphema (blood in anterior chamber of eyeball)
-Retinal detachment.
-Penetrating wounds of globe.

**Burns:**
-Chemical : bases (lyes) are worse than acids
-Arc welding
-Flash

**Contact lens problems**
-A lens can hold a chemical in the eye even with irrigation.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Cause of fall ?<br>2. Distance fallen ?<br>3. Confused or sleepy ?<br>4. Dizzy or feeling faint ?<br>5. Any obvious injuries ? (also refer to Trauma card)<br>6. Still down ? | **DON'T MOVE VICTIM!** If you must, try to keep his head and neck from turning or pulling, to prevent further injury.<br>Do not place pillow, etc. under victim's head.<br>Don't treat unless serious bleeding present (refer to Bleeding card). |

## DISPATCH PRIORITIES

| | | |
|---|---|---|
| **FA** | **1** | **-Long fall ≥20 feet**<br>-Requires rope rescue<br>-Signs of shock<br>-Status unknown<br>-Still down |
| **FA** | **3** | **-Fall <20 feet**<br>-Signs of shock<br>-Status unknown<br>-Still down |
| **FA** | **9** | -"Invalid Assist" (Conference with FAD) |
| **FA** | **0** | -All others |

**16 FALLS** R 8/92

## ADDITIONAL INFORMATION

"FALLS" IS NOT A SPECIFIC DIAGNOSIS. IT COVERS MANY VARIED SITUATIONS. INQUIRE FOR SPECIFIC FACTS.

Elderly patients frequently sustain hip fractures when they fall.

A "ground level" fall (when someone is standing or sitting and just falls to the ground) may have been caused by a medical condition. Consider unconscious/fainting, seizure, stroke, etc. and go to appropriate card for additional questions.

Consider the potential for difficult extrication - industrial sites with catwalks, staircases, basements, construction sites. Advise FAD of need for additional resources.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Type of injuries ?<br>2. Number of victims ? (consider MCI)<br>3. Is extrication necessary ?<br>4. Name of product ? (Spelling ?)<br>5. Are there product markings or labels ?<br>6. What is the source and quantity of product released ? | Do not touch victim or enter area unless the product is identified and appropriate protective clothing is worn.<br><br>IF NO DANGER TO RESCUER, remove victim(s) from toxic environment and keep victim(s) isolated.<br><br>Establish specific location for someone to meet and guide responding units to incident site. Advise caller that there may be more than one unit arriving. |

## DISPATCH PRIORITIES

If source is a toxic or unknown substance, do not dispatch anyone yet - CONFERENCE WITH FAD AND DISPATCH PER THEIR INSTRUCTIONS.

INFORM ALL RESPONDING PERSONNEL OF POTENTIAL DANGER, AND PROVIDE SPECIAL INSTRUCTIONS WHEN AVAILABLE - If field personnel request air ambulance, relay all HazMat info to aeromedical crew/dispatch.

**HM 1** -One or more victims

**HM 9** -All others

ADVISE ALL RESPONDERS TO STAGE UNTIL CLEARED FOR ENTRY BY HAZMAT UNIT(S)



## ADDITIONAL INFORMATION

Toxic gasses may be colorless, odorless, and tasteless (example: Carbon Monoxide). Signs/symptoms can range from headache to unconsciousness: victim can present in any state of intoxication or altered mental status.

Very small quantities of toxic substances can be fatal.

Contamination is often not visible.

Anyone who handles a contaminated victim must also be decontaminated.

***NOTE:*** Personnel on scene should:

Remove as much of contaminating substance as possible from victim before transporting.
If possible, wrap contaminated victim prior to transport - to reduce contamination spread.
Notify MRH/Poison Control of nature of product as soon as possible.
Notify receiving facility of situation and wait for their directions before transferring patient.

**NOTE:** HazMat team response or any appropriate increase in response level should be determined by FAD.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Recent trauma to head ? (refer to Trauma card)<br>2. Any periods of unconsciousness, confusion or behavioral changes ?<br>3. Sudden onset ?<br>4. Speech or motor problems ?<br>5. Changes in vision ?<br>6. Is this the worst headache you've ever had ? | Make patient comfortable.<br>Reassure and keep her as calm as possible. |

## DISPATCH PRIORITIES

**HE 3**
-Periods of unconsciousness, confusion or behavioral changes
-Sudden onset
-Severe speech or motor problems
-Changes in vision
-Worst headache

**HE 0**
-All others



## ADDITIONAL INFORMATION

**TYPES:**
-Tension
-Sinus
-Migraine
-Cluster
-Meningitis
-Subdural Hematoma
-Subarachnoid Hemorrhage

Since the brain is the organ of concern in victims with headache, changes in alertness, behavior, or speech and motor function (paralysis, weakness) all indicate a more serious underlying problem.

Sudden, severe onset may also suggest a more serious underlying cause.

## KEY QUESTIONS

**HEAT**

1. High temperature of victim ?
2. Skin dry, face red/flushed ?
3. Confused, acting strangely, staggering ?
4. Skin cold, clammy, sweaty ?
5. Muscle Cramps ?

**COLD**

1. Unresponsive ?
2. Frozen extremities ?
3. Confused or acting strangely ?
4. Length of time in cold ?

## PRE-ARRIVAL INSTRUCTIONS

**HEAT**

Take victim out of sunlight/hot environment.
Use cool cloths/wet sheets to reduce temperature.
Lie victim flat and elevate feet.
If vomiting or nauseous, refer to V/N card for instructions.

**COLD**

Give nothing by mouth
Avoid excessive movement
Wrap with blankets
Frostbite; minimal treatment -protect injured area
- DO NOT RUB or immerse in hot water.

## DISPATCH PRIORITIES

**HEAT**

**HC 1** -High body temperature, skin dry or face red/flushed
-Confused, acting strangely or staggering
**HC 3** -Skin cold, clammy, sweaty
-Muscle cramps
**HC 0** -All others

**COLD**

**HC 1** -Unresponsive
-Frozen extremities
**HC 3** -Confused or acting strangely
**HC 0** -All others



## ADDITIONAL INFORMATION

**HEAT:** If temperature has been taken, a "high" reading is greater than 102° F (38.8°C).

| | Heat Exhaustion | Heat Stroke |
|---|---|---|
| Mental State------ | May be disoriented---------- | Confused or coma |
| Temperature------ | Normal or low---------- | Very high |
| Skin---------- | Cool, pale, moist---------- | Hot, red, dry |
| Pulse---------- | Rapid, weak---------- | Rapid, strong, full |
| Treatment--------- | Cooling---------- | Rapid cooling |

HEAT STROKE IS A PROFOUND EMERGENCY !!

**COLD:** Consider hypothermia in the elderly, the alcoholic and the patient found outdoors, particularly during the cold/freezing seasons. It is possible to become hypothermic in temperatures above freezing, indoors as well as outdoors. Wet and/or windy environments increase risk.

Severe Hypothermia : Skin ice cold, rigid muscles, little or no heart sounds. May appear dead. Handle very gently.

"Nobody is dead until they are warm and dead"

## KEY QUESTIONS

1. Specific traumatic injuries ?* Bleeding ?*
2. Trapped / caught in machinery ?
3. Fallen ?*
4. How many injured ?
5. Specific location of victim(s) ?

*If necessary, refer to appropriate card.

## PRE-ARRIVAL INSTRUCTIONS

**TURN OFF MACHINERY !!**

Don't move victim unless location increases danger. If you must move him, try to keep his head and neck from turning or pulling, to prevent further injury.

Assign specific location for someone to meet and guide responding units — advise caller that there may be more than one unit arriving.

## DISPATCH PRIORITIES

**TR 1** -If extrication is needed
-If more than one victim

**TR 3** -If unknown type of injuries or unknown if extrication is needed
-Any industrial/machinery accident for which specific information cannot be obtained.



## ADDITIONAL INFORMATION

Generally will be a third party caller.

It is very important to determine if extrication from machinery is needed.

It is often difficult to locate the victim in plants, warehouses, hold of ships, construction sites, etc. — **GET CLEAR DIRECTIONS**

**20 INDUSTRIAL / MACHINERY ACCIDENT** 8/92

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Difficulty breathing ?<br>2. Confused or disoriented ?<br>3. Source of toxic substance ?<br>4. How many victims ?<br>NOTE: "Sniffing" glue, etc. is an Overdose problem - see Overdose card. | DO NOT TOUCH VICTIM OR ENTER AREA UNTIL PRODUCT IS IDENTIFIED OR UNTIL PROPER PROTECTIVE CLOTHING IS WORN.<br>IF NO DANGER TO RESCUER, REMOVE VICTIM FROM TOXIC ENVIRONMENT AND KEEP VICTIM ISOLATED<br>If necessary, refer to appropriate sequence card for airway breathing or CPR instructions.<br>Assign specific location for someone to meet and guide responding units.<br>Advise caller that there may be more than one unit arriving. |

## DISPATCH PRIORITIES

•• IF SOURCE IS A TOXIC OR UNKNOWN SUBSTANCE, REFER TO HAZMAT CARD ••
•• NOTIFY ALL RESPONDING PERSONNEL OF POTENTIAL DANGER AND PROVIDE SPECIAL INSTRUCTIONS WHEN AVAILABLE ••

**IN 1** -If patient has not been removed from toxic environment
-Unconscious or condition unknown.
-Difficulty breathing or confused

**IN 9/0** -All others

MULTIPLE VICTIMS : Consider activation of MCI plan.

**21 INHALATION POISONING** 8/92

## ADDITIONAL INFORMATION

Toxic gasses may be colorless, odorless and tasteless (e.g., Carbon Monoxide). Symptoms can range from headache to unconsciousness and victim can present in any state of intoxication.

Very small quantities of toxic substances can be fatal.

## KEY QUESTIONS

1. What is the reason that you think he has a medical emergency ?
2. Did you see him fall ?
3. Did you see him get injured or assaulted ?
4. Is he bleeding ?
5. Is he moving ?

**Get a physical description of the patient**
MAKE EVERY ATTEMPT TO DETERMINE SPECIFIC FACTS AND REFER TO THE APPROPRIATE CARD

## PRE-ARRIVAL INSTRUCTIONS

Did you see any medic-alert tags (neck, wrist, ankle)?

Look for and direct responders to the victim.

Inform caller that there may be a delay in response.

If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.

## DISPATCH PRIORITIES

MN 9 -Unknown problem

Send CHIERS (W26) if patient located within their Central City District

Send Police if patient outside W26 area or W26 is unavailable.

If specific information is discovered after the call is dispatched, inform all responders and send additional units as needed. Add new information to the incident immediately.



## ADDITIONAL INFORMATION

"MAN DOWN" IS NOT A SPECIFIC DIAGNOSIS. IT COVERS MANY VARIED SITUATIONS. INQUIRE FOR SPECIFIC FACTS.

Only one card in the Triage Guidelines asks if the caller/victim has ingested alcohol — the Overdoses/ Poisoning/Ingestion card. Information regarding a subject's state of intoxication may be offered by the caller, but this info should not be used in determining response.

The intoxicated person may also have a legitimate medical emergency — calltakers should be wary of assuming that a reportedly intoxicated person is "just a drunk". Diabetes, head injuries, and other serious medical emergencies can "mimic" inebriation.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Confused or drowsy ?<br>2. What and how much ingested ?<br>How long ago ?<br>Alcohol also ingested ?<br>3. DT's or withdrawal ? | Gather medications / pill bottles, etc.<br>If appropriate, or if caller is the patient, stay on line with caller until help arrives.<br>If necessary, refer to appropriate cards for vomiting, airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**OD 1** -Unconscious

**OD 3** -Confused or drowsy
-Alcohol taken with drugs
-Suspected or confirmed DT's or withdrawal
-Condition unknown

All other ingestions / overdoses : Conference with Poison Control Center and await their instructions.

**ALL** overdoses : refer to Police.



## ADDITIONAL INFORMATION

IF THE CALLER IS THE PATIENT, KEEP HIM/HER ON THE LINE UNTIL HELP ARRIVES !

**Overdose:** Intentional act by victim.

**Ingestion:** Denotes accidental intake

Most ingestions by children can be handled by the Oregon Poison Control Center (OPCC).

All calls referred to the Oregon Poison Control Center will be evaluated by them and necessary units dispatched per recommendation. If appropriate, stay on line with OPCC until OPCC determines no need for emergency response.

Because overdose victims have a motive for their action (suicide, attention getting, a "cry for help", etc) they often are misleading about the amount or type of medication taken. They may also exhibit violent and/or unpredictable behavior. Make sure that all responders are aware of unusual circumstances!!

DT's (Delirium Tremens) is associated with alcohol withdrawal and can cause tremors, convulsions, and hallucinations. Delirium Tremens has a mortality rate of up to 20%.

Patients who are addicted to drugs may experience a severe reaction when the drug is withdrawn. These reactions are characterized by anxiety, nausea, vomiting, convulsions, delirium, profuse sweating, rapid heart rate, hallucinations, and severe abdominal cramps.

## KEY QUESTIONS

1. Bleeding ? How much ?
2. Months pregnant ? First pregnancy ?
3. Type of pain ? (bearing down, contraction )
4. Frequency of pain ?
* 5. Mother pushing or baby's head crowning ?
* 6. If delivered, is baby conscious & breathing ?
7. Seizures ? (Refer to seizure card)

## PRE-ARRIVAL INSTRUCTIONS

**IMMINENT BIRTH:** See Childbirth Sequence Card

Do not pack anything into the vagina to control bleeding. Use pads/towels to absorb.

Do not attempt to stop delivery !

If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.

## DISPATCH PRIORITIES

**OB 1** -Excessive bleeding during 3rd trimester, before or after delivery.
-Delivery has just occurred, is occurring now, or is imminent *
-Abnormal presenting body part.
-New onset seizure activity (if seizing now, refer to seizure card pre-arrivals)

**OB 3** -Excessive bleeding during 1st or 2nd trimester.

**OB 0** -All others



## ADDITIONAL INFORMATION

* **IMMINENT:** Pains less than 2 minutes apart in first pregnancy, less than 5 minutes apart in second or more pregnancy, rapid progression of labor, head crowning or mother pushing.

In general, initial pregnancies progress through labor slower than successive pregnancies. Therefore, labor pains two minutes apart in a third pregnancy are considered more urgent than in a first pregnancy.

**Stages of pregnancy:**
1st trimester - 0 - 3 months
2nd trimester - 4 - 6 months
3rd trimester - 7 - 9 months (to delivery)

**NOTE:** Presentation of the cord, hands or feet first as baby delivers is a dire pre-hospital emergency. Often the only chance for the baby's survival is rapid transport for in-hospital care.

**Contraction** = Labor pains from contractions of the uterus.

**Bearing down** = May mean the mother is physically attempting to push the baby through the birth canal or that the mother feels that she has to move her bowels. This is caused by baby's head pressing on the mother's rectum. (birth is imminent!)

**Crowning:** Top of baby's head showing at vagina (birth is imminent!)

Bleeding and/or pain during the first or second trimester may be a sign of miscarriage/ectopic pregnancy or other problems.

Some bleeding always occurs at delivery. More than 5 blood-soaked pads is considered excessive bleeding (before or after delivery).

**REMEMBER:** After delivery there are two patients!!

If the mother tells you that "The baby is coming!" — it usually is.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Has the seizure stopped ?<br>2. More than 1 seizure in a row ?<br>* 3. Pregnant ? (Refer to Pregnancy card)<br>4. High fever ?<br>5. Any associated trauma ? (Refer to Trauma card) | No CPR on seizing patient.<br>Do not restrain patient or force objects into his / her mouth<br>Move dangerous objects away from patient.<br>Turn gently on side after seizure stops.<br>Don't let patient wander about.<br>Refer to vomiting card instructions if vomiting occurs.<br>**Instruct caller to call back if patient has another seizure.** |

## DISPATCH PRIORITIES

**SZ 3** -Still seizing
-One or more seizures
-Febrile seizure, child 5 years or younger (even if not seizing now)

**SZ 9** -Not seizing now
-If caller is patient and says he/she thinks a seizure is imminent.

**SZ 0** -All others



## ADDITIONAL INFORMATION

*Seizures during the third trimester of pregnancy (eclampsia) may indicate a serious complication of pregnancy which may be life threatening to the woman and child.

Also known as "fits" or epilepsy.

A seizure is an abnormal firing of brain cells, a "short circuit" resulting in random patterns of emotion or motion.

**Types:** Grand mal, Petit mal ("absence"), Psychomotor, Jacksonian, Focal.

**Causes:** Epilepsy, trauma, meningitis, cardiac arrest (specifically from hypoxia —lack of Oxygen to the brain), fever, DT's, many others.

**Associated problems:** Airway (patient position, secretions, vomitus ), cyanosis, oral trauma (bitten tongue or cheek), fractures (from "thrashing about"), inappropriate CPR and mouth-to-mouth, post-ictal state (patient is "spaced out"), recurrent or continuous seizures (Status Epilepticus — very serious ).

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. What is different today ?<br>2. Confused or hard to arouse ?<br>3. Dizzy or feeling faint ?<br>4. Does something hurt ?<br>5. Duration of illness ?<br>6. Suspected cause ? History ? Dialysis or Transplant patient ?<br>7. Fever ? | Make patient as comfortable as possible.<br>Monitor breathing. |

## DISPATCH PRIORITIES

**SK 3** -Confused or hard to arouse
-Dizzy or feeling faint.
-Other signs of shock
-Dialysis patient
-Transplant patient

**SK 0** -Unknown status
-Fever only, no emergency signs or symptoms.

**NOTE:** If vomiting the only sign or symptom, see VOMITING card.



## ADDITIONAL INFORMATION

Complaints such as Cancer, Leukemia, chronic illness, dehydration, infection, meningitis, etc. elicit an emotional response from dispatchers because the terms seem serious. Stick to obtaining signs and symptoms that can be prioritized.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. Confused or hard to arouse ?<br>2. Difficulty breathing ?<br>3. Headache ?<br>4. Victim able to move both sides of body ? (weakness/paralysis on one side ?)<br>5. Slurred or difficult speech ?<br>6. Facial droop or drooling ?<br>7. History of previous stroke ? | **REASSURE VICTIM**<br>Lay patient down.<br>No pillows behind head (can cause airway problem)<br>If difficulty breathing, position of comfort (may be lying down or semi-reclining)<br>Check airway. If vomiting or drooling, turn head to side. If necessary, refer to appropriate card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**ST 3**
-Confused or hard to arouse
-Any difficulty breathing
-Headache
-Weakness or paralysis of one side
-Slurred or difficult speech
-Facial droop or drooling?

**ST 0**
-All others

**27 STROKE** 8/92

## ADDITIONAL INFORMATION

The airway may become obstructed by the patient's tongue (due to loss of gag reflex from nerve damage).

**Definition:** Disruption of blood flow to the brain or part of the brain due to blood clot or hemorrhage. Hemorrhage also causes increased pressure within the skull. Clots are usually spontaneous while hemorrhage is either spontaneous or traumatic.
Paralysis or weakness of one side, altered level of consciousness and respiratory changes are all common symptoms. Other than supportive care there is no specific pre-hospital treatment.

**C.V.A** = CerebroVascular Accident.

**T.I.A.** = Transient Ischemic Attack ("little stroke"= stroke-like symptoms that resolve quickly)

**NOTE:** Many stroke victims are unable to talk or respond, but are very aware of everything around them. Reassurance is very important. Talking about them or their condition as if they cannot hear or understand may greatly increase their feelings of helplessness, anxiety and/or panic.

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. What happened ?<br>(Refer to list in ADDITIONAL INFORMATION section)<br>2. Any injuries ?<br>3. Number of victims ?<br>4. Anyone trapped or pinned ?<br>5. Any hazards at the scene ?<br>(fire, leaking fuel, hazmat, toxic fumes, etc.) | Don't move victims unless immediate danger — (fire, leaking fuel, hazmat, toxic fumes, etc.)<br>If you must move him, try to keep his head and neck from turning or pulling, to prevent further injury.<br>Don't treat unless serious bleeding (If necessary, refer to Bleeding card.) |

## DISPATCH PRIORITIES

**•• IF HAZARDOUS MATERIALS / CARGO VEHICLES INVOLVED, *CONFERENCE WITH FAD* ••**

**TA 1** -Reported 2 or more victims (consider MCI potential)
-Victim(s) pinned in, trapped, or unconscious
-Hazards at scene with known victim(s)
-Violent Mechanism of Injury * (REFER TO LIST IN ADDITIONAL INFORMATION SECTION)

**TA 3** -Known injuries



## ADDITIONAL INFORMATION

***VIOLENT MECHANISM OF INJURY** = A type of incident which, by its very nature, significantly increases the possibility of serious injury due to the large amount of energy involved. Always a TA 1.

| | | |
|---|---|---|
| Examples: | - Auto vs. pedestrian | - Any high-speed accident |
| | - Auto vs. bicycle | - Passengers thrown from vehicle |
| | - Any motorcycle accident | - Vehicle on its top, off bridge, etc. |
| | - Rollover | - Extensive damage to vehicle(s) |

Always inform ALL responding agencies (police, fire and/or medical) if there is any possibility of hazardous materials involved and provide special instructions when available.

In single vehicle accidents (car vs. pole, car into ditch, etc.) consider medical cause, e.g. M.I., diabetic problem, fainting, etc.

Consider dispatching additional units/resources if multiple patient situation — Estimate 1 transporting unit for each 2 patients. (MCI?)

If responders at scene report no traffic accident located, notify other responding agencies.

**IF IN DOUBT, UPGRADE THE RESPONSE.**

## KEY QUESTIONS

1. What happened ?
2. Number of victims ? (Consider MCI)
3. Victim(s) trapped or pinned ?
4. Part(s) of body injured ?
5. Open fractures ? Amputation?
6. Difficulty breathing ?
7. Confused or sleepy ?

## PRE-ARRIVAL INSTRUCTIONS

Don't move victim unless immediate danger —
(fire, hazardous materials, toxic fumes, etc.)

If you must move victim, try to keep his head and neck from turning or pulling, to prevent further injury.

Don't splint

If bleeding, apply and maintain direct pressure to wound site.

If severe bleeding or amputation, refer to Bleeding card.

Industrial Accident: see Industrial Card

## DISPATCH PRIORITIES

**TR 1** -CRITICAL (refer to list in ADDITIONAL INFORMATION section)
Also: -Reported two or more victims (consider MCI)
-Victim(s) pinned in, trapped or unconscious
-Hazards at scene with known victim(s)
-Violent mechanism of injury**

**TR 3** -POSSIBLY CRITICAL or NON-CRITICAL (refer to list in ADDITIONAL INFORMATION section)
--with signs of shock, excessive bleeding, open fracture or amputation.

**TR 9/0** -POSSIBLY CRITICAL or NON-CRITICAL (refer to list in ADDITIONAL INFORMATION section)
--with NO signs of shock, excessive bleeding, open fracture or amputation.

**IF IN DOUBT, UPGRADE!!**



## ADDITIONAL INFORMATION

**Types of Injuries:**

| | | |
|---|---|---|
| Fracture (break) | Contusion (bruise) | Laceration (cut) |
| Dislocation (out-of-joint) | Abrasion (scrape) | Avulsion (torn away) |

| CRITICAL | POSSIBLY CRITICAL | | NON-CRITICAL | |
|---|---|---|---|---|
| Head | Back | Clavicle | Fingers | Toes |
| Neck or Spine * | Pelvis/Hip | Shoulder | Hands | Feet |
| Chest, ribs, sternum | Femur | Genitalia | Wrist | Ankle |
| Abdomen | Arms | Tibia (shin) | Elbow | Knee |

**VIOLENT MECHANISM of INJURY: A type of incident which, by its very nature, significantly increases the possibility of serious injury due to the large amount of energy involved.

* A patient with spinal cord injuries may have one or more of the following:
1. Tingling sensation or numbness in arms or legs
2. Inability to move
3. No pain (with obviously serious injuries)

AVOID ANY UNNECESSARY MOVEMENT WITH POSSIBLE SPINAL CORD INJURIES ! !

**NOTE:** IF multiple victims with known central wounds, use your judgement in determining additional response or notifications. Consider MCI or HazMat potential.

## KEY QUESTIONS

1. Breathing ? (see Additional Info)
2. Now conscious ?
3. Cause / history of unconsciousness ? (What happened ?).

## PRE-ARRIVAL INSTRUCTIONS

Did you see any medic-alert tags (neck, wrist, ankle)?

* BREATHING CHECK

** PULSE CHECK

If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions.

## DISPATCH PRIORITIES

**UN 1**
-Unconscious, not breathing
-Unconscious, not known if breathing
-Unconscious, abnormal or possible agonal breathing

**UN 3**
-Unconscious, breathing normally
-Semi-conscious (confused, hard to arouse) and breathing (if with difficulty, refer to BREATHING card)
-Now conscious and breathing (if with difficulty, refer to BREATHING card)



## ADDITIONAL INFORMATION

*** BREATHING CHECK:** Place your ear next to his/her mouth and nose and look toward the chest. Can you feel or hear any air movement? Is there fluid, bubbles or anything else in the mouth or nose? Do you see the chest or stomach moving? Place your hand on his/her stomach. Can you feel it rising or falling?

**** PULSE CHECK: Child/Adult:** Place your index and middle finger into the groove next to his/her Adam's Apple. DON'T PRESS TOO HARD! Feel for a pulse for 5 seconds.

**Infant:** Place your index and middle finger over the baby's left nipple. DON'T PRESS TOO HARD! Feel for a pulse for 5 seconds.

**AGONAL BREATHING:** Gasping, ineffective breaths that often occur at the time of Cardiac Arrest. The caller may describe the person as "breathing funny, breathing weird, gasping, making funny noises, etc."

**SIGNS OF SHOCK:** Confused/sleepy; skin cool/moist, pale/blue; nausea/vomiting; dizzy/faint.

**SOME CAUSES OF UNCONSCIOUSNESS:**

| | | |
|---|---|---|
| Cardiac Arrest (sudden onset) | Diabetic problems | Syncope (fainting) |
| Other heart problems | Respiratory problems | Head Injury (old or new) |
| Overdose, poisoning, intoxication | Seizures | Stroke (CVA) |

| KEY QUESTIONS | PRE-ARRIVAL INSTRUCTIONS |
|---|---|
| 1. What is the reason that you think she has a medical problem ?<br>2. Does she have any known history of medical problems ?<br>3. Is she breathing normally ?<br>4. Have you spoken with her ?<br>5. Can she talk in her usual manner ?<br>6. Is she able to move ?<br>MAKE EVERY ATTEMPT TO DETERMINE SPECIFIC FACTS AND REFER TO THE APPROPRIATE CARD | Did you see any medic-alert tags (neck, wrist, ankle)?<br>Look for and direct responders to the victim.<br>If necessary, refer to appropriate sequence card for airway, breathing or CPR instructions. |

## DISPATCH PRIORITIES

**UK 3** -Caller indicates severe medical problem but is unable to describe specific signs or symptoms.

**UK 9** -Unverified medical alarm from a licensed alarm company.
-If patient <u>can be seen</u> with obvious medical problem.

NOTE: If specific information is discovered after call is dispatched, inform responders and send additional units as needed. Add new information to the incident immediately.

**31 UNKNOWN PROBLEM** 8/92

## ADDITIONAL INFORMATION

"UNKNOWN PROBLEM" IS <u>NOT</u> A SPECIFIC DIAGNOSIS. IT COVERS MANY VARIED SITUATIONS. INQUIRE FOR SPECIFIC FACTS.

Location of victim could suggest type of problem likely to be encountered:

Restaurant ---------- may suggest ---------- Choking
Seafood Restaurant --- may suggest ---------- Choking, severe allergic reaction
Garage ---------- may suggest ---------- Carbon Monoxide poisoning, electrocution
Bank ---------- may suggest ---------- Cardiac arrest
Park ---------- may suggest ---------- Intoxication, OD, choking, assault
Street ---------- may suggest ---------- Intoxication, cardiac arrest, seizure, OD, assault

Relay <u>type</u> of location and/or business name (if known) to responding units, not just address.

## KEY QUESTIONS

1. Any other symptoms ?
2. Vomiting blood or "coffee ground" type material
3. Level of consciousness ?
4. Confused or sleepy ?

## PRE-ARRIVAL INSTRUCTIONS

**TRAUMA VICTIM:** Don't move him!! If you must, try to keep his head and neck from turning or pulling, to prevent further injury.

If unconscious, turn head to side or roll entire body to side. Scoop matter out of mouth.

If semi-conscious, make sure victim can clear own airway. If not, assist as above.

If patient in semi-reclining position of comfort, lean them forward or to side. Laying them down may compromise breathing.

**SHOCK:** Lay down, elevate legs.

## DISPATCH PRIORITIES

| | | |
|---|---|---|
| **AB** | **3** | -Vomiting bright red blood or dark "coffee ground" substance. |
| **SK** | **3** | -Vomiting with signs of shock |
| **SK** | **0** | -Vomiting only, no other symptoms |



## ADDITIONAL INFORMATION

The biggest danger from vomiting is aspiration (inhalation) of the vomitus. Whenever a patient's state of consciousness is such that they cannot protect their own airway, steps must be taken to protect the patient from aspiration (hence turning head to side, rolling body to side, etc.). Aspiration of any petroleum-based substance can cause chemical pneumonia, which can also be fatal.

Nausea can be symptomatic of a wide range of problems, from tension/nervousness to life threatening problems like heart attack or shock.

Vomiting is a normal bodily reaction to rid the stomach of its contents. In the case of food that disagrees with the body, vomiting itself may solve the problem.

Nausea/vomiting may be one of the signs of heart attack, shock, overdose of some drugs; bloody vomitus can indicate internal bleeding from ulcer, trauma, etc. "Coffee ground" vomitus is partly digested blood from chromic internal bleeding.

## PRE-ARRIVAL SEQUENCE CARDS

Encourage caller to bring victim as close to phone as possible.

Ask the caller : "Do you or anyone else there know CPR ? ". If he knows CPR, find out if he needs assistance and tell him you can assist with telephone instruction.

Use the following statement : "Do you want to do CPR — I'll help you!!" This statement should be recited as one sentence with NO break after "CPR". Do not allow caller to say no because she doesn't know CPR. This should be a forceful and persuasive statement, but if the caller declines for any reason that is her decision and you no longer have verbal consent to proceed. Coercion should NOT be used. Callers may be physically unable to perform CPR or they might be placed in physical jeopardy by performing CPR - Allow THEM to make the decision.

Follow the sequence card exactly. Slight changes in wording can change the effectiveness of CPR. CPR is ineffective on a soft surface - ensure that the patient is on a hard surface (table or floor) before attempting chest compressions.

Reassure the caller frequently that help is on the way.

THE SEQUENCE CARDS CANNOT POSSIBLY INCLUDE THE ANSWER TO EVERY SITUATION. THE CALL-TAKER MUST MAKE DECISIONS USING JUDGEMENT AND EXPERIENCE.

The "hysteria threshold" is the point at which an operator can gain control of a seemingly hysterical or uncooperative caller, and can begin to give effective pre-arrival instructions. The calltaker must realize that this threshold exists and can be reached in almost all cases if the calltaker doesn't give up before obtaining control of the caller. "Repetitive Persistence," repeating a phrase or request over and over without changing the wording or structure, is a very effective way to reach this "hysteria threshold". Example: "You must be calm so you can help your baby" (repeat). The consistent phrase should eventually "break through" to the agitated/hysterical caller and enable the calltaker to regain control and proceed with instructions.



## AIRWAY CONSIDERATIONS

Airway control and maintenance is the most important aspect of emergency care for the critically ill or injured patient. Insuring that proper instructions are given and appropriate pre-arrival sequence cards are followed is of paramount importance. There may be some patients who are obviously breathing who need types of airway management that are not included in the sequence cards.

In all situations (except pre-arrivals, DIABETIC PROBLEMS), do not encourage or sanction the giving of any food or drink prior to the arrival of responders.

Always check for and remove loose dentures if the patient needs any type of airway support.

A pillow, blanket, etc. may have been placed under the victim's head "to make him more comfortable." HOWEVER, this action can flex the neck forward and compromise/obstruct the patient's airway and/or worsen a neck injury. CAUTION YOUR CALLER TO AVOID IT.

If unconscious and vomiting, turn patient's head to side or roll entire body to side. Scoop vomitus out of mouth. If trauma victim, "log roll" patient to side; try to keep the head and neck from turning or pulling, to prevent further injury.

If semi-conscious, make sure patient can clear his/her own airway. If not, assist as above. Patient may bite rescuer while "scooping" vomitus out. CAUTION CALLER TO BE CAREFUL!!

If patient is in a semi-reclining position of comfort, lean him forward or to the side. Laying him down may compromise his breathing. Find position most comfortable to patient and most supportive of effective respirations.

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help your baby.
(If caller hysterical: YOU MUST BE CALM SO YOU CAN HELP YOUR BABY. [Keep repeating until calm.])
Bring the baby near the phone.
Is the baby still choking? Is the baby able to breathe?

CHOKING - NOT BREATHING

Is he coughing or wheezing ? — YES

NO

Is he able to speak or cry ?

NO

YES → Do not do anything now. Wait until EMT's arrive. →

NOT CHOKING - NOW BREATHING

Check his mouth for objects. If you see something, use your finger to sweep it out of the mouth.

If unconscious, slightly tilt his head BACK to keep his throat open. STAY ON THE LINE WITH ME!

** Lay him FACE DOWN across your arm or lap with his HEAD LOWER THAN HIS BODY (Support his head).
Deliver 4 sharp blows with the heel of your hand right between his shoulder blades.
Look in his mouth. Do you see an object?

NO

Lay the baby FACE UP on hard surface

YES

Use your finger to sweep it out of his mouth. Is it out?

NO

YES

8/92

Place 2 fingers in the MIDDLE of the CHEST right BETWEEN THE NIPPLES. Make sure your FINGERS are on the CENTER of the CHEST, RIGHT BETWEEN THE NIPPLES.

PUSH with your fingertips UP AND DOWN rapidly 4 times, like you're "PUMPING" the chest.

Look in the mouth. Can you see an object? — YES

NO

Is he breathing now? — YES → If unconscious, slightly tilt his head BACK to keep his throat open. STAY ON THE LINE WITH ME!

NO

Repeat from **.

NO AGAIN

Is he breathing or moving — YES → If unconscious, slightly tilt his head BACK to keep his throat open. STAY ON THE LINE WITH ME!

NO

GO TO INFANT: MOUTH-TO-MOUTH CARD (35)

8/92

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help your baby. (If caller hysterical: YOU MUST BE CALM SO YOU CAN HELP YOUR BABY. [Keep repeating until calm.])

Bring her near the phone.

Put the baby flat on her back on a table or the floor.

Place your HAND UNDER her NECK AND SHOULDERS and SLIGHTLY TILT her HEAD BACK.

Is there vomit in her mouth? — YES

NO

VOMITING INSTRUCTIONS: Turn her HEAD to the SIDE. SCOOP MOUTH OUT (before you start Mouth-to-Mouth.).

REMEMBER: Do this any time vomiting occurs — YOU MUST BLOW THROUGH THE REMAINING FLUID.

Is she breathing now? — YES

NO

Maintain SLIGHT HEAD TILT and check her breathing often.

Do you or anyone else there know CPR? (If so, STAY ON THE PHONE and relay sequence to ensure they're doing it properly.)

I'm going to tell you how to give MOUTH-TO-MOUTH. First, tilt her head back like you did before.

** COMPLETELY COVER her MOUTH AND NOSE with your MOUTH.

Blow 2 SLOW BREATHS OF AIR into her LUNGS, just like you're filling up a SMALL balloon.

Watch for her chest to rise.

Go do it now and then come right back to the phone.

Did you see her CHEST RISING when you blew in the air... Did you feel the AIR GOING IN? — YES

NO

MAKE SURE HER HEAD IS TILTED BACK SLIGHTLY. (Go back to ** , repeat the sequence, and BLOW A LITTLE HARDER.) — YES - NOW

NO AGAIN

Go to INFANT: CHOKING CARD (34)

I'm going to tell you how to check for the pulse.

* Place your INDEX AND MIDDLE FINGER over her LEFT NIPPLE. DON'T PRESS TOO HARD. FEEL for a PULSE for 5 SECONDS.

Do you FEEL A PULSE?

YES

++ Continue Mouth-to-Mouth. Blow 1 SLOW BREATH into her ONCE EVERY 3 SECONDS. Go do this now, BUT DON'T HANG UP! KEEP THE LINE OPEN and tell me if she starts to breathe on her own...Is she breathing on her own?

NO

Continue Mouth-to-Mouth

YES

STOP Mouth-to-Mouth and monitor. If breathing stops again: Go back to * and repeat.

NO

Go to INFANT: COMPRESSIONS CARD (36)

8/92

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you what to do next.

(Bring the baby near the phone). Place him on his back on a hard surface (table or floor).

Place 2 fingers in the MIDDLE of his CHEST right BETWEEN THE NIPPLES. Make sure your FINGERS are in the CENTER of the CHEST, RIGHT BETWEEN THE NIPPLES.

PUSH with your fingertips STRAIGHT UP AND DOWN rapidly 5 times, like you're PUMPING the chest.

Then put your HAND UNDER the NECK AND SHOULDER area so that his HEAD is SLIGHTLY TILTED BACK.

Put your MOUTH over his NOSE AND MOUTH.

* Blow in 1 SLOW BREATH OF AIR and then PUMP the CHEST again rapidly 5 times.

Repeat cycle 4 times and then come right back to the phone.

** Check for a pulse:

Place your INDEX AND MIDDLE FINGER over his LEFT NIPPLE. DON'T PRESS TOO HARD. FEEL for a PULSE for 5 SECONDS.

8/92

Do you FEEL A PULSE? — YES

NO

Keep repeating *, checking for a pulse every 4th time. Make sure his head is tilted back to keep his airway open.

KEEP DOING IT UNTIL HELP CAN TAKE OVER OR UNTIL HE STARTS TO BREATHE ON HIS OWN.

If he starts breathing on his own: STOP CPR AND MONITOR CLOSELY.

If he STOPS breathing again: Go back to **.

Maintain HEAD TILT and monitor breathing often. IF NOT breathing:

Go to ++ on INFANT: AIRWAY/MOUTH-TO-MOUTH CARD (35) and give MOUTH-TO-MOUTH instructions.

| | |
|---|---|
| VOMITING INSTRUCTIONS:<br><br>REMEMBER: Do this anytime vomiting occurs. | Turn his HEAD to SIDE. SCOOP MOUTH OUT. YOU MUST BLOW THROUGH THE REMAINING FLUID. |

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help your child. (If hysterical: YOU MUST BE CALM SO YOU CAN HELP YOUR CHILD. [Keep repeating until calm.])
Bring her near the phone.

Is she still choking? Is the child able to breathe?

CHOKING - NOT BREATHING

Is she coughing or wheezing? — YES → Don't do anything now. Wait until EMT's arrive.

NO

Is she able to speak or cry?

YES → Don't do anything now. Wait until EMT's arrive.

NO

** Lay her FACE UP ON THE FLOOR. Tilt her head back slightly to open her airway.

KNEEL at her FEET, Place the HEEL of your hand just above her belly button BELOW her ribs in the middle of her stomach.

Push quickly DOWN INTO her stomach 6 times.

Look in her mouth. Do you see an object? — YES → Use your finger to sweep it out of her mouth. Is it out?

NO → Repeat from **.

YES

NO

Is she breathing now? — YES → If unconscious, LIFT HER CHIN SO HER HEAD TILTS BACK to keep the throat open. STAY ON THE LINE WITH ME!

NO

Repeat from **.

NO AGAIN

Is she breathing or moving? — YES → If unconscious, tilt her head BACK to keep her throat open. STAY ON THE LINE WITH ME!

NO

GO TO CHILD: AIRWAY/MOUTH-TO-MOUTH CARD (38).

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help your child. (If hysterical: YOU MUST BE CALM SO YOU CAN HELP YOUR CHILD. [Keep repeating until calm.])

Bring the child near the phone.

Put him flat on his back on a table or on the floor.

LIFT HIS CHIN SO HIS HEAD TILTS BACK.

Is there vomit in his mouth? — YES

NO

VOMITING INSTRUCTIONS: Turn his HEAD to the SIDE. SCOOP his MOUTH OUT (before you start Mouth-to-Mouth.).

REMEMBER: Do this any time vomiting occurs — YOU MUST BLOW THROUGH THE REMAINING FLUID.

Is he breathing now? — YES

NO

Do you or anyone else there know CPR? (If so, STAY ON THE PHONE and relay sequence to ensure they're doing it properly.)

Continue lifting his chin and check his breathing often.

I'm going to tell you how to give MOUTH-TO-MOUTH.

8/92

** COMPLETELY COVER his MOUTH AND NOSE with your MOUTH. If you can't, then HOLD HIS NOSE CLOSED and COMPLETELY COVER his MOUTH with your MOUTH.

Blow 2 SLOW BREATHS into his LUNGS, just like you're filling up a SMALL balloon.

Watch for his chest to rise.
Go do it now and then come right back to the phone.

Did you see his CHEST RISING when you blew in the air...
Did you feel the AIR GOING IN? — YES

NO

MAKE SURE YOU ARE STILL LIFTING HIS CHIN.
(Go back to **, repeat the sequence, and BLOW A LITTLE HARDER.) — YES-NOW

NO AGAIN

Go to CHILD: CHOKING CARD(37)

I'm going to tell you how to check for a pulse.

* Place your INDEX AND MIDDLE FINGER into the groove next to his ADAM'S APPLE.. DON'T PRESS TOO HARD. FEEL for a PULSE for 5 SECONDS.

Do you FEEL A PULSE?

YES

++ Continue Mouth-to-Mouth. Blow 1 SLOW BREATH into him ONCE EVERY 4 SECONDS. Go do this now, BUT DON'T HANG UP! KEEP THE LINE OPEN and tell me if he starts to breathe on his own...Is he breathing on his own?

NO

Continue Mouth-to-Mouth

YES

STOP Mouth-to-Mouth and monitor. If breathing stops again: Go back to * and repeat.

NO

Go to CHILD: CHEST COMPRESSIONS CARD (39)

8/92

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you what to do next.

Bring the child near the phone. Place her on her back on a hard surface (table or floor).
Place the HEEL ONLY of ONE HAND in the MIDDLE of her CHEST right BETWEEN THE NIPPLES.
Make sure ONLY THE HEEL of one HAND is in the CENTER of her chest, RIGHT BETWEEN THE NIPPLES.

PUSH STRAIGHT UP AND DOWN with the HEEL of your hand 5 times, just like you're PUMPING the chest. PUSH DOWN FIRMLY with the HEEL OF 1 HAND, 1 INCH. PUSH 5 times – at least 1 PUSH EVERY SECOND.

LIFT THE CHIN SO HER HEAD BENDS BACK.

COMPLETELY COVER her MOUTH AND NOSE with YOUR MOUTH. If you can't, then HOLD HER NOSE CLOSED and COMPLETELY COVER her MOUTH WITH YOUR MOUTH.

* Blow in 1 SLOW BREATH and then PUMP the CHEST again 5 times.

Repeat cycle 4 times and then come right back to the phone.

** Check for a pulse:

Slide your INDEX AND MIDDLE FINGER into the groove next to her ADAM'S APPLE. DON'T PRESS TOO HARD. FEEL for a PULSE for 5 SECONDS.

Do you FEEL A PULSE? ——— YES

NO

8/92

Maintain CHIN LIFT and monitor her breathing often.
IF NOT breathing:

Go to ++ on CHILD: AIRWAY/MOUTH-TO-MOUTH CARD (38) and give MOUTH-TO-MOUTH instructions.

Keep repeating *, checking for a pulse every 4th time.

KEEP DOING THIS UNTIL HELP CAN TAKE OVER OR UNTIL SHE STARTS TO BREATHE ON HER OWN.

If she starts breathing on her own: STOP CPR AND MONITOR CLOSELY.

If she STOPS breathing again: Go back to **.

| | |
|---|---|
| VOMITING INSTRUCTIONS: | Turn her HEAD to SIDE. SCOOP MOUTH OUT. YOU MUST BLOW THROUGH THE REMAINING FLUID. |
| REMEMBER: Do this anytime vomiting occurs. | |

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help him. (If caller hysterical: YOU MUST BE CALM SO YOU CAN HELP HIM. [Keep repeating until calm.])

Bring him near the phone

Can he stand?

- YES → Keep him near the phone.
- NO (victim probably unconscious or will be soon)

Is he coughing or wheezing?

- NO → Can he breathe or talk?
  - NO → Listen carefully. I'll tell you how to do the Heimlich Maneuver.
  - YES → Reassure him. Don't do anything now. Wait until EMT's arrive. STAY ON THE LINE WITH ME!
- YES → Can he breathe or talk?
  - NO → Listen carefully. I'll tell you how to do the Heimlich Maneuver.
  - YES → Reassure him. Don't do anything now. Wait until EMT's arrive. STAY ON THE LINE WITH ME!

Is he coughing or wheezing?

- YES → Can he breathe or talk?
  - NO → Listen carefully. I'll tell you how to do the Heimlich Maneuver.
  - YES → Reassure him. Don't do anything now. Wait until EMT's arrive. STAY ON THE LINE WITH ME!
- NO → Can he breathe or talk?
  - NO → Listen carefully. I'll tell you how to do the Heimlich Maneuver.
  - YES → Reassure him. Don't do anything now. Wait until EMT's arrive. STAY ON THE LINE WITH ME!

Listen carefully to these instructions! Then go to him and do EXACTLY as I tell you- and COME RIGHT BACK TO THE PHONE.

** Make sure he is laying FACE UP on a hard surface (table or floor). STRADDLE his HIPS. Tilt his head back slightly, to open his airway.

Place your hands, one on TOP of the other, just ABOVE his belly button. With a quick THRUST, PUSH INTO his STOMACH DOWNWARD AND TOWARD HIS HEAD using your weight. Do this 6 times and return to the phone right away.

Look into his mouth. Can you see an object?

- NO → Is he breathing now?
  - NO → Repeat the sequence from ** and then return to the phone right away.
  - YES → STOP treatment. Monitor closely.
- YES → Use your FINGER to sweep it out of his MOUTH. Is it out?
  - NO → Repeat the sequence from ** and then return to the phone right away.
  - YES → Can he breathe or talk now?
    - NO → GO TO ADULT: AIRWAY/MOUTH-TO-MOUTH CARD (41).
    - YES → STOP treatment. Reassure him. Monitor closely.

* Move BEHIND him and put your arms around his waist.

Grasp your FIST with your other hand, just ABOVE his belly button. Be sure you are BELOW the ribs and breast bone. In a quick motion, JERK HARD, INWARD AND UP, INTO his stomach. Do this 6 times and return to the phone right away.

Is the object out and can he breathe and talk now?

- YES → STOP treatment. Reassure him. Monitor closely.
- NO → Repeat from * until the object is out or he loses consciousness.
  - If he cannot stand up any longer, go to **.

8/92



8/92

HELP IS ON THE WAY! LISTEN CAREFULLY ! I'll tell you how to help her. (If hysterical: YOU MUST BE CALM SO YOU CAN HELP HER. [Keep repeating until calm.])

Can you get the phone next to her? If so, do it NOW.

I'm going to tell you how to open her airway. LISTEN CAREFULLY to these instructions and do EXACTLY as I tell you. Lay her FLAT ON HER BACK. If there is a pillow under her head, REMOVE IT.

LIFT HER CHIN SO HER HEAD TILTS BACK.

Go do this now and come right back to the phone.

Is there vomit in her mouth?

NO

YES → VOMITING INSTRUCTIONS: Turn her head to the SIDE. SCOOP MOUTH OUT (before you start mouth-to-mouth). YOU MUST BLOW THROUGH THE REMAINING FLUID.

REMEMBER - do this any time vomiting occurs

Is she breathing now?

NO

YES → Maintain the CHIN LIFT and check her breathing often.

Do you want to do CPR - I'll help you!

YES

NO → Stop giving instructions and tell caller that help is on the way.

8/92

Do you or anyone else there know CPR? (If so, STAY ON THE PHONE and relay sequence to ensure they're doing it properly.)

I'm going to tell you how to give Mouth-to-Mouth.

Lift her CHIN up the way I told you before.

** Hold her NOSE CLOSED.

COMPLETELY COVER her MOUTH with your mouth. SLOWLY FORCE 2 DEEP BREATHS into her LUNGS just like you're blowing up a BIG balloon. Watch for her CHEST TO RISE.

Go do this now and come right back to the phone.

Did you see her CHEST RISING when you blew in the air?...Did you feel the air going in? — YES

NO

Lift the CHIN UP MORE and repeat from **.

NO AGAIN

YES NOW →

Does it feel like her throat is blocked?... That the air wasn't going in? — NO

YES

Go to ADULT: CHOKING CARD (40)

I want you to check for her pulse. *Slide your INDEX AND MIDDLE FINGER into the groove next to her ADAM'S APPLE. DON'T PRESS TOO HARD. FEEL for a PULSE for 5 SECONDS. Do you FEEL A PULSE? — YES

NO

Go to ADULT: CHEST COMPRESSION CARD (42).

Continue MOUTH-TO-MOUTH until person resumes breathing or help arrives. Give 1 BREATH /5 SECS. Recheck her pulse periodically. *

HELP IS ON THE WAY! LISTEN CAREFULLY and I'll tell you what to do next.
Can you get the phone next to him? If so, do it now.
Put him ON THE FLOOR OR A HARD SURFACE. DO IT NOW. Then come right back to the phone.

Put the HEEL of your HAND on the BREASTBONE in the CENTER of his CHEST, RIGHT BETWEEN THE NIPPLES.

Put YOUR OTHER HAND ON TOP OF THAT HAND.

Push DOWN FIRMLY with ONLY THE HEELS of your hands 2 INCHES.

Push with ONLY THE HEELS of your hands STRAIGHT UP AND DOWN 15 times. JUST like you're PUMPING THE CHEST. Do it 15 times, ONCE A SECOND...REMEMBER!

Now pinch his NOSE CLOSED AND LIFT THE CHIN AGAIN.

* SLOWLY BLOW IN 2 BIG BREATHS, then PUMP THE CHEST 15 more times. Make sure ONLY THE HEEL of your HAND is on the bone in the CENTER OF THE CHEST, RIGHT BETWEEN THE NIPPLES.

Repeat the cycle 4 times and come right back to the phone. I'll stay on the line.

Now check for a pulse: Slide your INDEX and MIDDLE FINGERS into the groove next to his ADAM'S APPLE. DON'T PRESS TOO HARD! FEEL for 5 SECONDS.

8/92

Is there a pulse? —— YES → Keep repeating *, checking for a pulse every 4th time. Maintain CHIN LIFT and check his breathing often. If NOT breathing: Continue MOUTH-TO-MOUTH. Give 1 BREATH / 5 SECONDS. Recheck pulse periodically. (refer to ADULT: AIRWAY/MOUTH-TO-MOUTH CARD (41) if necessary)

NO

KEEP DOING THIS UNTIL HELP CAN TAKE OVER OR UNTIL HE STARTS BREATHING ON HIS OWN.

If he starts breathing on his own: STOP CPR AND MONITOR CLOSELY.

If he stops breathing again:
CHECK FOR A PULSE.

Is there a pulse?

NO → Go back to *.

YES → Continue MOUTH-TO-MOUTH. Give 1 BREATH / 5 SECONDS, until person resumes breathing or until help arrives. Recheck pulse periodically.

VOMITING INSTRUCTIONS: Turn his HEAD to the SIDE. SCOOP MOUTH OUT (before you start Mouth-to-Mouth.) YOU MUST BLOW THROUGH THE REMAINING FLUID.

REMEMBER: Do this any time vomiting occurs.

HELP IS ON THE WAY! LISTEN CAREFULLY. I'll tell you what to do.

Has she already delivered?

NO

Is the mother pushing or straining?

YES

Lay mom on her back in the center of bed or on the floor. Raise her head with pillows, but don't let her sit up and DON'T LET HER GO TO THE BATHROOM.

You will need a clean, dry cloth (washcloth OK), at least 2 clean dry towels, a blanket or extra towel and a shoelace. Go get them now - I'll stay on the phone.

With each contraction place hand against the vagina and apply firm but GENTLE pressure to keep baby's head from delivering too fast and tearing mom. As the HEAD delivers, it may turn to the side. Now clean out baby's MOUTH and NOSE with a dry cloth. As the body delivers remember BABY WILL BE SLIPPERY, BE CAREFUL!! Support baby's HEAD and SHOULDERS and hold HIPS and LEGS firmly. Wrap baby in dry towel and place on mom's stomach. If the 1st towel becomes wet, replace it with a dry towel.

CONTINUE TO CLEAN OUT THE AIRWAY AS NECESSARY - KEEP BABY WARM - COVER HEAD BUT NOT FACE.

Tie the shoelace tightly around the umbilical cord approximately 6 inches from baby. DO NOT CUT THE CORD.

Is the baby crying/breathing? — NO → REFER TO INFANT: AIRWAY/ MOUTH-TO-MOUTH CARD (35).

YES → Maintain baby AND Mom. Keep both warm.

NO

There is still some time left before delivery occurs. Calm mom, instruct her to take deep breaths between contractions.

You will need at least 2 clean dry towels, a blanket or extra towel, a clean dry cloth (washcloth OK) and a shoelace.

Go get them now. Let me know if mother begins pushing or straining with contractions.

Come right back to the phone and we'll decide what to do next.

YES

Is the baby crying/breathing?

NO

YES

BABY WILL BE SLIPPERY – BE CAREFUL! SUPPORT HIS HEAD AND SHOULDERS; HOLD HIS HIPS AND LEGS FIRMLY.

Place baby across mom's stomach.

You will need a clean, dry cloth (washcloth OK), at least 2 clean dry towels, a blanket or extra towel and a shoelace. Go get them now – I'll stay on the phone.

Clean out baby's MOUTH and NOSE with dry cloth. Dry baby off and wrap in dry towel or blanket. Cover baby's HEAD and KEEP IT WARM. DO NOT COVER FACE. Tie shoelace tightly around cord approximately 6 inches from baby. DO NOT CUT CORD.

Make sure mother is kept warm also.

8/92

INSTRUCTIONS FOR DELIVERY OF AFTERBIRTH:

When the afterbirth is delivered, (usually about 20 minutes after birth of baby) wrap it in a towel and KEEP IT. DO NOT THROW IT AWAY. The doctor will need to examine it.

# ATTACHMENT L

# CHORAL

# C.H.O.R.A.L.

## Computerized Hospital On-line Resource Allocation Link

CHORAL is a unique proprietary software system designed to establish a community-wide network that improves the allocation and efficient use of participating hospitals emergency services resources.

*The CHORAL system provides:*

- ✓ A means to manage the problem of hospital closures and ambulance diverts.
- ✓ A single consistent method of communicating divert status to EMS personnel.
- ✓ Documentation for hospitals to monitor their profile of diverts over a period of time for improved staffing assignments and financial analysis.
- ✓ Data for EMS systems planners to monitor and begin solving the problems of hospital diverts within their community.
- ✓ One step method of alerting the entire community of a hospitals closure or selective diverts.
- ✓ A way to help solve the problem of unequal distribution of the medically indigent public.

*List of Hospitals Currently Using The CHORAL System:*

In Oregon:
University Hospital, Portland
Emanuel Hospital and Health Center, Portland
Providence Medical Center, Portland
Good Samaritan Hospital & Medical Center, Portland
Portland Adventist Medical Center, Portland
Mount Hood Medical Center, Gresham
Holladay Park Medical Center, Portland
Bess Kaiser Medical Center, Portland
Kaiser Sunnyside Medical Center, Clackamas
St. Vincent Hospital, Portland
Woodland Park Hospital, Portland
Rogue Valley Medical Center, Medford
Providence Medical Center, Medford

***Quest Technologies, Inc.*** • P.O. Box 19412, Portland, Oregon 97219 • (503)245-8850 • (800)228-0790 Fax (503)245-2368

# CHORAL

## (Computerized Hospital On-line Resource Allocation Link) Information Sheet

There is a growing problem of hospitals diverting patients. This practice, well described in the August 1989 jems, (Journal of Emergency Medical Services), creates several problems. Hospitals diverting patients for financial reasons unfairly burden the ultimate receiving institution. The emergency medical services system is unable to find a suitable receiving hospital for its patients. Families who believe their loved one is being transported to one hospital arrive there to find they are at the wrong facility. While preventing hospitals from ever diverting is unlikely, there is a system recently implemented in Portland, Oregon which displays hospitals' divert status to dispatch centers, the base station, and other area hospitals allowing the system to make necessary compensations.

The system is based on an interhospital computerized communications system which was previously used to monitor the status of this area's trauma hospitals. This trauma system role is described in Jack Stout's "Interface" column in the June 1988 issue of jems. In short, the earlier system relied on computers located within the emergency departments of 14 Portland hospitals. These computers were all linked to the emergency medical services system base station which in Portland is known as Medical Resource Hospital (MRH). In that system, hospitals displayed their trauma status visually on their terminal screen and that data was transmitted to all other hospitals as well as MRH which monitored the entire system and advised paramedics which of the 14 facilities were available for trauma at any given moment.

Building on that system, the Multnomah County office of Emergency Medical Services, working with the Oregon Association of Hospitals, contracted with Richard Quest of Salem, Oregon to rewrite the software so that the system will instead monitor six hospital divert categories and display that information system wide. The 911 communications center and MRH monitor system divert status so that paramedics are advised when they start to a hospital with a patient of that hospital's status. This avoids hospital shopping. Each hospital controls its own data. No hospital nor the 911 center nor MRH can change any data displayed by the other hospitals. Facility changes, after going out to the system, are saved in each hospital's own computer memory. The system divert history is stored in the MRH computer. This database will allow the EMS system to see patterns and prevalence of diverts. We have found that widely distributing information about facilities tends to keep each honest. One would think that in this information system a hospital would be tempted to display itself as being more capable that it really is. In fact, the Multnomah County experience appears to be the opposite.

The software is designed so that a hospital can provide its own compatible hardware or purchase hardware through Quest Technologies. The software allows maximum flexibility. Future changes in the screen format can be easily accomplished using a menu driven program. This program allows system planners to add or delete data points from the display as the system evolves and different needs arise. For example, other hospitals may wish to join the system or existing hospitals may add services which they want displayed on the screen. This is easily and inexpensively accomplished.

This system allows communities to monitor the divert status of all hospitals on the system. Paramedics, dispatch centers, and the base station can quickly identify an available hospital for the ambulance if the original destination is on divert. Patients then reach care more quickly.

**Quest Technologies, Inc.** • P.O. Box 19412, Portland, Oregon 97219 • (503)245-8850 • (800)228-0790 Fax (503)245-2368

# Emergency Medical Services

**Multnomah County**

# AMBULANCE SERVICE PLANNING REPORT

# 1993

# (APPENDIX TO THE AMBULANCE SERVICE PLAN)

MULTNOMAH COUNTY EMERGENCY MEDICAL SERVICES

MULTNOMAH COUNTY HEALTH DEPARTMENT

# AMBULANCE SERVICE PLANNING REPORT

## CONTENTS


SECTION ONE - INTRODUCTION

SECTION TWO - PLANNING PROCESS

SECTION THREE - FINDINGS - WORK GROUPS AND STUDIES

SECTION FOUR - CONCLUSIONS

SECTION FIVE - OPTIONS

SECTION SIX - RECOMMENDATIONS

EXHIBITS

# 1. INTRODUCTION

Emergency Medical Services (EMS) are fundamental health services. They are part of a larger set of basic public health and safety services necessary to ensure the health and well-being of the people of our community.

The mission of the Multnomah County EMS Program is to make sure that everyone who lives, works, or visits in our community has access to appropriate prehospital care and transportation services in the event of a medical emergency. Inherent in this mission are five service delivery goals:

1. The services must be readily available;

2. To be effective, services must be timely;

3. The care provided must be of high quality;

4. The system must be financially viable and stable; and

5. Optimal use must be made of available resources.

The county's mission in EMS involves three basic activities. First, we must assess our community's needs, desires, and resources. Second, we must set goals for the nature and desired outcomes of services to be provided, and determine how these goals can be met. Finally, we must assure that these goals are actually met, whether through regulation, contracting, direct service delivery, or other mechanisms.

As is the case for other fundamental public health and safety services, government's approach to assuring the availability of emergency medical services must be developed in the context of the current legal, social, political, and resource environment, and what we can reasonably anticipate that environment will be in the future. As is also true for other services, there are many service delivery designs for providing emergency medical services that will meet service delivery and resource utilization goals in the current environment. If we assume the future environment will be very similar to the current one, any of these designs can be a good choice. The challenge comes in anticipating significant trends that may make the future environment different from the present.

To ensure that our EMS system has adequate resources to perform well over the next 5-10 years, there are two major trends that must be carefully considered.

The first is increasing pressure on scarce local government resources. This pressure is the result of increasing demand for and cost of government services in the face of clear limitations on available revenues. Unless this trend is reversed, local government resources will continue to be scarce in the coming years.

The second trend is cost containment in health care. Pressured by the public, both the state and federal governments have come to recognize the crisis in health care financing and are on the verge of taking significant steps to contain and reduce expenditures throughout the health care delivery system. While neither the state nor federal government has decided on the specifics, it is clear that health care financing reform will bring pressure to decrease the cost of health services through limiting government reimbursement, regulation, manipulation of market forces, or a combination of these and perhaps other mechanisms. At this time, there is no reason to believe that reimbursement for emergency medical services will be exempt from pressures brought about by health care financing reform.

Considering the fundamental public health and safety nature of emergency medical services, the responsible path for the county is one that creates a system most likely to assure the people of the county access to high quality emergency medical services both now and in the coming years. This system must be based on a high quality of response and care, and on funding mechanisms that are adequate and stable, and likely to remain so into the foreseeable future.

## 1.1 PLAN REQUIREMENTS

Under ORS 823.180, et seq. each county is required to develop and submit to the Oregon Health Division an Ambulance Service Plan (ASA Plan). Rules for the form and content of the plan are specified in OAR 333-28-095 through 333-28-130. (Exhibit 1)

The purpose of the planning process is to assure that the people in the county have access to appropriate emergency medical services. This is done by establishing one or more Ambulance Service Areas within the county, with each ASA having an identified transporting provider.

Ambulance service plans are submitted to the Oregon Health Division for review and approval. The plans are approved if:

The plan is certified by the governing body through a non-emergency ordinance;

Each required subject has been considered and addressed;

The governing body judges that the ambulance service areas established provide for efficient and effective provision of ambulance services; and

The County has complied with ORS 823.180(2) and (3), ORS 823.310, and existing local ordinances and rules.

The Oregon Health Division does not pass judgment on the details of the plan such as the number of ASAs, which providers are chosen, etc. In essence, the state review is aimed at ensuring an adequate planning process and development of a complete plan.

## 1.2 HISTORY

Ambulance service planning activities have been on going in the County in one form or another for more than ten years. In 1982, a plan was submitted to the state that divided the County into four service areas, each with an exclusive provider. In the mid-1980s, concerns were raised about the amount consumers were being charged for ambulance services under the four service area system. To look at this issue, the County EMS Program retained a consultant to carry out an analysis of ambulance rates. This study suggested that charges in Multnomah County were significantly higher than those in comparable communities. In December, 1986, in response to the rate study and concerns voiced by the medical community regarding quality of care, the EMS Policy Board adopted a plan calling for a single ASA
served by a single ambulance provider under the medical direction of a single physician supervisor.

In February, 1987, suit was filed by two of the County's private ambulance companies, claiming the single ASA plan was illegal. Concurrent with the litigation of this suit, the EMS Program prepared a Request for Proposal to choose the provider for the proposed single ASA system. This was adopted by the EMS Policy Board in October of 1987. In December of that year, Judge Crookham ruled on the single ASA plan suit and found that the County did not have the authority to create a single ambulance service area. This

ruling was appealed by the County, and was ultimately reversed by the Appeals Court in July, 1989. Following Judge Crookham's decision, and because of a desire to move forward with system change, the EMS Policy Board considered a plan featuring two ASAs in 1988. In the 1989 Oregon legislative session, the statute governing ASA planning was revised, clarifying counties' authority to create a single ASA. These statutory changes, and their associated rules finally became effective in May, 1990.

In September, 1990, the Board of County Commissioners (BCC) directed EMS Program staff to develop an ASA plan featuring a single ASA served by one contacted provider. A plan draft was developed in November, 1990, but was not submitted at that time to the BCC because of concerns about financial viability. In December, 1990 the then EMS Director resigned. The planning process was suspended pending selection of a new director and was resumed in the Fall of 1991.

## 1.3 PLAN STATUS

In 1982, the County submitted a plan to the Oregon Health Division. This plan was approved. However, this approval was prior to the May, 1990, effective date of changes in the statute and rules governing ASA planning. Therefore, the plan does not meet current legal requirements and is not any longer considered by the state to be in effect. No amendments or changes to that plan have been submitted since its initial submission in 1982.

This proposed plan corrects this legal deficiency and meets all of the present requirements of the Oregon Health Division administrative rules regarding Ambulance Service Area planning.

# 2. PLANNING PROCESS

## 2.0 INTRODUCTION

In the Fall of 1991, the EMS Program proposed that the planning process should be revisited, focusing on 1) development of verifiable data and findings that would speak to major issues and concerns; and 2) pursuit of consensus regarding system design. More specifically, the process was designed to answer the question *Should the County be served through a single ambulance service area or multiple service areas?* After initial interviews with interested parties it was evident that the issues and concerns were varied, there were strong opinions held by many of the interested parties, and there was little adequately derived information to address major issues.

## 2.1 IDENTIFICATION OF CONCERNS AND MAJOR ISSUES

On December 5th, 1991 an open meeting was held with 23 people involved in EMS. This group represented providers, physician supervisors, the EMS Medical Advisory Board (MAB), paramedics, the Multnomah County Medical Society (MCMS), hospitals, elected officials, EMS staff, and other interested persons. The session was facilitated by a consultant who had no affiliation with any interested party or point of view. The purpose of this meeting was to identify concerns, delineate major issues, and to find if there was immediate, overwhelming need to change the current system, especially with regard to the number of ambulance service areas and providers.

The process resulted in the following points of consensus.

The system should retain many of its existing standards, including:

Providing an all ALS ambulance response to emergency calls;

Moving toward county-wide ALS first response;

Having two paramedics on each ambulance;

Responding to at least 90% of emergency ambulance dispatches in 8 minutes or less;

Providing a first response in 4 minutes or less, 90% of the time.

The meeting also identified several areas of concern about the current system:

The current quality assurance process is inadequate to advance the system's quality of care;

The data system is inadequate to judge provider performance and to serve as a basis for quality improvement;

It is unclear that the rates charged to consumers are appropriate;

Clinical quality of care may be impaired by inconsistent compliance with protocols;

There is inadequate medical and administrative accountability in the system; and

There may be too many paramedics for the number of calls, resulting in insufficient patient care experience opportunities, and in problems in providing and maintaining a desirable level of continuing paramedic training.

The question of the number of ASAs and providers was not resolved by the group. However, in response to the question "... can you make a compelling case for a single provider and are you willing to spend 100 hours toward that goal in the next year?" there were fourteen (14) "no" answers and only four (4) "yes".

## 2.2 WORK GROUP PROCESS

Based on the points of consensus developed in the December meeting, four work groups were formed. Each group was charged with 1) determining what specific information would be needed to address that group's area of concern; 2) gathering and analyzing that information; and 3) developing findings for inclusion into the County's ASA plan. The four groups were:

### 2.2.1 MEDICAL DIRECTION AND SUPERVISION

This group was a continuation of ongoing discussions on how to best provide medical supervision and direction for Multnomah County's EMS system. The consideration of a system medical director was undertaken somewhat independently from the rest of the planning process because 1) it was anticipated that this change could be implemented before other changes in the system; and 2) there is a need

for a medical director in any system design. Further, having a medical director in place also could be extremely valuable in working through system design changes.

### 2.2.2 QUALITY ASSURANCE AND IMPROVEMENT

This work group was charged with reviewing current quality assurance (QA) activities and recommending the ASA plan's direction regarding quality assurance/quality improvement.

### 2.2.3 RATES AND COSTS

The original intent of this group was to examine the current system's rate structure and to make a determination as to whether the rates were reasonable. The group moved instead to a review aimed at developing a costing methodology that could be applied to cost analysis of differently structured systems.

### 2.2.4 SYSTEM STATUS / DISPATCH

The purpose of this work group was to determine the methodology for reviewing the community's demand for emergency medical services and to prepare a "what if" scenario to examine the potential performance of a single, county-wide ASA.

### 2.2.5 OTHER STUDIES

In addition to these work groups, several studies were carried out by the EMS office to provide additional information necessary to address other questions raised in the planning process. These studies covered:

TURNOVER. This study was based on five years of data maintained by the EMS office on EMT employment. The study looked at both private ambulance providers and fire providers.

REVENUE/CHARGES. This study was on based on provider invoice charges for 9-1-1 calls. This produced the first well documented data on emergency ambulance charges in the county since 1986.

COLLECTIONS. This review of provider records resulted in a better understanding of the availability of financial resources for EMS through examination of the nature of payors and the amounts providers are able to collect.

## 2.3 STUDIES BY OTHER AGENCIES

At the same time the EMS office has been carrying out its planning process, the two largest first responder agencies in the county, Portland Fire Bureau and Gresham Fire Department, have been re-examining their involvement and roles in EMS. The Gresham Fire report is complete and the Portland report will be submitted to the city leaders in the near future.

# 3. FINDINGS - WORK GROUPS AND STUDIES

## 3.1 MEDICAL DIRECTION AND SUPERVISION

Under Oregon law, each EMT must work under the direction of a physician supervisor who meets state criteria and who is approved by the state. In the current system, each provider employs a physician, who is responsible for the EMTs of that provider. While this is not currently the case, there could be as many as thirteen (13) physician supervisors in the County if each provider employed a different physician. This multiplicity of physician supervisors can result in serious problems with clinical care. In the past there have been problems with differing interpretation of ALS and BLS protocols on the part of physician supervisors. Physician supervisors may have differing standards for the appropriateness of EMTs' practices, resulting in inconsistencies in approach and uneven discipline.

In 1986, the Multnomah County Medical Society (MCMS), through a special task force on EMS, recommended that the county's EMS system have a single medical authority. The MCMS "White Paper" coupled a single medical authority with a single transporting ambulance provider and stated "...a single system for [ALS and BLS], accountable to a single medical authority... [who] should be the physician supervisor for the single ALS service,...responsible to the Multnomah County Health Officer." (Exhibit 2) In addition, the single medical authority concept has been endorsed by the Oregon Chapter American College of Emergency Physicians (ACEP).

In reviewing the issues surrounding medical supervision, the work group's initial finding was that a single medical authority was necessary for the EMS system and that this authority could be a single physician or an organized group with an identified Medical Director. There was general agreement on the clinically related duties of the single physician authority by all interested parties. A proposal embodying this approach was forwarded to the Medical Advisory Board (MAB) for discussion. At about the same time, the Portland Area Paramedic Alliance (PAPA), in conjunction with one member of the MAB, brought to the MAB an alternate proposal for medical direction. This proposal differed in that gave a single physician control of all aspects of the EMS system. It also called for the physician to receive program direction from the Medical Advisory Board, and report administratively directly to the Chair of the County Board of Commissioners (BCC). This proposal was adopted by the MAB.

At an informal hearing in front of the BCC, the EMS Program was instructed to prepare an ordinance change to implement medical direction through a single Physician Medical Director responsible for all medical aspects of the EMS system. This Medical Director was to be placed organizationally in the Health Department.

## 3.2 QUALITY ASSURANCE AND IMPROVEMENT

At the single meeting of this work group, there was consensus that an integrated, system-wide quality management program was necessary to improve the functioning of whatever system the county might adopt. This concept has a historical basis in the MCMS "White Paper" and was put forth in the PAPA medical supervision proposal.

Quality Assurance (QA), as practiced in many organizations, focuses on identification of problems, allocation of blame, and often times sanctions as a part of the solution. It is not a standards driven, system oriented process. Many organizations in EMS are turning to a Continuous Quality Improvement (CQI) model based on the Total Quality Management theory of W. Edwards Demming and his work with Japanese industry. As part of the planning process an educational forum was held on October 15, 1992 to provide information on the CQI model. Forty five (45) people attended, representing seventeen (17) groups involved with EMS in the tri-county area. The presenters were from Portland State University, Oregon Health Sciences University, and the Kaiser Health Plan. Following this forum a group of interested providers, paramedics, physicians, and EMS staff have met several times to begin the process of implementing a CQI model in Multnomah County and in the surrounding jurisdictions.

Critical to the success of a CQI program is the development and use of an integrated data base containing data related to patient care and outcomes. This database must be derived from a number of sources including 9-1-1 call records, dispatch center records, pre-hospital patient care reports, and hospital care and discharge data. The Oregon Health Division EMS Program is in the process of developing a data base specification and associated computer software that will be useful in providing data for the CQI process.

In addition to the new CQI effort, the group found that case reviews, complaint resolution, and peer review should continue. These activities can serve as additional data sources for the CQI process as well as fulfilling their own objectives in system management.

## 3.3 SYSTEM STATUS PLANNING

The primary question that has permeated the county's ASA planning effort for several years is: *Should there be a single ASA or multiple ASAs?* Most other considerations have seemed secondary to this question.

While past planning results have put forth proposals featuring both one and two ASAs, the rationale behind these proposals has been largely intuitive or theoretic, and not based on specific information. In an attempt to address this question more objectively, the system status work group decided to develop a county-wide ambulance service model, basing its technique on a method known as system status planning. This technique involves several essential steps carried out in two phases.

Phase one consists of two steps leading to development of a preliminary ambulance deployment plan based on the distribution of demand for emergency services over time. The first step is determining how the demand is distributed across the days of week and the hours of each day. Second, applying certain well-established rules of thumb to the data, a preliminary ambulance deployment plan is developed to match ambulance availability to demand.

The second phase of system status planning determines optimal geographic placement of ambulances to ensure that the system can respond to the locations where service is needed and meet response time requirements.

System status planning utilizes a combination of data on call location, call volume, and travel times, as well as the experience of the provider crews in determining the best locations for ambulance placement. After an initial plan is developed, it is "fine tuned" through trial and error.

The resources necessary to support a deployment plan can be quantitatively described. The unit of measurement is the "unit-hour". Each unit-hour represents one fully staffed and equipped ambulance deployed for one hour. The cost of producing a unit-hour can be derived from its component costs, e.g., paramedic salaries, vehicle costs, etc. Therefore, the cost of a given deployment plan can be calculated once the number of unit-hours deployed is determined.

In attempting to set up a model, it became evident that it would be impossible to compare the current system's demand and deployment directly to a single county-wide system. This difficulty arose from the current system's practice of allowing providers to remove units from "9-1-1 available" status to run private, non-emergency calls when

there are sufficient available units in the system. In addition, while any "9-1-1 available" unit can run one of these calls, some of the calls are run by additional units not available to the 9-1-1 system. Thus the system's current demand is a blend of 9-1-1 emergency calls and non-emergency call demand and some of the system's non-emergency call demand. Ambulance deployment strategies in the current system are based on this blended demand. To develop a single county-wide emergency demand, all private calls were excluded. Thus, the county-wide demand model is for 9-1-1 calls only.

The demand model used most commonly used for system status planning looks at the number of calls by hour of day and by day of week. The system status planning exercise used a twenty-eight week sample period with 19,084 calls. Four measures of demand for each hour of the day and day of the week can be calculated . The planning exercise used a measure called the average peak demand. In brief, this measure represents the average of the highest demands seen in each of four seven week periods.

There was concern voiced in the work group that the above methodology could result in an inappropriately low number of ambulances in the initial deployment plan. Therefore, demand data were also statistically analyzed. The group examined the frequency distribution of all calls for each day and hour of day to determine the 85th, 90th, and 95th percentiles. This revealed that the 95th percentile and the average peak demands were equivalent. The group then proceeded to construct a demand model using the average peak demand data.

Initial ambulance deployment plans are usually based on the average peak demand, adjusted to accommodate the requirement to schedule reasonable working shifts. This is the method that has been used by the private providers in Multnomah County to date, and was the method used in the planning exercise.

A problem with the above methodology is that the resulting deployment plan could not be tested and fine tuned "on the street" to see whether the plan matched the geographic distribution of calls and met response time requirements. To solve this problem EMS worked with the University of Washington school of Civil Engineering to develop and carry out a computer simulation of the single ASA system. The simulation utilized the Emergency Medical Services Information and Mapping System (EMSIMS). This program has been used successfully to plan and refine ambulance deployment in King County, Washington. This program utilizes a database that has information on number

of calls, call location, transportation system, travel times, hospital locations, and potential ambulance locations. The program provides coverage patterns, expressed in travel time from any given location. It also shows overlaps in coverage and areas not covered. Finally, it provides a "best fit" for ambulance locations, given any specific number of units deployed.

The results of the group's system status planning study shows that 39,208 unit-hours could be saved each year by switching to a single ASA system. This means that the system could meet its response goals for 9-1-1 calls with roughly three to four fewer ambulances on the street at most times during the day. One caveat is that these savings could vary, depending upon the actual schedule implemented. However, the variance would likely be small and would not effect projected savings in any substantial way. Also this model, as explained earlier, does not allow for private, non-emergency calls to be run by the "9-1-1 available" units.

Table one (1) summarizes detailed demand data.

Exhibit 3 shows the detail of the demand analysis.

## 3.4 RATES AND COSTS

### 3.4.1 UNIT HOUR COSTS

The initial discussions of this work group were aimed at determining what information would be most helpful in delineating the costs of both the current system and of any proposed alternative system structures. The group agreed that determining the unit-hour cost of the current system would provide the most appropriate basis for evaluating cost savings or increases resulting from the change from a multiple to a single ASA system. For this exercise, a unit-hour was defined as one fully equipped ambulance, staffed with two paramedics, deployed for one hour. The group's methods were not intended to compare costs between ambulance companies. Therefore, a composite of company costs was used, resulting in an average unit-hour cost for the County. The data were combined using a weighted average to allow for the differing workloads experienced by each provider in the current system. Cost components that varied according to the number of unit-hours deployed were classified as variable. Costs that did not vary substantially within a given range of unit-hour deployment were classified as fixed.

Each ambulance company was requested to provide cost information in a set format. This format was not based on the accounting format used by any of the companies. So that the data from all the companies was similar in content and

DEMAND SUMMARY

| | CURRENT DEPLOYMENT | | PROPOSED | |
|---|---|---|---|---|
| | DAY | YEAR | DAY | YEAR |
| SUNDAY | 338 | 17,576 | 229 | 11,908 |
| MONDAY | 352 | 18,304 | 238 | 12,376 |
| TUESDAY | 349 | 18,148 | 219 | 11,388 |
| WEDNESDAY | 347 | 18,044 | 230 | 11,960 |
| THURSDAY | 347 | 18,044 | 241 | 12,532 |
| FRIDAY | 347 | 18,044 | 267 | 13,884 |
| SATURDAY | 337 | 17,524 | 239 | 12,428 |
| | 2,417 | 125,684 | 1,663 | 86,476 |
| UNIT HOUR SAVINGS | | | | 39,208 |

This schedule shows savings derived from a demand analysis of "911" calls.

Current deployment is compiled from data submitted by providers. Refer to Table 2 for current deployment breakout.

TABLE ONE

format, the providers were asked to allocate costs into the categories listed below. Data was self-reported and the county did not perform any audits to substantiate reported costs.

FORMAT

| COST CENTER | COST BASE |
|---|---|
| Paramedics | FTE/month |
| Includes wages, benefits, taxes. This cost is directly dependent upon the number of unit-hours deployed. | |
| Salaried Employees | Per/month |
| Includes supervisors, training officer, incremental $ paid to paramedics(FTO). This cost would not vary until sufficient unit-hours were reduced to necessitate less supervision and training. | |
| Administration | Per/month |
| Includes middle and upper management. | |
| Supplies | Per/transport |
| Billing and collection | Per/transport |
| Medical supervision | Per/contract |
| Control Center | Per/month |
| Training/education | Per/month |
| There is a certain fixed base cost, however, the per FTE cost will vary. | |
| Vehicle/equipment | Per/month |
| Includes all costs and equipment in the ambulance. Small adjustments to the unit-hours will not vary this cost. Permanent reduction in ambulance need will vary the cost. | |
| Fees/license | Per/month |

General overhead Per/month

Includes all other allocated costs.

This cost study computed costs on monthly, annual, and per unit-hour basis. The unit-hour costs are based on the current deployment of 125,684 unit-hours.

Table two (2) shows the current deployment of unit-hours used in the study.

The analysis revealed an average current cost of $75.45 per unit-hour. Since there is a basic cost associated with "doing business," much of the hourly cost represents fixed expenditures. Buildings, management, and billing are examples of costs that do not vary substantially with moderate changes in unit-hour deployment. The variable portions of the costs due to unit-hour deployment identified in this process were:

Paramedic salaries and benefits - $26.83 per unit-hour.

Other salaries and benefits - $3.63 per unit-hour.

Training and education - $.91 per unit-hour.

Vehicles and equipment - $5.55 per unit-hour.

All other costs are essentially fixed when the only system factor that changes is the number of unit-hours deployed. Except for paramedic costs, other variable costs can only be determined by an allocation only after unit-hour deployment is established.

Paramedic salaries and benefits represent 36% of the allocated cost. This percentage can be applied to calculating cost changes related to any change in unit-hour deployment.

Table three (3) shows details of the analysis. In addition to the information above, the table shows the number of transports, based upon the monthly average from BOEC, and number of paramedic FTEs, compiled from the provider data.

### 3.4.2 DUPLICATED COSTS

The previous discussion looked at the cost as a function of unit-hour deployment. This cost is essentially independent of the number of transporting ambulance providers. The remaining costs allocated to the system

## CURRENT UNIT HOUR DEPLOYMENT

| | SUN | MON | TUES | WED | THUR | FRI | SAT | WEEK | MONTH | YEAR |
|---|---|---|---|---|---|---|---|---|---|---|
| AA | 97 | 101 | 98 | 96 | 96 | 96 | 96 | 680 | 2,947 | 35,360 |
| BUCK | 144 | 154 | 154 | 154 | 154 | 154 | 144 | 1,058 | 4,585 | 55,016 |
| CARE | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 679 | 2,942 | 35,308 |
| TOTAL | 338 | 352 | 349 | 347 | 347 | 347 | 337 | 2,417 | 10,474 | 125,684 |

This table shows current field deployment by day of the week. Data used in this table has been submitted by providers.

TABLE TWO

COST SUMMARY AND SAVINGS PROJECTION (taken from 1992 data)

| | MONTH | ANNUAL |
|---|---|---|
| UNIT HOURS | 10,474 | 125,688 |
| TRANSPORTERS | 2,143 | 25,716 |
| UNIT HR RATIO | 20.5% | 20.5% |
| PARAMEDIC/FTE (FTE=106) | 2,648 | 31,776 |

| COMPILED COSTS | | CURRENT COST | | | | PROJECTED SAVINGS | |
|---|---|---|---|---|---|---|---|
| | MONTH | ANNUAL | UNIT HR | % Total | ANNUAL | % Saved |
| Paramedic | $284,462 | $3,413,544 | 26.83 | 36% | $1,051,951 | 11% |
| Salaried | 37,997 | 455,964 | 3.63 | 5% | | |
| Vehicle/equipment | 58,151 | 697,812 | 5.55 | 7% | | |
| Tranining/ED | 9,486 | 113,832 | 0.91 | 1% | | |
| Total variable costs | 390,096 | 4,681,152 | 36.92 | 49% | 1,051,951 | 11% |
| Administrative | 49,383 | 592,596 | 4.72 | 6% | 296,298 | 3% |
| Supplies | 27,879 | 334,548 | 2.66 | 4% | | |
| Billing | 43,680 | 524,160 | 4.17 | 6% | | |
| MD supervision | 8,509 | 102,108 | 0.81 | 1% | | |
| Control center | 49,583 | 594,996 | 4.73 | 6% | 594,996 | 6% |
| Fee & license | 19,717 | 236,604 | 1.88 | 2% | | |
| General overhead | 204,947 | 2,459,364 | 19.57 | 26% | 1,229,682 | 13% |
| Total fixed costs | 403,698 | 4,844,376 | 38.54 | 51% | 2,120,976 | 22% |
| Total costs | $793,794 | $9,525,528 | 75.46 | 100% | $3,172,927 | 33% |

This table shows current cost breakdowns from information submitted by local providers. The projected columns illusrate possible cost savings generated by a reduction in paramedic hours (Table 1) and the elimination of duplicated costs.

TABLE THREE

depend on the number of calls in the system and on system design. The costs associated with supplies and billing are depend on the number of calls in the system and would not change with changes in system design. However, it could be argued that if there is a change from three providers to one, the costs associated with administration and general overhead could be reduced by as much as two thirds. These costs represent expenditures duplicated by each provider. Assuming that these duplicated costs could be reduced by one-half, rather than two-thirds, there could be a savings in administration and overhead of up to $1,525,980. Further, the EMS Program maintains a dispatch center at BOEC for all 9-1-1 calls. Provider control centers exist primarily for other purposes, e.g. dispatch of non-emergency calls. The current system therefore inappropriately allocates the $594,996 cost of the private control centers to emergency calls. This amount could be saved through implementation of a single provider ASA with appropriately allocated costs.

Finally, there could also be additional cost reductions through the elimination of other duplicated resources, e.g., training officers, billing supervisors, etc. The amount of these cost reductions would depend on how service is organized and staffed in the new system.

### 3.4.3 RATES (CHARGES)

Under current EMS regulations, the county does not control the rates charged to consumers for emergency medical services. Each provider is required to post with the EMS office a list of charges for ambulance and pre-hospital care services. The EMS office has authority to review individual bills to insure that charges are in compliance with posted rates.

The work group on rates did not attempt to determine if the rates charged by providers in the current system were appropriate. In previous rate discussions it has been suggested that rates in Multnomah County must be compared to those in other areas to determine if our rates are appropriate. This methodology does not provide much useful information because systems and their finances are inherently difficult to compare. There are differences in service standards, population, geography, transportation networks and other factors. Further, the rates may or may not reflect a subsidy. If it exists, a subsidy may be direct and readily quantifiable, or indirect and difficult to quantify. EMS therefore did not undertake this type of comparison. The rate charged to consumers in Multnomah County should reflect what is being purchased. Charges should be based on the cost to provide required services under a given system design. The rates should take into

consideration any subsidy, direct or indirect, that may be available.

Citizen input on rates comes primarily from complaints. The EMS office receives an average of three (3) complaints about charges per month. In 1992, with 21,700 transports, there were 36 complaints, representing 0.15% of the patients transported by the system. This low rate of complaints about charges does not show that the rates being charged in the system are appropriate, only that individual consumers do not seem to be highly motivated to express their concerns about ambulance charges.

## 3.5 TURNOVER

One of the issues that has been raised during the current system planning effort is the longevity of employment of paramedics working in the system. This issue is important because it may directly impact quality of care. Increasing a paramedic's experience in the system should result in an improved understanding of and compliance with medical protocols and standards. It should also lead to better knowledge of the community's geography and street patterns, resulting in lowered response times.

To determine the extent of turnover in the current system, the EMS program reviewed its records of EMT employment. Both ambulance and first response providers are required to provide the EMS office with a listing of all EMTs employed for each one year licensing period. Our review looked at each provider's information and determined:

The number of EMT-Paramedics employed.

The number that were new to that provider since the previous year; and

The number that left that employer during the year.

The study methodology did not account for movement of paramedics between providers, nor did it account for paramedics that leave the system and subsequently return after one or more years. Therefore, the analysis represents a worst case scenario.

For private ambulance providers, the study revealed that an average of 30% (range: 20% - 40%) of paramedics are new to private providers each year. Further, an average of 30% of the paramedics (range 14% - 55%) leave the providers each year.

For fire providers, an average of 13% (range 5% - 33%) of paramedics are new each year, with most of these new paramedics being due to increases in staff size. Only 4% (range 1% - 9%) of fire paramedics leave their employer each year.

Because of the wide range of the turnover data, we also looked at longevity of service by provider. Again, this did not take into account paramedics that move among providers within the system. The average years of service for a paramedic working for an ambulance provider is 2.6 years. After five years only 6.7% were still working as paramedics with the ambulance provider they were employed by at the start of the five year study period. In contrast, the average length of service for fire paramedics in the study period was 4.4 years. After five years 49% were still employed as paramedics.

Table four (4) summarizes the results of the turnover study.

Table five (5) shows the detailed results of the longevity analysis. Each column is discrete (not cumulative).

## TURNOVER - FIVE YEAR STUDY

| | | 1987 | | 1988 | | 1989 | | 1990 | | 1991 | | 1992 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | STAFF | % | STAFF | % | STAFF | % | STAFF | % | STAFF | % | STAFF | % |
| AA | EMT-4 | 43 | | 36 | | 38 | | 40 | | 43 | | 37 | |
| | NEW | n/a | | 19 | 53% | 13 | 34% | 9 | 23% | 14 | 33% | 12 | 32% |
| | LEFT | 26 | 60% | 9 | 25% | 8 | 21% | 11 | 28% | 18 | 42% | n/a | |
| BUCK | EMT-4 | 81 | | 96 | | 95 | | 108 | | 127 | | | |
| | NEW | n/a | | 32 | 33% | 12 | 13% | 23 | 21% | 33 | 26% | | |
| | LEFT | 17 | 21% | 19 | 20% | 6 | 6% | 15 | 14% | 84 | 66% | n/a | |
| CARE | EMT-4 | 46 | | 54 | | 46 | | 59 | | 80 | | 60 | |
| | NEW | n/a | | 23 | 43% | 10 | 22% | 23 | 39% | 29 | 36% | 16 | 27% |
| | LEFT | 15 | 33% | 18 | 33% | 11 | 24% | 8 | 14% | 36 | 45% | n/a | |
| Total Providers | EMT-4 | 170 | | 186 | | 179 | | 207 | | 250 | | 97 | |
| | NEW | n/a | | 74 | 40% | 35 | 20% | 55 | 27% | 76 | 30% | 28 | 29% |
| | LEFT | 58 | 34% | 46 | 25% | 25 | 14% | 34 | 16% | 138 | 55% | n/a | |
| PFB | EMT-3/4 | 55 | | 60 | | 69 | | 73 | | 70 | | 72 | |
| | NEW | n/a | | 10 | 17% | 10 | 14% | 5 | 7% | 5 | 7% | 4 | 6% |
| | LEFT | 5 | 9% | 1 | 2% | 1 | 1% | 6 | 8% | 2 | 3% | n/a | |
| GRESH | EMT-3/4 | 4 | | 6 | | 9 | | 12 | | 17 | | 25 | |
| | NEW | n/a | | 2 | 33% | 3 | 33% | 3 | 25% | 5 | 29% | 8 | 32% |
| | LEFT | | | | | | | | | 1 | 6% | n/a | |
| Provider & FD Total | | 229 | | 252 | | 257 | | 292 | | 337 | | 194 | |

This table has been prepared from provider license information. Each box shows the reported total EMT staff with a break out of new staff and staff that have left.

TABLE FOUR

STAFF TURNOVER - YEARS OF YEARVICE - FIVE YEAR STUDY

| | SIX | FIVE | FOUR | THREE | TWO | ONE | 5 yr Total | AVERAGE RETENTION |
|---|---|---|---|---|---|---|---|---|
| AA | 6 | 7 | 10 | 11 | 19 | 56 | 109 | 2.2 YRS |
| | 5.50% | 6.42% | 9.17% | 10.09% | 17.43% | 51.38% | 100.00% | |
| BUCK | 10 | 42 | 24 | 15 | 45 | 48 | 184 | 3 YRS |
| | 5.43% | 22.83% | 13.04% | 8.15% | 24.46% | 26.09% | 100.00% | |
| CARE | 13 | 10 | 11 | 17 | 31 | 59 | 141 | 2.4 YRS |
| | 9.22% | 7.09% | 7.80% | 12.06% | 21.99% | 41.84% | 100.00% | |
| Provider total | 29 | 59 | 45 | 43 | 95 | 163 | 434 | 2.6 YRS |
| | 6.68% | 13.59% | 10.37% | 9.91% | 21.89% | 37.56% | 100.00% | |
| PFB | 44 | 10 | 14 | 1 | 5 | 16 | 90 | 4.4 YRS |
| | 48.89% | 11.11% | 15.56% | 1.11% | 5.56% | 17.78% | 100.00% | |
| GRESH | 4 | 2 | 3 | 3 | 5 | 8 | 25 | 2.9 YRS |
| | 16.00% | 8.00% | 12.00% | 12.00% | 20.00% | 32.00% | 100.00% | |
| Total 5 yr base | 77 | 71 | 62 | 47 | 105 | 187 | 549 | |
| | 14.03% | 12.93% | 11.29% | 8.56% | 19.13% | 34.06% | 100.00% | |

This table is compiled from provider license information. It allocates the full 5 year EMT employee history into the number of years employed by the provider, i.e. the column headed "SIX" shows all employees retained six or more years, the column headed "FIVE" shows all employees retained five to six years, etc.

TABLE FIVE

## 3.6 REVENUE

In order to asses the fiscal viability of a system proposal it is necessary to determine the current revenue applicable to the 9-1-1 calls. This requires determining the average charge for service, the mix of payors for the people served, and the collection percentage for each type of payor and for all payors combined.

### 3.6.1 CHARGES

To determine the average charge for 9-1-1 calls, we reviewed fifteen (15) days' worth of invoices obtained from the three current providers. During the period studied, all providers were charging on an "all inclusive" basis for either ALS or BLS service. Each invoice showed a service charge and a mileage charge. We compiled the aggregate charges and determined an average charge per 9-1-1 call. The average charge during the study period was $588.00. Table six(6) shows the detail of the review.

### 3.6.2 PAYER DISTRIBUTION AND COLLECTIONS

As part of rule making for user fees, EMS was required to conduct a study to a reasonable method for allocating EMS user fees among the transporting providers. This study, using provider collection data, distributed patients into four (4) payor classes with the following estimated collection rates:

Medicaid - 11%

Medicare - 75%

All payors except above - 90%

No payor - 25%

For calls that could not be classified into one of the above categories, a collection rate of 60%, based on weighted average collection estimates, was applied.

Table seven (7) shows the collection detail by provider.

These rates were then applied to the 21,700 transports for 1992. The estimated gross revenue (charges) for that year was $12,759,600. The estimated net collected revenue was $7,141,165. This is a system collection rate of 56%. Table eight (8) shows the details of these estimates.

AVERAGE CHARGES - JUNE 1-JUNE 15, 1992

| | INVOICES | CHARGES | AVERAGE |
|---|---|---|---|
| ALS | 723 | $394,481 | $546 |
| BLS | 184 | $86,311 | $469 |
| EMERGENCY | 28 | $17,707 | $632 |
| AID | 5 | $625 | $125 |
| TOTAL BASE | 940 | $499,124 | $531 |
| MILEAGE CHARGES | 940 | $53,563 | $57 |
| INVOICE TOTAL | 940 | $552,687 | $588 |

Data for this table has been submitted by providers. The table shows the number of invoices counted during the time period, the gross charges, and an average charge per invoice.

TABLE SIX

DISTRIBUTION BY PAYER

COLLECTION RATES

| | AA | BUCK | CARE/TVA |
|---|---|---|---|
| MEDICAID @ 11 % | 16% | 20% | 10% |
| MEDICARE @ 75 % | 13% | 9% | 20% |
| ALL PAYERS EXCEPT ABOVE @ 90 % | 38% | 41% | 44% |
| NO PAYER @ 25 % | 33% | 30% | 26% |
| TOTAL CHARGES | 100% | 100% | 100% |
| WEIGHTED COLLECTION RATE | 53.90% | 53.40% | 62.10% |

This information is based on provider data from 4/1/91 to 7/1/91. The table profiles the percentage of provider charges by source. The table then calculates a weighted collection rate for each provider based on estimated collection weight percentages of each source.

TABLE SEVEN

ESTIMATED REVENUE STUDY

| | TRANSPORTS | | | | | | Gross Charges | Collection % | Estimated Revenues |
|---|---|---|---|---|---|---|---|---|---|
| | AA | BUCK | CARE | OTHER | Total | % of Total | | | |
| MEDICAID | 1,042 | 1,823 | 564 | | 3,429 | 16% | $2,016,017 | 11.00% | $221,762 |
| MEDICARE | 846 | 820 | 1,129 | | 2,795 | 13% | $1,643,436 | 75.00% | $1,232,577 |
| OTHER PAYERS | 2,474 | 3,737 | 2,482 | | 8,693 | 40% | $5,111,496 | 90.00% | $4,600,346 |
| NO PAYERS | 2,148 | 2,734 | 1,467 | | 6,349 | 29% | $3,733,459 | 25.00% | $933,365 |
| ALL PAYERS | | | | 434 | 434 | 2% | $255,192 | 60.00% | $153,115 |
| COLUMN TOTALS | 6,510 | 9,114 | 5,642 | 434 | 21,700 | 100% | $12,759,600 | 56.00% | $7,141,165 |

This table estimates revenues based on workload information taken from BOEC. Gross charges are calculated by multiplying the number of transports by the average charge per invoice (Table 6). The estimated revenues are calculated by multiplying gross charges by the estimated collection percentage (Table 7). Revenues estimated under this method are believed to be conservative.

TABLE 8

# 4. CONCLUSIONS

## 4.1 SYSTEM GOALS

To reiterate, there are five basic goals for the County's EMS system:

1. Services must be readily available;
2. To be effective, services must be timely;
3. The care provided must be of high quality;
4. The system must be financially viable and stable; and
5. Optimal use must be made of available resources.

The choice of an EMS system design must be based on the ability of that design to meet the community's service goals, and on the strengths of that design in meeting the challenges presented by changes in the political, social, and fiscal environment over time.

## 4.2 AMBULANCE SERVICE AREAS

The information and data collected and analyzed in the planning process leads to an inescapable conclusion; there is no reasonable basis for maintaining the current multiple ambulance service area system in Multnomah County.

The primary reason for this conclusion is the excessive cost of the current system design. Given the increasing fiscal pressures that EMS will face in the future, a financially inefficient EMS system is something we cannot afford now, and certainly will not be able to afford in the future.

The single ASA system plan model presented above shows that the 9-1-1 service demand can be met through deploying substantially fewer unit-hours than are now attributed to meeting that demand. This will result in a lower cost for service. In addition, a reduction in the number of providers could further reduce costs. Applying only the paramedic cost of $26.83 per unit-hour, deploying an estimated 39,208 fewer unit-hours, will result in a savings of $1,051,951, i.e., an 11% reduction in the total system cost. The cost study identified additional savings of up to $1,525,980 in duplicated costs of administration and general overhead. This represents 16% of current costs. Ambulance company dispatch/control center costs of $594,996 represent another

6% cost reduction. These reductions could result in a total savings of up to 33%. This savings represents the change in the unit-hours deployed and in the number of providers in the system. All else remaining the same.

It must be noted that these projected savings apply to 9-1-1 emergency services only. In our analysis, these costs were allocated by providers to these services. It may be necessary to reallocate portions of these costs to non-emergency services. This could increase the cost and charges for non-emergency ambulance service. However, emergency service revenues should not subsidize non-emergency ambulance service and its payors.

A second reason to abandon the current multiple ASA system is improving medical control and uniformity of service. While there are no hard data on this point, it is reasonable to assume that a single, well-integrated system will result in improved uniformity of care and more efficient use of medical direction and supervision resources.

Finally, operation of the system according to an integrated County-wide plan will improve the efficiency and effectiveness of the regulatory and coordination efforts of the EMS Program. This will allow for more effort within current resource limitations to be applied to improving service effectiveness and quality of patient care.

There are a number of options for implementing a single ASA. These will be discussed later in Section 5.

## 4.3 MEDICAL DIRECTION AND SUPERVISION

A single EMS Medical Director, employed by the county, and serving as the physician supervisor for all EMTs will best meet the medical direction goals spelled out through the planning process. The EMS Medical Director must be responsible for all medical aspects of the EMS system. Because of the anticipated workload, there maybe a need for other medically trained individuals to carry out some duties of the Medical Director. The details of any such arrangements must be developed by the Medical Director and must occur under his or her direct supervision.

## 4.4 QUALITY ASSURANCE AND IMPROVEMENT

Multnomah County EMS needs to develop a county-wide, integrated quality management program. It should be a data driven, Continuous Quality Improvement (CQI) process with input from all relevant sources. The sole purpose of this process must be the improvement of the EMS system.

Participation in the process must occur in all components of the system, and must be focused on problem solving at the source of the problem.

An integrated data base must be developed to implement the CQI process. Multnomah County should adopt the State EMS data requirements as the basis for data collection.

As part of the CQI process the EMS office will continue to address and resolve complaints, and monitor compliance with system requirements. These activities will provide additional information to the CQI process.

## 4.5 RATES (CHARGES)

While the current rates are excessive to some, they do not seem to present a major problem in blocking users' access to the system. However, rates are higher than they could be because of the current system design.

Appropriate rates for ambulance services under any proposed system must be determined in light of system costs and any subsidy that may be available. There should be a formal rate-setting process, and rates should be controlled through contracts and agreements.

In addition to supporting transporting ambulance services, a portion of the rate should be identified for the partial support of the first response program to offset expenses for supplies, equipment, and training. This can be accomplished while still achieving a reduction in current ambulance charges.

## 4.6 REVENUE

The actual amount of fee revenue available to support the EMS system depends on the level of charges for service and the collectability of those charges. It is safe to conclude that in the current environment the collectable percentage should be between 55% and 60% of the gross charges. This amount is currently $7,141,000 per year. This amount may decrease with reimbursement changes brought about by health care financing reform.

## 4.7 TURNOVER

Using turnover as one indicator of stability, the current workforce for the transporting providers does not represent a very stable resource. With thirty (30) percent of the paramedics changing each year, compliance with patient care protocols and familiarity with the EMS system

and the geography of the community are potential problems. Unless turnover is reduced, these problems will continue.

## 4.8 NUMBER OF PARAMEDICS IN THE SYSTEM

Data from the turnover study showed an annual average of 250 EMT-Paramedics and EMT-3s (181 private and 69 fire) working in the Multnomah County EMS system. There are no accepted standards as to the number and type of annual patient encounters paramedics should experience to insure that they remain proficient. Assuming that both transporting paramedics are directly involved in the care of the patient, each private paramedic experiences an average of 4.6 patient encounters per week. From the data, an average of 1.5 fire medics are involved in each first response call. This represents an average of 8.9 patient encounters per week for fire paramedics. These calculations are intended to provide only a very rough view of the situation. It is obvious that some paramedics have a greater than average number of encounters while other have fewer. While this plan does not attempt to set a standard for numbers of paramedic encounters, consideration needs to be given to a system design that reduces the current number of paramedics.

# 5. OPTIONS

## 5.0 INTRODUCTION

The findings of the work groups and studies conducted by the EMS Office and the conclusions drawn from this information support the position that there should be only one Ambulance Service Area in Multnomah County. There is however, more than one service delivery option that could meet this criterion. This section presents outlines of three service delivery options that speak to the issues identified in this report. The options have similar requirements for medical direction and supervision, a quality improvement program, and data support. These components have been discussed in the previous section.

The options are presented in order of preference. As this document is a plan, the descriptions are summary in nature; a more detailed system design and implementation plan will be developed for the option approved by the Board of County Commissioners.

## 5.1 OPTION #1: PUBLIC-PRIVATE SYSTEM

The system design that best fits the goals, findings, and conclusions of the ASA planning process is a tiered response system with the following major components:

Fire department first response with EMT-Paramedic and/or EMT-Basic capability;

Fire EMT-Paramedic ("fire medic") transport capability for patients needing critical, paramedic level services; and

Private ambulance transport for patients in need of less critical emergency transportation.

### 5.1.1 FIRST RESPONSE

All current fire agencies would continue to provide first response service. The ability of non-paramedic first responders to provide EMT-Basic level of service and automatic cardiac defibrillation would be required and phased in over time.

### 5.1.2 AMBULANCE RESPONSE

This system would use the current and augmented

resources of the Portland Fire Bureau for critical emergency ambulance response and transport. A single private ambulance provider will be contracted for the remaining emergency transports. Transport decisions will be governed by triage and treatment protocols. Fire medic units will transport patients in need of critical care as defined by the protocols. This will allow fire medic units to return to service at the earliest opportunity in order to maximize this resource. All other patients will be transported by private contract ambulances. Inter-facility transfers and all non-emergency transport will be provided by private ambulances.

### 5.1.3 RESPONSE TIME REQUIREMENTS

First responders will respond to at least 90% of medical calls in four (4) minutes or less. Rural volunteer responders may not be able to meet this standard.

ALS fire medic ambulances will be required to respond to at least 90% of medical calls in eight (8) minutes or less.

Contract ambulances will be required to respond to at least 90% of medical calls in 12 minutes or less.

### 5.1.4 DISPATCH

All dispatch for 9-1-1 calls will be made through EMS Central dispatch at BOEC. Dispatch of units will be based on a county-wide system status plan. All move-ups for system coverage will be dispatched by BOEC. Fire first response and all ambulances will be dispatched by the same dispatcher. All calls will receive first response. Depending on the triage and dispatch protocols, a fire medic unit may be simultaneously dispatched. Fire medic units will be "canceled enroute" when the first responder's evaluation reveals that the patient's condition would allow for contract ambulance transport.

Contract units will be dispatched at the request of first responders or fire medic units and in accordance with the dispatch protocols. Fire medic units will not respond as first responders. No "dual" response involving both fire medic and contract ambulances will be required, except in defined circumstances involving multiple patients.

### 5.1.5 STAFFING

First Responders will have one or more individuals on the responding unit trained to at least the EMT-Basic level. Portland and Gresham Fire units will have one individual at

the EMT-Paramedic level. The EMT-Basic level of training may not initially be practical for the rural protection districts and will be phased in over time.

Fire medic units will be staffed with two (2) EMT-Paramedics.

Contract Ambulance units will be staffed with one EMT-Paramedic and one other person trained to at least the EMT-Basic level.

Staffing requirements for non-emergency ambulances will be developed and may vary from those of contract emergency ambulances.

### 5.1.6 RATES

Rates charged to patients will be developed based on the costs that must be recovered by the providers to adequately support the system. It is anticipated that the fire service cost recovery will be based on the incremental expenditures identified with EMS delivery. The contract ambulance rate will also be based on recovery of necessary costs, but will not exceed the fire service rate. In both cases the rates will be less than the current rate because of relaxed response time requirements for contract ambulances, and the use of current fire resources. Rates will be uniform for all 9-1-1 calls and no contractual "discounts" will be allowed.

Charges for non-emergency ambulance service provided by private companies will not be regulated.

### 5.1.7 AIR AMBULANCE SERVICE

Air ambulance service will remain as provided in the current system. Rates will be independent of the ground ambulance rates and set by the air ambulance provider.

### 5.1.8 RELATIONSHIPS

All first responders, transporting ambulance providers, and air ambulance providers will be required to enter into either intergovernmental agreements or contracts with the Multnomah County EMS Program. These agreements will specify performance requirements, system design, component responsibilities, rates, and monitoring and compliance criteria.

### 5.1.9 DISCUSSION

The reasons that the Public-Private System is the first preference among system design options are 1) this design has proven itself to provide excellent response and quality of care; and 2) the mix of public (tax) and fee support will provide a stable resource base into the foreseeable future.

Many communities around the country have adopted this system design and have found it to provide excellent service. In the Pacific Northwest, the most notable example is the Seattle-King County system.

The Public-Private tiered system will address many of the operational and quality of care concerns that have been raised about the current system. First, it will concentrate experience in managing critically ill and injured patients in a relatively small number of paramedics. Second, it will address the problem of turnover. As discussed above, local fire providers have decidedly lower rates of paramedic turnover than do private providers. Third, this design will allow medical direction and training resources to be better focused on the paramedics performing the highest volume of critical patient care. Finally, by utilizing paramedics in the second tier of contracting ambulances, patients whose condition deteriorates during transport will still be cared for by EMT- Paramedics, not EMT- Basics.

From a resource utilization perspective, this design is superior in a number of ways. First, it recognizes local fire agencies' commitment to EMS, and takes maximum advantage of the existing public resources that this commitment has produced. Portland and Gresham fire have already developed an extensive infrastructure to support EMS, including paramedic staff, supervisory and training capabilities, and equipment. The investment required to make these agencies capable of transporting the required number of patients would be modest in comparison with other designs. Second, this system design continues to utilize patient fee revenues in a highly effective way. It should be capable of adequately supporting the services provided by the contracting private ambulance provider. It also has the potential to provide an offset to fire agencies' current requirements for local tax support. Third, by better matching the system's response to the patient's level of need, the proposed system will use resources more efficiently. This is in contrast to the current system's requirements to provide first response and an eight minute ALS ambulance response, regardless of the patient's need. Finally, because of its efficient use of resources, the Public-Private system should result in a substantial reduction in patient charges.

## 5.2 OPTION #2: SINGLE CONTRACTED PROVIDER

This option will require all 9-1-1 ambulance response and transport to be provided by a single ambulance provider under an exclusive franchise contract with the County. This provider will be chosen by a competitive bid process open to public and private providers. The ambulances assigned to 9-1-1 emergency response will be dedicated to that service. Private ambulance companies will provide inter-facility transfers and non-emergency services in an open competitive market.

### 5.2.1 FIRST RESPONSE

First response to 9-1-1 emergency calls will continue to be provided by the fire services within the county. Non-paramedic responders will be required to provide EMT-Basic level of service and automatic cardiac defibrillation. Portland and Gresham Fire will be encouraged to provide ALS (paramedic) first response to all calls in their jurisdiction.

### 5.2.2 AMBULANCE RESPONSE

ALS contract ambulances will respond to all 9-1-1 calls throughout the county. These units will provide only emergency response services and will not be used for inter-facility transports or non-emergency calls.

### 5.2.3 RESPONSE TIME REQUIREMENTS

First responders will respond to at least 90% of medical calls in four (4) minutes or less. Rural volunteer responders may not be able to meet this standard.

Contract ambulances will be required to respond to at least 90% of medical calls in eight (8) minutes or less.

### 5.2.4 DISPATCH

Dispatch of first responders and ambulances will be made through EMS Central dispatch at BOEC. There will be a single response area and BOEC will dispatch all move-ups for system coverage. First response and ambulance dispatch will be performed by the same dispatcher. All calls will receive first response and ambulance services in accordance with the triage and dispatch protocols.

### 5.2.5 STAFFING

First Responders will have one or more individuals on the responding unit trained to at least the EMT-Basic level. Portland and Gresham Fire units will have one individual at the EMT-Paramedic level. The EMT-Basic level of training may not initially be practical for the rural protection districts and will be phased in over time.

ALS contract ambulances will be staffed with two (2) EMT-Paramedics.

Standards for non-emergency ambulance staffing will be developed and may vary from the ALS contract staffing requirements.

### 5.2.6 RATES

Rates to be charged to patients will be determined through the bid process. Through the evaluation of RFPs, rates will be carefully scrutinized to ensure they are based on sound cost information. The rate will include support for certain first responder expenses including supplies, equipment, and training. Based on the cost study described in Section three (3) of this report, rates should be less than those in the current system. Rates will be uniform for all 9-1-1 calls and no contractual "discounts" will be allowed.

Charges for non-emergency ambulance service will not be regulated.

### 5.2.7 AIR AMBULANCE SERVICE

Air ambulance service will continue to be provided as it is in the current system. Rates will be independent of the ground ambulance rates.

### 5.2.8 RELATIONSHIPS

First responders will be required to enter into intergovernmental agreements with Multnomah County EMS.

The ambulance contractor will execute a performance contract with EMS that will delineate service provision requirements, system design, provider responsibilities, rates, and monitoring and compliance requirements.

### 5.2.9 DISCUSSION

This option features many of the advantages of the Public-Private option.

Contracted single provider systems have proven themselves to produce excellent response and quality of care in many communities across the United States. There are many excellent private contracted systems around the country, with Pinellas County, Florida, often being cited as a high-performance system.

The Single Contracted Provider design concentrates experience in managing critical cases in a relatively small number of paramedics. It should also address the problem of turnover. Systems of this design have clear incentives to recruit and retain high quality paramedic staff. Anecdotal evidence suggests that these systems tend to respond positively to this incentive. This design also allows medical direction and training resources to be focused. In fact, it is probably somewhat superior to the Public-Private design in this regard because it keeps all transporting paramedics within one agency. Finally, this design has no hand-off feature, assuring continuous paramedic level service throughout field treatment and transport. This is at least a theoretic advantage over the Public-Private design.

In terms of resource utilization, the Single Contracted Provider model would be an improvement over the County's current system, but has significant disadvantages compared to the Public-Private option.

First, the Single Contracted Provider design does not take optimal advantage of existing public resources. This design must depend either entirely on fee revenues, or on a combination of fees and explicit government subsidies. Across the country, a minority of systems of this design are unsubsidized. While private providers are usually more effective than public providers in collecting patient fees, dependence on fee revenue is likely to be a disadvantage in the long run because of the anticipated effects of health care financing reform. Thus in the future, under this design, the County is more likely to be confronted with choosing between a significant degradation of services or providing an operating subsidy to the contracted provider.

Second, this design does not optimize the match between patient need and system response. All patients receive services provided by units capable of the highest level of response, regardless of the patient's need for that level of service. That is, this design provides a uniformly high level of response. Charges must reflect the costs associated with this level of service and are likely to be

higher than those of the Public-Private design. It is theoretically possible that charges for emergency calls could be lowered by allowing emergency ambulances to also respond to non-emergency calls. However, this would require deployment of more ALS ambulances in the system. Any change in system design in this direction should be considered only after careful evaluation for its effects on both service and cost performance.

Thus, while the single contracted provider design has some operational and financial advantages, on balance it is a design that is more vulnerable to future financial instability because it depends more heavily on user fees.

## 5.3 OPTION #3: PUBLIC AMBULANCE SERVICE (COUNTY)

This option is essentially the same service design as the single contractor option with the major difference being that the transporting ambulance will be provided by a county operated ambulance service. The county service would respond to all 9-1-1 calls and transport all patients. Inter-facility transfers would be provided by private ambulances.

### 5.3.1. DISCUSSION

The Public Ambulance Service falls under a system design model generally known as a "third public safety service" or simply "third service". Police and fire services are the first two public safety services. Third service EMS systems have been successfully implemented in many communities, particularly larger urban areas. The nearest example of a good sized third service system is in San Francisco, CA.

This system design offers some of the operational advantages of both the Public-Private and Single Contracted Provider designs. First, this system design would limit the number of paramedics and concentrate the care of critical patients within this workforce. This design's ability to do this is roughly comparable to that of the single contract provider design. Second, the design allows for appropriate concentration of medical direction and training resources. Again, it is similar to the single contract provider in this regard. Third, like the Public-Private design, the third service model should result in lower EMT turnover and improved longevity. Finally, because it is an integrated, direct government service, coordination and regulation are relatively straight forward.

Unfortunately, the third service design has several disadvantages in resource utilization. These disadvantages make the model particularly problematic in light of the

future anticipated state of local government revenue and health care financing environment.

The third service design would incorporate the same advantages as a single contract provider model in having a dedicated response, fewer paramedics, and focused use of medical direction resources. On the down side, the third service makes poor use of existing government resources. On the contrary, this model would require development of a separate infrastructure for staff, supervision, billing, and other operational support. It would also require a substantial investment in vehicles, equipment, and supplies. This would require an initial commitment of capitol. Second, given future anticipated reductions in governmental and other third party reimbursement for medical services, this design is financially risky. The combination of typical increases in the cost to provide services, coupled with declining reimbursement, could force the County to choose between degrading service or providing an ongoing operating subsidy. In this regard the third service and contract provider designs are similar. However, the third service design is arguably more vulnerable in light of governments history of increases in costs to do business and its poorer success in fee collection. The net results of this situation could be direct competition between EMS and other County programs for scarce general fund revenues. Finally, this design ignores and fails to take advantage of the substantial expertise and resource base that exists among private sector providers. In effect, it displaces private business resources and replaces them with County resources.

On balance, these disadvantages make the Public / Third Service a distant third choice behind the Public-Private and Single Contract Provider options.

# 6. RECOMMENDATIONS

Multnomah County EMS, based on the findings, conclusions, and system design options discussed in this planning report, make the following recommendations for an EMS system design to be incorporated into the Ambulance Service Area Plan.

1. Multnomah County should comprise a single Ambulance Service Area.

2. First response to medical calls should be provided by fire districts at the service level utilizing either defibrillator trained EMT-Basic or EMT-Paramedic personnel.

3. Ground ambulance transport service for emergency calls should be provided by fire paramedic units for critical patients and by private ambulances of a single, contracted provider for urgent, but non- critical patients.

4. All other ambulance service should be provided by private, non-emergency ambulances.

5. Air ambulance services should be provided by private helicopter and airplane providers.

6. Fire medic units will be staffed by two EMT-Paramedics. Contract ambulances should be staffed by one EMT-Paramedic and one EMT-Basic.

7. Dispatch for all 9-1-1 calls and ambulance move up should be provided by the City of Portland, Bureau of Electronic Communications (BOEC).

8. Primary radio communications will be on the 800Mhz system. Mobile Data Terminals (MDT) will be used for dispatch and CAD communications.

9. Medical direction and supervision must be provided through a single EMS Medical Director employed by the county.

10. The Health Department EMS Program Office should continue to administer the EMS system in Multnomah County.

11. EMS will maintain a pre-hospital patient care, dispatch, and hospital disposition data base.

# Emergency Medical Services

**Multnomah County**

AMBULANCE SERVICE PLAN PRESENTATIONS

BOARD OF COUNTY COMMISSIONERS

JUNE 23, 1993

EMS MEDICAL ADVISORY BOARD RECOMMENDATIONS 4:28

PORTLAND AREA PARAMEDIC ALLIANCE 6:42

EMS STAFF RECOMMENDATIONS 17:56

PORTLAND FIRE BUREAU 4:05

EMS PROVIDER BOARD RECOMMENDATIONS 30:00 + 3:30

BUCK MEDICAL SERVICES 12:56

**Health Department**
**426 S.W. Stark Street—9th Floor · Portland, Oregon 97204 · 248-3220 · Fax 248-5453**

AN EQUAL OPPORTUNITY EMPLOYER

CERTIFICATION
OAR 333-28-110

THE UNDERSIGNED CERTIFY PURSUANT TO OREGON ADMINISTRATIVE RULE 333-28-110 (2)(A)(B)(C) THAT:

1) Each subject or item contained in the Multnomah County Ambulance Service Plan has been addressed and considered in the adoption of the plan by this body.

2) In this governing body's judgment, the ambulance service areas established in the plan provide for the efficient and effective provision of ambulance services.

3) To the extent they are applicable, the County has complied with ORS 823.180 (2) (3) and 823.310 and existing local ordinances and rules.

_____

The Honorable Hank Miggins, Chair
Multnomah County Board of County Commissioners

## OVERVIEW OF COUNTY
## OAR 333-28-05

Multnomah County is Oregon's smallest county, containing 465 square miles. It is also the most densely populated, with a population of 583,887. Washington, Columbia, Clackamas and Hood River counties surround Multnomah in Oregon. Clark County, Washington, and the Columbia River form the northern border of the County. From a central point established at the Burnside Bridge in Portland, in five-mile increments, Multnomah County is most densely populated near the urban center of Portland, next a less densely populated suburban section, then a rural region, and last a forest/ wilderness edge.

Located wholly within Multnomah County are the cities of Fairview, Gresham, Maywood Park, Portland, Troutdale and Wood Village. Portland is the largest city within the county, with a population of 437,398.

The County has a population of 4,336 persons who reside in nursing homes. This particular group has the highest use of emergency medical services and ambulance transportation within the County.

Within the population of Multnomah County, approximately 572,582 residents live within urban areas of the County, and 12,305 live outside the urban areas. There is a large population shift that occurs primarily on weekdays during business hours. An estimated 193,762 of the County's residents drive alone to work; 36,933 carpool; and 27,601 ride public transportation. A very large population, estimated at 165,000, commutes to work or shops in the County but lives in the ajoining five-county area. The primary movement is toward downtown Portland in the morning and toward the suburban areas in the evening. Interstate Highway I-205 loops around the central urban area, I-5, I-84 and I-405 run through the central urban areas. A primary highway subject to closure is US 26 west of downtown Portland. This major road uses a pair of tunnels across an earthquake fault to access western Multnomah and Washington Counties.

Located within the city limits of Portland are 7,500 acres of public park including the largest urban park, Forest Park. Forest Park contains approximately 5,000 acres of primarily forest lands. In this park, emergency access is limited to fire patrol roads and trails. Some are subject to closure due to inclement weather. Direct access to a patient is limited to small vehicles and may require rescue techniques similar to any forest or mountain rescue.

Weather is also a consideration in EMS delivery. Winter weather in the County brings

periods of snow or ice that result in limited access to one of two Level 1 trauma centers within the region, limits the uses of air ambulance and helicopter responses, and subjects a number of bridges crossing the Willamette river to closure or blockage . Ice and snow particularly limit or delay access to the eastern portions of the County along the Interstate 84 corridor and parallel Union Pacific Rail lines in the Columbia Gorge area. Many areas along the Gorge are without organized fire protection, but are subject to a unique public law allowing fire and rescue responses into the area with third-party reimbursement for service.

Industry within Multnomah County is the most diversified in Oregon. The County is served by over 100 motor carriers, three interstate railroads and an international airport. Portland is a deep draft ship port with international shipping of cargos. Primary manufacturing, transportation, shipping and warehousing all bring dangerous processes and hazardous materials to the County. Specialized resources and training for responding personnel are necessary for appropriate patient rescue and safe operations. These resources are primarily the responsibility of the fire departments within the County.

DEFINITIONS
OAR 333-28-100

Definitions.

*Italic sections are definitions found in the Oregon Revised Statutes or Administrative Rules.*

A. *"Address and consider " means the meaning given these terms by ORS 823.180 (2) (3).*

B. "Advanced Life Support" or "ALS" means the provision of medical services requiring advanced medical treatment skills as defined by ORS Chapter 823 and Oregon Administrative Rules and authorized to an EMT 2, 3, 4 (Intravenous, Intermediate, Cardiac, Advanced or Paramedic). Any vehicle identified as "Advanced Life Support" or "ALS" or "Paramedic" unit shall be continuously staffed by two (2) medical personnel whose skill level shall be a minimum of EMT-4 (Paramedics or Advanced); and, as described in OAR 333-28-050, when in operation and meeting the System Standard of Care established by Multnomah County.

C. *"Ambulance" means any privately or publicly owned motor vehicle, aircraft, or watercraft that is regularly provided or offered to be provided for the emergency transportation of persons suffering from illness, injury, or disability.*

D. "Ambulance Patient" means any patient being transported in a reclining or other position of comfort in a specialized motor vehicle or craft.

E. *"Ambulance services"* means *the transportation of an ill, injured, or disabled individual in an ambulance and, in connection therewith, the administration of prehospital medical or emergency care, if necessary.*

F. *"Ambulance Service Area"*means *a geographic area which is served by one ambulance service provider and may include all or a portion of a county, or all or portions of two or more contiguous counties.*

G. *"Ambulance Service Plan"* means *a written document which outlines a process for establishing a county emergency medical services system. A plan addresses the need for and coordination of ambulance services by establishing ambulance service areas for the entire county and by meeting the other requirements of the rules. Approval of a plan*

*will not depend upon whether it maintains an existing system of providers or changes the system. For example, a plan may substitute franchising for an open market system.*

H. "Ambulance Service Provider" means a person or entity which is under license with Multnomah County to provide emergency or non-emergency ambulance service within the Ambulance Service Area as defined in the Ambulance Service Plan.

I. "Basic Life Support" or "BLS" means those medical treatment skills as defined by ORS Chapter 823 authorized to an EMT-1 or 1-D or Basic EMT. Any vehicle identified as "Basic Life Support "or "BLS" shall be continuously staffed by a minimum of two EMT 1, 1-D, or Basic EMTs; and as described in OAR 333-28-050, when in operation and meeting the System Standard of Care established by Multnomah County.

J. "County" means Multnomah County, Oregon.

K. *"Division"*means *Oregon Health Division, Department of Human Resources.*

L.*"Effective provision of ambulance services"* means *ambulance services provided in compliance with the county ambulance service plan provisions for boundaries, coordination and systems elements.*

M. *"Efficient provision of ambulance services"* means *effective ambulance services provided in compliance with the county ambulance service plan provisions for provider selection.*

N. "Emergency Ambulance" means a special service ambulance for which a special license and permit are given that is equipped with specially trained personnel and special medical equipment under the medical supervision of the Physician Medical Director for response to requests for emergency medical aid and/or transportation.

O. *"Emergency Medical Service" or "EMS" means those prehospital functions and services whose purposes is to prepare for and respond to medical emergencies, including rescue and ambulance services, patient care, communications and evaluation.*

P. "Emergency Medical Technician" or "EMT" means a person who is authorized to render specialized emergency or non-emergency medical care pursuant to ORS Chapter 823.

Q. "Financial Oversight Board" or "FOB" means the board established pursuant to County ordinance to provide financial advisory oversight of emergency medical service and ambulance providers.

R. "Medical Advisory Board" or "MAB" means the board established pursuant to County ordinance to provide medical oversight and performance review of the emergency medical service and ambulance providers.

S. " Medical Call Taker" means a person in the employ of or acting under the control of a private business or public agency who receives calls concerning possible medical emergencies and administers emergency medical dispatch protocols approved by the Physician Medical Director; or a person who receives requests for non-emergency ambulance services for a non- emergency ambulance provider.

T. "Medical Protocol" means any diagnosis-specific or problem-oriented written statement of standard procedures promulgated to state or local law or regulation for prehospital care for a given clinical condition.

U. "Mutual Aid Agreement" means a contract between Multnomah County and each and every licensed or permitted provider of emergency medical service or ambulance transportation for mutual cooperation in times of public emergency or catastrophe for the benefit of the public health and safety.

V. *"Notification time" means the length of time between the initial receipt of the request for emergency medical service by either a provider or an emergency dispatch center (9-1-1), and the notification of all responding emergency medical services personnel.* Initial receipt of the request shall be defined as the moment the first of three critical items of information have been received by the medical call taker: location of the emergency, chief medical complaint, or caller's telephone number. Notification shall be complete with the end of the dispatch message to the last of the responding units.

W. "Non-Emergency Ambulance" means a vehicle meeting the requirements of the System Standard of Care of this ordinance which is ordinarily licensed and permitted for the transportation of only medically stable patients on routine transports on a non-emergency basis, excepting responses under a Mutual Aid Agreement in times of public emergency or catastrophe.

X. "On-Line Medical Resource" means instruction, direction, advice and professional support given to an EMT via radio or other communications media by a physician or other licenced health professional authorized by the Physician Medical Director for the purpose of assisting in the provision of prehospital, on-site or in-transit, basic or advanced life support services, meant as a supplement to a written medical protocol.

Y. "Person" means an individual, partnership, company, association, corporation (government or private), or any other legal entity including any receiver, trustee, assignee, or similar representative.

Z. "Physician Medical Director" or "PMD" means a a singular person who is an experienced board certified emergency medicine physician, employed full time by the County for the purpose of establishing and overseeing a uniform standard of care for emergency medical services, ambulance operations, related dispatch, and ancillary services related to provision of such services. The Physician Medical Director serves at the pleasure of the Chair of the Multnomah County Commissioners.

AA. *"Provider" means any public, private or volunteer entity providing EMS.*

BB. *"Provider selection process" means the process established by the County for selection of an ambulance service provider or providers.*

CC. *"Response time" means the length of time between the notification of each provider and the arrival of each provider's emergency medical services unit(s) at the incident scene.*

DD. "System Standard Of Care" or "Standard of Care" means the combined compilation of all standards for prehospital medical care including but not limited to priority dispatching protocols; pre-arrival instruction protocols; medical protocols for ALS and BLS providers; minimum medical standards of care for emergency and non-emergency ambulances; protocols for the selection of destination hospitals; standards for certification of prehospital care personnel including medical call takers, EMS responders, ambulance personnel, on-line medical resource physicians and others, including continuing education requirements; standards for the issuance of permits for ambulances, first response units, helicopter rescue and transport units, special use mobile intensive care services and other vehicles; response time standards, hours of service for ambulance personnel; vehicle operation standards; standards for initial construction and continuing maintenance of vehicles; standards governing on-board medical equipment and supplies; standards for radio equipment and operations; standards for licensure of ambulance services and emergency medical service agencies; standards for inter-hospital transfers; and standards for medical services at areas of public assembly.

BOUNDARIES
OAR 333-28-115

**(1) ASA Map with Response Time Zones**
**(2) ASA Narrative Description**

The Ambulance Service Area for Multnomah County is described as:

Beginning on the most northwest tip of Sauvie Island located in Columbia County, all areas of Sauvie Island located in Columbia County and Multnomah County; all areas of Multnomah County as legally described including those areas within the city limits of Portland which are located within Washington County; and areas under intergovenmental agreement for service,

Excepting the following areas:

The unincorporated portion of Multnomah County south of the city limits of Portland commonly known as Dunthorpe, wholly contained within the Rural Fire Protection District 11- Riverdale;

The portions of Multnomah County located within the city limits of Lake Oswego;

The unincorporated area of Multnomah County and the city limits of Portland bordered by Cornelius Pass Road, Skyline Road and Cornell Road including all addresses on either side of these roads;

The portion of Multnomah county which is contained within the boundaries of the Scappoose Rural Fire Protection District;

The Board of County Commissioners reserves the right, following the procedure according to statute, to change the boundaries of this Ambulance Service Area, or create other ASAs in order to provide effective and efficient provision of emergency medical services.

**(3) Map Depicting "9-1-1" , Fire Districts, Incorporated Cities**

**(4) Alternatives Considered to Reduce Response Times**

(A) The first alternative to reduce response times is to remove from the ASA those areas which are more quickly served by ambulance from another county due to

geographical delays in response.

(B) The next alternatives involve programs to reduce calls for emergency medical service to selected populations by substituting more appropriate specialized medical care on an urgent but non-emergency basis based upon the triage of the call. These alternatives are not to deny or delay the response of any necessary emergency medical service or emergency ambulance to any patient.

**CHIERS Program**- The CHIERS program is an outreach effort to assist the public inebriate or chemically dependent person primarily within the central core of urban Portland. The CHIERS units are staffed by Basic EMTs who respond to "man down" calls where there is a high suspicion of a publicly inebriated person as the patient. These EMTs assess the patient for medical need and follow protocols concerning appropriate medical or social services for the patient. These EMTs will also use the Physician Medical Director for medical supervision and protocols. Their charts on patients will be included in the EMS quality assurance programs of the County.

(C) The final alternatives are programs to provide information on the operations of the EMS system and how to improve the operation and delivery of emergency medical services and ambulances.

Public Involvement and Education Program
Epilepsy Awareness and Membership Rate Program
Diabetes Awareness and Membership Rate Program
Continuous Process Improvement Program

SYSTEM ELEMENTS
OAR 333-28-120

**(1) Division of Service Types**

It is a purpose of this ordinance to separate emergency ambulance from non-emergency ambulance services. It is the opinion of the Commissioners of Multnomah County that there is justification for such a division. The Commissioners of Multnomah County believe that persons injured as a result of accident, or incapacitated by illness or other emergency, are not informed consumers of suitable emergency medical services or ambulance services at the time of urgent need. It is further believed that these injured persons are best served by a single uniform specialized provider of emergency medical care and transportation. This ordinance creates a special class of ambulance for this medical transportation need to be called an emergency ambulance. The rates charged for such service are best regulated by the County through a Financial Oversight Board, subject to change as the Standard of Care is modified, and approved by the Medical Advisory Board, and subject to the review of the County. Response to calls for emergency ambulance service or transportation of medically unstable patients as defined in the system standard of care shall be the exclusive right and use for an emergency ambulance.

There is also a large market within the Multnomah County for routine or schedulable transportation of persons who require the care and supervision of a skilled medical person while enroute. This ordinance creates an ordinary class of ambulance for these transportation needs, to be called a non-emergency ambulance. These patients do not require a special vehicle uniquely equipped for emergency care but do require certain specially designed and equipped vehicles with medical equipment and personnel not found in other forms of public transportation. The operation of these vehicles, and the care and medical supervision of these patients while enroute shall be regulated by the County under the System Standard of Care as with other emergency medical services and emergency ambulances. Response to routine or scheduled transportation of medically stable patients as defined in the system standard of care shall be the exclusive use for a non-emergency ambulance except as provided for in a catastrophe.

Assignment of the exclusive ASA shall refer only to the emergency ambulances. Non-emergency ambulances, and CHIERS vehicles are not subject to the geographic service restrictions of the Ambulance Service Area.

## (2) Notification / Response Times for Each ASA Provider

The standard for notification time of EMS providers and emergency ambulances is 80 seconds, 90% of the time.

Response times for emergency ambulances within the Ambulance Service Area shall be:

Within the Urban Growth Boundary - 7 minutes 59 seconds or less, 90% of the time uniformly within all areas of this zone, not subject to averaging. The most often occurring response time shall be 6 minutes 30 seconds or less.

Outside of the Urban Growth Boundary but within the boundary of a Rural Fire Protection District - 14 minutes 59 seconds or less, 90% of the time uniformly within the zone, not subject to averaging.

Outside of any Rural Fire Protection District and outside of the Urban Growth Boundary - 44 minutes 59 seconds or less 100% of the time, provided that each dispatch shall be made immediately to the closest available emergency ambulance which shall continuously respond in a emergency manner. Actual response in roadless, wilderness areas and national forests will be determined by access capability.

Response times for other EMS providers within the Ambulance Service Area shall be determined by the Physician Medical Director in consultation with the local EMS responder. The Physician Medical Director shall take into consideration their available resources for reasonable, efficient, and effective EMS responses within their districts.

Non-emergency ambulances shall respond to an unscheduled request for service within one hour of request, 100 % of the time within the County, not subject to the ASA boundary.

## (3) Level of Care & (4) Personnel

The level of care and personnel for EMS providers shall be at a minimum of two EMT -1s or Basics and certified by the Physician Medical Director for Multnomah County. All other aspects of EMS operations and responding vehicles shall meet the System Standard of Care.

The level of care and personnel for vehicles operating in the CHIERS program shall be a minimum of one EMT-1 or Basic and certified by the Physician Medical Director for Multnomah County. Other medical aspects of the CHIERS operations and responding vehicles shall meet the System Standard of Care.

The level of care and personnel for non-emergency ambulances shall be, at a minimum, Basic Life Support with at least two EMT-1s or Basics and certified by the Physician Medical Director for Multnomah County. Medical wheelchair transportation units shall be staffed by at least one EMT-1 or Basic. All other aspects of operations and vehicles shall meet the System Standard of Care.

The level of care for emergency ambulances shall be, at a minimum, Advanced Life Support with at least two EMT 4s (Paramedic or Advanced) and certified by the Physician Medical Director for Multnomah County. All other aspects of operations and vehicles shall meet the System Standard of Care.

Standards for the level of care are to be developed by the Physician Medical Director and will be incorporated as a supplement to this document as adopted.

**(5) Medical Supervision**

Physician Medical Director. The County shall retain a singular person who is a currently board certified experienced emergency physician, who has demonstrated experience and expertise in training prehospital persopnnel, direction of EMTs, EMS quality improvement and processes. The Physician Medical Director shall be a employee of the County through direct employment for the position of Physician Medical Director. The Physician Medical Director shall serve at the pleasure of the Chair of the Multnomah County Commissioners. The Physician Medical Director shall have duties and responsibilities including, but not limited to, the following :

A) To regularly ride along with emergency medical service and ambulance personnel for the purpose of system improvement, education, training, and supervision and to act as an advocate for emergency medical service personnel and their patients.

B) To prescribe and periodically revise the System Standard of Care for emergency medical care and services so as to supplement or exceed the standards set by Oregon state statute, rule, and regulation.

C) To develop and supervise a multiple level quality assurance program to improve delivery of emergency medical services and patient care. This program shall use a peer review of system-wide operations, a statistical review of all operations to identify areas of

improvement, and direct medical review of patient care involving both the Medical Advisory Board and community physicians.

D) To develop, supervise and instruct, with others if necessary, continuing education classes for the emergency medical system members with the intent of offering continuous improvement in medical techniques and skills and to supervise the collection of medical data for the purposes of research and publishing of research papers.

E) To establish policies for a uniform disciplinary process regarding substandard medical performance of emergency medical technicians and other employees.

F) To maintain narcotics license(s) and monitor procurement, dispensation and administration of narcotics.

G) To appoint such standing and ad hoc advisory committees as may be appropriate to secure broad-based input for improving the Standard of Care. Membership of such committees may include emergency medical services providers such as physicians, nurses, and emergency medical technicians; public and private emergency response and planning agency personnel; and consumers of emergency medical and ambulance services.

H) To issue, renew, suspend, revoke and restrict the licenses, certifications, and permits provided for by this ordinance, subject to appeal or review as prescribed by this ordinance and not inconsistent with state law.

I) To establish and maintain a system of clinical and response time monitoring, medical control, and audit designed to detect and correct deviations from the Standard of Care which reduce the level of patient care, to identify and correct deficiencies in the system of care itself; and to advance the practice of prehospital medicine through clinical research.

The Physician Medical Director shall be the supervising physician for all emergency medical services, and for all emergency and non-emergency ambulance EMTs while working in the regular course of their employment by a licensee within Multnomah County. Duties of the Physician Medical Director may be delegated to others by the Physician Medical Director, but the ultimate responsibility for the components of medical direction will remain with the Physician Medical Director.

**(6) Patient Care Equipment, (7) Vehicles, (8) Training** *(items regarding these chapters are underlined)*

These items have been addressed and considered in the formation of this plan. A specific duty of the Physician Medical Director is to establish and oversee a uniform System Standard of Care for emergency medical services and ambulances within Multnomah County. These uniform standards may also be used as the system requirements for the bidding process for the provider of the emergency ambulance service within the ASA.

The specific standards to be developed for prehospital medical care include but are not limited to: priority dispatching protocols; pre-arrival instruction protocols; medical protocols for ALS and BLS providers; minimum medical standards of care for emergency and non-emergency ambulances; protocols for the selection of destination hospitals; standards for certification of prehospital care personnel including medical call takers, EMS responders, ambulance personnel, on-line medical resource physicians and others, including continuing education requirements; standards for the issuance of permits for ambulances, first response units, helicopter rescue and transport units, special use mobile intensive care services and other vehicles; response time standards; hours of service for ambulance personnel; vehicle operation standards; standards for initial construction and continuing maintenance of vehicles; standards governing on-board medical equipment and supplies; standards for radio equipment and operations; standards for licensure of ambulance services and emergency medical service agencies; standards for inter-hospital transfers; and standards for medical services at areas of public assembly.

**(9) Quality Assurance**

**(A) Structure** The Physician Medical Director shall develop a system of retrospective review of medical care received by patients, and provide case reviews to members of the EMS community.

This Plan also uses a peer driven system of continuous improvement based on the "Deming" model of statistical quality sampling to improve uniformity in the delivery of patient care. This peer driven system involves bringing together all members in the EMS system, including outside members of the medical community, to identify problems and work out solutions cooperatively. It involves standardization, measuring compliance, testing and inspection in a constant process of improvement and training.

This system, by producing standardized measurements, readily lends itself to development of studies for research or publication as well as developing predictions of patient outcomes. It also has an effect of overall cost reduction by improving methods of delivering care while increasing efficiency. All providers of care, including non-emergency ambulance providers, will participate in the this uniform system of review. In addition to the process above, a patient chart may receive review by the auditing process of the Medical Advisory Board.

**(B) Process** The process used shall not be less than the standard used by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) including:

Prospective Evaluation

- Primary or initial education of personnel

- Continuing education programs on a periodic basis or in response to a real or perceived deficiency
- Periodic skill examinations, either formally or informally
- Preceptorship or apprenticeship programs of improved or proposed skills

Concurrent Evaluation

- Real time observations by Physician Medical Director

Retrospective Evaluation

- Debriefing or oral review
- Critique sessions
- Chart review
- Formal chart audit

Development of Standards

- Structure standards
- Process standards
- Outcome standards

**(C) Problem Resolution** It is an intent of this plan to create a uniform system of emergency medical care and ambulance service within Multnomah County. It is a goal of the system design and the quality assurance program to define problems in the delivery of effective, efficient emergency medical care and ambulance services and resolve them. This design should first investigate the underlying cause of the problem before identifying a person as the source of the error . Every effort should then be directed at correcting the system portion of the defined problem. However, it is also impossible to design a system that does not contain occasional personnel problems. To address these personnel problems this plan provides for a uniform process of discipline to be created by the Physician Medical Director.

**Personnel:** If the defined problem is a perceived skill deficiency, the Physician Medical Director shall first prescribe remedial skill improvements such as requesting of remedial instruction, additional education programs to improve a defined skill deficiency, real time observation in the field, peer training, or other program to improve an EMT's skill to an acceptable level. For problems in performance not related to patient care, the Physician Medical Director shall refer the problem to the employer of the EMT for resolution or discipline. The Physician Medical Director shall be able to restrict or suspend a certification to practice in Multnomah County in extreme cases.

**Providers:** All providers are members of the peer driven quality assurance program and may address problems through the quality assurance process. Problems not resolved in the quality assurance process or by the Physician Medical Director may be

addressed at the Medical Advisory Board.

## (d) Sanctions for Non-Compliant Personnel or Providers

*From the accompanying ordinance by reference:*

Section 11. License Denials, Nonrenewals, Revocations, Suspensions and Restrictions

A. Basis. The Physician Medical Director may deny a license application or license renewal, or revoke, suspend, or restrict a license if he or she has reasonable cause to believe that the applicant for or holder of the license has violated any provision or failed to meet and maintain the standard of care established through this ordinance which supplements or exceeds that established by state law.

B. Notice. If the Physician Medical Director denies a license application or license renewal, or revokes, suspends, or restricts a license, the applicant for or a holder thereof shall be given a written notice stating:

(1) The facts and conclusions upon which the decision is based, and

(2) That the Physician Medical Director's decision shall be final and conclusive and that the applicant or holder shall be deemed to have waived all rights to an administrative hearing unless the applicant or holder files with the County a written notice of appeal pursuant to Subsection C of this Section. Notice of a license revocation, suspension, or restriction shall be given prior to the effective date of such action; provided that the Physician Medical Director may revoke, suspend or restrict a license without prior written notice, but subject to a timely appeal, if the Physician Medical Director finds that immediate action is necessary in order to protect the health, welfare, or safety of the public.

C. Appeal. The notice of appeal shall be filed with the County within ten (10) working days following the notice of the PMD's decision and shall state the grounds for the appeal. Upon the filing of an appeal, the County shall cause to have scheduled a hearing thereon before the Medical Advisory Board or before a hearing examiner appointed by the Board of County Commissioners within thirty (30) days and provide at least five (5) day's notice of the hearing to the applicant or holder. The decision of the Physician Medical Director shall be upheld unless the MAB or hearing

examiner finds that the decision was arbitrary, capricious, or contrary to law. The decision of the MAB or hearing examiner shall be final and conclusive unless review is sought in a court of competent jurisdiction within ten (10) days of the written decision.

Section 14. Procedures for Denial, Revocation, Suspension or Restriction of Certifications and Permits

A. Basis. The Physician Medical Director may deny application for an initial or renewal of a certification or permit for failure to comply with, or for the violation of, any provision of this ordinance or any Standard of Care or rule established through this ordinance which supplements or exceeds that set by state law.

B. Notice/Appeal. The Physician Medical Director shall notify the applicant or holder of the certification or permit, in writing, of the facts and conclusions upon which the Physician Medical Director's decision is based, and the Physician Medical Director's decision shall be final and conclusive, and the applicant or holder shall be deemed to have waived all rights to review of the decision unless the applicant or holder files with the County a written notice of appeal stating the grounds therefor within ten (10) working days following the notice of such a decision. Such appeal shall be processed pursuant to the terms of Section 11-(C) of this ordinance.

## COORDINATION

### (1) The Entity That Will Administer And Revise The ASA Plan

The administrator of the Multnomah County Ambulance Service Area Plan shall be the Physician Medical Director. The Physician Medical Director is the sole responsible person for all aspects of emergency medical services within Multnomah County.

The Physician Medical Director shall have a chief administrator, an EMS System Administrator. The EMS System Administrator duties shall include, but are not limited to:

Providing direct supervision of assigned supervisory, technical and clerical staff; plan, prioritize, assign, supervise and review the work of staff.

Monitor contracts and intergovernmental agreements; prepare and administer budget; prepare cost estimates for budget recommendations; review and post all rates and fees for services by EMS providers.

Assist in system design and planning.

Prepare various reports and documents on operations and activities necessary for system operation including reports to the Physician Medical Director and Medical Advisory Board.

Supervise the licenses, certifications, and permits issued; Initial vehicle construction, maintenance requirements and inspections of vehicles.

Implement discipline procedures.

Answer questions and provide information to the public; investigate complaints and recommend corrective action to the Physician Medical Director.

Other duties and responsibilities as directed by the Physician Medical Director.

The EMS System Administrator and staff shall be County employees.

The Physician Medical Director and the Medical Advisory Board may propose to the Multnomah County Commissioners changes to Ambulance Service Plan. The Board of County Commissioners reserves the right, following the procedure according to statute, to change the boundaries of this Ambulance Service Area, or to create other ASAs in order to provide effective and efficient emergency medical services.

**(2) Complaint Review Process**

A standard for the fair and equitable handling of complaints concerning EMS care and service of ambulances shall be adopted by the Physician Medical Director. All licensed or permitted ambulances and providers of emergency medical service shall promptly file complete copies of all compliants received with office of the Physician Medical Director.

Complaints shall be reviewed and either satisfactorily resolved between the parties or as necessary referred to the appropriate board or outside regulatory agency or investigated and resolved through fine, sanction, disciplinary, or criminal action.

**(3) Process For Mutual Aid Agreements**

The Physician Medical Director shall develop a uniform Mutual Aid Agreement for all licensed or permitted providers. It shall be a condition of receiving a permit or license as an ambulance or EMS provider to complete a uniform Mutual Aid Agreement with the County.

**(4) Disaster Response**

**(A) County Resources Other Than Ambulances**

**(B) Out of County Resources**

### (C) Mass Casualty Incident Plan(s)

Multnomah County maintains an Emergency Services Office for the purpose of planning and maintaining readiness for a major emergency or catastrophe. A complete library of plans for special types of incidents and resources available is located within this office. EMS dispatchers have manuals of procedure for major emergency responses and resources.

## (5) Personnel and Equipment Resources

### (A) Hazardous Materials

Hazardous materials situations within Multnomah County are responded to by the Multnomah County Sheriff, Portland Fire Bureau, Port of Portland and Gresham Fire Department. Hazardous materials classes are currently required for all responding EMS personnel under federal law. The State of Oregon also has a Hazardous Materials program and response through the State Fire Marshal's office

### (B) Search and Rescue

Responsibility for search and rescue is assigned to the sheriff of a county by Oregon State Statute. The Multnomah County Sheriff has such a search and rescue team. Also the 304th Search and Rescue Squadron is coordinated through the sheriff's office.

### (C) Specialized Rescue - (D) Extrication

Specialized rescue teams and equipment for extrication, water rescue, vertical terrain, dive rescue, airport crash hazardous materials, and other special situations within the County are provided by the Portland Fire Bureau, Gresham Fire Department, Fire Districts 10 and 14, Sauvie Island Fire and Skyline Fire, and the Port of Portland. One ambulance business in Multnomah County has a specialized "Reach and Treat" team to deliver medical care to a patient until a rescue is possible. The Public Safety Answering Point (PSAP) dispatches special rescue teams and other EMS responders as needed within jurisdictions according to triage guidelines.

## (6) Emergency Communications and System Access

Citizens requesting emergency aid may access emergency services within Multnomah County in many ways. Most will use a telephone and dial 9-1-1. Others may use a portable cellular radio telephone, use a private radio system, hail a government vehicle or go to a public building in search of assistance. Emergency calls then go to a Public Safety Answering Point for the dispatch of appropriate assistance.

Multnomah County and the incorporated cities within Multnomah County jointly operate the Multnomah County Public Safety Answering Point at Kelly Butte in Portland,

Oregon. The facility is operated through the City of Portland Bureau of Emergency Communications (BOEC). The PSAP is currently being upgraded and a new facility is being built. New computer aided dispatching and two-way radio equipment is being purchased for the facility. The upgrade is not yet in service, and the new center is scheduled for opening in the fall of 1993.

The Physician Medical Director's office has the responsibility to establish and maintain a countywide office for the receiving and dispatch of emergency medical services at the PSAP. Functions of this office include instruction and supervision of emergency medical calltakers; triage of calls for need; medical first aid instructions to the emergency caller; dispatch and radio communications between emergency medical service providers; and the review and archiving of EMS dispatch records. The Bureau of Emergency Communications is currently under contract to the Multnomah County EMS Office for the operation of the medical portion of the emergency call taking and dispatch functions within the County.

**(A) Telephone**

Requests for emergency aid placed by telephone within Multnomah County are predominantly received at the Multnomah County Public Safety Answering Point (PSAP) in the Bureau of Emergency Communications facility at Kelley Butte in Portland. Calls are received at this PSAP encripted for enhanced 911 service which provides automatic call identification and address location simultaneously with the arrival of the voice of the emergency caller to the call taker at the PSAP. This facility handles approximately 815,000 calls annually through the 911 telephone systems serving Multnomah County. Ninety percent of these calls are for law enforcement requests. Not all calls received are requests for service within Multnomah county, nor are all calls for aid within Multnomah County received at this PSAP.

Several other potential answering points occur outside of Multnomah County which could receive a call for emergency assistance within Multnomah County. These other points are not based on political considerations or intergovernmental agreements but are usually due to a state requirement that calls be directed to the police responder for that address. Some small areas within the County receive police service from one jurisdiction and fire and EMS service from others.

Radio telephone or cellular telephone calls are also answered at the Kelly Butte facility. These calls travel to the nearest specialized radio receiver or private branch exchange (PBX) before being transferred by telephone line to a switching center which then distributes the call to the PSAP for that switching center. Thus a emergency call to an address within Multnomah County by private radio, radio phone or cellular phone may not necessarily

first arrive at the Kelly Butte facility but may go to another PSAP for handling.

**(B) Dispatch Procedures**

The Multnomah County PSAP will dispatch all emergency ambulances within Multnomah County. The Multnomah County PSAP shall provide a connection for the Emergency Ambulance licensee to acquire the Automatic Number Identification / Automatic Location Identification (ANI/ALI ) and 911 medical call taker data from the PSAP for the operation of a computer aided dispatch center.

A 911 caller's request for emergency medical aid will be processed by a BOEC medical calltaker. The call taker will obtain the caller's location, phone number for call-back and chief complaint. The calltaker will then transfer the information via computer screen for appropriate dispatch. Following the System Standard of Care, the BOEC employees will use the Criteria Based Dispatch Guidelines book to triage the call to determine the level of response of the ambulance needed for the patient and what emergency pre-arrival instructions should be given to the caller for the aid to the patient until emergency help arrives.

The EMS Dispatcher shall determine the ambulance with the shortest response time to the patient and begin dispatch of the ambulance and other EMS providers based upon the triage guidelines and the location of the call within the County.

Certain locations and conditions may require an out-of-county ambulance to respond to a call. Guidelines to such responses shall be determined by written protocol developed between the Physician Medical Director and affected dispatch and EMS agencies using an automatic Mutual Aid Agreement.

**(C) Radio System**

Currently two major radio systems are used in EMS within Multnomah County. One is for dispatch and communication between EMS providers and emergency dispatchers within the County. The other is used for the transmission of medical advice or communication between hospitals and other medical providers within the state. These radios are Ultra High and Very High Frequency in design. These radios operate on frequencies assigned by the Federal Communications Commission specifically for medical communication and / or emergency vehicle operation. These frequencies are also assigned and used according to the State of Oregon Emergency Medical Services Communication Plan.

Current and future medical protocols for EMTs require specific communication by radio to an EMS dispatcher, on-line Medical Resource or receiving hospital. The frequencies most commonly used are Med Net-9 at 462.950 Mhz for dispatch and 155.340

Mhz for the HEAR hospital communications. Frequency and radio use is also controlled by Multnomah County Administrative Rules.

With the planned upgrade of the Multnomah County PSAP, extensive improvements are being considered for the radio communication system. These include changing radio frequencies to 800 Hz band, trunking of available frequencies, mobile video display terminals and automatic vehicle location devices. The upgrade for all radio improvements has not been installed yet and is not operational.

**(D) Emergency Medical Services Dispatcher Training**

Currently all PSAP emergency dispatchers are trained to the Emergency Medical Dispatch standard adopted by the State of Oregon. Future training and develop of improved triage and Criteria Based Dispatch guidelines will be developed by the Physician Medical Director and will continue to meet or exceed state minimums.

All licenced providers of non-emergency ambulances shall train their dispatchers to a standard determined by the Physician Medical Director to ensure that only medically stable patients shall be transported by non-emergency ambulances.

## PROVIDER SELECTION — OPTION "1"

### (1) Initial Assignment

The Board of County Commissioners for Multnomah County shall establish the type of service model to implement emergency medical service and emergency ambulance service described in this plan as required in ORS 823. The cost for the selection of a vendor shall be recovered from applicant fees and an award fee from the successful vendor upon awarding of the contract.

The Board of County Commissioners desires an INDEPENDENT CONTRACTOR model.

The County Commissioners shall establish a selection committee to design the necessary Request for Credentials (RFC), Request for Proposals (RFP); and administrative procedures to select and award a contract to an independent contractor for emergency ambulance service.

The committee shall be made up of three members. The first member shall be the Physician Medical Director. The second member shall be the County Counsel for Multnomah County. The third member shall be an outside consultant who is skilled in design and implementation ambulance systems for cities or counties of similar size.

The County will then solicit credentials from any person who desires to provide emergency ambulance service within the ASA. The committee will then determine which applicants are sufficiently experienced and capitalized to provide emergency ambulance service within the ASA and also meet the requirements of the RFC.

After the selection of appropriate candidates from the credentialing process, the County will then solicit proposals, pursuant to the Request for Proposals, from the final applicants. The committee will then establish an independent review team and, using procedures designed by the committee, judge the proposals to determine the most suitable vendor to provide the emergency ambulance service within the ASA.

The Committee will make its recommendation of the successful vendor to the Board of County Commissioners for the awarding of a contract for a period detemined by the Commissioners.

### (2) Reassignment

The service within the ASA is limited to a single provider under Oregon Statute. The contracted vendor shall not transfer, contract, sublet, or assign a portion of the ASA to

another person. The contract shall not be transferred, sold, or assigned without the written permission of the County.

The RFP and contract shall provide for an orderly completion of the contract and a process to reassign or solicit a new vendor in a manner similar to that found in (1) Initial Assignment.

Certain protections pertain to the emergency medical technicians regarding replacement of one provider in an ASA with another. When hiring to fill vacant or new positions during the six-month period immediately following the date of replacement, the replacing ambulance service shall give preference to qualified employees of the previous ambulance service at comparable certification levels. If a collective bargaining agreement exists between the ambulance service being replaced and its employees, including its emergency medical service personnel, the replacement ambulance service shall honor that collective bargaining agreement until it expires or is renegotiated by the replacement ambulance service. If the replacement service has in place a collective bargaining agreement providing for the higher benefits and wages than the previous contracted vendor, the new higher contract shall prevail.

### (3) Application for an ASA

Application for the Ambulance Service Area for Multnomah County shall be open to any person who submits a response to the Request for Creditials notice from the County and pays a non-refundable fee. The County reserves the right to reject all applications for any reason.

### (4) Notification of Vacating an ASA

**Voluntary Withdrawal:** The contracted provider of the Multnomah County ASA shall give to the County written notice one hundred and eighty (180) days prior to its intent to vacate the service within the ASA. The contracted provider shall during the vacating period continue all operations and support services at substantially the same levels of service, effort, and performance as were in effect at the time of the notice. The contracted provider shall make no changes in methods of operation which could be considered to be aimed at cutting the level of service and/or operations costs to maximize profits during the vacating period. The contracted provider shall assist in an orderly transition of services to the new vendor, including offering of key personnel to the new vendor on a temporary basis for 90 days after the new vendor takes over. The new vendor, if it elects to retain these persons during the 90 day period, shall pay for the wages and benefits of these employees. The contracted vendor shall be allowed to reduce inventories

and staff through a schedule approved by the Physician Medical Director.

A contracted vendor, once giving notice to vacate, shall not be reinstated for any reason. A contracted vendor may not elect to vacate the ASA in anticipation of, during, or as a result of, a labor dispute. Other restrictions may apply as described in the Request for Proposals bid document.

**Emergency Vacating:** Should the contracted vendor default, the Physician Medical Director shall declare an emergency and follow the procedures according to law, the Request for Proposals and contract documents. The County reserves the right in this case to declare an emergency and appoint a receiver, trustee or interim provider to provide emergency ambulance service to protect the public health and safety.

**(5) Maintenance of Level of Service**

The contracted vendor shall maintain the levels of service bid in the Request for Proposal and contract documents subject to fine, sanction, or suspension of license.

The operation of all emergency ambulances by a single provider raises the concern of a disruption of service by a labor dispute or strike. The successful vendor shall in its contract with its employees agree to binding arbitration in a manner similar to that used for police and firefighters. Such arbitration shall use a "Best Offer" process to reach a final and binding decision (*reference HB 3198-1993 Ore. Legis.).* A completed labor contract meeting this requirement shall be necessary before the awarding of a service contract for the ASA by the County.

## PROVIDER SELECTION — OPTION "2"

### (1) Initial Assignment

The Board of County Commissioners for Multnomah County shall establish the type of service model to implement emergency medical service and emergency ambulance service described in this plan as required in ORS 823.

The Board of County Commissioners desires a COUNTY SERVICE DISTRICT model.

The Board of County Commissioners shall establish a County Service District (District) to provide emergency ambulance service and related emergency medical services. The County shall follow the procedure found in ORS 451- COUNTY SERVICE FACILITIES which provides for the establishment of ambulance services.

The County shall employ such persons as necessary to plan, design, establish, and operate such facilities within the ASA on a self supporting basis without a tax base by establishing service or user charges and the issuance of debt instruments as necessary.

Upon sucessful completion of the District formation, the County shall award to itself alone the ASA service contract without bid.

### (2) Reassignment

The County Service District shall continuously operate the emergency ambulance service and related ancillary services. The County Service District shall not assign or reassign the services to another person while in existence. Should the District file a notification to vacate the ASA, the County shall award the ASA using one of the methods found in this plan.

### (3) Application for an ASA

The County Service District shall apply to Multnomah County and be awarded the ASA formed for emergency ambulance and related services. The County shall not solicit any other provider.

### (4) Notification of Vacating an ASA

The County Service District shall provide a 1-year notice of its intention to vacate the

ASA. The District shall then file for dissolution following the procedures in ORS 451.

**(5) Maintenance of Level of Service**

The County Service District shall operate and maintain the levels of service found in System Standard of Care continuously during the existence of the County Service District.

The operation of all emergency ambulances by a single provider raises the concern of a disruption of service by a labor dispute or strike. The Service District shall in its contract with its employees agree to binding arbitration in a manner similar to that used for police and firefighters. Such arbitration shall use a "Best Offer" process to reach a final and binding decision. *(reference HB 3198-1993 Ore. Legis.).* A completed labor contract meeting this requirement shall be necessary before the awarding of a service contract for the ASA by the County.

Certain protections pertain to the emergency medical technicians regarding replacement of one provider in an ASA with another. When hiring to fill vacant or new positions during the six-month period immediately following the date of replacement, the replacing ambulance service shall give preference to qualified employees of the previous ambulance service at comparable certification levels. If a collective bargaining agreement exists between the ambulance service being replaced and its employees, including its emergency medical service personnel, the replacement ambulance service shall honor that collective bargaining agreement until it expires or is renegotiated by the replacement ambulance service. If the replacement service has in place a collective bargaining agreement providing for the higher benefits and wages than the previous contracted vendor, the new higher contract shall prevail.

## PROVIDER SELECTION — OPTION "3"

### (1) Initial Assignment

The Board of County Commissioners for Multnomah County shall establish the type of service model to implement emergency medical service and emergency ambulance service described in this plan as required in ORS 823.

The Board of County Commissioners desires an COUNTY OPERATED model.

The Board of County Commissioners shall establish an independent department to provide emergency ambulance service and related emergency medical services within the ASA.

The County shall employ such persons as necessary to plan, design, establish and operate such facilities within the ASA on a self supporting basis without a tax base by establishing service or user charges and the issuance of debt instruments as necessary.

### (2) Reassignment

The County shall continuously operate the emergency ambulance service and related ancillary services. The County shall not assign or reassign the services to another person while in operation. Should the County file a notification to vacate the ASA, the County shall award the ASA using one of the methods found in this plan.

### (3) Application for an ASA

The County shall be awarded the ASA formed for emergency ambulance and related services. The County shall not solicit any other provider.

### (4) Notification of Vacating an ASA

The County shall provide a 1-year notice of its intention to vacate the ASA and provide notification of its selection of a model to award the ASA.

### (5) Maintenance of Level of Service

The County shall operate and maintain the levels of service found in System Standard of Care continuously during the existence of the County.

The operation of all emergency ambulances by a single provider raises the concern of a

disruption of service by a labor dispute or strike. The County shall in its contract with its employees agree to binding arbitration in a manner similar to that used for police and firefighters. Such arbitration shall use a "Best Offer" process to reach a final and binding decision (*reference HB 3198-1993 Ore. Legis.).* A completed labor contract meeting this requirement shall be necessary before the awarding of a service contract for the ASA by the County.

Certain protections pertain to the emergency medical technicians regarding replacement of one provider in an ASA with another. When hiring to fill vacant or new positions during the six-month period immediately following the date of replacement, the replacing ambulance service shall give preference to qualified employees of the previous ambulance service at comparable certification levels. If a collective bargaining agreement exists between the ambulance service being replaced and its employees, including its emergency medical service personnel, the replacement ambulance service shall honor that collective bargaining agreement until it expires or is renegotiated by the replacement ambulance service. If the replacement service has in place a collective bargaining agreement providing for the higher benefits and wages than the previous contracted vendor, the new higher contract shall prevail.

## COUNTY ORDINANCES AND RULES

Attached is the Multnomah County Uniform Emergency Medical Services Ordinance.
#_____

AN ORDINANCE relating to and providing for the regulation of emergency medical services and ambulance operations; supplementing Oregon Revised Statues and Administrative Rules and Regulations; and repealing Ordinances 669, 652, 589, 573, 229, and Chapter 6.32 of the Multnomah County Code.

WHEREAS, the provision of efficient, effective, timely and professional emergency medical services is a matter of utmost public interest; and

WHEREAS, the Commissioners of Multnomah County have appointed an advisory board for the purposes of advising on issues regarding emergency medical services and ambulance operations; and

WHEREAS, a state mandated goal of the Board of County Commissioners has been the development of a comprehensive plan for effective and efficient emergency medical service and ambulance regulation and the monitoring of the performance of such operations; and

WHEREAS, it is necessary for the implementation of such policies that there be adopted a County Ambulance Service Plan and a Uniform Emergency Medical Services Ordinance to provide a statutory framework for the strengthened regulatory medical oversight of such an emergency medical service system; now, therefore,

BE IT RESOLVED BY THE COMMISSIONERS OF MULTNOMAH COUNTY, STATE OF OREGON, as follows:

Section 1. Purpose It is the purpose of this ordinance:

A. To establish and adopt a uniform county ambulance service plan for the effective and efficient emergency medical and ambulance service throughout the County.

B. To establish oversight and regulatory standards for the provision of ambulance and emergency medical services which supplement and exceed the standards of Chapter 823 of the Oregon Revised Statutes and Oregon Administrative Rules Chapter 333, Division 28 - Health Division, and regulations adopted thereunder.

C. To promote state-of-the-art clinical quality of prehospital emergency medical care with reasonable, reliable response time standards, and with the goal of furnishing the best

chance of survival, without disability or preventable complication, to each patient.

D. To provide a method to develop specific performance standards, adequate review and supervision, and written medical protocols for such services.

Section 2. Definitions Unless a different meaning is plainly required by the context, words and phrases used in this ordinance shall have the meanings attributed to ORS Chapter 823 or in this Section, provided that, in case of any conflict, this ordinance shall control:

A. "Advanced Life Support" or "ALS" means the provision of medical services requiring advanced medical treatment skills as defined by ORS Chapter 823 and Oregon Administrative Rules and authorized to an EMT 2, 3, 4 (Intravenous, Intermediate, Cardiac, Advanced, or Paramedic). Any vehicle identified as Advanced Life Support or ALS shall be continuously staffed by two (2) medical personnel whose skill level shall be a minimum of EMT-4s (Paramedic or Advanced); and, as described in OAR 333-28-050, when in operation and meeting the System Standard of Care established by Multnomah County.

B. "Ambulance" means any privately or publicly owned motor vehicle, aircraft, or watercraft that is regularly provided or offered to be provided for the transportation of persons suffering from illness, injury, or disability enroute to or from a health care facility .

C. "Ambulance Patient" means any patient being transported in a reclining or other position of comfort in a specialized motor vehicle or craft.

D. "Ambulance Service Area" or "ASA" means the combined area of unincorporated Multnomah County and within the corporate limits of the cities of Fairview, Gresham, Maywood Park, Portland, Troutdale and Wood Village, Oregon, defined in the Multnomah County Ambulance Service Plan.

E. "Ambulance Service Plan" means that county ambulance service plan as adopted by the Multnomah County Commissioners and approved by the Oregon State Health Division for the provision of ambulance service as defined in ORS 823.180, known as the Multnomah County Ambulance Service Plan.

F. "Ambulance Service Provider" means a person or entity under license with Multnomah County to provide emergency or non-emergency ambulance service within the Ambulance Service Area as defined in the Ambulance Service Plan.

G. "Basic Life Support" or "BLS" means those medical treatment skills as defined by

ORS Chapter 823 authorized to an EMT 1, 1-D, or Basic EMT. Any vehicle identified as "Basic Life Support" or "BLS" shall be continuously staffed by, at a minimum, two (2) EMT-1s, 1-Ds, or EMT Basics; and, as described in OAR 333-28-050, when in operation and meeting the System Standard of Care for Multnomah County.

H. "County" means Multnomah County, Oregon.

I. "Emergency Ambulance" means a special service ambulance, for which a special license and permit are given, that is equipped with specially trained personnel and special medical equipment under the medical supervision of the Physician Medical Director for response to requests for 911 emergency medical aid and/or transportation of medically unstable patients as defined in the System Standard of Care.

J. "Emergency Medical Service" or "EMS" means those prehospital functions and services whose purposes is to prepare for and respond to medical emergencies, including rescue and ambulance services, patient care, communications, and evaluation.

K. "Emergency Medical Technician" or "EMT" means a person who is authorized to render specialized emergency or non-emergency medical care pursuant to ORS Chapter 823.

L. "Financial Oversight Board" or "FOB" means the board established pursuant to this ordinance to provide financial advisory oversight of emergency medical service and ambulance providers.

M. "Medical Advisory Board" or "MAB" means the board established pursuant to this ordinance to provide medical oversight and performance review of the emergency medical service and ambulance providers.

N. " Medical Call Taker" means a person in the employ or acting under the control of a private business or public agency who receives calls concerning possible medical emergencies and who administers emergency medical dispatch protocols approved by the Physician Medical Director; or a person who receives requests for non-emergency ambulance services for a non-emergency ambulance provider.

O. "Medical Protocol" means any diagnosis-specific or problem-oriented written statement of standard procedures promulgated to state or local law or regulation for prehospital care for a given clinical condition.

P. "Mutual Aid Agreement" means a contract between Multnomah County and each and every licensed or permitted provider of emergency medical service or ambulance

transportation for mutual cooperation in times of public emergency or catastrophe for the benefit of the public health and safety.

Q. "Non-Emergency Ambulance" means an ambulance, meeting the requirements of the System Standard of Care of this ordinance, which is operated under an ordinary ambulance license and permitted for the transportation of only medically stable patients, on routine transports on a non-emergency basis excepting responses under a mutual aid agreement in times of public emergency or catastrophe.

R. "On-Line Medical Resource" means instruction, direction, advice and professional support given to an EMT via radio or other communications media by a physician or other licenced health professional authorized by the Physician Medical Director for the purpose of assisting in the provision of prehospital, on-site or in-transit, basic or advanced life support services, meant as a supplement to a written medical protocol.

S. "Public Safety Answering Point" or "PSAP" means an office or facility whose purpose is the answering or receiving of emergency calls received through a 911 telephone exchange or other means.

T. "Person" means an individual, partnership, company, association, corporation (government or private), or any other legal entity including any receiver, trustee, assignee, or similar representative.

U. "Physician Medical Director" or "PMD" means a singular person solely employed by Multnomah County for the purpose of establishing and overseeing a uniform standard of care for emergency medical services, ambulance operations, related dispatch and ancillary services related to provision of such services.

V. "System Standard Of Care" or "Standard of Care" means the combined compilation of all standards for prehospital medical care including but not limited to: priority dispatching protocols; pre-arrival instruction protocols; medical protocols for ALS and BLS providers; minimum medical standards of care for emergency and non-emergency ambulances; protocols for the selection of destination hospitals; standards for certification of prehospital care personnel including medical call takers, EMS responders, ambulance personnel, on-line medical resource physicians and others including continuing education requirements; standards for the issuance of permits for ambulances, first response units, helicopter rescue and transport units, special use mobile intensive care services and other vehicles; response time standards; hours of service for ambulance

personnel; vehicle operation standards; standards for initial construction and continuing maintenance of vehicles; standards governing on-board medical equipment and supplies; standards for radio equipment and operations; standards for licensure of ambulance services and emergency medical service agencies; standards for inter-hospital transfers; and standards for medical services at areas of public assembly.

Section 3. Division of Service Types and Rate Supervision. It is a purpose of this ordinance to separate emergency ambulance from non-emergency ambulance services. It is the opinion of the Commissioners of Multnomah County that there is justification for such a division. The Commissioners of Multnomah County believe that persons injured as a result of accident, or incapacitated by illness or other emergency are not informed consumers of suitable emergency medical services or ambulance services at the time of urgent need. It is further believed that these injured persons are best served by a single uniform specialized provider of emergency medical care and transportation. This ordinance creates a special class of ambulance for this medical transportation need to be called an emergency ambulance. The rates charged for such service are best regulated by the County through a Financial Oversight Board, subject to change as the Standard of Care is modified and approved by the Medical Advisory Board, and subject to the review of the County.

There is also a large market within Multnomah County for routine or schedulable medical transportation of persons who require the care and supervision of a skilled medical person while enroute. This ordinance creates an ordinary class of ambulance for these transportation needs, to be called a non-emergency ambulance. These patients do not require a special vehicle uniquely equipped for emergency care but do require certain specially designed and equipped vehicles with medical equipment and personnel not found in other forms of public transportation. The operation of these vehicles and the care and medical supervision of these patients while enroute shall also be regulated by the County under the System Standard of Care as with other emergency medical services and emergency ambulances. Response to routine or scheduled transportation of medically stable patients as defined in the System Standard of Care shall be the exclusive use for a non-emergency ambulance except as provided for in a catastrophe. It is also the opinion of the Commissioners that the services of non-emergency ambulances should allow competition and response from the economic forces of the marketplace. To accomplish this

goal, the Commissioners recommend the establishment of a maximum rate for services, allowing providers to set their own rates for services at or below the maximum rates set, subject to approval of the Financial Oversight Board, subject to change as the Standard of Care is modified and approved by the Medical Advisory Board, and subject to the review of the County.

Section 4. Physician Medical Director. The County shall retain a singular person who is an experienced board certified emergency medicine physician, who shall be a full time employee of the County through direct employment for the position of Physician Medical Director. The Physician Medical Director shall serve at the pleasure of the Chair of the Commissioners of Multnomah County. The Physician Medical Director shall have these duties and responsibilities including, but not limited to, the following :

A) To regularly ride along with emergency medical service and ambulance personnel for the purpose of system improvement, education, training, and supervision, and to act as an advocate for emergency medical service personnel and their patients.

B) To prescribe and periodically revise the System Standard of Care for emergency medical care and services so as to supplement or exceed the standards set by Oregon state law, rule and regulation.

C) To develop and supervise a multiple level quality assurance program to improve delivery of emergency medical services and patient care. This program shall use a peer review of system-wide operations, a statistical review of all operations to identify areas of improvement, and direct medical review of patient care involving both the Medical Advisory Board and community physicians.

D) To develop, supervise, and instruct, with others if necessary, continuing education classes for the emergency medical system members with the intent of offering continuous improvement in medical techniques and skills, and to supervise the collection of medical data for the purposes of research and publishing of research papers.

E) To establish policies for a uniform disciplinary process regarding substandard medical performance of emergency medical technicians and other employees.

F) To maintain narcotics license(s) and monitor procurement, dispensation, and administration of narcotics.

G) To appoint such standing and ad hoc advisory committees as may be appropriate to

secure broad-based input for improving the Standard of Care. Membership of such committees may include emergency medical services providers such as physicians, nurses, and emergency medical technicians; public and private emergency response and planning agency personnel; and consumers of emergency medical and ambulance services.

H) To issue, renew, suspend, revoke and restrict the licenses, certifications, and permits provided for by this ordinance, subject to appeal or review as prescribed by this ordinance and not inconsistent with state law.

I) To establish and maintain a system of clinical and response time monitoring, medical control, and audit designed to detect and correct deviations from the Standard of Care which reduce the level of patient care; to identify and correct deficiencies in the System of Care itself; and to advance the practice of prehospital medicine through clinical research.

The Physician Medical Director shall be the supervising physician for all emergency medical services, emergency and non-emergency ambulance EMTs working in the regular course of their employment by a licensee within Multnomah County. The Physician Medical Director shall not delegate responsibility of any supervisory or regulatory duties to others or appoint any agent for medical supervision of EMTs without the approval of the Medical Advisory Board.

The Physician Medical Director shall be the sole responsible employee for standards and supervision of emergency medical services and ambulances within Multnomah County. The Physician Medical Director shall also be the administrator of the Ambulance Service Plan.

The Medical Advisory Board shall, with the County Employee Services Office, recruit and recommend to the Board of County Commissioners the Physician Medical Director. The Medical Advisory Board shall also recommend the annual renewal or suspension of the employment of the Physician Medical Director.

Section 5. Administrative Duties

The Physician Medical Director, the EMS System Administrator or persons designated by the Physician Medical Director in writing on a temporary basis, shall have the authority

to do the following:

A. Administer oaths.

B. Audit records in order to assure compliance with this ordinance.

C. Certify official acts and records.

D. Subpoena and require attendance of witnesses at meetings or hearing to determine compliance with this ordinance.

E. Require production of relevant documents.

F. Swear witnesses.

G. Take testimony of any person by deposition.

H. Perform all other acts necessary to enforce the provisions of this ordinance.

Section 6. Establishment of an EMS Office and Operations. There shall be established within the government of Multnomah County an Emergency Medical Services Office for the Physician Medical Director and such staff as necessary for the proper supervision and regulation of the provisions of this ordinance.

Section 7. Dispatch of EMS and Emergency Ambulances. There shall be established and operated by the Physician Medical Director an EMS Central Dispatch Office within the Public Safety Answering Point (911 telephone center ) for Multnomah County. This office shall receive and dispatch emergency calls for emergency medical services and emergency ambulance services. This office shall promptly dispatch appropriate responders of emergency medical service(s) and emergency ambulance(s) based upon System Standard of Care triage and dispatch standards. The emergency ambulance licensee shall have exclusive market rights and responsibilities relative to all 911 medical requests and all medically unstable patients requiring transportation originating within the Ambulance Service Area described in the Multnomah County ASA Plan.

Section 7.1 Simultaneous Response By Other EMS Providers This ordinance acknowledges the important role of other EMS providers in providing rapid delivery of prehospital care to a patient. Simultaneous responses by other agencies such as fire departments, police departments, and other government agencies within the Ambulance Service Area for the purpose of delivering emergency medical service may be made

consistant with the ASA plan. The Physician Medical Director and a representative from the responding agency shall use the Triage guidelines to determine appropriate responses by non-transporting agencies for optimal patient care. The Physician Medical Director and the representative shall also take into consideration their available resources to determine reasonable, efficient and effective EMS response standards within their districts.

Section 8. Interim Physician Medical Director, Standard of Care and Transition Operations

Until a System Standard of Care is written by the Physician Medical Director and adopted by the Medical Advisory Board, the current written protocols adopted by the Medical Advisory Board shall remain in effect. This Interim System Standard of Care may be revised by the Interim Physician Medical Director. This Interim System Standard of Care shall not be valid for more than one year after adoption of this ordinance. During the period between the adoption of this ordinance and the retaining of the Physician Medical Director by Multnomah County, the Interim Physician shall be recommended by the Medical Advisory Board from a list of qualified applicants supplied by the County employee services office; subject to appointment by the Board of County Commissioners. The Interim Physician Medical Director shall have the same medical qualifications as necessary for the Physician Medical Director and shall have had prior experieince as a physician supervisor of EMTs. This interim position shall not extend for a period longer than one year. The EMS office budget shall continue to be funded using the method and formula found in Ordinance 669 : EMS Rule 6.32-090 (User Fees) until a Financial Oversight Board can be appointed, a System Standard of Care adopted, and service rates approved. This interim funding shall not extend for a period of more than one year.

Section 9. Process for Altering System Standard of Care

(A) Proposal by Physician Medical Director. Modifications to the System Standard of Care may be proposed periodically by the Physician Medical Director, after input from any appropriate ad hoc or standing advisory committees established pursuant to this ordinance. The Medical Advisory Board shall then schedule a time for the review of the proposed modification to examine its importance to the provision of quality prehospital care. The

Physician Medical Director shall notify the Medical Advisory Board, the Commissioner of the County supervising its Health Department, and all affected holders of licenses, permits and certifications of the proposed modification not less than twenty (20) days prior to the date of a regular Medical Advisory Board meeting. The Medical Advisory Board shall not delay any decision for more than two meetings. The Medical Advisory Board shall base its decision solely on the merits of the proposal without regard to the proposal's cost or financial benefit. The affected persons or entities shall submit a statement of financial impact to the Physician Medical Director, documenting projected actual and reasonable costs of implementing and maintaining such modification and the impact of such costs on the fees, if any, they charge for their services or on the amount of local government funding for such services. The financial impact statement shall be submitted in a format approved by the Physician Medical Director in consultation with the Financial Oversight Board. If the statements submitted show that the proposed modification can be implemented without an increase in fees to consumers or without exceeding the reserve fund established for System Standard of Care modifications, the modification shall be implemented within thirty (30) days of the approval of the Medical Advisory Board by a majority vote of members present. If financial impact statements are submitted to show that the modification will result in increased fees to consumers or will exceed the reserve fund established for System Standard of Care modifications, the proposed modification shall then be referred to the Financial Oversight Board for review.

(B) Proposal by Resolution of the Medical Advisory Board

Modifications to the System Standard of Care may be proposed periodically by the Medical Advisory Board to the Physician Medical Director, after input from any interested person at a regularly scheduled meeting of the Medical Advisory Board established pursuant to this ordinance. The Medical Advisory Board shall then schedule a time for the review of the proposed modification to examine its importance to the provision of quality prehospital care. The Chair of the Medical Advisory Board shall notify the Physician Medical Director, the Commissioner of the County supervising its Health Department, and all affected holders of licenses, permits and certifications of the proposed modification not less than twenty (20) days prior to the date of the Medical Advisory Board meeting. The Medical Advisory Board shall not delay any decision for more than two meetings. The

Medical Advisory Board shall base its decision solely on the merits of the proposal without regard to the proposals cost or financial benefit. The affected persons or entities shall submit a statement of financial impact to the Physician Medical Director, documenting their projected actual and reasonable costs of implementing and maintaining such modification and the impact of such costs on the fees, if any, charged for services or on the amount of local government funding for such services. The financial impact statement shall be submitted in a format approved by the Physician Medical Director in consultation with the Financial Oversight Board. If the statements submitted show that the proposed modification can be implemented without an increase in fees to consumers or without exceeding the reserve fund established for System Standard of Care modifications, the modification shall be implemented within thirty (30) days of the approval of the Medical Advisory Board by a two-thirds vote of all members.

(C) Financial Oversight Board Upon receipt of a proposal for a modification in the System Standard of Care approved by the Medical Advisory Board which is alleged to result in a cost which may exceed the reserve fund established for Standard of Care modifications, the Financial Oversight Board shall schedule a hearing within thirty (30) days of receipt to determine the probable financial impact of the proposed modification. The Physician Medical Director, the Commissioner of the County supervising its Health Department, and all affected holders of licenses, permits and certifications shall be given not less than five (5) days prior notice of the hearing and shall have the opportunity to present evidence and argument at the hearing. The Financial Oversight Board shall approve and if appropriate adjust the affected rate(s) charged or amount of increase to the reserve fund; or deny the proposed modification and give notice of its decision along with its reasoning to the Physician Medical Director, the Commissioner of the County Health Department, and all affected holders of licenses, permits and certifications. The modification so approved or denied shall become subject to review by the County for thirty (30) days after the decision of the FOB. If the County gives notice to the FOB of its election to review the modification, the County shall then schedule a hearing before the Board of County Commissioners on the modification within thirty (30) days of its notice of election and shall give the Physician Medical Director, Medical Advisory Board, Financial Oversight Board, the Commissioner of the County supervising its Health Department, and all affected holders of licenses, permits and certifications not less than five

(5) days prior notice of the hearing and the opportunity to present evidence and argument at the hearing. The County Commissioners may approve, modify or deny the modification, provided that the modification shall not be modified without the prior approval of the Physician Medical Director. The written decision of the Board of Comissioners on the modification shall be final and conclusive unless review is sought in a court of competent jurisdiction within ten (10) days of the Board of Commissioners written decision.

Section 10. Emergency Medical Service or Ambulance Licenses

A. No person or entity shall provide emergency medical services or ambulance service within Multnomah County, excepting those ambulances transporting a patient from outside the county to a destination within the County, or those ambulances which pass through the County enroute to a destination outside of the County, unless licensed to do so pursuant to this ordinance.

B. No such license shall be issued for emergency medical services or emergency ambulance service outside of the method described in the Ambulance Service Area Plan. A license shall not be jointly issued to two or more persons, nor shall it assigned, operated or divided among two or more persons. Emergency ambulances shall not be licensed for non-emergency, routine transport of medically stable patients.

C. No license shall be issued for emergency medical service, emergency or non-emergency ambulance service unless:

(1) The applicant having fully and accurately completed an application on a form approved by the Physician Medical Director; and

(2) The applicant has fulfilled all the requirements of the laws of the State of Oregon, including but not limited to ORS Chapter 823 and its implementing regulations and administrative rules as they now exist or as they may be hereafter amended; and

(3) The applicant has also met all of the requirements of this ordinance which supplement or exceed those established by state law, including all elements of the Standard of Care established hereunder; and

(4) If the application is for an ambulance, the applicant has obtained an ambulance permit as provided in Section 13 of this ordinance and has paid a one time ambulance and equipment inspection fee per vehicle of one thousand dollars ($1000) plus a three hundred sixty five dollar ($365) annual permit fee per ambulance utilized by the

applicant. Such inspection fee shall likewise be paid upon acquisition of each additional ambulance. If the application for permit or permit for an item of equipment is rejected by the Physician Medical Director, the applicant or licensee may submit the ambulance or item of equipment one additional time without additional fee or may seek Medical Advisory Board review of the rejection as provided in Section 11(c) of this ordinance; and

5) The applicant has completed and signed a Mutual Aid Agreement with the County, as approved by the Physician Medical Director, for rendering of temporary assistance in the case of a public catastrophe or emergency.

Licenses shall be valid for a period of two (2) years from the date of issuance unless suspended, revoked, or restricted for cause. Licenses shall be non-transferable except with the approval of the Physician Medical Director.

Section 11. License Denials, Nonrenewals, Revocations, Suspensions and Restrictions

A. Basis. The Physician Medical Director may deny a license application or license renewal, or revoke, suspend, or restrict a license if he or she has reasonable cause to believe that the applicant for or holder of the license has violated any provision or failed to meet and maintain the Standard of Care established through this ordinance which supplements or exceeds that established by state law.

B. Notice. If the Physician Medical Director denies a license application or license renewal, or revokes, suspends, or restricts a license, the applicant for or a holder thereof shall be given a written notice stating:

(1) The facts and conclusions upon which the decision is based, and

(2) That the Physician Medical Director's decision shall be final and conclusive and that the applicant or holder shall be deemed to have waived all rights to an administrative hearing unless the applicant or holder files with the County a written notice of appeal pursuant to Subsection C of this Section. Notice of a license revocation, suspension, or restriction shall be given prior to the effective date of such action; provided that the Physician Medical Director may revoke, suspend, or restrict a license without prior written notice, but subject to a timely appeal, if the Physician Medical Director finds that immediate action is necessary in order to protect the health, welfare, or safety of the public.

C. Appeal. The notice of appeal shall be filed with the County within ten (10) working

days following the notice of the PMD's decision and shall state the grounds for the appeal. Upon the filing of an appeal, the County shall cause to have scheduled a hearing thereon before the Medical Advisory Board or before a hearing examiner appointed by the Board of County Commissioners within thirty (30) days and provide at least five (5) days notice of the hearing to the applicant or holder. The decision of the Physician Medical Director shall be upheld unless the MAB or hearing examiner finds that the decision was arbitrary, capricious, or contrary to law. The decision of the MAB or hearing examiner shall be final and conclusive unless review is sought in a court of competent jurisdiction within ten (10) days of the written decision.

Section 12. Certifications No person or entity shall perform services as a medical call taker, EMS responder, emergency or non-emergency ambulance personnel, on-line medical resource, or other EMS provider without having a valid certification issued by the Physician Medical Director pursuant to the Standard of Care established by this ordinance. Such certifications shall be valid for a period of three (3) years, unless suspended, revoked or restricted by the Physician Medical Director for cause. Applications for certifications shall be made upon forms approved by the Physician Medical Director. Such certifications shall not be transferable. These certifications shall not override the restriction, suspension, revocation, or expiration of a required license, certification, or other permit required under Oregon law. Written notice shall be given by any affected person to the Physician Medical Director immediately upon the restriction, suspension, revocation, expiration, or other discipline by a State agency or Board; arrest by any law enforcement agency; or change in or separation from their employer.

Section 13. Permits No person or entity shall operate or utilize any vehicle used as an ambulance, EMS response vehicle, helicopter used for transport from emergency scenes, or special use mobile intensive care vehicle within Multnomah County without having in effect a permit issued by the Physician Medical Director pursuant to this ordinance. Such permits shall be valid for one year unless revoked, suspended, or restricted for cause. Permit applications shall be made upon forms approved by the Physician Medical Director. Such permits shall be non-transferable. A fee shall be collected for each such permit.

Section 14. Procedures for Denial, Revocation, Suspension, or Restriction of

Certifications and Permits

A. Basis. The Physician Medical Director may deny application for an initial or renewal of a certification or permit for failure to comply with, or for the violation of, any provision of this ordinance or any Standard of Care or rule established through this ordinance which supplements or exceeds that set by state law.

B. Notice/Appeal. The Physician Medical Director shall notify the applicant or holder of the certification or permit, in writing, of the facts and conclusions upon which the PMD's decision is based and the PMD's decision shall be final and conclusive, and the applicant or holder shall be deemed to have waived all rights to review of the decision unless the applicant or holder files with the County a written notice of appeal stating the grounds therefor within ten (10) working days following the notice of such a decision. Such appeal shall be processed pursuant to the terms of Section 11-(C) of this ordinance.

Section 15. Confidential Reporting Any current or past employee within six (6) months of leaving employment by any licensee covered under this ordinance; or health care provider, shall be able to make a report to the Physician Medical Director or District Attorney of Multnomah County in a confidential manner. Rules shall be developed for the confidential reporting of suspected abuse or neglect, criminal activity, medical incompetency or unprofessional conduct, or violations of this ordinance or law. The confidential report shall be signed by the complainant and delivered to the Physician Medical Director or the District Attorney of Multnomah County for prompt investigation. Such information provided to the Physician Medical Director or District Attorney is confidential and shall not be subject to discovery or public disclosure, nor shall it be admissible as evidence in any judicial proceeding. Any person who reports or provides information to the Physician Medical Director or District Attorney under this Section and who provides information in good faith and without malice, believing such information to be true, shall not be subject to an action for civil damage as a result thereof. No licensee shall discourage or take punitive action against any employee who reports in good faith under this Section. No portion of this Section shall relieve any person from a required duty to make a report to a state agency under any provision of state law.

Section 16. Prohibited Activities No person intended to be regulated under this

ordinance shall intentionally, knowingly, or recklessly:

A. Make a false statement of a material fact, or omit disclosure of a material fact, in any license, certification, or permit required by this ordinance;

B. Perform the services of or allow the performance of EMT, physician, or nurse activities by any EMT, physician, nurse, or student of such position while under suspension or outside of a restriction by a state board or agency.

C. Solicit the performance of ambulance services or the transport of an ambulance patient by any person not licensed or certified under this ordinance or use of any vehicle or equipment for which a permit is required and not in effect under this ordinance.

D. Solicit funds, goods, or services in person or by agent for preferential treatment regarding service response or patient care whether in anticipation of, at the scene of, or after any emergency medical or ambulance service. To solicit funds, goods or services in person or by agent using the name of the County or these emergency services or implying such affiliation or employment, for activities in which all the funds, goods or services do not go directly to the County. To offer to pay, provide, or receive consideration for the referral or solicitation of an ambulance patient to a provider of ambulance service, or to divert a patient's destination for the benefit of a particular medical facility.

E. Advertise on a vehicle or employee uniform a level of service or medical certification not being consistently provided by that particular vehicle or person or identify a level of service or medical skill on a vehicle or an employee uniform not defined by state law or this ordinance. Said levels of service must be available any time that the vehicle is available for service, provided that this ordinance shall not be construed to require a level of service advertising on vehicles.

F. Wear any badge or device similar to a badge traditionally worn by police or fire personnel while serving on or with an ambulance providing medical transportation within the County unless said ambulance is owned or controlled by a public safety agency and the personnel are employees of said agency.

G. Respond with an ambulance to an emergency call unless under special emergency ambulance license issued by the County or when authorized by radio dispatch or other means in time of emergency under a Mutual Aid Agreement.

H. If licenced by this ordinance, fail or refuse to immediately transfer and advise the Public Safety Answering Point (911) for Multnomah County of receipt of a request for

emergency medical assistance, request emergency ambulance transportation for an unstable patient, or other emergency call.

I. Falsify, deface, obliterate or fail to prominently display to the public any license, certificate, or permit required under this ordinance.

J. Transport an ambulance patient in any vehicle other than a licensed ambulance, except in times of mass emergency or public danger, or transport of a ambulance patient found upon arrival to be medically unstable under the System Standard of Care in a non-emergency ambulance or fail to notify the PSAP of such a patient so as to deny emergency ambulance services to the patient.

K. Deny or delay emergency ambulance or other EMS service to any person on account of possible inability to pay, race, creed, religion, age, sex, national origin, physical or mental disability, disease or medical condition, place of residence, financial condition, presence or absence of medical insurance coverage; provided that it shall not be a violation of this ordinance for ambulance personnel to obtain at the time of service information required for effective billing, to comply with state or federal regulations pertaining to patient care and transport, or to comply with special benefit eligibility procedures established by medical insurers or medical service providers.

L. Fail to maintain records of patients receiving service or fail to keep a log book signed by the driver of an emergency or non-emergency ambulance showing the date, time, and address of each patient receiving transportation or address responded to.

M. Disclose to the general public through a transmission by radio, in a written or oral statement or other means, a patient name or confidential medical information; or other information that in combination could provide identification of a patient or confidential medical information. This Section shall not apply to reports considered public records or other reports not considered confidential under Oregon Revised Statutes.

N. Withhold of service upon receipt of an emergency or non-emergency ambulance dispatch or withhold of a vehicle from service in anticipation of a future request for the service of an ambulance.

Section 17. Penalties.

A. Misdemeanor. Any of the following violations of this ordinance is a misdemeanor punishable upon conviction with not more than one year in jail and/or a fine not to exceed

one thousand dollars ($1000):

(1) Section 10, Unlicensed service;

(2) Section 12, Uncertified service;

(3) Section 13, Operation without permit;

(4) Section 15, Interference with confidential reporting;

(5) Section 16 (A), False statements;

(6) Section 16 (B), Performing or allowing performance while under suspension, revocation or termination of certification;

(7) Section 16 (D), Solicitations; and

(8) Section 16 (M), Disclosure.

B. Civil Violations

(1) Continuing Violations Any other violation of this ordinance shall be a civil violation. Each day a violation is permitted or suffered to continue shall be deemed a separate violation. In any prosecution for such violation, it shall be sufficient to sustain a conviction to show a single act of conduct in violation of any provisions of this ordinance, and it shall not be necessary to show a general course of such conduct.

(2) Notice of Civil Violation / Notice to Correct.

Whenever the Physician Medical Director has reasonable grounds to believe that a violation of this ordinance not listed in Subsection A of this Section has been committed or exists, the PMD is authorized to issue to the violator a Notice of Civil Violation and/or Order to Correct notifying the violator of the facts and conclusions upon which the determination of violation is based; order the violation to be corrected within a reasonable period of time; notify the violator of the right to appeal of the Notice and/or Order pursuant to Section 11 (C) of this ordinance; and/or assess civil penalties against any violator within any twelve (12) month period as follows:

| | |
|---|---|
| First violation | $100 |
| Second violation | $200 |
| Third violation | $300 |
| Fourth violation | $600 |
| Subsequent violations | $1000 each |

All penalties shall be paid to the County within thirty (30) days after service

of the Notice of Civil Violation. If the penalties are unpaid between 31 and 60 days of service, an additional late penalty of 100% of the original penalty shall be assessed; and if unpaid between 61 and 90 days after service, an additional penalty of 200% of the original penalty shall be assessed. Fines shall be paid into a dedicated fund whose purpose shall be determined by the Physician Medical Director.

(3) Service of Notices. The Notice of Civil Violation/Order to Correct shall be served upon the violator by sheriff's civil process service or by certified mail, postage prepaid, return receipt requested, to the violator at his or her last known address.

(4) Appeal of Notice/Orders. Persons to whom a Notice of Civil Violation and/or Order to Correct have been issued may appeal the Notice and/or Order pursuant to the provisions of Section 11 (C) of this ordinance.

Section 17. Exceptions This ordinance shall not apply to :

(1) Ambulances owned or operated under the control of the United States Government.

(2) Vehicles being used to render temporary assistance in the case of major catastrophe or emergency with which the ambulance services of the surrounding locality are unable to cope, or when directed to be used to render temporary assistance by an official at the scene of an accident.

(3) Vehicles operated solely on private property or within the confines of institutional grounds, whether or not incidental crossing of any highway through the property or grounds involved.

Section 18. Creation of Advisory and Oversight Boards; Members of Such Boards

There shall be created a Medical Advisory Board. The Medical Advisory Board shall consist of seven (7) persons, none of whom shall be elected officials:

1. One at-large physician whose primary practice is emergency medicine.
2. One physician representing the Oregon Chapter of the American College of Emergency Physicians.
3. One physician representing the Multnomah County Medical Society.
4. One physician representing the Medical Resource hospital.
5. One nurse representing the Emergency Nurses Association.
6. One Emergency Medical Technician-4 (Paramedic or Advanced)

representing nontransporting emergency medical technicians in Multnomah County.

7. One Emergency Medical Technician-4 (Paramedic or Advanced) representing transporting emergency medical technicians in Multnomah County.

Each member shall be recommended for appointment from a name or names submitted from their representative groups. If a named representative group should no longer remain or be contracted at the end of the appointed representative's term, a new representative group shall be selected by the Medical Advisory Board and the new representative group change recommended to the Board of County Commissioners for adoption. The MAB shall elect such officers and adopt such rules as appropriate for the orderly conduct of business.

The members of the current Medical Advisory Board serving as of the effective date of this ordinance shall continue in office until expiration of their present terms. New members shall thereafter be appointed in accordance with this ordinance. Each member shall serve a term of three (3) years.

There shall be created a Financial Oversight Board. The Financial Oversight Board shall consist of seven (7) persons, none of whom shall be elected officials or employed by a regulated person under this ordinance, consisting of the following:

1. Physician Medical Director (ex-officio voting member)
2. One person with expertise in the field of private health care administration or business.
3. One Certified Public Accountant with expertise in general business or finance.
4. One attorney whose expertise is in health care or elder law.
5. One person with expertise or experience in health insurance administration or business.
6. One person representing citizens at large.
7. One person representing senior citizens.

Each member shall be recommended for appointment from a name or names submitted from their representative groups. If a named representative group should no longer remain or be contracted at the end of the appointed representative's term, a new representative group shall be selected by the Financial Oversight Board and the new representative group change recommended to the Board of County Commissioners for adoption.
Initial appointees, other than the Physician Medical Director Officer, shall draw lots from a selection including three appointments for two years and three appointments for three years. Thereafter, terms shall be for three-year terms. The FOB and MAB shall elect such officers and adopt such rules as appropriate for the orderly conduct of business.

If any member of a board is absent from more than three (3) regularly scheduled board meetings within one calender year without having notified the board chair in advance of such absence, such member shall be deemed to have resigned from the board. The position shall be thereafter be vacant and subject to appointment.

Members of the Medical Advisory Board and Financial Oversight Board shall receive compensation at the rate of twenty ($20) dollars per hour including reimbursement for expenses incurred in the performance of their duties.

Section 19. Powers and Duties of Boards

The Medical Advisory Board shall :

A. Review and comment on the EMS system operation and changes thereto.

B. Report to the Board of County Commissioners of Multnomah County annually in a public meeting regarding the condition and operations of the EMS system in Multnomah County.

C. Advise the Board of County Commissioners from time to time, and as requested, on matters concerning EMS operations and the System Standard of Care.

D. Review modifications to the System Standard of Care, subject to review by the County.

E. Annually review the performance of the Physician Medical Director and report to the Board of County Commissioners on such performance.

F. Review and recommend to the Board of County Commissioners, final candidates for the position of Physician Medical Director from a list submitted by through the County personnel office.

G. Review complaints not resolved by the Physician Medical Director concerning patient care.

H. Perform such other duties as directed by the Board of County Commissioners.

The Financial Oversight Board shall:

A. Review and comment on the financial aspects of the EMS system.

B. Establish a Maximum Rate schedule for non-ambulance service; review and approve changes in the rates charged for Emergency Medical services, emergency ambulance and non-emergency ambulance services after the approval of a Standard of Care upgrade by the Medical Advisory Board, subject to review by the County.

C. Establish a minimum Reserve Fund for modifications to the System Standard of Care from within the maximum rate for services billed to ambulance patients.

D. Recommend to the Board of County Commissioners effective ways to reduce costs of operation of the EMS system.

E. Review and audit the financial records of licensees under the direction of the Physician Medical Director. Such review or audit shall not make available confidential business information to the general public

F. Review complaints not resolved by the Physician Medical Director concerning patient billings.

G. Review and approve fees set by the Physician Medical Director for the budget and operation of an EMS office, subject to review and approval by the Board of County Commissioners.

H. Maintain a public record of all charges for EMS or ambulance service.

I. Perform such other duties as directed by the Board of County

Commissioners.

Section 20. Authority to Charge Fees The Physician Medical Director shall have the authority to charge fees to establish an EMS Office and to budget for the operation thereof. Such fees shall be proposed by the Physician Medical Director and approved by the Financial Oversight Board, subject to review by the Board of County Commissioners. Moneys received as fees shall be used solely for the operation and improvement of the EMS system within Multnomah County. The operation of this office and its employees shall be self supported by fees from licensees or revenues collected for specific programs and should not rely on general ongoing funding from the County .

Section 21. Recital It has been and remains the intent of the Board of County Commissioners for Multnomah County to create a single Ambulance Service Area for Multnomah County and that a single provider of emergency ambulances be licensed to service that area. It is also the intent of the Commissioners that Multnomah County retain regulation of ambulances and emergency medical services as provided by state law. By repealing any ordinance or its codified version concerning emergency medical service including ambulances, it is the County's intent to substitute a more timely, comprehensive and uniform ordinance for the regulation thereof, not to change from its stated policy of a single Ambulance Service Area, a single emergency ambulance provider, or the prompt dispatch of the appropriate ambulance(s) nearest the location of the person(s) in need of emergency aid within Multnomah County.

Section 22. Intergovernmental Liaison. Until the completion of all intergovernmental agreements by the County and approval of the Ambulance Service Area Plan by the State of Oregon, the representative for the County regarding EMS issues shall be the Commissioner of Multnomah County responsible for supervision of the County Health Department. Upon approval of the ASA Plan by the State of Oregon, the administrator of the ASA Plan will be the Physician Medical Director.

Section 23. General Duty Nothing in this ordinance is intended to create a cause of action or claim against the County or its officials, employees or agents running to specific

individuals. Any duty created by this ordinance is a general duty running in favor of the public. Nothing in this ordinance shall be construed to make the County liable for the costs of ambulance or EMS services.

Section 24. Ratification Acts taken in conformity with this ordinance prior to its effective date are hereby ratified and confirmed.

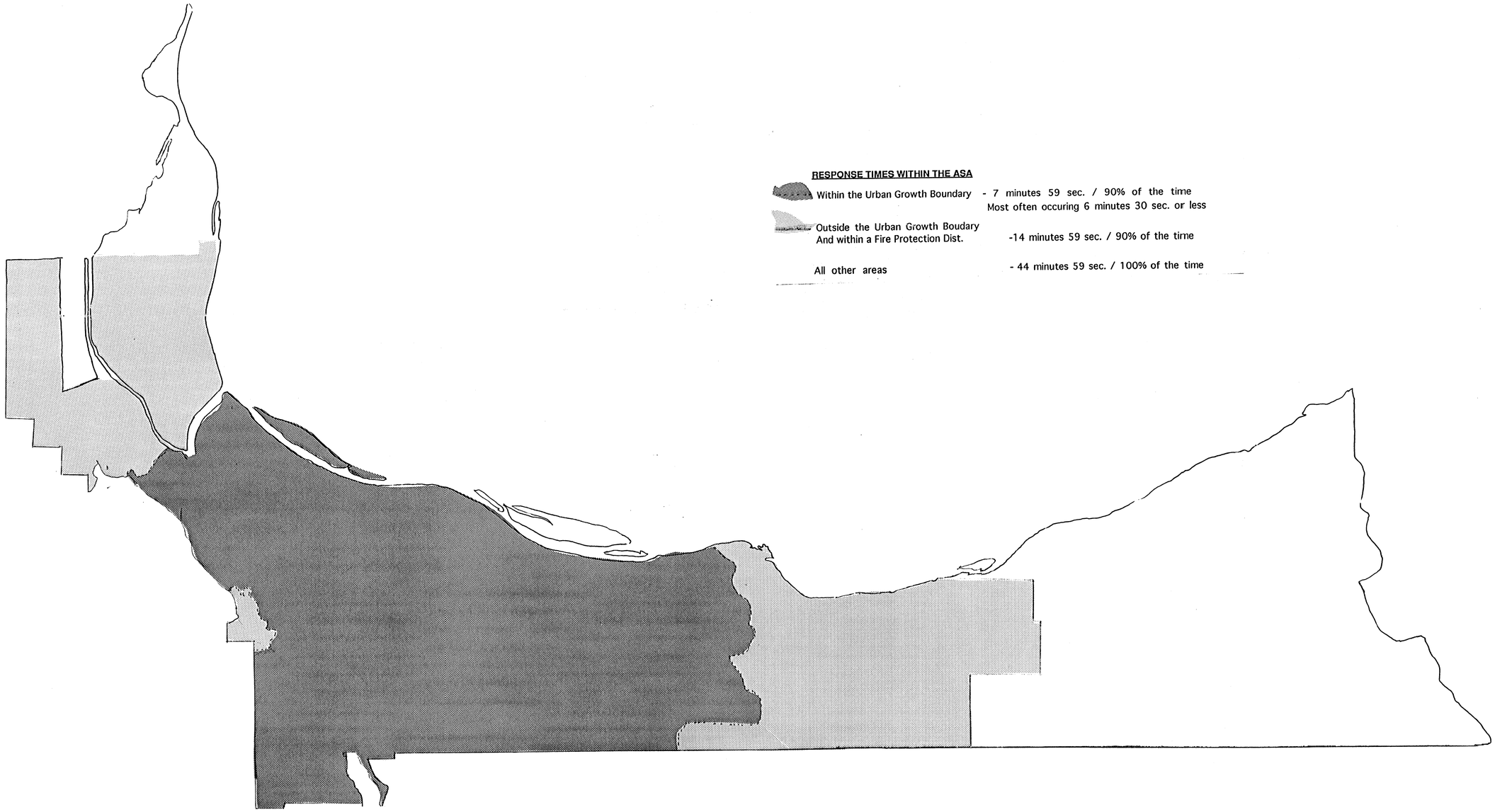
Section 25. Severability and Validity If any section, subsection, clause or phrase of this ordinance is for any reason held by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The Board declares that should any section, phrase, sentence, or word of this ordinance be declared for any reason void or unconstitutional, it is intended that all other portions of the same which are not expressly held to be void or unconstitutional shall continue in full force and effect.

Section 26. Repeal Ordinances No. 669, 652, 589, 573, 229 and Codified at Chapter 6.32 M.C.C.C. are hereby repealed.

ADOPTED THIS_____DAY OF JULY, 1993 being the date of its second reading before the Board of County Commissioners of Multnomah County.

_____

The Honorable Hank Miggins, Chair
Multnomah County Board Of Commissioners



**RESPONSE TIMES WITHIN THE ASA**

| | |
|---|---|
| Within the Urban Growth Boundary | - 7 minutes 59 sec. / 90% of the time<br>Most often occuring 6 minutes 30 sec. or less |
| Outside the Urban Growth Boudary And within a Fire Protection Dist. | -14 minutes 59 sec. / 90% of the time |
| All other areas | - 44 minutes 59 sec. / 100% of the time |

## Fire Districts Within Multnomah County

Gresham Fire Department
Multnomah County RFPD #14 - Corbett
Multnomah County RFPD #20 - Skyline
Multnomah County RFPD # 30 - Sauvie Island
Portland Fire Bureau
By contract to PFB:
Burlington Water District
Valley View Water District
Multnomah County RFPD #4 - Sylvan
Multnomah County RFPD #10 - Powellhurst

Scappoose Fire District

**All Telephones within Multnomah County have 9-1-1 service**

### LEGEND

- Interstate Route (Exit Numbers)
- U S Route
- State Route
- County Route
- USFS Nat'l Forest Route
- BLM Route
- Private Road System
- Primary Highway
- Secondary Highway (MILEPOST)
- Paved Road
- Not Passable / Blocked / Gate
- All Weather Road
- Dirt and Primitive Road
- Trail
- Railroad
- Overhead Transmission Line
- Underground Line or Pipeline
- Sawmill
- Horizontal Control Station
- House Cabin or Other Building
- Church / School
- Mine or Quarry
- Improved Recreation Site
- Landmark or Location
- District Headquarters
- Unit Headquarters
- USFS Ranger Station
- Guard Station
- USFS Lookout Station
- State Lookout Station
- Incorporated City
- State Board of Forestry Lands
- State Land Board Lands (Land Managed by ODF)
- National Forest Lands
- BLM Lands
- Official Protection District Boundary
- District Administrative Boundary
- Rural Fire Protection District Boundary
- Class 1 Stream

The identification of streams shown on this map as Class 1 streams( downstream from break) is intended for preliminary planning use only. See ODF district headquarters for official maps.

WILD AND SCENIC WATERWAYS

SCALE ½=1 MILE

ELEVATIONS SHOWN IN METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by 0.3048