

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

In the matter of Approval of the)	RESOLUTION
<i>Multnomah County 1996-2000</i>)	96- 91
<i>Transportation Capital Improvement</i>)	
<i>Plan and Program</i>)	

WHEREAS, the Multnomah County Board of Commissioners recognizes the need to maintain and preserve the County roadways, Willamette River Bridges, bikeways, pedestrianways, and related structures so as to promote the safe and efficient movement of people and commerce throughout the County; and

WHEREAS, the preservation and improvement of County roadways, Willamette River Bridges, bikeways, pedestrianways, and related structures is vital to an orderly and balanced transportation system; and

WHEREAS, a unified approach to long range facilities planning and capital investment programming is a County goal; and

WHEREAS, extensive and timely analysis and evaluation of County roadways, Willamette River Bridges, bikeways, pedestrianways, and related structures has been undertaken; and

WHEREAS, the Multnomah County Transportation Division Capital Improvement Plan specified a process to establish priorities for capital improvement needs which will maximize the use of resources which is the *Multnomah County 1996-2000 Transportation Capital Improvement Plan and Program*; and

WHEREAS, the Multnomah County Transportation Capital Improvement Plan and Program will be updated every two years as a necessary element of the safe and reliable public use of the County roadways, Willamette River Bridges, bikeways, pedestrianways, and related structures; and

WHEREAS, three public meetings were held to solicit public input on the Transportation Capital Improvement Plan; and

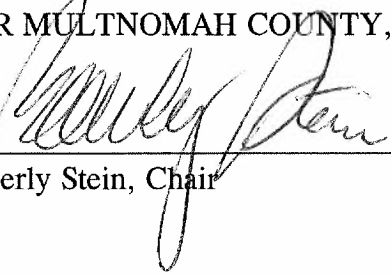
WHEREAS, at its May 6, 1996, meeting the East Multnomah County Transportation Committee considered and recommended approval of the *Multnomah County 1996-2000 Transportation Capital Improvement Plan and Program*.

THEREFORE IT IS RESOLVED that the Multnomah County Board of Commissioners approve the *Multnomah County 1996-2000 Transportation Capital Improvement Plan and Program*.

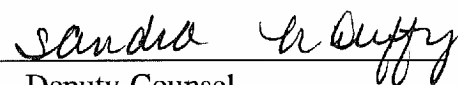
APPROVED this 16th day of May, 1996.



BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON


Beverly Stein, Chair

REVIEWED
LAURENCE KRESSEL
MULTNOMAH COUNTY COUNSEL

By 
Deputy Counsel

EAVH1971.RES



Multnomah County

Department of Environmental Services

**Multnomah County
1996-2000 Transportation
Capital Improvement Plan
and
Program**

May 1996

Prepared by
Multnomah County
Transportation and Land Use Division

Multnomah County 1996-2000 Transportation Capital Improvement Plan and Program

Preface

Multnomah County Transportation Division has instituted a Capital Improvement Plan (CIP) process. This process follows the guidelines established in the 1983 County Comprehensive Framework Plan: Physical Support System Policies. The objective of the Capital Improvement Plan is to identify and set priorities for road, bicycle, pedestrian and bridge projects, and related improvements necessary to maintain and enhance the County transportation system. The Transportation Capital Improvement Program (TCIP) implements the CIP by assigning available revenue to the highest ranked capital projects. A schedule is established of ranked and funded projects for each fiscal year.

The format for the 1996-2000 TCIP is to evaluate transportation needs for each of the four categories, as follows:

1. 1996-2000 Roadway Capital Improvement Plan and Program
2. 1996-2000 Bikeway Capital Improvement Plan and Program
3. 1996-2000 Pedestrian Capital Improvement Plan and Program
4. 20 Year 1996-2015 Capital Improvement Plan and Program for the Willamette River Bridges

1995 marked a significant milestone for the Transportation Division. In July, Multnomah County completed negotiations with the cities of Fairview, Troutdale and Gresham to transfer many local roads to the cities. Multnomah County has retained the regional road network outside of Portland.

In February, 1996, northwestern Oregon was hit with a major storm that resulted in widespread landslides and flooding effecting many of the roads within Multnomah County's jurisdiction. A large number of roads, especially in the rural areas were damaged. While all of effected roads are open, maintenance and repairs were extensive.

Funds to repair the damage were initially taken from the Transportation Division's budget. Construction projects programmed for construction in FY 1996-97 are budgeted and will be built. However depending upon the level of federal aid reimbursement for the damage, construction projects programmed in future years may be delayed.

**Multnomah County
1996-2000 Transportation
Capital Improvement Plan and Program**

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ROADWAY CAPITAL IMPROVEMENT PLAN

- Two meetings were held in rural areas of Multnomah County (Corbett and Sauvie Island).
- Each city in the county was asked to consider and identify potential projects in county road rights-of-way.

Other sources of information included:

- The 1994-98 Capital Improvement Plan and Program;
- The Functional Classification of Trafficways; and
- Multnomah County Master Road List.
- Metro's Traffic Forecast Model
- Regional Transportation Plan
- Input from utilities and other users of the county right of way

Project Evaluation Methodology

Each potential project was evaluated and ranked using the Project Evaluation Framework (see Appendix I). The framework uses ten different evaluation criteria utilizing 45 pieces of information for each candidate project. The criteria includes existing roadway conditions, traffic congestion and levels of service, and safety. Appendix I displays the Project Evaluation Framework. Appendix II identifies the types of background data collected for each project.

Transportation projects are ranked and priorities are established using a scoring system for each classification of facility. The point system uses base points plus bonus points (see Appendix III). For example, if a candidate project meets either an immediate or short term need, it will be designated respectively Priority 1 or Priority 2, through the assignment of project base points. A project that deals with a long term need will be classified Priority 3 and assigned a base score of zero.

After base points have been assigned to each project, bonus points are awarded when certain conditions exist (transit route, bike route, etc.) Bonus points are used to rank projects within each priority and classification of project (road, bikeway, pedestrian).

The highest ranking projects designated Priority 1 have the most immediate need for implementation. Priority 1 projects require attention before lower priority projects within the five year capital program. Priority 2 projects are also necessary but funding levels do not provide for immediate resolution. Resources remaining after completing Priority 1 projects will be allocated towards Priority 2 projects for construction during the program period, generally in years 3-5. Priority 3 projects have no immediate need but will be re-evaluated in future updates of the CIP.

Willamette River Bridge ranking methodology is explained in the Project Rating Criteria chapter of the Capital Improvement Plan and Program for the Willamette River Bridges section.

Project Report

The Capital Improvement Projects list includes all known potential projects in rank order within their project category (arterial streets, collector streets, local streets, bridges*, and signals). Total points assigned, project descriptions, and cost estimates are displayed for each project.

This list of future transportation projects is the result of the County's CIP process. The CIP will be presented for review and recommendation by the East Multnomah County Transportation Committee (EMCTC), and approved by Board of County Commissioners (BCC). It will then be used by the Transportation and Land Use Division in the preparation of the Transportation Capital Improvement Program, and preparation of the annual Transportation and Land Use Division budget.

The CIP Update Process

The Multnomah County CIP process is a continuous and open process, allowing citizen input annually. The County road system is dynamic, changing in response to land use decisions and infrastructure life cycles. Consequently, the Capital Improvement Plan and Program must be reconsidered and revised on a regular basis.

Public meetings are held in the various communities to solicit public input regarding transportation needs. Project proposals are also solicited from each of the cities. The list of projects is reviewed and revised before being transmitted to EMCTC for review, and approval by the BCC.

The Capital Improvement Plan is reviewed by the Transportation and Land Use Division on an annual basis. A full update process involving all interested parties will be scheduled every two years. The annual review and the biennial updates ensure that limited resources for capital projects will be efficiently allocated to the most critical capital needs. (Appendix IV illustrates the Roadway CIP process.)

***Non-Willamette River Bridges**

INFORMATION FORMAT

The Capital Improvement Projects Report organizes potential future capital improvement projects by category: Arterial, Collector and Local Streets, Bridges, and Signals, and by priority: 1, 2, and 3. Projects are organized within each category by priority and displayed in descending order of points assigned (base priority plus bonus points).

The information provided describes each project and ranks projects by relative importance. Project descriptors include the following:

MULTNOMAH COUNTY OREGON		CAPITAL IMPROVEMENT PROJECTS 1996 - 2000					TRANSPORTATION DIVISION				
		ENVIRONMENTAL SERVICES									
CATEGORY: ARTERIAL											
		MAP NUMBER		Existing			New			TOTAL COST	
TOTAL	PROJECT NAME	PROJECT	SOURCE	PRIM JURIS	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
PTS	FROM	TO	PRIM ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
			2NDY ST CLASSIF	LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

Category - All projects are categorized into one of five types of projects: Arterial Street, Collector Street, Local Street, Bridges, and Signals.

Priority - There are three priorities of projects. Priority 1 projects should be constructed within the first two years of the five year program period. Priority 2 projects should be constructed between the third and the fifth years of the five year program period. Priority 3 projects can be deferred beyond the current five year program period.

Project Name - The name of the project is taken from the street segment or intersection location proposed for construction or reconstruction.

Total Points - The sum total of base points plus bonus points awarded to each project. The "Total Points" score establishes the projects rank order within each category. Projects with the highest point total have the greatest need.

From - To (Street Names) - The termini are identified for each road segment project. For intersection projects, 200 feet of each leg of the intersection is the assumed project boundary.

Map Number - A 3-digit number was assigned to each project. Refer to the CIP map for the location of each project which is referenced by a map number.

Project Source - The source of information which initially identified the need for the project.

Primary Street Classification - The highest classified street segment (Arterial, Collector, Local) within the project limits.

Secondary Street Classification - The second highest classified street segment within the project limits.

Primary Jurisdiction - Identifies the jurisdiction(s) having responsibility for project implementation.

Local Jurisdiction 1 - Identifies the jurisdiction within which the majority of the project is located, if other than unincorporated Multnomah County.

Local Jurisdiction 2 - Identifies other local jurisdictions within which part of the project is located.

Existing Lanes/New Lanes - Indicates the current and standard number of travel and turning lanes for the road segment or intersection leg.

Existing Right-of-Way/New Right-of-Way - Indicates the current and standard width of County road right-of-way, in feet for the road segment or intersection leg.

Existing Pavement/New Pavement - Indicates the current and standard pavement width in feet from curb-to-curb or road-edge to road-edge.

Existing Drainage/New Drainage - Indicates current and proposed storm sewer facilities: ditches, sumps, or culvert types of storm water drainage facilities.

Existing Signs/New Sign(s) - Indicates proposed replacement signs, or additional new signs.

Existing Signal/New Signal - A traffic signal exists, or a new signal is proposed as part of the project, either a signal upgrade or the installation of a signal at a new location.

Existing Sidewalk/New Sidewalk - Indicates sidewalks currently exist, or a new or replacement sidewalk will be constructed.

Existing Bikeway/New Bikeway - Indicates either a bike route or bike lanes exist, or a bikeway will be installed as part of the project.

Existing Lights/New Lights - Indicates street lighting exists, or new or replacement street lighting will be installed.

Existing Striping/New Striping - Indicates striping exists, or new or replacement striping will be installed.

Existing Turn Lane/New Turn Lane - Indicates turning lanes exist, or new or replacement turn lanes will be installed.

Existing/New Intersection Improvement - Indicates modification to an existing intersection such as realignment, adding turn lanes, upgrading signals, or widening pavement.

Total Cost - The sum of estimated Right-of-Way and Construction Costs.

Right-of-Way Cost - The estimated cost for the purchase of required additional right-of-way.

Construction Cost - The sum of estimated project construction costs.

Multnomah County Share - Committed or potential revenue from County revenue sources.

Federal Share - Committed or potential revenue derived from Federal and/or State government revenue sources.

Table 1

**MULTNOMAH COUNTY 1996-2000 TRANSPORTATION CAPITAL IMPROVEMENT PLAN
INDEX OF CAPITAL PROJECTS**

STREET NAME	FROM	TO	CATEGORY	PRIORITY	POINTS	MAP#
Arata Rd	223rd Ave	238th Dr	Collector	2	222	430
Barbara Welch Rd	County Line	Portland City Limit	Collector	3	16	330
Bull Run St	Burnside Rd	257th Ave	Collector	1	314	521
Burnside Rd/242nd Dr			Signal	1	413	559
Burnside Rd/3rd St			Signal	1	423	545
Butler Rd	190th Ave	Regner Rd	Collector	3	24	300
Butler Rd/209th Ave			Signal	2	209	556
Butler Rd/Regner Rd			Signal	3	9	555
Butler Rd/Rodlin Rd			Signal	3	19	353
Cherry Park Rd	257th Dr	Hensley Rd	Arterial	1	402	418
Cherry Park Rd	242nd Dr	257th Ave	Arterial	1	413	402
Clatsop St	Barbara Welch Rd	162 Ave	Collector	3	6	301
Cochran Dr	1375' E of 257th Ave	Troutdale Rd	Collector	2	226	431
Columbia River Hwy	Halsey St	244th Ave	Collector	2	209	441
Corbett Hill Rd	1200' S of I-84	2200' S of I-84	Arterial	1	415	601
Cornelius Pass Rd	County Line	Skyline Blvd	Arterial	3	8	101
Cornelius Pass Rd	Mile Post 2	3550' N of Skyline	Arterial	2	308	104
Cornelius Pass Rd	Mile Post 2	Highway 30	Arterial	3	9	100
Crown Pt Hwy/Corbett Hill Intersection Improvement			Collector	2	219	602
Division Dr	268th Ave	Troutdale Rd	Arterial	3	20	529
Division Dr/Troutdale Rd			Signal	2	299	557
Division St	257th Ave	268th Ave	Arterial	3	11	533
Division St	198th Ave	Wallula Ave	Arterial	3	8	561
Foster Rd	Jenne Rd	County Line	Arterial	1	397	360
Glisan St	3500' E of 223rd Ave	242nd Ave	Arterial	1	433	411
Glisan St	223rd Ave	3500' E of 223rd Ave	Arterial	1	416	403
Glisan St	202nd Ave	207th Ave	Arterial	1	434	407
Glisan St/172nd Ave			Signal	1	424	257
Glisan St/188th Ave			Signal	2	329	259
Glisan St/192nd Ave			Signal	2	324	260
Gordon Creek Rd	Mile Post 0	Mile Post 6.8	Collector	1	319	600
Halsey St	238th Dr	Columbia River Hwy	Arterial	3	40	406
Halsey St	223rd Ave	238th Dr	Arterial	3	47	405
Halsey St	207th Ave	223rd Ave	Arterial	1	446	404
Halsey St	190th Ave	207th Ave	Arterial	1	430	200
Halsey St/172nd Ave			Signal	3	38	254
Halsey St/201st Ave			Signal	1	422	251
Halsey St/223rd Ave			Signal	1	433	454
Halsey St/238th Ave			Signal	1	429	451
Hensley Rd	257th Ave	262nd Ave	Collector	1	310	433
Hensley Rd	262nd Ave	Troutdale Rd	Collector	1	310	440
Hillyard Rd	252nd Ave	267th Ave	Collector	3	7	534
Jenne Rd	2050' NE of Foster	800' S of Powell	Arterial	1	416	306
Marine Dr Extension	Frontage Rd	Hist. Columbia River Hwy	Collector	1	295	427
Marine Dr/Sundial Rd			Signal	2	226	417
Orient Dr	267th Ave	Gresham City Limit	Collector	3	25	520
Orient Dr	257th Ave	267th Ave	Arterial	2	331	500
Orient Dr/257th Ave			Signal	1	414	554
Orient Dr/262nd Ave			Signal	3	4	553

**MULTNOMAH COUNTY 1996-2000 TRANSPORTATION CAPITAL IMPROVEMENT PLAN
INDEX OF CAPITAL PROJECTS**

STREET NAME	FROM	TO	CATEGORY	PRIORITY	POINTS	MAP#
Orient Dr/267th Ave			Signal	3	19	552
Powell Valley Rd	Burnside Rd	257th Ave	Arterial	1	420	504
Powell Valley Rd	Barnes Rd	Troutdale Rd	Collector	3	24	505
Powell Valley Rd	257th Ave	262nd Ave	Collector	3	21	503
Powell Valley Rd/257th Ave			Signal	1	409	551
Regner Rd	Butler Rd	County Line	Collector	2	217	536
Rocky Point Rd	Mile Post 1.5	Mile Post 1.6	Local	2	114	120
Sauvie Island Rd	Bridge	Reeder Rd	Collector	3	15	121
Stark St	257th Ave	Troutdale Rd	Arterial	1	441	409
Stark St/Troutdale Rd			Signal	1	433	459
Troutdale Rd	19th St	Cherry Park Rd	Collector	3	6	435
Troutdale Rd	Strebin Rd	Stark St	Collector	1	319	434
Troutdale Rd	Stark St	1700' N of Stark St	Collector	2	210	410
Troutdale Rd	Sandy Ave	700' S of Sandy Ave	Collector	2	229	419
162nd Ave	RR Bridge at I-84		Bridge	1	409	238
162nd Ave	Glisan St	Halsey St	Arterial	1	411	206
162nd Ave	Halsey St	I-84	Arterial	3	12	208
162nd Ave/Main St			Signal	2	319	256
162nd Ave/Stark St			Signal	1	400	271
169th Ave	Halsey St	Wilkes Rd	Collector	3	16	232
172nd Ave/Foster Rd			Signal	1	402	358
182nd Ave/Division Ave			Signal	1	427	205
182nd Ave/Powell Blvd			Signal	1	427	230
185th Ave	Sandy Blvd	City Boundary	Collector	2	222	234
185th Ave	RR Bridge at 750' N of Sandy		Bridge	1	321	241
190th Ave	Stark St	2400' S of Yamhill St	Collector	1	318	220
190th Ave	Butler Rd	Highland Dr	Arterial	2	307	309
201st Ave	Halsey St	Sandy Blvd	Collector	1	323	235
201st Ave	RR Bridge at I-84		Bridge	1	321	237
201st Ave	Glisan St	Halsey St	Collector	1	314	240
202nd Ave	Stark St	Division St	Collector	3	33	242
202nd Ave	Burnside Rd	Stark St	Collector	3	24	236
202nd Ave	Division St	Powell Blvd	Collector	3	11	310
202nd Ave	Stark St	Glisan St	Collector	1	311	210
207th Ave Connector	Halsey St	Glisan St/207th Ave	Arterial	1	431	421
209th Ave	Butler Rd	Heiney Rd	Collector	3	7	508
223rd Ave	RR Bridge at I-84		Bridge	1	319	438
223rd Ave	Glisan St	Halsey St	Arterial	1	423	423
223rd Ave	RR Bridge at 2000' N of I-84		Bridge	1	321	439
223rd Ave	Sandy Blvd	Marine Dr	Collector	2	235	415
223rd Ave	Halsey St	Sandy Blvd	Collector	2	219	414
242nd Ave	Powell Blvd	Burnside Rd	Arterial	1	419	509
242nd Ave	Palmquist Rd	Powell Blvd	Arterial	2	312	510
242nd Ave Connector	Glisan St	Sandy Blvd	Arterial	2	318	425
242nd Ave/23rd St			Signal	1	423	450
257th Ave	Orient Dr	Powell Valley Rd	Arterial	2	315	514
257th Ave	Powell Valley Rd	Bull Run Rd	Arterial	1	401	513
257th Ave	Bull Run Rd	Division St	Arterial	1	429	512
257th Ave/Bull Run Rd			Signal	2	322	558
257th Ave/MHCC Entrance			Signal	3	49	452
257th Dr/Cherry Park Rd			Signal	1	427	416

**MULTNOMAH COUNTY 1996-2000 TRANSPORTATION CAPITAL IMPROVEMENT PLAN
INDEX OF CAPITAL PROJECTS**

STREET NAME	FROM	TO	CATEGORY	PRIORITY	POINTS	MAP#
262nd Ave	Hensley Rd	Cherry Park Rd	Collector	3	16	437
262nd Ave	Powell Valley Rd	267th Ave	Collector	3	9	531
267th Ave	Powell Valley Rd	Division Dr	Collector	3	19	530
282nd Ave	Powell Valley Rd	Orient Dr	Collector	3	27	542

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: ARTERIAL Priority 1

CATEGORY: ARTERIAL Priority 1				Existing			New			TOTAL COST	
PROJECT NAME		MAP NUMBER		LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST	
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST	
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT	SHARE
		2NDY ST CLASSIF	LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L	SHARE
<hr/>											
											1,560,000
446	NE Halsey St	404		2	yes	no	3/5	yes	yes		\$0
	207th Ave	MC/Frvw	MULT_CO	80	yes	yes	80	yes	yes		1,560,000
	223rd Ave	ART,Minor	Fairview	20	no	no	66	yes	yes		1,560,000
				ditch	no	---	storm	yes	yes		\$0
<hr/>											
											1,480,000
441	Stark St	409		5/2	yes	no	5	yes	yes		\$0
	257th Ave (Kane Dr)	Mult Co.	MULT_CO	60-80	yes	yes	90	yes	yes		1,480,000
	Troutdale Rd	ART,Major	Troutdale	34	no	yes	66	yes	yes		1,480,000
			Gresham	ditch	no	---	storm	yes	yes		\$0
<hr/>											
											\$680,000
434	NE Glisan St	407		2	yes	no	5	yes	yes		\$0
	202nd Ave	MC/Frvw	MULT_CO	80	no	yes	80	yes	yes		\$680,000
	207th Ave	ART,Major	Fairview	24	no	yes	66	yes	yes		\$680,000
				ditch	no	---	storm	yes	yes		\$0
<hr/>											
											1,500,000
433	Glisan St	411		2-	---	no	-5-	---	yes		
	3500' E of 223rd Ave	LSI Corp	MULT_CO	60	no	yes	90-	no	yes		1,500,000
	242nd Ave	ART,Major	Wd Village	27	no	no	72	yes	yes		1,500,000
			Gresham	ditch	no	no	storm	yes	yes		
<hr/>											
											8,420,000
431	207th Ave Connector	421		0	no	no	5	yes	yes		3,260,000
	Halsey St	MC/Frvw	MULT_CO	0	no	no	90	yes	yes		5,160,000
	Glisan St/223rd Ave	ART,Minor	Fairview	0	no	no	66	yes	yes		6,684,000
				n/a	no	no	storm	yes	yes		1,736,397
<hr/>											
											2,200,000
430	NE Halsey St	200		2	yes	no	3/5	yes	yes		\$0
	190th Ave	MC/Grshw	MULT_CO	60-90	no	yes	80-90	yes	yes		2,200,000
	207th Ave	ART,Minor	Gresham	20	no	no	66	yes	yes		2,200,000
				ditch	no	---	storm	yes	yes		\$0

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: ARTERIAL						Existing			New		
PROJECT NAME			MAP NUMBER								TOTAL COST
TOTAL	FROM		PROJECT SOURCE	PRIM JURIS	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	ROW COST
PTS	TO		PRIM ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
			2NDY ST CLASSIF	LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

											1,160,000
	257th Ave		512		4/2	yes	no	5	yes	yes	\$0
429	Bull Run Rd		MC/Grshn	MULT_CO	90	yes	yes	90	yes	yes	1,160,000
	Division St		ART, Major	Gresham	20	no	yes	66	yes	yes	1,160,000
					ditch	no	---	storm	yes	yes	\$0
											1,375,000
	223rd Ave		423		2/3	yes	no	3-5	yes	yes	\$385,000
423	Glisan St		Fairview	MULT_CO	50	yes	yes	80	yes	yes	\$990,000
	Halsey St		ART, Minor	Fairview	26	no	no	66	yes	yes	1,375,000
				Wd Village	ditch	no	---	storm	yes	yes	\$0
											1,120,000
	Powell Valley Rd		504		4/2	yes	no	5	yes	yes	\$280,000
420	Burnside rd		Mult Co.	MULT_CO	60	yes	yes	80	yes	yes	\$840,000
	Kane Rd (257th Ave)		ART, Minor	Gresham	24-38	no	yes	66	yes	yes	1,120,000
					ditch	yes	---	storm	yes	yes	\$0
											1,130,000
	242nd Ave		509		2	yes	yes	5	yes	yes	\$330,000
419	Powell Blvd		Mult Co.	MULT_CO	60	yes	yes	90	yes	yes	\$800,000
	Burnside Rd		ART, Major	Gresham	44	no	yes	72	yes	yes	1,130,000
					storm	no	---	storm	yes	yes	\$0
											4,220,000
	242nd Ave Connector		425			no	no	5	yes	yes	
418	Glisan St		Mult Co	MULT_CO		no	no	80	yes	yes	4,220,000
	Sandy Blvd		ART, Major	Wd Village		no	no	66	yes	yes	4,220,000
				Troutdale		no	no	storm	yes	yes	
											2,130,000
	Jenne Rd		306		2	yes	no	2/rea	yes	no	\$470,000
416	2050' NE of Foster		Mult Co.	MULT_CO	50	no	yes	60	no	yes	1,660,000
	800' S of Powell		ART, Rural	Portland	20	no	no	44	yes	no	2,130,000
				Rural/Urb	ditch	no	---	storm	yes	no	\$0

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: ARTERIAL				Existing			New			TOTAL COST
PROJECT NAME		MAP NUMBER		LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
		2NDY ST CLASSIF	LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

										2,156,000
	NE Glisan St	403		2	yes	no	5	yes	yes	\$156,000
416	223rd Ave	MC/Frvw	MULT_CO	60	yes	yes	90	yes	yes	2,000,000
	3500' E of 223rd Ave	ART, Major	Wd Village	20-35	no	no	66	yes	yes	\$828,000
			Gresham	ditch	no	---	storm	yes	yes	\$0
										\$345,000
	Corbett Hill Rd	601		2	yes	no	2/rea	yes	no	\$35,000
415	1200' S of I-84	Mult Co.	MULT_CO	60	no	yes	60	no	yes	\$310,000
	2200' S of I-84	ART, Rural		22	no	no	50	no	no	\$345,000
				ditch	no	no	ditch	no	no	\$0
										1,450,000
	Cherry Park Rd	402		2	yes	yes	5	yes	yes	\$440,000
413	242nd Dr (Hogan Ave)	Mult Co.	MULT_CO	40-60	yes	yes	80	yes	yes	1,010,000
	257th Ave (Kane Rd)	ART, Minor	Troutdale	32-20	yes	yes	66	yes	yes	1,450,000
				storm	no	no	storm	yes	yes	\$0
										1,730,000
	162nd Ave	206		3/2/5	yes	no	5	yes	yes	\$440,000
411	Glisan St	Mult Co.	MULT_CO	50-90	yes	yes	80-90	yes	yes	1,290,000
	Halsey St	ART, Minor	Gresham	22	no	yes	48-66	yes	yes	1,730,000
				ditch	no	---	sm/st	yes	yes	\$0
										\$440,000
	Cherry Park Rd	418		-2-	yes	no-	-2-	yes	yes	\$440,000
402	257th Dr	Troutdale	MULT_CO		no-	no		no-	yes	\$440,000
	Hensley Rd	ART, Minor	Troutdale		no-	no-		yes	no	\$440,000
		COLL, Neigh			no-	no		yes	yes	
										1,205,000
	257th Avenue	513		2	yes	no	5	yes	yes	\$265,000
401	Powell Valley Road	Mult Co.	MULT_CO	50	yes	yes	80	yes	yes	\$940,000
	Bull Run Road	ART, Major	Gresham	20	no	no	66	yes	yes	1,205,000
				ditch	no	---	storm	yes	yes	\$0

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: ARTERIAL		MAP NUMBER		Existing			New			TOTAL COST
TOTAL	PROJECT NAME	PROJECT SOURCE	PRIM JURIS	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
PTS	FROM TO	PRIM ST CLASSIF	LOCAL JUR1	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
		2NDY ST CLASSIF	LOCAL JUR2	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHAR
				DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHAR

	Foster Rd	360		2	yes	no	2	yes	no	\$410,000
397	Jenne Rd	Mult Co	MULT_CO	60	no	yes	60	yes	yes	\$410,000
	County Line	ART,Rural		20-24	no	no	40	no	yes	\$410,000
				ditch	no	no	ditch	no	yes	

Total Right-of-Way Cost: \$6,061,000 Total Construction Cost: \$28,650,000 Federal Share: \$1,736,397 County Share: \$31,647,000

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: ARTERIAL Priority 2

PROJECT NAME		MAP NUMBER	Existing			New			TOTAL COST	
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
		2NDY ST CLASSIF	LOCAL JUR2	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
				DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE
										1,850,000
337	242nd Ave	426		-4-	yes	yes	-5-	yes	yes	\$250,000
	Glisan St	Mult Co	MULT_CO	60	yes	yes	90	yes	yes	1,600,000
	Stark St	ART, Major	Gresham	44	no	no	72	yes	yes	1,850,000
				storm	no	no	storm	yes	yes	
										2,060,000
331	Orient Dr	500		2	yes	no	5	yes	yes	\$330,000
	Kane Rd (257th Ave)	Mult Co.	MULT_CO	60	no	yes	80	yes	yes	1,730,000
	Anderson (267th) Rd	ART, Minor	Gresham	30	no	no	66	yes	yes	2,060,000
				ditch	no	--	storm	yes	yes	\$0
										1,020,000
315	257th Ave	514		2	yes	no	5	yes	yes	\$230,000
	Orient Dr	Mult Co.	MULT_CO	50	no	yes	80	yes	yes	\$790,000
	Powell Valley Rd	ART, Minor	Gresham	22	no	no	66	yes	yes	1,020,000
				ditch	no	---	storm	yes	yes	\$0
										2,190,000
312	242nd Ave	510		2	yes	no	5	yes	yes	\$520,000
	Palmquist Rd	Mult Co.	MULT_CO	50	yes	yes	90	yes	yes	1,670,000
	Powell Blvd	ART, Major	Gresham	24	no	yes	72	yes	yes	2,190,000
				ditch	no	---	storm	yes	yes	\$0
										2,210,000
308	Cornelius Pass Road	104		2	yes	no	2	yes	no	\$350,000
	Mile Post 2	Mult Co.	MULT_CO	60	no	yes	60	no	yes	1,860,000
	3550' N of Skyline	ART, Rural		20	no	no	44	no	no	2,210,000
				ditch	no	no	ditch	yes	no	
										1,585,000
307	190th Ave	309		3/2	yes	no	5	yes	yes	\$275,000
	Butler Rd	Mult Co.	MULT_CO	50	no	yes	80	no	yes	1,310,000
	Highland Drive	ART, Minor	Gresham	22	no	yes	66	yes	yes	1,585,000
		COLL, Rural		ditch	no	---	storm	yes	yes	\$0

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: ARTERIAL Priority 3			Existing				New			TOTAL COST
PROJECT NAME			MAP NUMBER	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
		2NDY ST CLASSIF	LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

										1,510,000
	NE Halsey St	405		2	yes	no	5	yes	yes	\$0
47	223rd Ave	MC/Frvw	MULT_CO	80	yes	yes	80	yes	yes	1,510,000
	238th Dr	ART,Minor	Fairview	20	no	no	66	yes	yes	1,510,000
			Wd Village	ditch	no	---	storm	yes	yes	\$0
										2,540,000
	NE Halsey St	406		2	yes	no	5	yes	yes	\$0
40	238th Dr	MC/WdVlg	MULT_CO	80	yes	yes	80	yes	yes	2,540,000
	Columbia River Hwy	ART,Minor	Wd Village	32	no	no	66	yes	yes	2,540,000
			Troutdale	ditch	yes	---	storm	yes	yes	\$0
										\$930,000
	Division Drive	529		2	yes	no	3	yes	yes	\$0
20	268th Ave	Mult Co.	MULT_CO	60-75	yes	yes	60	yes	yes	\$930,000
	Troutdale Road	ART,Rural	Gresham	25	no	yes	44	yes	yes	\$930,000
		ART,Minor		ditch	no		storm	yes	yes	
										1,285,000
	162nd Ave	208		5/2	yes	no	5	yes	yes	\$75,000
12	Halsey St	Mult Co.	MULT_CO	70-90	yes	yes	80	yes	yes	1,210,000
	I - 84	ART,Minor	Portland	22	no	yes	66	yes	yes	1,285,000
			Gresham	d/stm	no	---	storm	yes	yes	\$0
										1,484,000
	Division St	533		2	yes	no	3	yes	yes	\$374,000
11	257th Ave	Mult Co.	MULT_CO	60-75	yes	yes	60	yes	yes	1,110,000
	268th Ave	ART,Minor	Gresham	25	no	yes	44	yes	yes	1,484,000
				ditch	no	---	storm	yes	yes	\$0
										5,130,000
	Cornelius Pass Rd	100		2	yes	no	2	yes	no	1,100,000
9	Mile Post 2	Mult Co.	MULT_CO	60-80	no	yes	60-80	no	yes	4,030,000
	Highway 30	ART,Rural		24	no	no	44	no	no	5,130,000
				ditch	no	no	ditch	yes	no	\$0

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: ARTERIAL			Existing			New			TOTAL COST
TOTAL	PROJECT NAME	MAP NUMBER	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
PTS	FROM	PROJECT SOURCE	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
	TO	PRIM ST CLASSIF	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
		2NDY ST CLASSIF	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

	Division Street	561	5	Y	N	5	Y	Y	\$435,000
8	198th Avenue	citizen	80-90	Y	Y	80-90	Y	Y	\$55,000
	Wallula Avenue	ART, Major	66	N	Y	66	Y	N	\$380,000
				N	N		Y	N	\$435,000
									\$0

	Cornelius Pass Rd	101	2	yes	no	2	yes	no	3,320,000
8	County Line	Mult Co.	80	no	yes	80	no	yes	\$550,000
	Skyline Blvd	ART, Rural	20	no	no	38	no	no	2,770,000
			ditch	yes	---	ditch	no	no	3,320,000
									\$0

Total Right-of-Way Cost: \$2,154,000 Total Construction Cost: \$14,480,000 Federal Share: \$0 County Share: \$16,634,000

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: COLLECTOR Priority 1

PROJECT NAME		MAP NUMBER	Existing			New			TOTAL COST	
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
		2NDY ST CLASSIF	LOCAL JUR2	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
				DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE
										1,670,000
323	201st Ave	235		2	yes	no	2	yes	yes	\$80,000
	Halsey St	Mult Co.	MULT_CO	40	no	yes	50	yes	yes	1,590,000
	Sandy Blvd	COLL, Neigh	Gresham	22-27	no	no	38	yes	yes	1,670,000
				ditch	no	---	storm	yes	yes	\$0
										\$680,000
319	Gordon Creek Road	600		2	yes	no	2/grl	yes	no	\$20,000
	Mile Post 0	Mult Co.	MULT_CO	60	no	yes	60	no	yes	\$660,000
	Mile Post 6.8	COLL, Rural		20-24	no	no	34-38	no	no	\$680,000
				ditch	no	---	ditch	no	no	\$0
										1,515,000
319	Troutdale Rd	434		2	yes	no	2/rea	yes	yes	\$145,000
	Strebin Rd	Mult Co.	MULT_CO	50-60	yes	yes	60	yes	yes	1,370,000
	Stark St	COLL, Major	Troutdale	24	no	no	44	yes	yes	1,515,000
				ditch	no	---	storm	yes	yes	\$0
										1,050,000
314	201st Ave	240		2	yes	no	2	yes	yes	\$110,000
	Glisan St	Mult Co.	MULT_CO	40	no	yes	50	yes	yes	\$940,000
	Halsey St	COLL, Neigh	Gresham	22-27	no	no	38	yes	yes	1,050,000
				ditch	no	---	storm	yes	yes	\$0
										1,220,000
311	202nd Ave	210		2	yes	no	2	yes	yes	\$130,000
	Stark St	Mult Co.	MULT_CO	40	yes	yes	50	yes	yes	1,090,000
	Glisan St	COLL, Neigh	Gresham	22	no	no	38	yes	yes	1,220,000
				sump	no	---	sump	yes	yes	\$0
										\$320,000
310	Hensley Rd	440		0	no	no	2	yes	yes	\$0
	262nd Ave	Troutdale	MULT_CO	0	no	no	60	no	yes	\$320,000
	Troutdale Rd	COLL, Neigh	Troutdale	0	no	no	44	yes	yes	\$320,000
				n/a	no	no	storm	no	yes	\$0

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: COLLECTOR		MAP NUMBER		Existing			New			TOTAL COST	
TOTAL	PROJECT NAME	PROJECT SOURCE	PRIM JURIS	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST	
PTS	FROM TO	2NDY ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	CONST COST	MULT SHARE
			LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE	

										\$350,000	
	Hensley Rd	433		2	yes	no	2	yes	yes		\$0
310	257th Ave	Mult Co.	MULT_CO	50	no	yes	50	no	yes	\$350,000	
	262nd Ave	COLL, Neigh	Troutdale	20	no	no	38	yes	no	\$350,000	
				ditch	no	---	storm	no	no		\$0

										1,800,000	
	Marine Drive Extension	427					3	no	yes	\$200,000	
295	Frontage Rd	Troutdale	MULT_CO					yes	yes	1,600,000	
	Hist Columbia Riv Hy	COLL, Major	Troutdale					yes	yes	1,750,000	
								yes	yes		

Total Right-of-Way Cost: \$685,000 Total Construction Cost: \$7,920,000 Federal Share: \$0 County Share: \$8,555,000

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CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: COLLECTOR Priority 2				Existing			New			TOTAL COST
PROJECT NAME		MAP NUMBER		LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
		2NDY ST CLASSIF	LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

										1,450,000
	223rd Ave	415		2	yes	no	2	yes	yes	\$0
235	Sandy Blvd	MC/Frvw	MULT_CO	60	no	yes	60	no	yes	1,450,000
	Marine Dr	COLL, Major	Fairview	20-24	no	no	44	yes	yes	1,450,000
				ditch	no	---	storm	yes	no	\$0
										\$50,000
	Troutdale Rd	419			yes	no-		yes	no-	
229	Sandy Ave	Troutdale	MULT_CO		no-	no-		no-	no-	\$50,000
	700' S of Sandy Ave	COLL, Major	Troutdale		no-	no-		yes	no-	\$50,000
					no-	no-		no-	no-	
										\$616,000
	Cochran Dr	431		2	yes	no	2	yes	yes	\$66,000
226	1375' E of 257th Ave	Mult Co.	Gresham	50	no	yes	60	no	yes	\$550,000
	Troutdale Rd	COLL, Major	MULT_CO	26	no	yes	44	yes	yes	\$616,000
			Troutdale	ditch	no	no	storm	no	no	\$0
										1,290,000
	Arata Road	430		2	yes	no	2	yes	yes	\$110,000
222	223rd Ave	MC/WdVlg	MULT_CO	50	yes	yes	50	yes	yes	1,180,000
	238th Ave	COLL, Neigh	Fairview	24	No	no	38	yes	no	1,290,000
			Wd Village	ditch	no		storm	no	no	
										\$565,000
	185th Ave	234		2	yes	no	2	yes	yes	\$80,000
222	Sandy Blvd	Mult Co.	Gresham	50	no	yes	60	no	yes	\$485,000
	City Boundary	COLL, Major	MultCo	20	no	no	44	yes	yes	\$565,000
				ditch	no	---	storm	yes	no	\$0
										1,220,000
	223rd Ave	414		2	yes	no	2	yes	yes	\$350,000
219	Halsey St	MC/Frvw	MULT_CO	50	yes	yes	60	yes	yes	\$870,000
	Sandy Blvd	COLL, Major	Fairview	22-26	no	no	44	yes	yes	1,220,000
				ditch	no	---	storm	yes	ues	\$0

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TRANSPORTATION DIVISION

CATEGORY: COLLECTOR				Existing			New			TOTAL COST
PROJECT NAME		MAP NUMBER		LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
		2NDY ST CLASSIF	LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

										\$350,000
219	Crown Pt Hwy/Corbett Hill Rd	602		2	yes	no	2/rea	yes	no	\$110,000
	intersection	Mult Co.	MULT_CO	60	no	yes	60	no	yes	\$240,000
	improvement	COLL,Major		22	no	no	22	no	no	\$350,000
		LOCAL			ditch	no	---	ditch	no	yes
										1,038,000
217	Regner Rd	536		2	yes	no	2	yes	yes	\$88,000
	Butler Rd	Mult Co.	Gresham	60	no	yes	60	yes	yes	\$950,000
	County Line	COLL,Major	MULT_CO	20	no	no	44	yes	yes	1,038,000
					ditch	no	---	storm	no	yes
										\$655,000
210	Troutdale Rd	410		2	yes	no	2	yes	yes	\$55,000
	Stark St	Troutdle	MULT_CO	50	yes	yes	60	yes	yes	\$600,000
	1700' N of Stark St	COLL,Major	Troutdale	20	no	no	44	yes	yes	\$655,000
					ditch	yes	---	storm	yes	yes
										1,220,000
209	Columbia River Highway	441		2	yes	no	3	yes	yes	\$50,000
	Halsey St	Troutdle	MULT_CO	40-50	no	yes	60	no	yes	1,170,000
	244th Ave	COLL,Major	Troutdale	24	no	no	44	yes	yes	1,220,000
					ditch	no	no	storm	yes	yes

Total Right-of-Way Cost: \$909,000 Total Construction Cost: \$7,545,000 Federal Share: \$0 County Share: \$8,454,000

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

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ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: COLLECTOR Priority 3										
PROJECT NAME		MAP NUMBER		Existing			New			TOTAL COST
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
		2NDY ST CLASSIF	LOCAL JUR2	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
				DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

										1,950,000
33	202nd Avenue	242		2	yes	no	3	yes	yes	\$130,000
	Stark Street	Mult Co.	MULT_CO	50	yes	no	60	no	yes	1,820,000
	Division Street	COLL, Major	Gresham	22	no	no	44	yes	yes	1,950,000
				sump	no		sump	yes	no	
										1,770,000
27	282nd Ave	542		2	yes	no	2	yes	yes	\$0
	Powell Valley Rd	Mult Co.	Gresham	60	yes	yes	60	yes	yes	1,770,000
	Orient Dr	COLL, Major	MULT_CO	20	no	no	44	yes	yes	1,770,000
		ART, Rural		ditch	no	---	storm	yes	yes	\$0
										\$690,000
25	Orient Dr	520		2	yes	no	2	yes	yes	\$0
	Anderson Rd (267th)	Mult Co.	MULT_CO	60	no	yes	60	no	yes	\$690,000
	Gresham City Limit	COLL, Major	Gresham	30	no	no	44	yes	no	\$690,000
				ditch	no	---	storm	yes	no	\$0
										3,330,000
24	Butler Road	300		2	yes	no	2	yes	yes	\$140,000
	190th Ave	Mult Co.	MULT_CO	60	no	yes	60	yes	yes	3,190,000
	Regner Rd	COLL, Neigh	Gresham	24	no	no	44	yes	yes	3,330,000
				ditch	no	yes	storm	yes	yes	\$0
										1,420,000
24	Powell Valley Rd	505		2	yes	no	2	yes	yes	\$0
	Barnes Rd	Mult Co.	MULT_CO	60	no	yes	60	no	yes	1,420,000
	Troutdale Rd	COLL, Major	Gresham	20-24	no	no	44	yes	no	1,420,000
				ditch	no	---	storm	yes	no	\$0
										\$680,000
24	202nd Avenue	236		2	yes	no	3	yes	yes	\$170,000
	Burnside Rd	Mult Co.	MULT_CO	50	yes	no	60	no	yes	\$510,000
	Stark St	COLL, Major	Gresham	22	no	no	44	yes	yes	\$680,000
				sump	no	---	sump	yes	no	\$0

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: COLLECTOR										
PROJECT NAME		MAP NUMBER		Existing			New			TOTAL COST
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
		2NDY ST CLASSIF	LOCAL JUR2	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
				DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

										\$560,000
21	Powell Valley Rd	503		2	yes	no	2	yes	yes	\$0
	Kane Rd (257th Ave)	Mult Co.	MULT_CO	60	no	yes	60	yes	yes	\$560,000
	Barnes Rd	COLL,Major	Gresham	24	no	no	44	yes	yes	\$560,000
				ditch	no	---	storm	yes	yes	\$0
										1,915,000
19	Anderson Rd (267th) Ave	530		2	yes	no	2	yes	yes	\$195,000
	Orient Dr	Mult Co.	MULT_CO	50	no	no	50	no	yes	1,720,000
	County Line	COLL,Neigh	Gresham	22	no	no	38	yes	no	1,915,000
				ditch	no	---	storm	no	no	\$0
										\$645,000
16	Barbara Welch Rd	330		2	yes	no	2	yes	no	\$55,000
	City Limit	Mult Co.	MULT_CO	60	no	yes	60	no	yes	\$590,000
	County Line	COLL,Neigh		20	no	no	38	yes	no	\$645,000
				ditch	no	no	storm	no	no	\$0
										\$680,000
16	262nd Ave	437		2	yes	no	2	yes	yes	\$0
	Hensley Rd	Mult Co.	MULT_CO	50	no	yes	50	no	yes	\$680,000
	Cherry Park Rd	COLL,Neigh	Troutdale	22	no	no	38	yes	no	\$680,000
				ditch	no	---	storm	no	no	\$0
										1,880,000
15	Sauvie Island Road	121		2	Y	N	2	Y	N	\$550,000
	Bridge	citizen	MULT_CO	40	N	Y	60	N	Y	1,330,000
	Reeder Road	COLL,Rural		24	N	N	28	N	N	1,880,000
				ditch	N	N	ditch	Y	N	\$0
										1,200,000
11	202nd Avenue	310		2	yes	no	3	yes	yes	\$120,000
	Division St	Mult Co.	MULT_CO	50	yes	no	60	yes	yes	1,080,000
	Powell Blvd	COLL,Major	Gresham	24	no	no	44	yes	yes	1,200,000
				sump	no	---	storm	yes	no	\$0

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: COLLECTOR				Existing			New			TOTAL COST
PROJECT NAME		MAP NUMBER		LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
		2NDY ST CLASSIF	LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

	Barnes Rd. (262nd Ave.)	531		2	yes	yes	2	yes	yes	1,620,000
9	Powell Valley Rd	Mult Co.	MULT_CO	40	no	no	60	no	yes	\$660,000
	Anderson Rd (267th)	COLL, Major	Gresham	26-36	yes	no	44	yes	no	\$960,000
				ditch	no	no	storm	no	no	1,620,000
										\$0
	Hillyard Rd	534								1,110,000
7	Palmblad Rd (252nd)	Mult Co.	Gresham							\$110,000
	Anderson Rd (267th)	COLL, Neigh	MULT_CO							1,000,000
										1,110,000
										\$0
	209th Ave (Towle Rd)	508		2	yes	no	2	yes	yes	1,090,000
7	Butler Rd	MC/Grsham	MULT_CO	40	no	yes	60	yes	yes	\$220,000
	Heiney Rd	COLL, Major	Gresham	18-46	no	yes	44	yes	yes	\$870,000
				ditch	no	---	storm	no	yes	1,090,000
										\$0
	Clatsop St	301		2	yes	no	2	yes	no	\$705,000
6	Barbara Welch Rd	Mult Co.	MULT_CO	30	no	yes	60	no	yes	\$175,000
	SE 162nd Ave	COLL, Major		22	no	no	44	yes	no	\$530,000
				ditch	no	no	storm	no	no	\$705,000
										\$0
	Troutdale Rd	435		2	yes	yes	2	yes	yes	\$775,000
6	19th St	MC/Trtdl	MULT_CO	50	no	yes	60	no	yes	\$65,000
	Cherry Park Rd	COLL, Major	Troutdale	20	no	no	44	yes	yes	\$710,000
				d/stm	yes	---	storm	yes	no	\$775,000
										\$0

Total Right-of-Way Cost: \$2,590,000 Total Construction Cost: \$19,430,000 Federal Share: \$0 County Share: \$22,020,000

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: SIGNAL Priority 1										
PROJECT NAME		MAP NUMBER		Existing			New			TOTAL COST
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
		2NDY ST CLASSIF	LOCAL JUR2	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
				DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

										\$320,000
433	Halsey St/223rd Ave	454		2/2	yes	no	5/3	yes	yes	\$0
	signal	Mult Co.	MULT_CO	80/50	yes	yes	80/50	yes	yes	\$320,000
	safety	ART,Minor	Fairview	66/44	no	no	66/38	yes	yes	\$320,000
		ART,Minor		storm	no	---	storm	no	yes	\$0
										\$395,000
433	Stark St/Troutdale Rd	459		3/3	yes	yes	5/3	yes	yes	\$35,000
	signal	Mult Co.	MULT_CO	60/50	yes	yes	90/60	yes	yes	\$360,000
	safety	ART,Major	Troutdale	34/25	yes	yes	66/44	yes	yes	\$395,000
		COLL,Major		storm	no	---	storm	no	yes	\$0
										\$430,000
429	Halsey St/238th Ave	451		2/4	yes	yes	3/5	yes	yes	\$110,000
	signal	Mult Co.	MULT_CO	50/80	yes	yes	80/80	yes	yes	\$320,000
	safety	ART,Minor	Wd Village	24/44	no	no	66/44	yes	yes	\$430,000
		ART,Minor		storm	no	---	storm	no	no	\$0
										\$185,000
427	182nd Ave/Division Ave	205		5/5	yes	yes	5/5	yes	yes	\$5,000
	Signal	Mult Co	MULT_CO	90/90	yes	yes	90/90	yes	yes	\$180,000
	Safety	ART,Major	Gresham	76/76		yes	76/76	yes	yes	\$185,000
		ART,Major		sump	no	yes	sump	yes	yes	
										\$75,000
427	257th Dr/Cherry Park Rd	416		5	yes	yes	6-	yes	yes	\$75,000
	Signal	Troutdle	MULT_CO		yes	yes		yes	yes	\$75,000
	Safety	ART,Major	Troutdale		yes	no-		yes	yes	\$75,000
		ART,Minor		storm	yes	no-	storm	yes	yes	
										\$520,000
427	182nd Ave/Powell Blvd	230		4/5	yes		5	yes	yes	\$520,000
	Signal	Mult Co	MULT_CO	60-80	yes	yes	80	yes	yes	\$520,000
	Safety	ART,Major	Gresham		yes		60	yes	yes	\$520,000
		ART,Minor		storm	no		storm	yes	yes	

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: SIGNAL											
PROJECT NAME		MAP NUMBER		Existing			New			TOTAL COST	
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST	
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST	
		2NDY ST CLASSIF	LOCAL JUR2	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE	
				DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE	

											\$165,000
424	Glisan St/172nd Ave	257		5/2	yes	no	5/2	yes	yes	\$5,000	
	signal	Mult Co.	Gresham	80/60	yes	yes	80/60	yes	yes	\$160,000	
	upgrade	ART, Major	MULT_CO	66/38	no	yes	66/38	yes	yes	\$165,000	
		COLL, Neigh		sump	no	---	sump	no	yes	\$0	
											\$140,000
423	242nd Ave/23rd St	450		4/2	no	---	4/3	no	---	\$140,000	
	Signal	Troutdale	MULT_CO		no	yes		yes	yes	\$140,000	
	Safety	ART, Major	Troutdale		yes	no		yes	yes	\$140,000	
		LOCAL	Gresham	storm	no	no	storm	no	yes		
											\$160,000
423	Burnside Rd/3rd St	545		5/3	yes	yes	5/3	yes	yes	\$160,000	
	Signal	Mult Co	MULT_CO	80	yes	yes	80	yes	yes	\$160,000	
	Safety	ART, Princ	Gresham	76	yes	yes	76	yes	yes	\$160,000	
		COLL, Major		storm	yes	no	storm	yes	yes		
											\$340,000
422	Halsey St/201st Ave	251		2/2	yes	no	5/3	yes	yes	\$20,000	
	signal	Mult Co.	MULT_CO	90/40	no	yes	90/50	yes	yes	\$320,000	
	safety	ART, Minor	Gresham	20/25	no	no	66/38	yes	yes	\$340,000	
		COLL, Neigh		ditch	no	---	storm	no	yes	\$0	
											\$695,000
414	Orient Dr/257th Ave (Kane Rd)	554		2	Yes	No	2	Yes	No	\$165,000	
	signal	MC/Grsham	MULT_CO	60	No	Yes	60	Yes	Yes	\$530,000	
	safety	ART, Minor	Gresham	30	No	No	40	Yes	Yes	\$101,000	
		ART, Minor		d/stm	No	No	d/stm	Yes	yes	\$594,000	
											\$430,000
413	Burnside Rd/242nd Dr	559		5/3	yes	yes	5/5	yes	yes	\$110,000	
	signal	Mult Co.	MULT_CO	90/80	yes	yes	90/110	yes	yes	\$320,000	
	safety	ART, Princ	Gresham	76/66	yes	yes	76/90	yes	yes	\$430,000	
		ART, Major		storm	no	---	storm	no	yes	\$0	

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: SIGNAL				Existing			New			TOTAL COST
PROJECT NAME		MAP NUMBER		LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
		2NDY ST CLASSIF	LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

										\$375,000
	Powell Valley Rd/257th Ave	551		2/2	yes	no	5/5	yes	yes	\$65,000
409	signal	Mult Co.	MULT_CO	60/50	no	yes	80/80	yes	yes	\$310,000
	safety	ART, Major	Gresham	24/22	no	no	66/66	yes	yes	\$375,000
		ART, Minor		ditch	no	---	storm	no	yes	\$0
										\$380,000
	172nd Ave/Foster Rd	358		2	Yes	No	3	Yes	No	\$10,000
402	signal	Mult Co.	MULT_CO	50	No	Yes	50	Yes	Yes	\$370,000
	safety	ART, Rural		24	No	No	38	Yes	Yes	\$380,000
		COLL, Rural		ditch	No	No	ditch	Yes	Yes	\$0
										\$170,000
	162nd Avenue/Stark Street	271		5	yes	no	5	yes	no	\$10,000
400	signal	Mult Co.	MULT_CO	80/90	Yes	yes	80/90	Yes	yes	\$160,000
	upgrade	ART, Major	Portland	66/76	Yes	no	66/76	Yes	no	\$170,000
		ART, Minor	Gresham		no	---		no	Yes	\$0

Total Right-of-Way Cost: \$535,000 Total Construction Cost: \$4,245,000 Federal Share: \$594,000 County Share: \$4,186,000

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: SIGNAL rPriority 2										
PROJECT NAME		MAP NUMBER		Existing			New			TOTAL COST
TOTAL	FROM	PROJECT	SOURCE	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
PTS	TO	PRIM ST	CLASSIF	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
		PRIM ST	CLASSIF	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
		2NDY ST	CLASSIF	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

										\$165,000
329	Glisan St/188th Ave	259		5/2	yes	no	5/2	yes	yes	\$5,000
	signal	Mult Co	MULT_CO	80/50	no	yes	80/50	yes	yes	\$160,000
	safety	ART, Major	Gresham	66/40	yes	yes	66/40	yes	yes	\$165,000
		COLL, Neigh		storm	no	---	storm	no	no	\$0
										\$165,000
324	Glisan St/192nd Ave	260		5/2	yes	no	5/2	yes	yes	\$5,000
	signal	Gresham	MULT_CO	80/50	no	yes	80/50	yes	yes	\$160,000
	safety	ART, Major	Gresham	66/28	no	yes	66/28	yes	yes	\$165,000
		COLL, Neigh		storm	no	---	storm	no	no	\$0
										\$270,000
322	257th Ave (Kane Rd)/1st St	558		2/2	yes	no	5/3	yes	yes	\$0
	signal	Mult Co.	MULT_CO	90/50	yes	yes	90/50	yes	yes	\$270,000
	safety	ART, Major	Gresham	20/24	no	yes	72/38	yes	yes	\$270,000
		COLL, Neigh		ditch	no	---	storm	no	yes	\$0
										\$160,000
319	162nd Ave/Main St	256		5/2	yes	no	5/2	yes	no	\$0
	signal	Mult Co.	MULT_CO	90/50	yes	yes	90/50	yes	yes	\$160,000
	safety	ART, Minor	Portland	76/22	no	yes	76/38	yes	yes	\$160,000
		COLL, Neigh		sump	no	---	sump	no	yes	\$0
										\$260,000
299	Division Dr/Troutdale Rd	557		2/2	yes	no	2/2	yes	yes	\$110,000
	signal	Mult Co.	MULT_CO	60/50	no	yes	60/60	no	yes	\$150,000
	safety	ART, Rural		24/24	no	no	44/44	yes	yes	\$260,000
		COLL, Rural		ditch	no	---	storm	no	yes	\$0
										\$140,000
226	Marine Dr/Sundial Rd	417		3	yes	no	3-	yes	no-	\$140,000
	Signal	Troutdale	MULT_CO		no-	yes		yes	yes	\$140,000
	Safety	COLL, Major	Troutdale		no-	yes		no-	yes	\$140,000
				Ditch	yes	no		yes	yes	

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: SIGNAL		MAP NUMBER		Existing			New			TOTAL COST
TOTAL	PROJECT NAME	PROJECT SOURCE	PRIM JURIS	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
PTS	FROM	PRIM ST CLASSIF	LOCAL JUR1	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
	TO	2NDY ST CLASSIF	LOCAL JUR2	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
				DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

	Butler Rd/209th Ave (Towle Rd)	556		2/2	yes	no	2/2	yes	yes	\$285,000
209	signal	Mult Co.	MULT_CO	60/40	no	yes	60/60	yes	yes	\$240,000
	safety	COLL, Neigh	Gresham	20/18	no	no	38/44	yes	yes	\$285,000
		COLL, Major		ditch	no	---	storm	no	yes	\$0

Total Right-of-Way Cost: \$165,000 Total Construction Cost: \$1,280,000 Federal Share: \$0 County Share: \$1,445,000

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: SIGNAL Priority 3				Existing			New			TOTAL COST
PROJECT NAME		MAP NUMBER		LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
PTS	TO	PRFM ST CLASSIF	LOCAL JUR1	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
		2NDY ST CLASSIF	LOCAL JUR2	DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

										\$160,000
49	257th Ave (Kane)/MHCC Entrance	452		5/2	yes	yes	5/2	yes	yes	\$0
	signal	Mult Co.	MULT_CO	80/34	no	yes	80/34	yes	yes	\$160,000
	safety	ART, Major	Gresham	66/32	yes	yes	66/32	yes	yes	\$160,000
		LOCAL		storm	no	---	storm	no	yes	\$0
										\$160,000
38	Halsey St/172nd Ave	254		5/2	yes	no	5/2	yes	yes	\$0
	signal	Mult Co.	Gresham	90/60	no	yes	90/60	yes	yes	\$160,000
	safety	ART, Major	MULT_CO	66/44	no	yes	66/44	yes	yes	\$160,000
		COLL, Neigh		storm	no	---	storm	no	no	\$0
										\$260,000
19	Butler Rd/Rodlin Rd	353		2	yes	no	2	yes	yes	\$20,000
		Mult Co.	MULT_CO	60/40	no	yes	60/50	yes	yes	\$240,000
		COLL, Neigh	Gresham	20/20	no	no	38/32	yes	yes	\$260,000
		LOCAL		ditch	no	---	storm	no	yes	\$0
										\$340,000
19	Orient Dr/267th Ave (Anderson)	552		2/2	yes	yes	3/3	yes	yes	\$30,000
	signal	Grsham/MC	MULT_CO	60/40	no	n/y	60/60	yes	yes	\$310,000
	safety	ART, Minor	Gresham	30/22	no	no	44/44	yes	yes	\$340,000
		COLL, Major		ditch	no	---	storm	no	yes	\$0
										\$200,000
9	Butler Rd/Regner Rd	555		2/2	yes	no	2/2	yes	yes	\$0
	signal	Grsham/MC	MULT_CO	60/60	no	yes	60/60	yes	yes	\$200,000
	safety	COLL, Major	Gresham	24/20	no	no	44/38	yes	yes	\$200,000
		COLL, Neigh		ditch	no	---	storm	no	yes	\$0
										\$365,000
4	Orient Dr/262nd Ave	553		2/2	yes	yes	5/3	yes	yes	\$55,000
	signal	MC/Grsham	MULT_CO	60/50	no	yes	80/60	yes	yes	\$310,000
	safety	ART, Minor	Gresham	30/22	no	no	66/44	yes	yes	\$365,000
		COLL, Major		ditch	no	---	storm	no	yes	\$0

CAPITAL IMPROVEMENT PROJECTS 1996 - 2000

MULTNOMAH COUNTY OREGON

ENVIRONMENTAL SERVICES

TRANSPORTATION DIVISION

CATEGORY: BRIDGES Priority 1

PROJECT NAME		MAP NUMBER	Existing			New			TOTAL COST	
TOTAL	FROM	PROJECT SOURCE	PRIM JURIS	LANES	SIGNS	LIGHTS	LANES	SIGNS	LIGHTS	ROW COST
PTS	TO	PRIM ST CLASSIF	LOCAL JUR1	ROW W	SIGNAL	STRPNG	ROW W	SIGNAL	STRPNG	CONST COST
		2NDY ST CLASSIF	LOCAL JUR2	PVT W	SIDEWK	TRNLN	PVT W	SIDEWK	TRNLN	MULT SHARE
				DRAIN	BIKE	INTIMP	DRAIN	BIKE	INTIMP	FED'L SHARE

	162nd Ave	238		2	yes	no	5	yes	no	\$867,000
409	RR Bridge	Mult Co.	MULT_CO	50	no	yes	80	no	yes	\$17,000
	at I-84	ART,Minor		37	no	no	66	yes	no	\$850,000
				ditch	no	---	storm	yes	no	\$867,000
										\$0

	185th Ave.	241		2	yes	no	2	yes	yes	\$870,000
321	RR Bridge	Mult Co.	Gresham	50	no	yes	60	no	yes	\$10,000
	at 750' N of Sandy	COLL,Major	Mult Co	20	no	no	44	yes	yes	\$860,000
				ditch	no	---	storm	yes	no	\$870,000
										\$0

	201st Avenue	237		2	yes	no	2	yes	yes	\$860,000
321	RR Bridge	Mult Co.	MULT_CO	40	no	yes	50	no	yes	\$10,000
	at I-84	COLL,Neigh	Gresham	25	no	no	38	yes	no	\$850,000
				ditch	no	---	storm	yes	no	\$860,000
										\$0

	223rd Ave	439		2	yes	no	2	yes	yes	\$900,000
321	RR Bridge	Mult Co.	MULT_CO	60	no	yes	60	no	yes	\$10,000
	at 2000' N of I-84	COLL,Major	Fairview	22	no	no	44	yes	no	\$890,000
				ditch	no	---	storm	yes	no	\$900,000
										\$0

	223rd Ave	438		2	yes	no	2	yes	yes	\$900,000
319	RR Bridge	Mult Co.	MULT_CO	50	no	yes	60	no	yes	\$10,000
	at I-84	COLL,Major	Fairview	22	no	no	44	yes	no	\$890,000
				ditch	no	---	storm	yes	no	\$900,000
										\$0

Total Right-of-Way Cost: \$57,000 Total Construction Cost: \$4,340,000 Federal Share: \$0 County Share: \$4,397,000

GRAND TOTAL BRIDGES

\$4,397,000

BIKEWAY CAPITAL IMPROVEMENT PLAN

improvement projects that can be accomplished by striping roads and posting signs (such as designating bicycle lanes or routes) are not funded by the Capital Improvement Program but by the Maintenance and Service Budget of the Bicycle Program.

The Bikeway Capital Improvement Plan process identifies candidate projects and evaluates them according to an objective ranking system. Identified in the Bicycle Master Plan are 114 miles of unbuilt bikeways on Multnomah County roads. The cost of building these is estimated to be \$16.6 million as shown in Table 2. Selection of bikeway capital improvements is a careful process of addressing the most critical needs and maximizing funding opportunities.

The selection process described below determines the list of 1996-2000 candidate bikeway projects. The highest ranked projects, without development constraints, are scheduled for implementation in the 1996-2000 Transportation Capital Improvement Program.

Information used in the selection process is described below:

- A. All unbuilt bikeways identified on the Bikeway Plan Map in the 1990 Bicycle Master Plan are considered.
- B. Projects that have committed funding by other programs in the next five years or with other constraints are eliminated, including:
 - 1) Bikeway projects that will be implemented in the 1996-2000 Transportation CIP.
 - 2) Projects funded with a \$1 million Congestion Management/Air Quality grant for implementation of Willamette River Bridge Accessibility Projects (WRBAP). See WRBAP section for details on these projects.
 - 3) Some projects are eliminated due to pending corridor studies or physical constraints such as railroad bridges.
 - 4) Projects that require small capital amounts (such as striping and signing bike lanes on built roads) are referred to the Maintenance budget.
 - 5) Shoulder bikeways that can be added through the annual Paving Program are eliminated.
- C. The remaining projects are evaluated according to the following criteria (See Table 3).
 - 1) Hazard Reduction
 - 2) Potential Use
 - 3) Outside Funding Opportunities
 - 4) Bikeway System Enhancement

Table 2

**1996-2000 Bikeway Capital Improvement Plan
Proposed Bikeway Projects**

Project	Termini	Distance (miles)	Facility	Funding or Constraint	Cost
162nd Ave.	UP Railroad North of I-84 / Halsey St	0.59	Bike Lane	RR constraint	\$207,200
162nd Ave.	Halsey St / Hoyt St	0.52	Bike Lane	Maintenance Program	\$5,500
162nd Ave.	Hoyt St / Burnside St	0.35	Bike Lane	Maintenance Program	\$3,700
162nd Ave.	Burnside St / Stark St	0.20	Bike Lane	Maintenance Program	\$2,100
181st Ave.	Burnside St / Yamhill St	0.45	Bike Lane	Maintenance Program	\$4,800
182nd Ave.	Yamhill St / Division St	0.80	Bike Lane	Maintenance Program	\$8,400
185th Dr.	Sandy Blvd / Gresham City Limit	0.22	L.S. Bikeway	RR constraint	\$77,200
190th Ave.	Highland Dr / Butler Rd	0.76	Bike Lane		\$266,900
201st Ave./Dr.	Sandy Blvd / Halsey St	0.80	Bike Lane	Corridor Study Constraint	\$280,900
201st Ave	Halsey St / Glisan St	0.50	Bike Lane	Corridor Study Constraint	\$175,600
202nd Ave.	Glisan St / Stark St	0.53	Bike Lane	Corridor Study Constraint	\$186,100
202nd Ave.	Burnside Rd / Division St	0.74	Bike Lane	Corridor Study Constraint	\$259,800
202nd Ave.	Division St / Powell Blvd	0.51	Bike Lane	Corridor Study Constraint	\$179,100
207th Ave.	Sandy Blvd / Glisan St	1.50	Bike Lane	TCIP	\$526,700
209th Ave. (Towle Ave)	SW Binford Pkwy / Butler Rd	0.70	Bike Lane		\$245,800
223rd Ave.	1086' N of Marine Dr / Marine Dr	0.21	Bike Lane	Maintenance Program	\$73,700
223rd Ave.	Marine Dr / Blue Lake Rd	0.20	Shldr Bkwy	Maintenance Program	\$10,600
223rd Ave.	Blue Lake Rd / RR south of I-84	0.89	Bike Lane	RR constraint	\$312,500
223rd Ave.	RR south of I-84 / Halsey St	0.45	Bike Lane		\$158,000
223rd Ave.	Halsey St / Glisan St	0.47	Bike Lane	TCIP	\$165,000
242nd Ave.	Glisan St / Stark St	0.58	Bike Lane		\$101,800
242nd Ave.	Burnside Rd / Powell Blvd	0.26	Bike Lane	State Grant	\$91,300
257th Ave. - 40 Mile Loop	Division St / Bull Run Rd	0.51	Bike Lane	TCIP	\$179,100
257th Ave. - 40 Mile Loop	Bull Run Rd / Powell Valley Rd	0.40	Bike Lane		\$140,400
257th Ave. - 40 Mile Loop	Powell Valley Rd / Palmquist Rd	0.33	Bike Lane		\$115,900

**1996-2000 Bikeway Capital Improvement Plan
Proposed Bikeway Projects**

Project	Termini	Distance (miles)	Facility	Funding or Constraint	Cost
282nd Ave.	Troutdale Rd / Orient Dr	1.29	Shldr Bkwy		\$68,100
302nd Ave.	Division St / Orient Dr	2.12	Shldr Bkwy		\$111,900
49th Ave	Stephenson St / County Line	0.74	Bike Lane		\$259,800
Blue Lake Rd.	223rd Ave / Blue Lake Park Entrance	0.44	Shldr Bkwy		\$23,200
Broadway Bridge, Lovejoy Ramp	NW 14th Ave / Broadway	0.13	WRB	WRBAP	\$70,000
Burnside Rd.	181st Ave / 197th Ave	0.88	Bike Lane	TCIP	\$309,000
Butler Rd.	190th Ave / Regner Rd	1.86	Shldr Bkwy		\$98,200
Butler Rd.	Regner Rd / Hogan Rd	0.85	Bike Lane	Maintenance Program	\$9,000
Buxton Rd.	Columbia River Hwy / Cherry Park Rd	0.49	Bike Lane	Maintenance Program	\$5,200
Cherry Park Dr.	242nd Dr / 257th Dr	0.72	Bike Lane		\$252,800
Cherry Park Dr.	257th Dr / Troutdale Rd	0.57	L.S. Bikeway	TCIP	\$200,100
Columbia/Sandy River Rte - 40 Mile Loop	223rd Ave / Graham Rd	3.80	Bike Path	Grant possibility	\$1,334,300
Cornelius Pass Rd.	St. Helens Rd / Mile Post 2	2.00	Shldr Bkwy		\$105,600
Cornell Rd.	5400' W of Thompson Rd / Skyline Blvd	1.47	Shldr Bkwy		\$77,600
Division St.	174th Ave / 195th Ave	1.10	Bike Lane	Maintenance Program	\$11,600
Division St.	195th Ave / 242nd Ave	2.30	Bike Lane	TCIP	\$807,600
Division St.	242nd Ave / 257th Ave	0.68	Bike Lane	Maintenance Program	\$7,200
Division St.	257th Ave / UGB	0.86	Bike Lane		\$302,000
Division St	UGB / Troutdale Rd	0.36	Shldr Bkwy		\$19,000
Division Dr.	Troutdale Rd / Oxbow Dr	1.53	Shldr Bkwy	Paving Program	\$80,800
Dodge Park Blvd.	Orient Dr / County Line	4.15	Shldr Bkwy	Paving Program	\$219,100
Evans Rd	Hurlburt Rd / Crown Point Highway	1.55	Shldr Bkwy	Paving Program	\$81,800
Foster Rd.	300' E of Jenne Rd / County Line	1.13	Shldr Bkwy		\$59,700
Giese Rd.	182nd Ave / 190th Ave	0.40	Shldr Bkwy		\$21,100
Glisan St.	162nd Ave / 203rd Ave	2.06	Bike Lane	Maintenance Program	\$21,800

**1996-2000 Bikeway Capital Improvement Plan
Proposed Bikeway Projects**

Project	Termini	Distance (miles)	Facility	Funding or Constraint	Cost
Glisan St.	203rd Ave / 223rd Ave	1.06	Bike Lane	TCIP	\$372,200
Glisan St.	223rd Ave / 242nd Dr.	0.99	Bike Lane	TCIP	\$347,600
Halsey St.	162nd Ave / 190th Ave	1.43	Bike Lane	Maintenance Program	\$15,100
Halsey St.	190th Ave / 207th Ave	0.95	Bike Lane	TCIP	\$333,600
Halsey St.	207th Ave / 213th Ave	0.17	Bike Lane	TCIP	\$59,700
Halsey St.	213th Ave / 223rd Ave	0.52	Bike Lane	TCIP	\$182,600
Halsey St.	223rd Ave / 238th Ave	0.75	Bike Lane	ODOT Funded	\$263,300
Hawthorne Bridge & Ramps	SW 1st / Grand Ave	0.90	WRB	WRBAP	\$70,000
Hewett Blvd.	Humphrey Blvd / 5200' W of Patton Rd	0.60	L.S. Bikeway		\$210,700
Hogan Rd.	Powell Blvd / Palmquist Rd	0.74	Shldr Bkwy	State Grant	\$39,100
Hogan Rd.	Palmquist Rd / Springwater Corridor	0.39	Shldr Bwy	TCIP	\$136,900
Hogan Rd.	Springwater Trail / County Line	1.05	Shldr Bkwy		\$55,400
Humphrey Blvd.	420' W of Patton Rd / 1286' E of Hewitt Blvd	0.27	L.S. Bikeway		\$94,800
Hurlburt Rd	Crown Point Hwy / Littlepage Rd	2.34	Shldr Bkwy	Paving Program	\$123,600
Jenne Rd.	Johnson Creek / SE McKinley Rd	0.86	Shldr Bkwy	TCIP	\$45,400
Johnson Creek Bike Path - 40 Mile Loop	Gresham City Limits / County Line	1.30	Bike Path	Grant possibility	\$456,500
Knieriem Rd	Littlepage Rd / Cown Point Hwy	3.50	Shldr Bkwy		\$184,800
Larch Mountain Rd	Crown Point Hwy / Larch Mtn	14.75	Shldr Bkwy		\$778,800
McKinley Rd.	174th Ave / 182nd Ave	0.50	Shldr Bkwy		\$26,400
Mershon Rd	Ogden Rd / Crown Point Hwy	2.06	Shldr Bkwy		\$108,800
Ogden Rd	Mershon Rd / Crown Point Hwy	1.14	Shldr Bkwy		\$60,200
Orient Dr.	Palmquist / Salquist Rd	0.56	Bike Lane		\$196,600
Orient Dr.	Salquist Rd / Welch Rd	0.62	Bike Lane		\$217,700
Orient Dr.	Welch Rd / Dodge Park Rd	1.04	Shldr Bkwy		\$54,900
Oxbow Dr.	Division Dr / Oxbow Pkwy	2.26	Shldr Bkwy		\$119,300

**1996-2000 Bikeway Capital Improvement Plan
Proposed Bikeway Projects**

Project	Termini	Distance (miles)	Facility	Funding or Constraint	Cost
Oxbow Park Road	Oxbow Pkwy / Oxbow Park	1.22	Shldr Bkwy		\$64,400
Oxbow Parkway	Oxbow Dr / Oxbow Park Rd	1.34	Shldr Bkwy		\$70,800
Patton Rd.	Scholls Ferry Rd / 400' S of Hewitt Blvd	0.84	L.S. Bikeway		\$294,900
Powell Valley Rd.	257th Ave / 282nd Ave	1.33	Shldr Bkwy	Maintenance Program	\$14,000
Sauvie Island Bridge	US 30 / Sauvie Island Rd	0.23	Undetermined	TCIP	\$80,800
Sauvie Island Rd.	600' S of Reeder Rd / Ferry Rd	0.40	Shldr Bkwy		\$140,400
Sauvie Island Rd.	Gillihan Rd / 600' S of Reeder Rd	1.70	Bike Path		\$596,900
Scholls Ferry Rd.	Hewitt Blvd / County Line	1.34	Bike Lane		\$470,500
Sellwood Bridge	Macadam Bike Path / SE 6th Ave	0.37	WRB	WRBAP	\$30,000
Shattuck Rd.	Patton Rd / Windsor Ct	0.25	L.S. Bikeway		\$87,800
Skyline Blvd.	1000' S of Cornell Rd / 450' E of Greenleaf	0.85	L.S. Bikeway		\$298,500
Skyline Blvd.	200' N of McNamee Rd / Cornelius Pass Rd	1.45	Shldr Bkwy		\$76,600
Skyline Blvd.	Cornelius Pass Rd / Rocky Point Rd	7.70	Shldr Bkwy		\$406,600
Springville Rd.	200' W of Skyline Blvd / County Line	2.32	Shldr Bkwy		\$122,500
Stark St.	257th Ave / Troutdale Rd	0.55	Bike Lane	TCIP	\$193,100
Troutdale Rd - 40 Mile Loop	Cherry Park Rd / Stark St	1.00	Bike Lane	Private Development	\$351,100
Troutdale Rd.	Stark St / Strebin Rd	0.82	Bike Lane	TCIP	\$287,900
Troutdale Rd.	Strebin Rd / 282nd Dr	1.39	Shldr Bkwy		\$73,400
Woodard Rd	Crown Point Hwy / Mershon Rd	1.10	Shldr Bkwy		\$58,100
Subtotal—other funding or constraints		45.17			\$7,194,300
Subtotal—projects to evaluate		68.73			\$9,412,366
Totals		113.90			\$16,606,666

Table 3
Criteria for Bicycle Project Evaluation

Criteria	Points
Hazard Reduction	
<u>Accidents</u>	
More than 8 during the last three years	5
More than 6 during the last three years	4
More than 4 during the last three years	3
More than 2 during the last three years	2
More than 1 during the last three years	1
Public report of hazard or public request for facility	4
<u>Traffic Condition</u>	
Average Daily Traffic (ADT) more than 10,000	2
Average Daily Traffic (ADT) more than 5,000	1
Lane width less than 12 ft. and shoulder width less than 4 ft.	2
Posted speed greater than 30 mph	2
Potential Use	
<u>Current bicycle use</u>	
High (e.g. Sauvie Island Rd., Hawthorne Bridge, Marine Dr.)	5
Medium (e.g. Division St., Burnside Rd.)	3
<u>Logical destinations</u> e.g. recreation areas, work sites, schools, community service buildings	
High (8 or more destinations)	5
Medium (4 or more destinations)	3
Low (2 or more destinations)	1

Criteria	Points
<p>Outside Funding Opportunities</p> <p>If 100 percent of funding is available from a source other than the Bicycle Fund, the project will not be considered for Bicycle Program funding.</p> <p>80-99 percent funding available from outside sources</p> <p>Less than 80 percent funding available from outside sources</p>	<p>10</p> <p>1 point per 10% funding</p>
<p>Bikeway System Enhancement</p> <p>Provides connections to:</p> <p>2 or more bikeway facilities</p> <p>1 bikeway facility</p> <p>Provides a needed bikeway in an area without standard facilities</p>	<p>10</p> <p>8</p> <p>5</p>

PEDESTRIAN CAPITAL IMPROVEMENT PLAN

Multnomah County Pedestrian Program 1996-2000 Capital Improvement Plan

The Multnomah County Transportation and Land Use Division has undertaken a program to develop a balanced transportation system that includes sidewalks in the urban areas and shoulders on rural roads. The Transportation and Land Use Division spends much more than the required one percent of its Motor Vehicle Fuel Tax on pedestrian projects. These expenditures comply with ORS 356.514, which mandates expenditures of one percent of state receipts on bicycle and pedestrian facilities.

A portion of Multnomah County's share of Motor Vehicle Fees is transferred to Portland. Funds transferred include the mandated one percent from bike and pedestrian facilities which Portland is responsible to use within the prescribed 10 year period. The Transportation and Land Use Division has used additional sources of revenue as necessary to construct pedestrian facilities in coordination with roadway development.

The Pedestrian Capital Improvement Plan (PCIP) is currently a sidewalk infill program including only urban streets that have curbs and drainage facilities in place. It is costly to develop sidewalks on urban streets without curbs due to the expense of installing drainage facilities. Curbed streets with drainage facilities significantly reduce sidewalk construction costs, making the PCIP a cost-effective sidewalk infill program. Multnomah County Transportation and Land Use Division has developed a comprehensive inventory of sidewalks in the urban areas that have curbs but lack sidewalks.

The sidewalk inventory identifies 166 miles of missing sidewalks in the urban areas. Of the 166 miles of needed sidewalks, 20 miles have storm drainage and curbs in place and need only sidewalks. The 20 miles of sidewalks where storm drainage and curbs are in place comprise the list of eligible projects (Table 4) for the Pedestrian Capital Improvement Plan. Table 4 lists the eligible projects and the funding or constraint that eliminates the project from further evaluation.

The Pedestrian Capital Improvement Plan update process has evaluated the needed sidewalk projects using criteria developed in the Pedestrian Master Plan to identify priorities. The Multnomah County Pedestrian Citizen Task Force reviewed the criteria and points (Table 5) used to assign priorities to projects.

Policies for the Pedestrian Master Plan and the PCIP are established in the 1983 Multnomah County Comprehensive Framework Plan. The PCIP is consistent with the Comprehensive Framework Plan policies for Capital Improvement (#32) and Bicycle/Pedestrian System (#33C).

Capital improvements to the roadway for needs other than sidewalks are scheduled in the Transportation Capital Improvement Program (TCIP). If a TCIP project requires sidewalks as part of the project, then it is constructed as part of the roadway construction project. The PCIP schedules improvements that have a high priority for implementation but are not scheduled for construction by the TCIP or other programs in the near future.

Selection Process for the 1996-2000 Pedestrian CIP

The Pedestrian Capital Improvement Plan process identifies candidate projects and evaluates them according to an objective ranking system. Identified in the PCIP are 20 miles of missing sidewalks on Multnomah County roads where storm drainage and curbs are in place. The cost of building these is estimated to be \$3.3 million as shown in Table 4. Selection of pedestrian capital improvements is a careful process of addressing the most critical needs and maximizing funding opportunities.

The selection process described below determines the list of 1996-2000 candidate sidewalk projects. The candidate projects are ranked according to objective criteria. The highest ranked projects without other development constraints are scheduled for implementation in the 1996-2000 Pedestrian Capital Improvement Program.

Information used in the selection process is described below:

- A. Missing sidewalk segments that have curbs and drainage in place are identified from the 1995 sidewalk inventory.
- B. Projects that have committed funding by other programs in the next five years or other constraints are eliminated including pedestrian projects that will be implemented in the 1996-2000 Transportation CIP.
- C. The remaining projects are evaluated according to the criteria in Table 5.

Table 4

Proposed Pedestrian CIP Projects

Location	Terminal	Side of Roadway	Distance (feet)	Cost*	Funding or Constraint
162nd Ave	Halsey St to Russell St	East	702	\$21,100	
162nd Ave	Wasco St to Halsey St	East	227	\$6,800	
181st Ave	Halsey St to Sandy Blvd	Both	3,339	\$100,200	
182nd Ave	Linneman Ave to 11th St	West	502	\$15,100	
201st Ave	Halsey St to Sandy Blvd	West	755	\$22,700	Corridor Study Constraint
201st Ave	San Rafael St to Sandy Blvd	East	701	\$21,000	Corridor Study Constraint
202nd Ave	5th St to Division St	Both	1,050	\$31,500	Corridor Study Constraint
202nd Ave	Burnside Rd to Stark St	Both	286	\$8,600	Corridor Study Constraint
202nd Ave	Division St to 14th St	Both	476	\$14,300	Corridor Study Constraint
202nd Ave	Glisan St to Oregon St	West	232	\$7,000	Corridor Study Constraint
202nd Ave	Stark St to Glisan St	Both	412	\$12,400	Corridor Study Constraint
209th Ave	31st st/Willow to 23rd St	West	47	\$1,400	
223rd Ave	Sandy Blvd to Marine Dr	Both	638	\$19,100	
242nd Ave	2nd St to Powell Blvd	West	148	\$4,400	BCIP Grant
242nd Ave	Powell Blvd to Burnside Rd	Both	1,415	\$42,500	BCIP Grant
242nd Ave	Stark St to Glisan St	West	248	\$7,400	
257th Ave/Kane Rd	Orient Dr to Powell Valley Rd	Both	327	\$9,800	
48th Pl	Windsor Ct to Downsview Ct	Both	1,662	\$49,900	
49th Ave	McNary Pkwy to Stephenson St	East	401	\$12,000	
50th Ave	Windsor Ct to Downsview Ct	Both	1,900	\$57,000	
52nd Pl	Thomas St to Downsview Ct	Both	2,729	\$81,900	
54th Pl	Thomas St to Dead end	Both	580	\$17,400	
55th Ave	Patton Rd to 55th Dr	Both	1,078	\$32,300	
55th Dr	55th Ave to Dead end	Both	2,934	\$87,700	
55th Dr	Dead end to Patton Rd	Both	4,109	\$123,300	
57th Ave	55th Dr to Windsor Ct	Both	1,816	\$54,500	
57th Ave	Westdale Dr to Patton Rd	Both	1,019	\$30,600	
58th Ave	Canyon Ct to Montgomery St	East	37	\$1,100	
61st Ct	61st Dr to Dead end	Both	644	\$19,300	
64th Pl	Bucharest Ct to Dead end	Both	670	\$20,100	
Arata Rd	223rd Ave to 238th Ave	Both	344	\$10,300	
Bucharest Ct	Dead end to Benz Farm	Both	1,140	\$34,200	
Burnside Rd	202nd Ave to Fariss Rd	North	3,933	\$118,000	
Butler Rd	Eastwood Pl to Rodlun Rd	South	32	\$1,000	
Butler Rd	St Andrews to Augusta Loop	North	174	\$5,200	
Canyon Ct	Skyline to Dead end	South	1,320	\$39,600	
Canyon Ct	Wash. Co Line to Highland Rd	North	2,403	\$72,100	
Cherry Park Rd	242nd Ave to 18th Way	South	53	\$1,600	
Cherry Park Rd	Hewitt to Fox	North	544	\$16,300	TCIP
Division St	175th Ave to 182nd Ave	Both	1,203	\$36,100	
Division St	182nd Ave to 202nd Ave	Both	4,366	\$131,000	
Division St	202nd Ave to Eastman Pkwy	Both	5,636	\$169,100	
Division St	242nd Ave to 257th Ave	Both	1,563	\$46,900	
Division St	Eastman Pkwy to Main St	Both	306	\$9,200	
Downsview Ct	52nd Pl to 48th Pl	Both	1,199	\$36,000	
Downsview Ct	57th Ave to 55th Dr	Both	1,194	\$35,800	
Fairview Blvd	Knights Blvd to Kingston Ave	South	322	\$9,700	
Glisan St	162nd Ave to 181st Ave	North	2,508	\$75,200	
Glisan St	181st Ave to 202nd Ave	Both	4,550	\$136,500	
Glisan St	202nd Ave to 223rd Ave	Both	671	\$20,100	TCIP

Proposed Pedestrian CIP Projects

Location	Termini	Side of Roadway	Distance (feet)	Cost*	Funding or Constraint
Graham Rd	Sundial to Harlow	North	6,157	\$184,700	
Graham Rd	Sundial to I-84	South	6,046	\$181,400	
Grover Ct	Dead end to 55th Dr	Both	518	\$15,500	
Halsey St	162nd Ave to 181st Ave	Both	1,483	\$44,500	
Halsey St	181st Ave to 201st Ave	Both	1,858	\$55,700	TCIP
Hist Co River Hwy	244th Ave to Halsey St	North	1,515	\$45,500	
Interlachen Lane	Marine Dr to Blue Lake Rd	Both	4,203	\$126,100	
Madison Rd	Salmon St to Dead end	Both	876	\$26,300	
Orient Dr	14th St to Salquist Rd	North	95	\$2,900	
Powell Valley Rd	257th Ave to 282nd Ave	Both	518	\$155,400	
Powell Valley Rd	Burnside Rd to 257th Ave	South	216	\$6,500	TCIP
Raab Rd	Dead end to Scholls Ferry Rd	North	306	\$9,200	
Riverwood Rd	Riverside Dr to Military Rd	West	401	\$12,000	
Salmon St	61st Dr to 57th Ave	Both	1,251	\$37,500	
Scholls Ferry Ct	Dead end to Scholls Ferry Rd	Both	1,004	\$30,100	
Stark St	202nd Ave to 223rd Ave	Both	3,671	\$110,100	
Stark St	257th Ave to Troutdale Rd	North	48	\$1,400	TCIP
Stark St	Evans Ave to 35th St	South	116	\$3,500	
Sundial Rd	Marine Dr to Graham Circle	West	396	\$11,900	
Sweetbriar Ct	64th Pl to Scholls Ferry Rd	North	813	\$24,400	
Taylor St	61st Dr to 57th Ave	Both	2,080	\$62,400	
Thomas St	Dead end to Shattuck Rd	Both	1,832	\$55,000	
Troutdale Rd	Beaver Cr Ln to Cherry Park Rd	Both	512	\$15,400	
Troutdale Rd	Sweetbriar Rd to Sweetbriar Ln	East	21	\$600	
Westdale Dr	57th Ave to Dead end	Both	1,499	\$45,000	
Windsor Ct	52nd Pl to Shattuck Rd	Both	2,150	\$64,500	
Windsor Ct	Dead end to Dead end	Both	1,340	\$40,200	
Woods Ct	55th Dr to Dead end	Both	888	\$26,600	
Subtotal—other funding or constraints			8,812	\$264,400	
Subtotal—projects to evaluate			97,546	\$3,066,200	
Total			106,358	\$3,330,600	

* Cost estimated at \$30/lineal foot, rounded to nearest hundred.

Table 5
Criteria for Pedestrian Project Evaluation

Safety	<ul style="list-style-type: none"> • Have pedestrian accidents occurred at location of project? 	3
	<ul style="list-style-type: none"> • Will barriers will be mitigated or eliminated? (railroad tracks, waterways, highways, signs, fire hydrants, telephone poles) 	2
	<ul style="list-style-type: none"> • Does the project replace a substandard condition, (Existing conditions do not meet ADA, AASHTO, MUTCD or walkway is in disrepair.) 	1
	<ul style="list-style-type: none"> • Does the project increase visibility for pedestrians or of pedestrians? (lighting) 	1
Land Use (within 1/4 Mile)	<ul style="list-style-type: none"> • Regional/Town or Rural Centers 	2
	<ul style="list-style-type: none"> • Schools 	2
	<ul style="list-style-type: none"> • Parks 	1
	<ul style="list-style-type: none"> • Main Street (2040 designation) 	1
	<ul style="list-style-type: none"> • Community buildings (libraries, health clinics, post offices, government buildings) 	1
Transit	<ul style="list-style-type: none"> • Headways less than or equal to 20 minutes 	2
	<ul style="list-style-type: none"> • Headways more than 20 minutes 	1
	<ul style="list-style-type: none"> • Within 1/4 mile of transit corridor 	2
	<ul style="list-style-type: none"> • School bus routes 	2
	<ul style="list-style-type: none"> • Within 1/4 mile of a MAX station 	2
Connectivity	<ul style="list-style-type: none"> • Does the project complete a missing segment? 	2
	<ul style="list-style-type: none"> • Is the project an extension of an existing facility? 	1
Public Input	<ul style="list-style-type: none"> • Is the project supported by a group, neighborhood organization or homeowners' association? 	2
	<ul style="list-style-type: none"> • Is the project supported by an individual's concern? 	1
Aesthetics	<ul style="list-style-type: none"> • Does the project increase the appeal of a pedestrian facility or increase the perceived safety of pedestrians? 	1
Functional Classification	<ul style="list-style-type: none"> • What is the functional classification of the adjacent roadway? 	
	<ul style="list-style-type: none"> Arterial Collector 	2 1

ROADWAY, BIKEWAY AND PEDESTRIAN

CAPITAL IMPROVEMENT PROGRAM

Capital Projects

Capital improvements are projects to improve county transportation facilities where either substantial reconstruction or new construction is required. Examples of capital projects include:

- Road reconstruction
- Extensive guardrail replacement
- Sidewalk construction
- Extensive drainage improvements
- New traffic signals and upgrades to existing traffic signals
- Intersection improvements
- Road widening and the construction of new roadways
- Bikeway construction

Road maintenance projects such as crack sealing, pavement overlays, striping and signing are not funded by the Transportation Capital Improvement Program. Maintenance is funded separately in the Division's Operations and Maintenance Budget. There are instances where roads that have been developed to current standards require major reconstruction. These projects receive top funding priority. They are identified in the TCIP as maintenance repairs.

Transportation Funding Strategy

County Comprehensive Framework Plan: Policy #34: Transportation, provides guidance to the Division in developing the County transportation system.

The adopted County policy is to develop a safe and efficient trafficway system using the existing road network, and by:

- (1) Improving streets to the standards established by the road classification system;
- (2) Placing priority on maintaining existing trafficways; and
- (3) Making improvements to the existing system which maximizes its capacity rather than constructing new facilities.

This policy establishes the overall capital improvement funding strategy: to enhance the existing road system before constructing new facilities. Consequently, road maintenance requirements are funded prior to funding capital needs. Capital projects that are scheduled for construction address the most critical transportation needs based on the objective evaluation process.

TCIP Organization

The Transportation Capital Improvement Program summarizes in the following sections:

- Projects recommended for funding are determined in the Project Schedule section.

- Estimated costs and funding sources for each project.
- Scheduled project implementation and constraints to development.

The Capital Programming Process section describes in general terms the relationship between the Capital Plan and the Capital Program and describe the capital programming process in greater detail.

The Transportation Funding section discusses assumptions used to develop revenue forecasts, and provides a general description of revenue sources utilized by the Multnomah County Transportation and Land Use Division to fund capital improvements.

The Conclusion section provides a summary of transportation capital needs and funding capabilities for roadway, bikeway and pedestrian capital projects.

The final Project Schedule section describes project categories and the capital improvement schedule. Project detail sheets describe each proposed improvement. This section represents the culmination of the CIP and TCIP processes.

The BCIP section identifies revenues and describes bikeway capital improvement projects

Pedestrian Capital Improvement Program (PCIP) projects and revenue sources are identified in the PCIP.

THE CAPITAL PROGRAMMING PROCESS

The Transportation Capital Improvement Program implements necessary transportation improvements identified in the CIP. The Plan has identified the array of capital needs on the County system and established priorities among these future capital projects. The process developed to implement the Plan is illustrated in the Capital Improvement Plan and Program Flow Chart, Appendix IV. Implementing the capital plan requires budgeting available revenue to the most critical and highest ranked transportation projects.

The first major step in this process is to prepare revenue forecasts. The revenue forecast is based on future projections regarding population growth trends, number of registered motor vehicles, road miles in the County system, gas tax revenue, and federal forest receipts. (See Transportation Funding section for a complete explanation of revenue sources.)

The next major step is to determine constraints to project development. Priority one CIP projects are compared with other public and private projects occurring in County road rights-of-way. This comparison will determine if a County CIP project will need to be coordinated with other non-CIP projects. Reviewing possible development constraints will: 1) establish the date that construction could begin for each CIP project; and, 2) coordinate development activities within road rights-of-way; and, 3) reduce the costs of implementing individual projects. Coordination of construction activities in road rights-of-way can reduce costs of individual projects, but may delay construction of the road project to accommodate the other projects. Development constraints reviewed include:

1. Local jurisdictions' capital programs for sanitary sewer, water, and storm sewer systems which may delay a road project.
2. The Mt. Hood Parkway major investment study will delay several County projects along the Parkway corridor until a corridor is selected. Selection of the preferred corridor is expected in 1996.
3. Projects funded from outside revenue sources may require an environmental analysis, or other planning and decision processes that could delay a project.
4. Utility construction (water, power, sewers and communication) are coordinated with each city or utility district or utility company for each County project.
5. Right-of-way acquisition is assumed to require one year to complete.

The Development Constraints schedule (Appendix V) indicates the earliest date to begin project construction. Project dates take into account all of the known development constraints.

After revenue forecasts are prepared and the earliest construction dates are identified, the next step is to schedule projects for construction. The highest ranked projects with the earliest start dates are assigned available revenue.

Two or more projects combined into a single project when convenient or economical. For example, a signal safety project may be incorporated with a road improvement when they coincide. However, where a priority intersection project would be significantly delayed by a road project, the intersection project will remain independent of the road project. Scheduling of County projects can also be effected by scheduling and funding of other related projects (such as drainage and culverts).

The Capital Plan and Program for Multnomah County roads, signals, sidewalks and bridges (other than Willamette River Bridges) are reviewed and approved at a public hearing before the Board of County Commissioners. Prior to public hearings, new projects were solicited at three public meetings held throughout the county.

East County cities had the opportunity to review draft plans and suggest changes or resolve differences. The East Multnomah County Transportation Committee will review the recommended plan and program, and make its recommendation to County Commissioners. Upon Board approval, the first two years of the capital program will be budgeted in the Division's annual budget (Multnomah County Road Fund Budget). Projects scheduled for the third through the fifth years of the program may change as the result of the biennial update of the CIP.

TRANSPORTATION FUNDING

Introduction

Multnomah County funds many of its transportation responsibilities through the Road Fund which are a dedicated revenue source comprised primarily of transportation user fees. State Highway Trust Funds, Federal Forest Receipts and County Gasoline Taxes are the primary sources of revenue. Road funds are restricted by county ordinance or the Oregon State Constitution for road purposes only. However, these sources can be used for planning, engineering, constructing and maintaining facilities within road rights-of-way.

The total capital need identified in the CIP is \$111.6 million. The funding capability forecasted in the County Transportation Capital Improvement Program for the five-year period is estimated at \$33.1 million. Limited revenue resources, and additional requirements (i.e. permitting) do not allow all projects to be completed in an ideal timeframe. The capital program will need to be modified as revenue forecasts and capital needs change.

Revenue and cost estimates are based on historical records and the best available current information. Revenue forecasts were without factoring potential changes in state and federal sharing of transportation funding (i.e. no additional or reduced state and federal revenue).

The Transportation Funding section explains: 1) where road fund revenues (which pay for capital improvements) are derived, 2) what outside funds can be used for capital improvements, and 3) requirements of Multnomah County in allocating funds including: the Portland Intergovernmental Agreement (Portland Agreement), Willamette River Bridges requirements, road maintenance and the Bike Fund. Finally, assumptions used in developing the revenue forecasts for the CIP are discussed.

Revenue Sources

Road Fund Sources

Road fund revenues for Multnomah County are derived primarily from three sources:

1. **State Highway Trust Fund:** Revenue from this source include the State gasoline tax, weight/mile tax on trucks, and vehicle registration fees, which are each constitutionally dedicated to road-related uses. The State Highway Trust Fund is distributed to the State, counties and cities at a rate of 60%, 24% and 16% respectively, after funding the Department of Motor Vehicles. Multnomah County is expected to receive \$24.1 million in FY 96-97 in gross revenue (before distribution to the city of Portland per the 1983 Portland Agreement). One percent is dedicated to bikeways and pedestrian facilities.

2. **Federal Forest Receipts:** These revenues derive from timber cut in National Forests within Multnomah County. Under Oregon Revised Statute (ORS) 293.560, the funds received are allocated at a rate of 75% to the Road Fund and 25% to the School Fund. Annual revenue to the Road Fund is estimated at \$562,000.
3. **County Gasoline Tax:** Established under Multnomah County Code (MCC) 5.30.030 as a business license fee for Multnomah County, the one cent per gallon tax was imposed in 1977, and increased to three cents per gallon in 1981. Today, the three cents raises approximately \$7 million annually.

Other revenue in the Road Fund includes service reimbursements including fees related to new development, and interest on investments.

Outside Funds

There are two primary sources of federal funds used by Multnomah County to fund road improvements: Surface Transportation Program (STP) funds and Highway Bridge Repair and Replacement (HBRR) funds.

Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991. This act substantially modifies the way federal transportation funds are used for transportation purposes. Congress created the broad and flexible STP revenue category to replace more restrictive road funding categories. A percentage of these funds is distributed to the metropolitan region by the state. These dollars are available competitively to Multnomah County and other agencies for alternative transportation projects, as well as road projects.

Federal bridge funds (HBRR) are available to Oregon based upon a formula defining the relative condition of bridges throughout the state. This applies to the Willamette River Bridges for Multnomah County.

State funds are also available for safety improvement projects which are deemed eligible based on historical accident data. The Division applies for those funds when specific projects qualify.

Revenue Requirements

Capital Program

Annual allocations are made from the Road Fund for the Portland Agreement and for Willamette River Bridges, the County Bike and Pedestrian Fund, and road maintenance. Remaining funds are then allocated to road capital projects which may also include bikeways and pedestrians. Estimated Road Fund monies for the 1996-2000 capital program are shown on Page 81.

Fiscal Year 1996-97 projects include carryover projects, outside funded projects, and \$3.2 million for new capital projects allocated from the Road Fund. New revenue available for capital projects in FY 1997-98, 1998-99, 1999-2000 and 2000-01 is estimated to average \$1 million each year. Projects not completed in prior years will modify total capital outlay each year by the amount of carryover.

Portland Agreement

In 1984 the city of Portland and Multnomah County entered into an intergovernmental agreement to share revenues and road responsibilities related to the City's annexation of unincorporated Multnomah County. County maintained roads within the city limits of Portland were transferred to the City in conjunction with a share of the County's Road Fund dollars. The formula for sharing County road funds with the City provided for an increased share of revenue based on miles of road transferred and population increases from annexation.

The Portland Agreement was amended in 1989 so that all user fee revenues received by the County and City are shared based solely on proportional road mileage of the City and County systems. Additionally, the agreement sets forth a requirement that a minimum of \$6 million over ten years will be spent by the County on urban transition projects; \$300,000/year for road improvements inside the Portland urban service boundary, and \$300,000/year on transit streets. While the agreement resulted in a decrease in road funds available to the County, the amendment has offset the decrease. County Road Fund revenue estimated to be transferred to the City of Portland in 1996-97 is \$17 million (approximately 54% of the County's transportation budget).

Willamette River Bridges

The Portland Agreement specifies yearly allocations of funds for capital construction and maintenance on the six County-maintained Willamette River Bridges. These bridges are: the Sellwood, Hawthorne, Morrison, Burnside, Broadway, and Sauvie Island. A portion of this money is set aside (through the Portland Agreement) and subtracted from the County road funds prior to administration of the sharing formula. Another portion is subtracted from the City's allocation. (Please refer to the City of Portland Intergovernmental Agreement, amended August, 1984 for more detailed information.) Programming funds for capital construction of the Willamette River Bridges is done under the County's *Capital Improvement Plan and Program for the Willamette River Bridges* section of the Transportation Capital Improvement Program.

Road Maintenance

Historically, Multnomah County has put great emphasis on maintenance of its road system. Each budget year, the maintenance programs for the County road network and bridge system are fully funded. As a result, the County does not have a maintenance backlog on the surface street system.

Bike Fund

Under ORS 366.514, one percent of the State Highway Trust funds received by the County is to be spent on bicycle facilities or footpaths. Multnomah County has established a separate fund for bicycle and pedestrian facility development. These resources are programmed under the Bicycle Capital Improvement Program section.

Transportation Initiatives Agreement

In FY 1994-95 Multnomah County reached an agreement to transfer roads and other resources to the cities of Fairview, Troutdale and Gresham. Included in the proposed transfer is approximately 70 miles of local roads, along with revenue to maintain the roads. In FY 1996-97 Multnomah County will transfer \$426,784 to these cities which is reflected in the projected revenues available for capital improvements. The amount is adjusted annually to reflect the Portland consumer price index.

Revenue Forecast Assumptions

The following assumptions are used to develop revenue forecasts for the Transportation Capital Improvement Program.

- State Highway Trust Fund monies to be received by the County are forecast from a County model which assumes a base revenue, developed from historical data.
 1. The base revenue is shared with counties and cities at an average percentage rate of 24.38% and 15.57% respectively.
 2. Multnomah County's share of all counties' share of the State Highway Trust Fund is 16.82% (number of registered vehicles in Multnomah County/number of registered vehicles Statewide).
 3. Portland's share of State Highway Trust Fund monies is 24.85% of all cities' share which is based on a population formula.
- The Multnomah County gasoline tax raises about \$7 million annually.
- Willamette River Bridges maintenance costs and a portion of capital costs are subtracted from the County's share of the State Highway Trust Fund and County Gas Tax. Additional capital is taken from the City of Portland's share per the Portland Agreement.
 1. Willamette River Bridge maintenance costs are estimated to be \$1,866,887 in FY 1996-97.

2. The annual bridge capital requirement is \$1,500,000; \$1,060,000 from the County's share, with the remainder from Federal Forest Receipts and city of Portland.
- Federal Forest receipts are retained by the County and are not factored into the sharing formula for the Portland Agreement. Projected revenue is estimated at \$562,000/year in FY 1996-97.
 - Total revenue for sharing with the City of Portland is comprised of:
 - State Highway Trust Fund to the County
 - County Gasoline Tax (less Willamette River Bridge allocations)
 - State Highway Trust Funds to the City.
 - Revenue is shared based on the percentage of city road miles and county road miles.
 - Subtracted from the City's allocation of shared revenue is a portion of Willamette River Bridges (WRB) capital budget. This revenue is dedicated to WRB.
 - County's gasoline tax allocation of the Road Fund includes:
 - County allocation of shared revenue
 - + Urban service and WRB set asides from Portland
 - + Federal Forest receipts
 - + Funds taken off the top for WRB maintenance and capital.

Other Revenue

- County road receipts include other revenue in addition to user fees. These include: reimbursements, permits, interest and miscellaneous (excluding beginning working capital), which are expected to provide \$2,500,000 per year.
- Other revenues are projected at a constant rate, with the exception of beginning working capital.
- Beginning working capital is comprised primarily of obligated funds not yet spent, and unaccounted revenue as a result of over forecasting.

CONCLUSION

The Transportation Capital Improvement Program has been developed to implement the capital plan. The capital plan identifies projects of greatest need on the Multnomah County road system. The capital program identifies funding sources and schedules the priority one projects for construction.

Priority one projects represent capital needs that should be constructed within the 5 year program period. Priority two projects are improvements of lesser need, to be reconsidered following implementation of priority one projects. Priority three projects are identified capital needs that can be deferred and will be considered for long-range improvement.

The CIP schedules 69 Priority 1, 2, and 3 transportation projects. Total estimated liability for all 100 projects is approximately \$111.6 million in 1995 dollars. Anticipated revenue in budget years 1996 - 2000 is \$20 million. Funding requirements for Priority 1 projects is \$48.3 million which exceeds available revenue.

The capital planning and programming process is designed to ensure that limited resources for transportation capital projects will be allocated to the most critical transportation needs. The priority ranking system developed in the Plan recognized 46 priority one projects. Twenty-five of these projects have been scheduled for development in this TCIP. Also scheduled are 19 carryover projects identified in the previous capital improvement program which are under or near construction. These 44 projects (25 new plus 19 carryover) are shown in the Roadway Capital Improvement Program section. The 21 unfunded Priority 1 projects amount to approximately \$27.4 million and will be reconsidered for funding in 1997-01. The 23 unfunded Priority 2 capital projects total over \$23 million, and the 31 unfunded Priority 3 long-term capital needs total over \$40 million in 1995 dollars.

The Bikeway CIP identifies 94 projects totalling \$16.6 million. Anticipated revenue is \$225,000 in budget years 1996-2000. Many of the projects will be constructed as part of other road improvements or from potential grants. Similarly, the Pedestrian CIP requires more funds than are available. The program attempts to fund and construct those projects that demonstrate the greatest need.

Constantly changing community needs will alter County transportation program priorities over time before all projects can be constructed. The Transportation Capital Improvement Program is reviewed by the Division on an annual basis, and fully revised including public input biennially. The current CIP is based on the best available revenue and cost information, and by clear and objective means, sets forth a strategy for addressing the highest priority transportation needs.

ROADWAY CAPITAL IMPROVEMENT PROGRAM

Table 6

**1996-2000 ROADWAY CAPITAL IMPROVEMENT PROGRAM
NEW CAPITAL ALLOCATION SUMMARY
BY CATEGORY AND PRIORITY**

	Liability*	Program (FY96/97)
Priority 1		
Arterial	\$30,491,000	\$10,058,000
Collector	\$8,605,000	\$1,370,000
Bridge	\$4,397,000	
Signal/Safety	\$4,780,000	\$1,240,000
Carryover and Other	N/A	\$2,821,000
Subtotal	<u>\$48,273,000</u>	<u>\$15,489,000</u>
Priority 2		
Arterial	\$13,285,000	
Collector	\$8,454,000	
Bridge		
Signal/Safety	<u>\$1,445,000</u>	
Subtotal	<u>\$23,184,000</u>	
Priority 3		
Arterial	\$16,634,000	
Collector	\$22,020,000	
Bridge		
Signal/Safety	<u>\$1,485,000</u>	
Subtotal	<u>\$40,139,000</u>	
TOTAL	\$111,596,000	\$15,489,000

*As identified in the 1996-2000 Transportation Capital Improvement Plan

Project Categories

The Roadway Capital Improvement Program consists of eight funding categories: Arterial, Collector, Signal/Safety, Bridges, Development Support, Drainage, Guardrail, and Safety Improvements. A separate category, Carryover projects fall under one or more of these funding categories as previously allocated, but not completed, in the prior year. The Bikeway Capital Improvement Program and Pedestrian Capital Improvement Program are contained in separate sections.

Funding Category Definitions

Arterial Streets

Arterial streets carry the highest volumes of traffic on the county road system and are three to five lanes. Rural Arterial streets are 2 lanes. Arterial streets are the regional traffic arteries of the East County road system. Arterial streets continue to be the most critical need on the county road system.

Arterial streets carry traffic between cities and provide direct connection between regional activity centers. Development of a multi-modal arterial system not only insures an efficient transportation network, it also reduces the negative effects of through traffic using neighborhood streets. Consequently, the highest priority, aside from maintaining the existing system, is to make necessary improvements to the arterial streets.

Collector Streets

Collector streets are the next highest priority and carry area traffic between neighborhoods and the arterial system. Collectors are not intended to serve through traffic.

Signal Safety

Traffic signals and turn lanes at intersections facilitate traffic flow and safety. Intersection and signal improvements can be developed independent of a road project. Improvement of intersection geometry, signal timing, or adding turn lanes at intersections can provide additional capacity and safety for an entire road segment.

Bridges

Bridges in this CIP, excluding Willamette River Bridges, are integral to the County road system and should be improved as roadways are improved. For example, five narrow railroad bridges over the existing county roads will need to be widened as the roads are improved. Willamette River Bridges under Multnomah County jurisdiction can be found in the *Capital Improvement Plan and Program for the Willamette River Bridges* section of this document.

Development Support

These funds are used in coordination with private development e.g., shopping centers and subdivisions. Development Support purchases right-of-way and provides additional road improvements for the benefit of the public.

Drainage

Storm sewers, sump systems, and other drainage improvements are constructed in conjunction with road improvement projects, or where a drainage problem exists. Drainage projects are funded in conjunction with road improvement projects, or as a stand-alone project to solve a drainage problem.

A drainage improvement funded under this category could include (1) measures taken to properly drain an existing roadway (e.g. where standing water is found), and (2) measures taken to relieve adjoining property from roadway runoff impacts.

Guardrails

Guardrail installation and repair is usually funded as part of the road safety program. Guardrails are sometimes included in conjunction with a rural road project.

New guardrail installations, or replacement guardrail projects maybe independent of a road project and are funded in this category.

Safety Improvements

Monies are set aside for unanticipated traffic hazards requiring immediate attention to protect the traveling public, e.g., to repair a washed out roadway, and are funded from this category.

Traffic signal preemption devices for emergency vehicles are funded from monies set aside in this category, or are included in designated intersection improvement projects. Specific intersections have been identified for preemption devices and are listed on Page 80. Preemption devices involving Light Rail Services (Tri-Met involvement) at certain intersections require more investigation before committing funds to those devices.

Carryover

The Capital Improvement Program includes a carryover category because some road projects require more than one year to complete. Carryover funds from the previous fiscal year, and the status of these projects are shown in the 1996-2000 Transportation Capital Improvement Program.

CIP Project Schedule

The five-year Capital Improvement Program schedule is shown on Page 81. The schedule displays by year, monies allocated for right-of-way acquisition and/or construction for each programmed project. A Project Detail Sheet provides greater information on the scope of each scheduled project.

Project Detail Sheets

Project Detail Sheets describe transportation projects scheduled for construction within the Capital Improvement Program for 1996-2000. Project detail descriptions are organized by project ranking.

Information on the Project Detail Sheets include:

- * Program
- * Project Name (street name and from - to termini points);
- * New Project/Carryover
- * Page Number (page number of project in this section of the Program);
- * Map Number (the identification number on the 1996-2000 Capital Improvement Plan and Program Project Location Map);
- * Project Number (a unique number assigned for cost accounting purposes for budgeted projects, if available);
- * Project Description (brief description of the planned improvements);
- * Detail Map of Project Area (highlighting project location).
- * Programmed Improvements are denoted
- * Costs by program year

The marked boxes of the project detail sheet indicate what is included as part of the project. Funding sources and costs are allocated per budget year, and totaled.

Signalized Intersections Identified for Preemption Devices

Multnomah County is investigating the potential of installing traffic signal preemption devices to assist emergency vehicles maneuver through signalized intersections. Preemption devices allow emergency vehicles to override traffic the signal, allowing for their safe passage.

The preemption devices have been installed at twelve intersections. Eight intersections are being considered for installation. One of the intersections has been programmed for installation, and seven require further analysis as outlined below. Intersections requiring further analysis are affected by light rail for signal preemption coordination.

<u>Intersection</u>	<u>Installation</u>	
	<u>Year</u>	<u>Funding Category</u>
172nd Ave/Glisan St	1998/99	In conjunction with signal safety project
181st Ave/Burnside Rd		Requires further analysis
Stark St/Burnside Rd		Requires further analysis
188th Ave/Burnside Rd		Requires further analysis
197th Ave/Burnside Rd		Requires further analysis
172nd Ave/Burnside Rd		Requires further analysis
162nd Ave/Burnside Rd		Requires further analysis
190th Ave/Stark St		Requires further analysis

Table 7

MULTNOMAH COUNTY
DEPARTMENT OF ENVIRONMENTAL SERVICES TRANSPORTATION DIVISION
1996-2000 ROADWAY CAPITAL IMPROVEMENT PROGRAM

PROJECT NAME (From/To)	FY 1996-97	FY 1997-98	FY 1998-99	FY 1999-2000	FY 2000-01
Category: Arterial Streets					
Stark St (257th Ave/Trtid Rd)	\$1,540,000				
Halsey St (190th Ave/207th Ave)		\$2,200,000			
Halsey St/223rd Ave (Combined)	\$2,638,000				
207th Connector (Halsey St/Glisan St)	\$3,810,000				
Jenne Rd (Foster Rd/PowellBd)		\$1,660,000			
Corbett Hill Rd (1200'-2200' S of I-84)			\$310,000		
Glisan St (3500' E of 223rd Ave/242nd Ave)		\$830,000			
257th Ave (Bull Run Rd/Division St)					\$1,160,000
Powell Valley Rd (Burnside Rd/257th Ave)				\$840,000	
Glisan St (223rd Ave/3500' E of 223rd Ave)	\$2,000,000				
Glisan St (202nd Ave/207th Ave)			\$650,000		
242nd Ave Bike Lanes (Palmquist/Springwater Trail)	\$70,000				
Category: Collector Streets					
201st Ave (Halsey St/Sandy Blvd)					\$1,590,000
Hensley Rd (257th Dr/Trtid Rd)	\$670,000				
Troutdale Rd (Strebin Rd/Stark St)				\$1,370,000	
201st Ave (Halsey St/Glisan St)			\$940,000		
Bull Run Rd (Burnside Rd/257th Dr)		\$600,000			
202nd Ave (Stark St/Glisan St)				\$1,090,000	
190th Ave (Division St/Yamhill St)	\$700,000				
Category: Signal					
182nd Ave/Powell Blvd				\$360,000	
Halsey St/238th Dr	\$490,000				
Burnside Rd/242nd Dr		\$370,000			
Glisan St/172nd Ave				\$160,000	
Powell Valley Rd/257th Ave			\$560,000		
182nd Ave/Division St			\$185,000		
Foster Rd/172nd Ave				\$370,000	
Breyman and Greenwood Rd/US 43	\$50,000				
Category: Bridge					
223rd Ave RR Bridge at I-84			\$900,000		
SUBTOTAL	\$11,968,000	\$5,660,000	\$3,545,000	\$4,190,000	\$2,750,000
Category: Development Support	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Cherry Park Rd (242nd Dr/257th Ave)	\$870,000				
Category: Drainage	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Category: Maintenance Repairs					
Burnside Rd (Powell Bd/242nd Dr)		\$970,000			
Category: Pedestrian					
Sidewalk	\$110,200	\$100,000	\$100,000	\$136,500	\$131,000
Ramp Retrofit	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Category: Bicycles					
Bike Loops		\$10,000	\$10,000	\$10,000	\$10,000
Bikeways	\$85,000	\$25,000	\$260,000	\$101,800	\$140,500
Category: Safety Improvements					
Orient Dr/257th Dr Signal	\$750,000				
Lower Rocky Point Rd (state)	\$125,000				
Miscellaneous Safety Projects	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
CAPITAL BUDGET	\$14,508,200	\$7,365,000	\$4,515,000	\$5,038,300	\$3,631,500

Category: Carryover*					
Stark St (242nd Dr/257th Dr)	\$2,000	Rs			
Stark St (257th Ave/Tritl Rd)	\$150,000	R			
Stark St (223rd Av/242nd Dr)	\$24,292	Cp			
Cleveland Av (Division St/Powell B)	\$1,000	Rs			
Halsey St (190th Av/201st Av)	\$22,584	R			
Bull Run Rd (Burnside Rd/257th Dr)	\$11,536	R			
Halsey St/223rd Av	\$103,928	R,C			
Orient Dr/282nd Ave	\$13,851	Rs			
Orient Dr/257th Dr	\$263,517	R			
Stark St/202nd Av Signal	\$9,697	R			
Stark St/202nd Av Signal	\$5,000	Cp			
Stark St/174th Av Signal	\$18,261	Cp			
Stark St/162nd Av Signal	\$179,681	C			
Hist Columbia River Hwy	\$25,738	Rs			
242nd Dr (Burnside Rd/Powell Blvd)	\$8,388	R			
Troutdale Rd (Strebin Rd/Stark St)	\$140,000	R			
207th Connector					
Unit 1 (I-84/Halsey St.)	\$100,000	C			
Unit 2 (Halsey St/Glisan St)	\$420,566	C			
Traffic Signal Interconnect	\$250,000	C			

Project Status Codes: C=Construction, Cp=Complete, Cn=Cancel, D=Delay, R=ROW, Rs=Reserve funds for closeout

*Carryover funds have been budgeted in previous fiscal years and are continued until project is complete, they are not cumulative.

1996-2000 Project Detail Sheets - Index

- 1.* Stark St (257th Dr - Troutdale Rd)
2. Halsey St (190th Ave - 207th Ave)
3. 223rd Ave (Glisan St - Halsey St) and
Halsey St (207th Ave - 223rd Ave)
4. 207th Ave Connector (Halsey St - Glisan St)
5. Jenne Rd (north of Foster Rd - south of Powell Blvd)
6. Corbett Hill Rd (1,200'-2,200' south of I-84)
7. Glisan St (3500' E of 223rd Ave - 242nd Dr)
8. 257th Ave (Bull Run Rd - Division St)
9. Powell Valley Rd (Burnside Rd - 257th Dr)
10. Glisan St (400' E of 223rd Ave - 3500' E of 223rd Ave)
11. Glisan St (202nd Ave - 207th Ave)
12. 242nd Ave (Powell Blvd - Palmquist Rd)
13. 201st Ave (Halsey St - Sandy Blvd)
14. Hensley Rd (257th Dr - Troutdale Rd)
15. Troutdale Rd (Strebin Rd - Stark St)
16. 201st Ave (Halsey St - Glisan St)
17. Bull Run Rd (Burnside Rd - 257th Dr)
18. 202nd Ave (Stark St - Glisan St)
19. 190th Ave (Division St - 2,400' south of Yamhill St)
20. Powell Blvd/182nd Ave
21. Halsey St/238th Dr Intersection
22. Burnside Rd/242nd Dr Intersection
23. Glisan St/172nd Ave Intersection
24. Powell Valley Rd/257th Dr Intersection
25. Foster Rd/172nd Ave Intersection
26. Breyman & Greenwood Rd/US 43 Intersection
27. 223rd Ave Railroad Bridge at I-84
28. Cherry Park Rd (1000' E of 242nd Dr - 257th Dr)
29. Burnside Rd (Powell Blvd - 242nd Drive)
30. Orient Dr/257th Dr Intersection
31. Lower Rocky Point Rd at BNRR Crossing
32. Stark St/162nd Ave Intersection

*Number refers to page number found in upper right-hand corner of Project Detail Sheet.

New Project: ☒Carryover: ☐

Project Detail

Page No.: 1

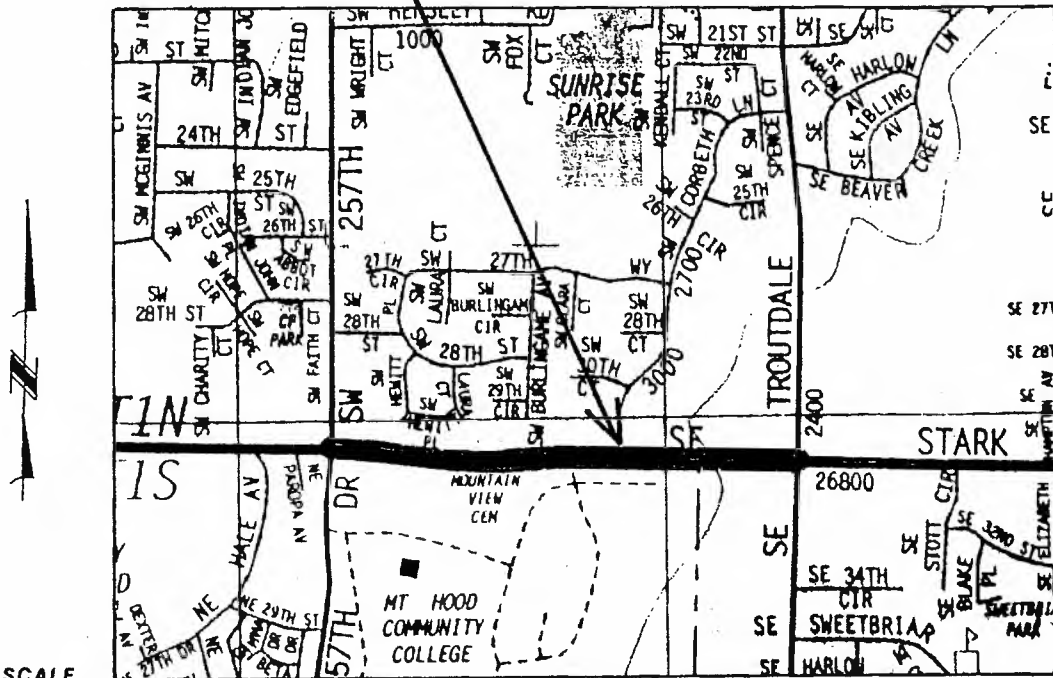
Map No.: 409

Project: SE Stark St. (257th Dr. - Troutdale Rd.)

Program: Transportation Capital

Project Description: Improve SE Stark St. to arterial standards by widening the existing two lanes to provide for four traffic lanes, a continuous left-turn lane, bike lanes, sidewalks, drainage, street lights and intersection improvements.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐SIGNAL: ☒

DRAINAGE

ROAD CONSTRUCTION: ☒SIDEWALK: ☒STORM DRAIN LINES: ☒STREAM/CREEK: ☒ILLUMINATION: ☒BRIDGES: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐INTERSEC. IMPROVE: ☒BICYCLE: ☒ROADSIDE GRADING: ☒CATCH BASIN: ☒

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$1,540,000					1,540,000
Federal:						
State:						
Local:						
Total:	\$1,540,000					1,540,000
Costs:						
ROW Cost:						
Const. Cost:	\$1,540,000					1,540,000
Total:	\$1,540,000					1,540,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 2

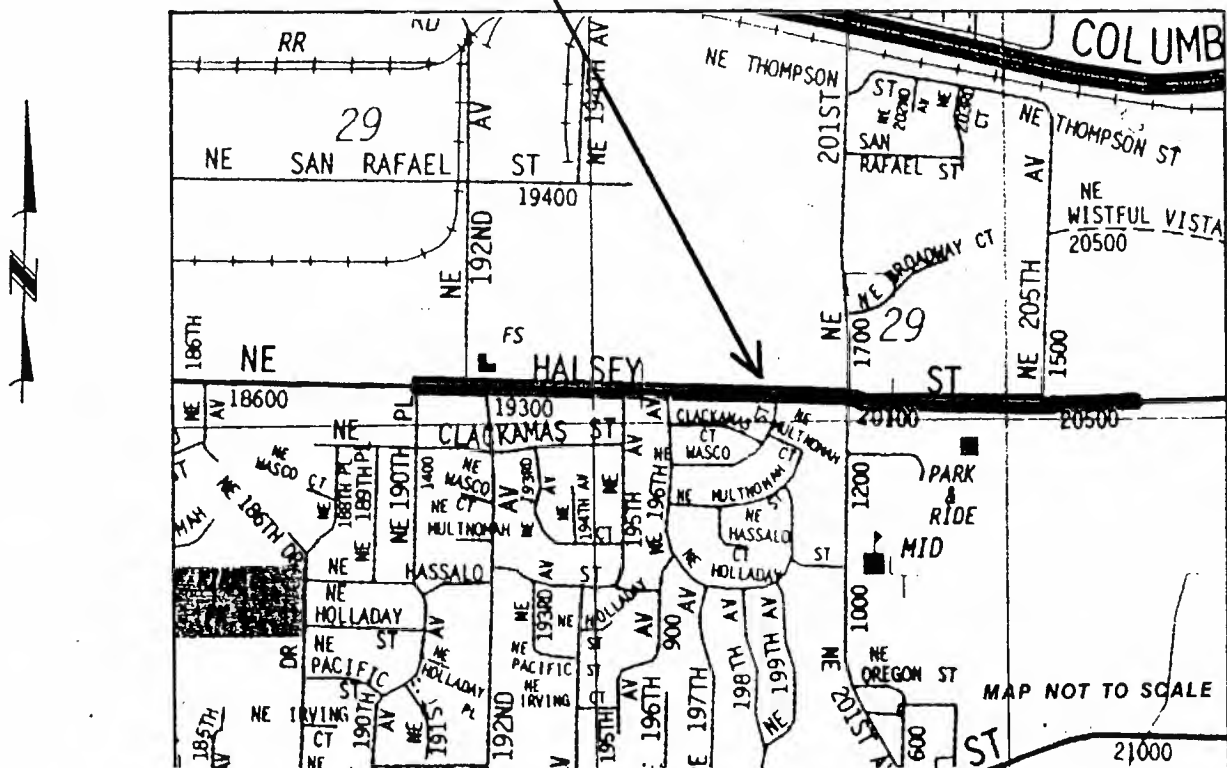
Map No.: 200

Project: NE Halsey St (190th Ave - 207th Ave)

Program: Transportation Capital

Project Description: Improve NE Halsey St to minor arterial standards by widening existing two lanes to 66' paved width including two travel lanes, a continuous left turn lane, a traffic signal, intersection improvement, sidewalks, bike lanes, and street lights. Ditch drainage is upgraded to storm sewer.

CONST. SITE

STRUCTURES: ☐SIGNAL: ☒

DRAINAGE

ROAD CONSTRUCTION: ☒SIDEWALK: ☐STORM DRAIN LINES: ☒STREAM/CREEK: ☒ILLUMINATION: ☒BRIDGES: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐INTERSEC. IMPROVE: ☒BICYCLE: ☒ROADSIDE GRADING: ☒CATCH BASIN: ☒

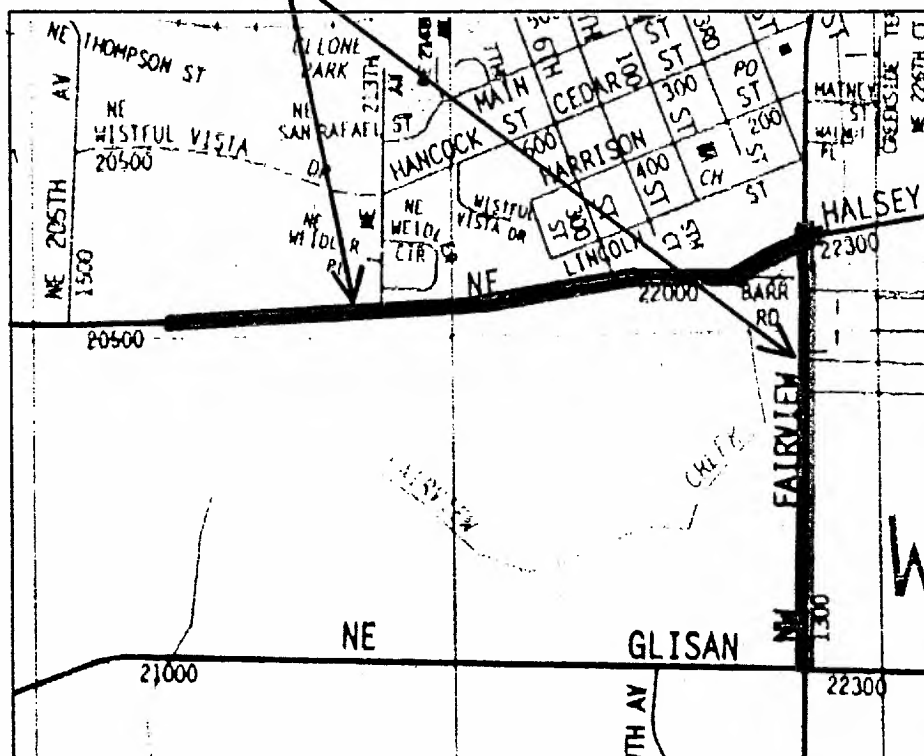
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Funding Sources:						
County:		\$2,200,000				2,200,000
Federal:						
State:						
Local:						
Total:		\$2,200,000				2,200,000
Costs:						
ROW Cost:		\$120,000				\$120,000
Const. Cost:		\$2,080,000				2,080,000
Total:		\$2,200,000				2,200,000

Project: NE Halsey St / 223rd Ave Combined Project

Program: Transportation Capital

Project Description:	Construct NE 223rd between NE Halsey St and NE Glisan St, and construct NE Halsey St between NE 207th Ave and NE 223rd Ave to minor arterial standards with two through lanes and continuous center turn lanes and new traffic signals at Halsey St / 223rd Ave.
-----------------------------	--

CONST. SITE



MAP NOT TO SCALE

STRUCTURES:

ROAD CONSTRUCTION: ☒

ILLUMINATION:

INTERSEC. IMPROVE:

SIGNAL: ☒

SIDEWALK: ☒

BRIDGES: 

BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☒

SUMP/DRY WELL INSTALL.: ☐

ROADSIDE GRADING:

STREAM/CREEK: ☒

DITCH: ☐

CATCH BASIN: ☒

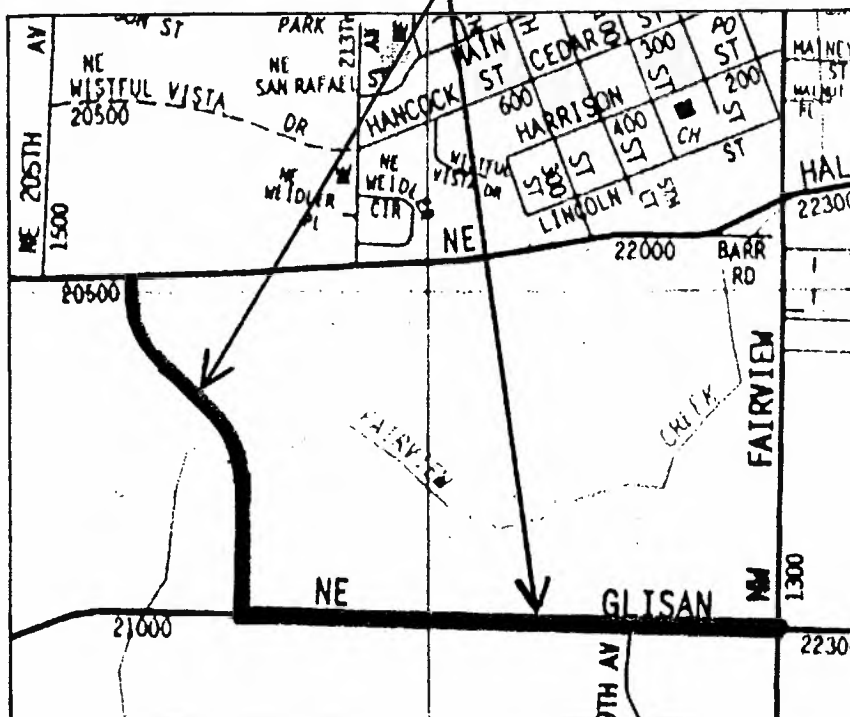
Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$2,638,000					2,638,000
Federal:						
State:						
Local:						
Total:	\$2,638,000					2,638,000
Costs:						
ROW Cost:	\$400,000					\$400,000
Const. Cost:	\$2,238,000					2,238,000
Total:	\$2,638,000					2,638,000

Page No.:	4
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Map No.: 421

Program: Transportation Capital

Project Description:	Construct new 207th Ave Connector to arterial standards between Halsey St. & Glisan St. Reconstruct Glisan St. Between 207th Ave. Connector and 223rd Ave with four lanes and intersection improvements.
-----------------------------	--



MAP NOT TO SCALE

SIGNAL: 

SIDEWALK:

BRIDGES:

BICYCLE: ☒

STORM DRAIN LINES: ☒

STREAM/CREEK: ☒

SUMP/DRY WELL INSTALL.: ☐

DITCH: ☐

ROADSIDE GRADING: ☒

CATCH BASIN: ☒

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$640,000					\$640,000
Federal:	\$3,640,000					3,640,000
State:						
Local:						
Total:	\$4,280,000					4,280,000
Costs:						
ROW Cost:						
Const. Cost:	\$4,280,000					4,280,000
Total:	\$4,280,000					4,280,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 5

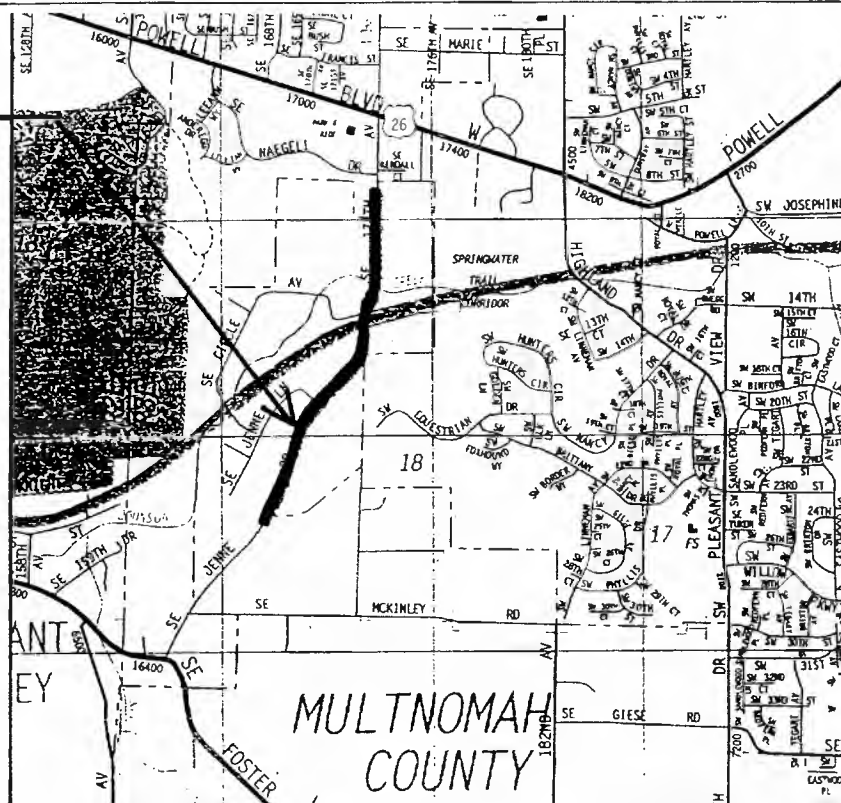
Map No.: 306

Project: Jenne Rd. (Foster Rd - Powell Blvd)

Program: Transportation Capital

Project Description: Construct Jenne Rd, 880' South of Powell Blvd and 2050' north of Foster Road to rural arterial standards with shoulder improvements, drainage and turn lanes.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☒ILLUMINATION: ☐INTERSEC. IMPROVE: ☐SIGNAL: ☐SIDEWALK: ☐BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☐SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☒STREAM/CREEK: ☒DITCH: ☒CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:		\$1,660,000				1,660,000
Federal:						
State:						
Local:						
Total:		\$1,660,000				1,660,000
Costs:						
ROW Cost:		\$500,000				\$500,000
Const. Cost:		\$1,160,000				1,160,000
Total:		\$1,660,000				1,660,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 6

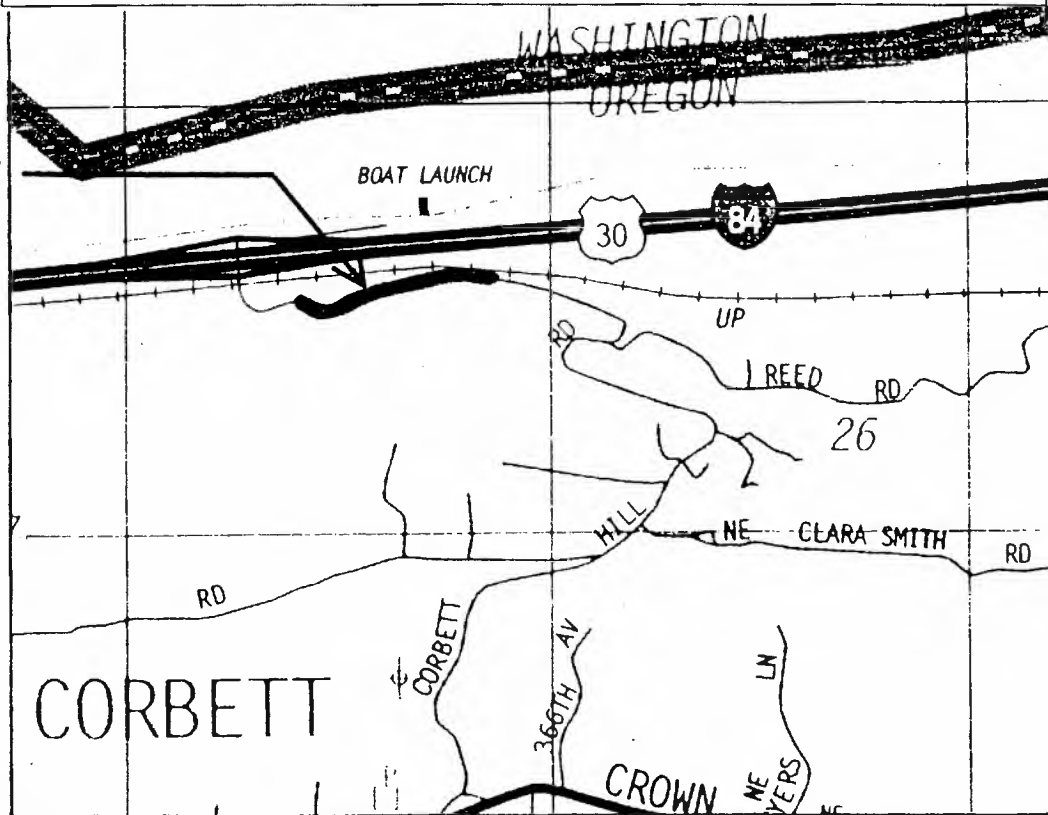
Map No.: 601

Project: Corbett Hill Rd (1200' to 2200 South of I-84)

Program: Transportation Capital

Project Description: Construct roadway with shoulder improvements as part of hillside stabilization.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐SIGNAL: ☐

DRAINAGE

ROAD CONSTRUCTION: ☒SIDEWALK: ☐STORM DRAIN LINES: ☐STREAM/CREEK: ☐ILLUMINATION: ☐BRIDGES: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☒INTERSEC. IMPROVE: ☐BICYCLE: ☐ROADSIDE GRADING: ☒CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:			\$310,000			\$310,000
Federal:						
State:						
Local:						
Total:			\$310,000			\$310,000
Costs:						
ROW Cost:			\$310,000			\$310,000
Const. Cost:			\$310,000			\$310,000
Total:			\$310,000			\$310,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 7

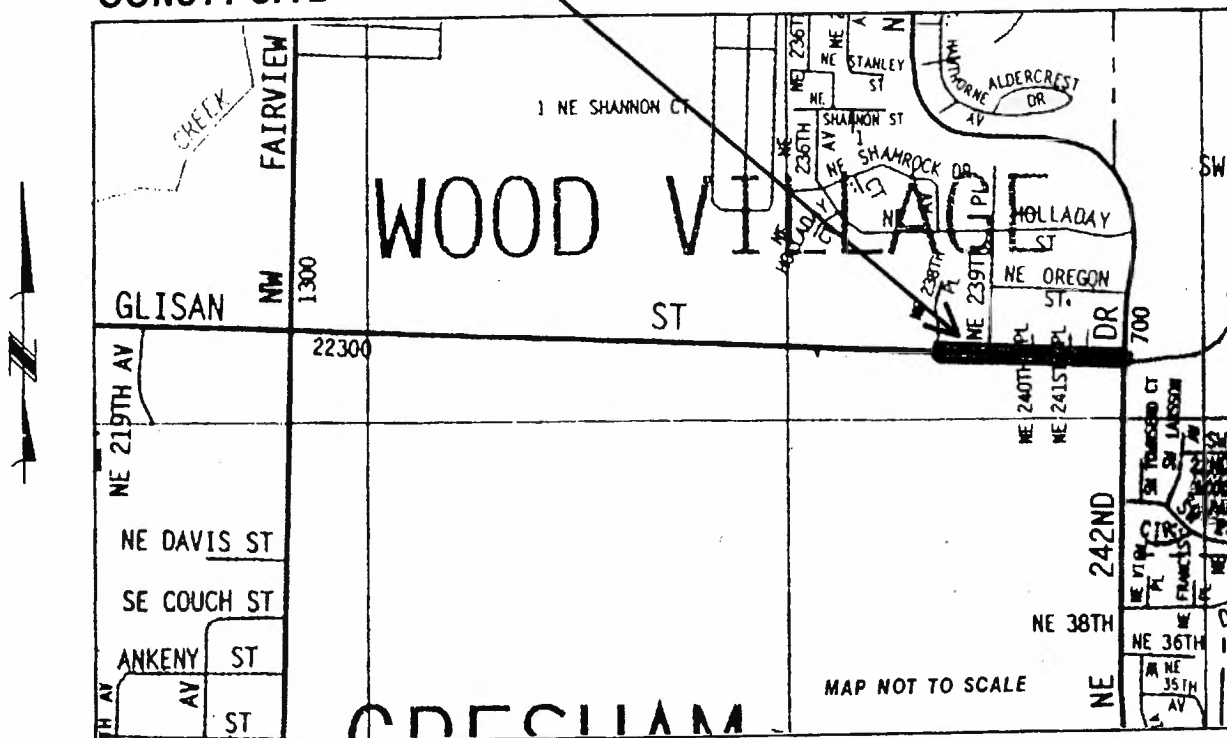
Map No.: 403

Project: NE Glisan St (3500' E of NE 223rd Ave. - NE 242nd Dr.)

Program: Transportation Capital

Project Description: Construct Glisan St. to 5 lane arterial standard including sidewalks, bike lanes and drainage improvements.

CONST. SITE

STRUCTURES: ☐SIGNAL: ☒

DRAINAGE

ROAD CONSTRUCTION: ☒SIDEWALK: ☒STORM DRAIN LINES: ☒STREAM/CREEK: ☐ILLUMINATION: ☐BRIDGES: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐INTERSEC. IMPROVE: ☒BICYCLE: ☒ROADSIDE GRADING: ☒CATCH BASIN: ☒

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:		\$830,000				\$830,000
Federal:						
State:						
Local:						
Total:		\$830,000				\$830,000
Costs:						
ROW Cost:						
Const. Cost:		\$830,000				\$830,000
Total:		\$830,000				\$830,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 8

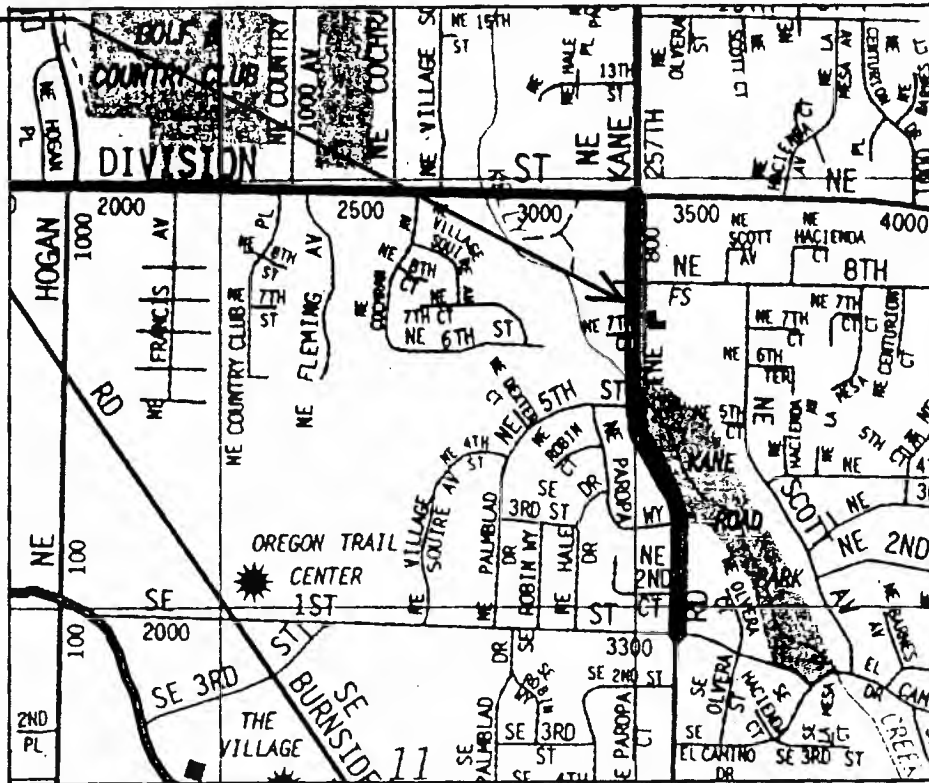
Map No.: 512

Project: 257th Ave (Bull Run Rd to Division St)

Program: Transportation Capital

Project Description: Construct 257th Ave to major arterial standards with bike lanes, sidewalks and drainage improvements.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☒ILLUMINATION: ☐INTERSEC. IMPROVE: ☐SIGNAL: ☐SIDEWALK: ☒BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☒SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☒STREAM/CREEK: ☒DITCH: ☐CATCH BASIN: ☒

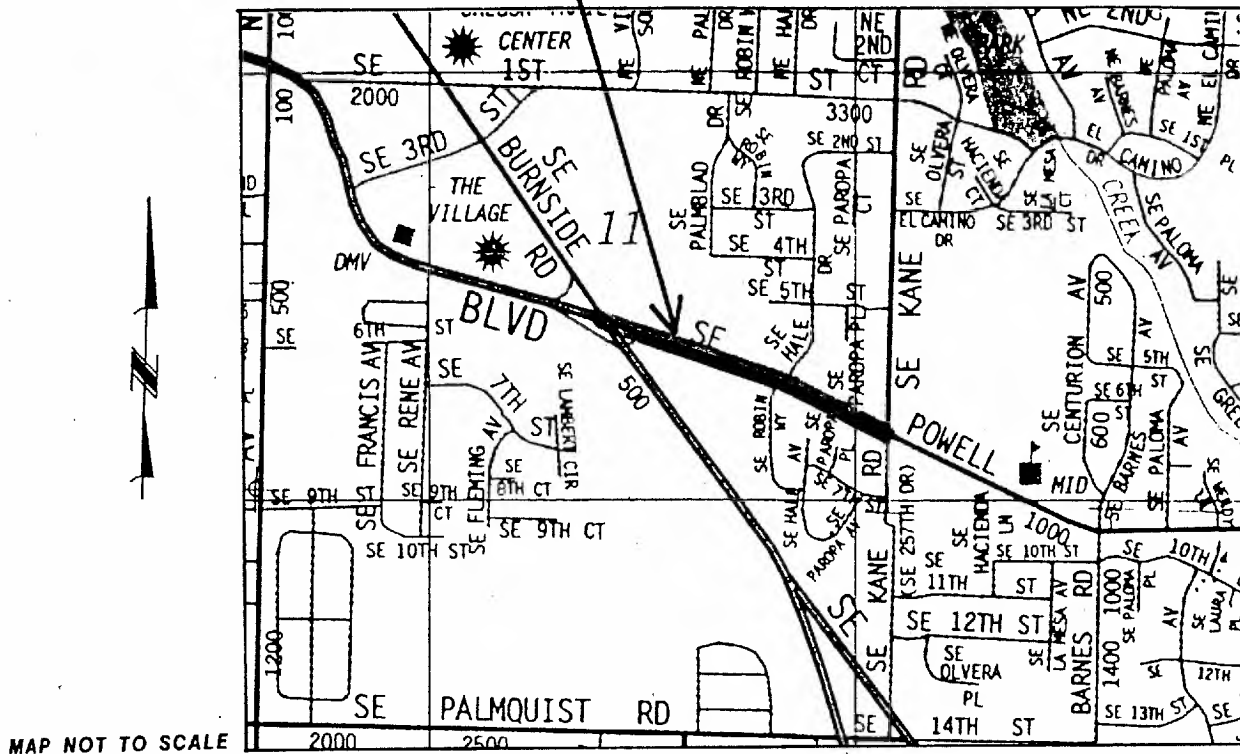
Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:					\$1,160,000	1,160,000
Federal:						
State:						
Local:						
Total:					\$1,160,000	1,160,000
Costs:						
ROW Cost:					\$1,160,000	1,160,000
Const. Cost:					\$1,160,000	1,160,000
Total:					\$1,160,000	1,160,000

Project: Powell Valley Rd (Burnside Rd to 257th Ave)

Program: Transportation Capital

Project Description:	Construct Powell Valley Rd to minor arterial standards with four travel lanes, a center turn lane, bike lanes and pedestrian facilities.
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CONST. SITE



MAP NOT TO SCALE

STRUCTURES:	<input type="checkbox"/>	SIGNAL:	<input type="checkbox"/>
ROAD CONSTRUCTION:	<input checked="" type="checkbox"/>	SIDEWALK:	<input checked="" type="checkbox"/>
ILLUMINATION:	<input type="checkbox"/>	BRIDGES:	<input type="checkbox"/>
INTERSEC. IMPROVE:	<input type="checkbox"/>	BICYCLE:	<input checked="" type="checkbox"/>

DRAINAGE	
STORM DRAIN LINES: <input checked="" type="checkbox"/>	STREAM/CREEK: <input type="checkbox"/>
SUMP/DRY WELL INSTALL.: <input type="checkbox"/>	DITCH: <input type="checkbox"/>
ROADSIDE GRADING: <input checked="" type="checkbox"/>	CATCH BASIN: <input checked="" type="checkbox"/>

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:				\$1,120,000		1,120,000
Federal:						
State:						
Local:						
Total:				\$1,120,000		1,120,000
Costs:						
ROW Cost:				\$280,000		\$280,000
Const. Cost:				\$840,000		\$840,000
Total:				\$1,120,000		1,120,000

New Project: ☐Carryover: ☒

Project Detail

Page No.: 10

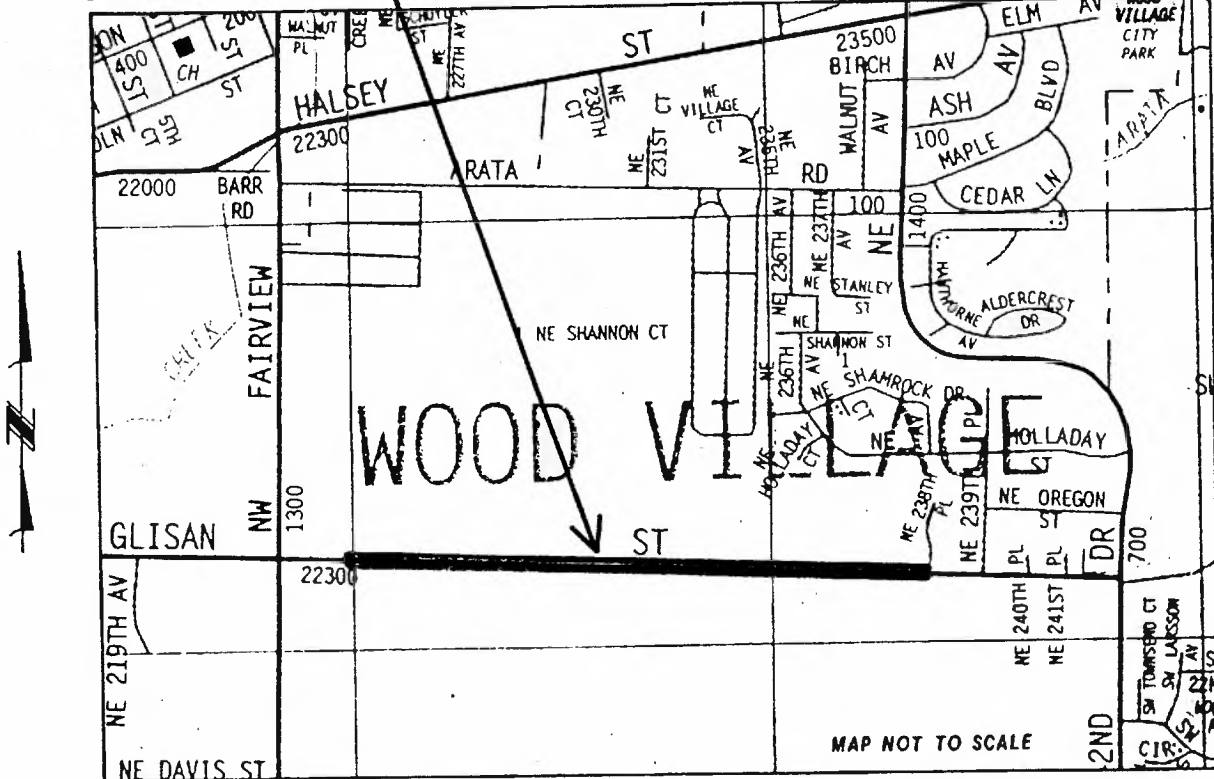
Map No.: 403

Project: NE Glisan St (400' E of 223rd Ave to 3500' E of NE 223rd Ave)

Program: Transportation Capital

Project Description: Construct Glisan St. to 5 lane arterial standard including sidewalks, bike lanes and drainage improvements.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☒SIGNAL: ☒

DRAINAGE

ROAD CONSTRUCTION: ☒SIDEWALK: ☒STORM DRAIN LINES: ☒STREAM/CREEK: ☒ILLUMINATION: ☐BRIDGES: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐INTERSEC. IMPROVE: ☒BICYCLE: ☒ROADSIDE GRADING: ☒CATCH BASIN: ☒

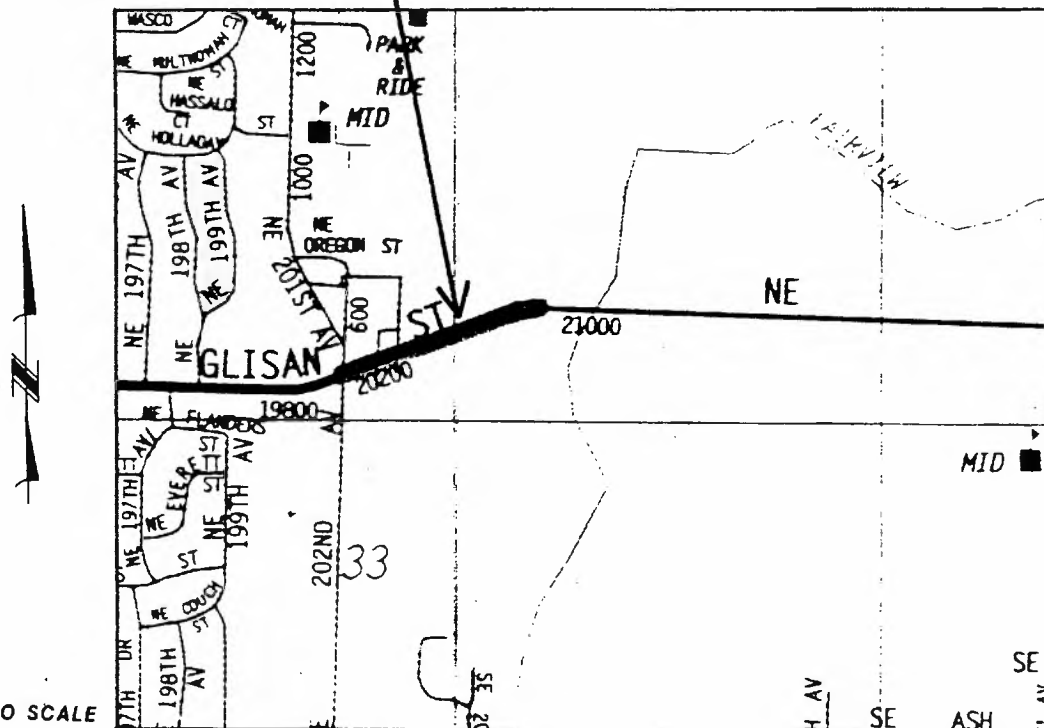
Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$1,050,000					1,050,000
Federal:						
State:						
Local:						
Total:	\$1,050,000					1,050,000
Costs:						
ROW Cost:	\$156,000					\$156,000
Const. Cost:	\$2,000,000					2,000,000
Total:	\$2,156,000					2,156,000

Project: NE Glisan St (NE 202nd Ave - NE 207th Ave)

Program: Transportation Capital

Project Description:	Construct Glisan St. to arterial standards including bike lanes, sidewalks, two travel lanes in each direction, center turn lane and drainage improvements.
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CONST. SITE



MAP NOT TO SCALE

STRUCTURES:

ROAD CONSTRUCTION: ☒

ILLUMINATION: ☐

INTERSEC. IMPROVE:

SIGNAL:

SIDEWALK:

BRIDGES:

BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☒

SUMP/DRY WELL INSTALL: ☐

ROADSIDE GRADING: ☒

STREAM/CREEK: ☒

DITCH:

CATCH BASIN: ☒

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:			\$650,000			\$650,000
Federal:						
State:						
Local:						
Total:			\$650,000			\$650,000
Costs:						
ROW Cost:						
Const. Cost:			\$650,000			\$650,000
Total:			\$650,000			\$650,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 12

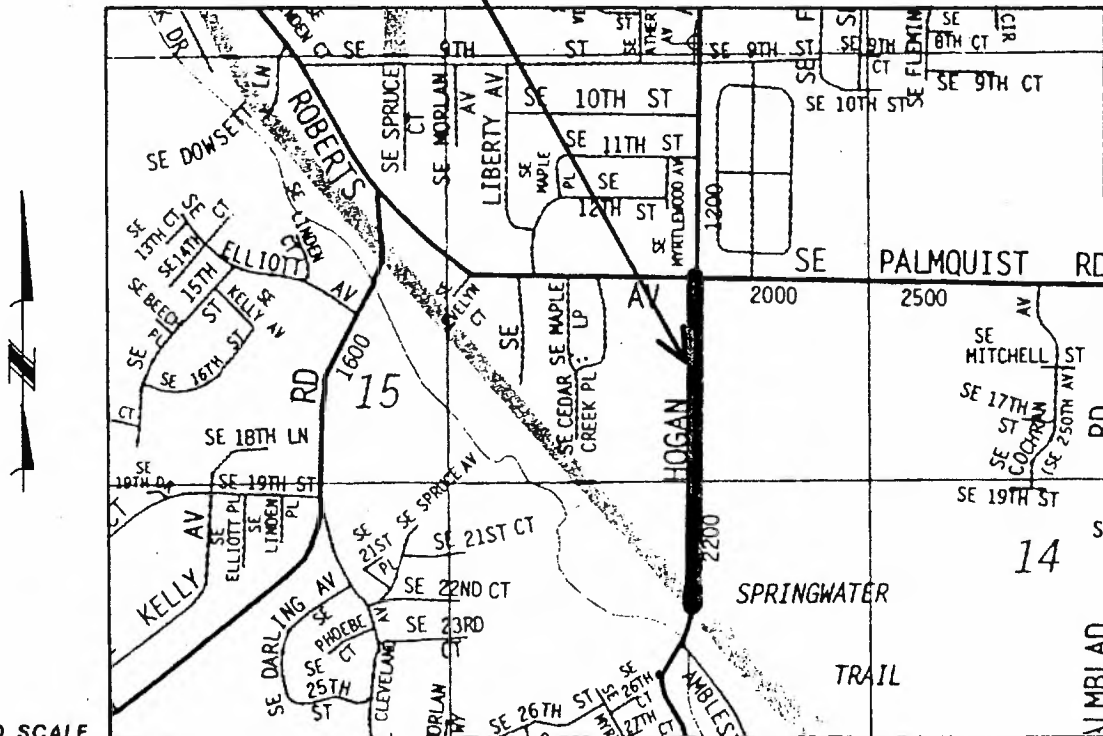
Map No.: 510

Project: 242nd Dr. (Springwater Trail - Palmquist Rd)

Program: Transportation Capital

Project Description: Project would extend 242nd Dr bikeway from Palmquist Rd to Springwater Trail.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☐ILLUMINATION: ☐INTERSEC. IMPROVE: ☒SIGNAL: ☐SIDEWALK: ☐BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☐SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☐STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☐

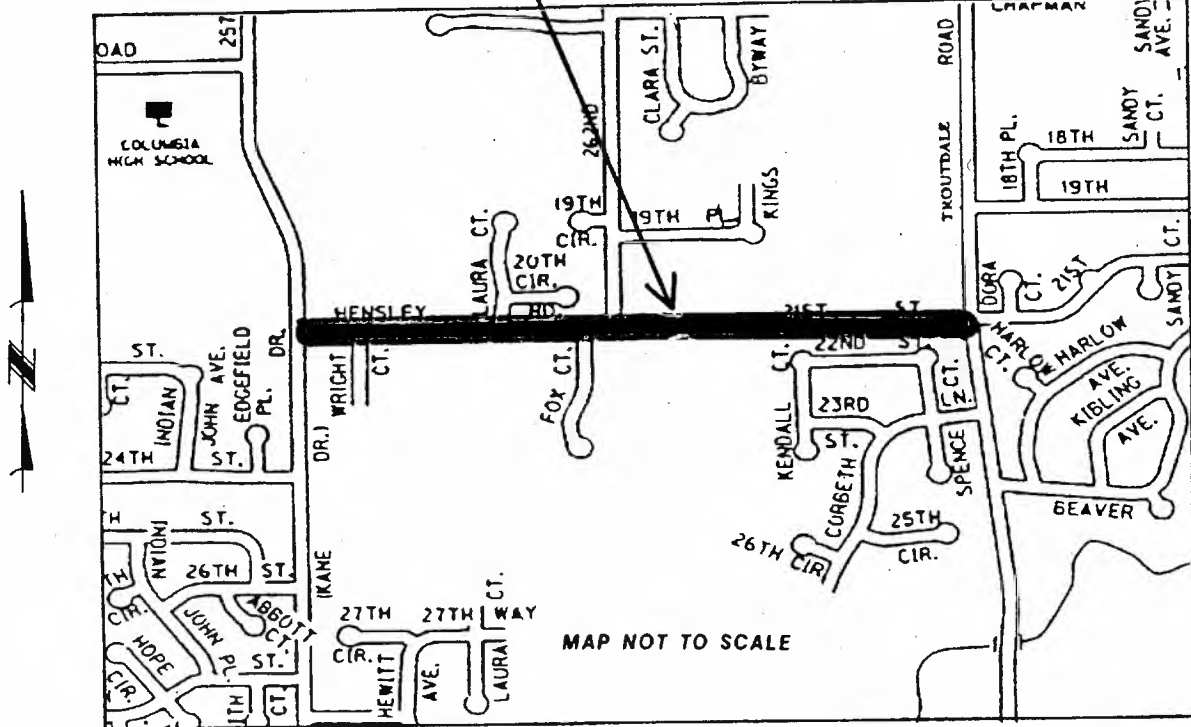
Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$70,000					\$70,000
Federal:						
State:						
Local:						
Total:	\$70,000					\$70,000
Costs:						
ROW Cost:	\$25,000					\$25,000
Const. Cost:	\$45,000					\$45,000
Total:	\$70,000					\$70,000

Project: Hensley Road (257th Ave - Troutdale Rd)

Program: Transportation Capital

Project Description:	NE Hensley Road will be developed to neighborhood collector standards to include two traffic lanes, sidewalks and intersection improvements. Storm sewer will be installed.
-----------------------------	---

CONST. SITE



STRUCTURES:

SIGNAL:

ROAD CONSTRUCTION:

SIDEWALK: 

ILLUMINATION:

BRIDGES: 

INTERSEC. IMPROVE: ☒

BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☒

STREAM/CREEK: ☐

SUMP/DRY WELL INSTALL.: ☐

DITCH: ☐

ROADSIDE GRADING: ☒

CATCH BASIN: ☒

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$670,000					\$670,000
Federal:						
State:						
Local:						
Total:	\$670,000					\$670,000
Costs:						
ROW Cost:						
Const. Cost:	\$670,000					\$670,000
Total:	\$670,000					\$670,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 15

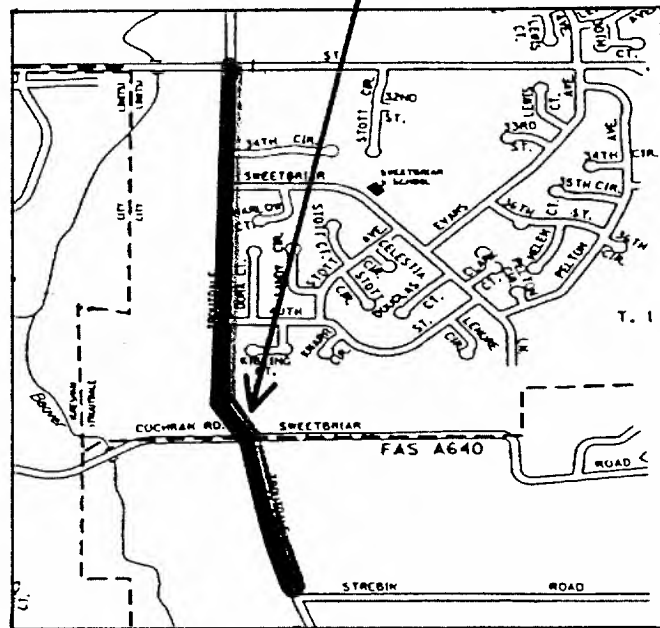
Map No.: 434

Project: Troutdale Rd. (Strebin Rd - Stark St.)

Program: Transportation Capital

Project Description: SE Troutdale Road will be improved from two lanes to collector standards with two traffic lanes, a center left turn lane, bike lanes and sidewalks. Intersection improvements and storm drainage are included in the improvement.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☒ILLUMINATION: ☐INTERSEC. IMPROVE: ☒SIGNAL: ☐SIDEWALK: ☒BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☐SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☐STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:				\$1,370,000		1,370,000
Federal:						
State:						
Local:						
Total:				\$1,370,000		1,370,000
Costs:						
ROW Cost:				\$360,000		\$360,000
Const. Cost:				\$1,010,000		1,010,000
Total:				\$1,370,000		1,370,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 16

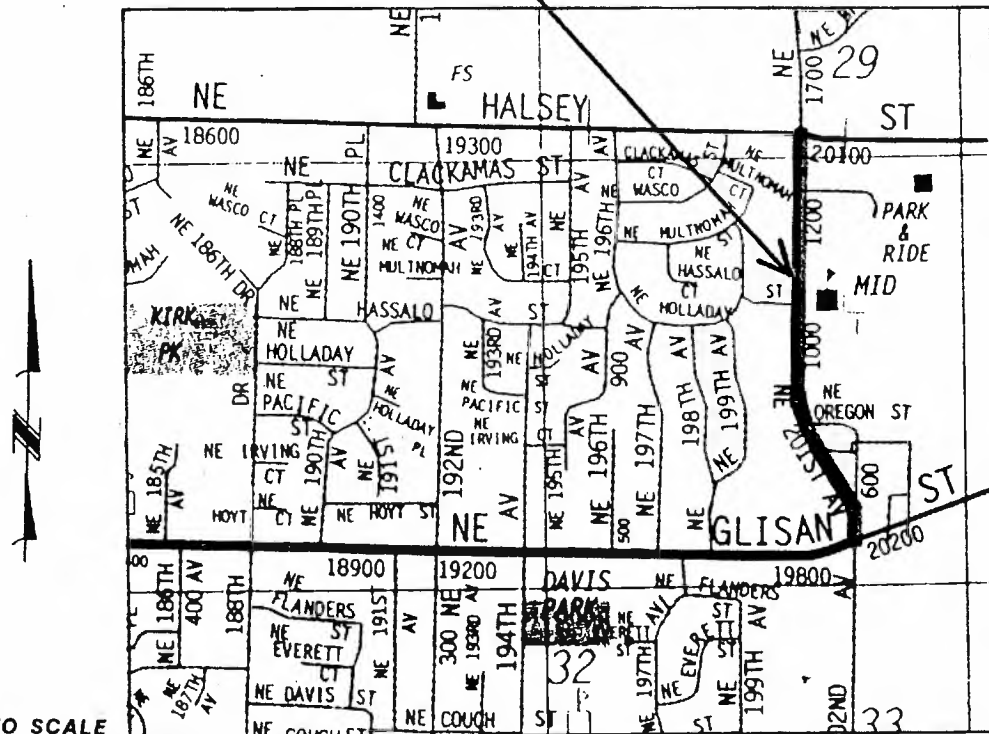
Map No.: 240

Project: NE 201st Ave (Halsey St to Glisan St)

Program: Transportation Capital

Project Description: Construct 201st Ave to urban collector standards with sidewalks and bike lanes.

CONST. SITE

STRUCTURES: ☐ROAD CONSTRUCTION: ☒ILLUMINATION: ☐INTERSEC. IMPROVE: ☒SIGNAL: ☐SIDEWALK: ☒BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☒SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☒STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☒

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:			\$1,050,000			1,050,000
Federal:						
State:						
Local:						
Total:			\$1,050,000			1,050,000
Costs:						
ROW Cost:			\$110,000			\$110,000
Const. Cost:			\$940,000			\$940,000
Total:			\$1,050,000			1,050,000

New Project: ☐Carryover: ☒

Project Detail

Page No.: 17

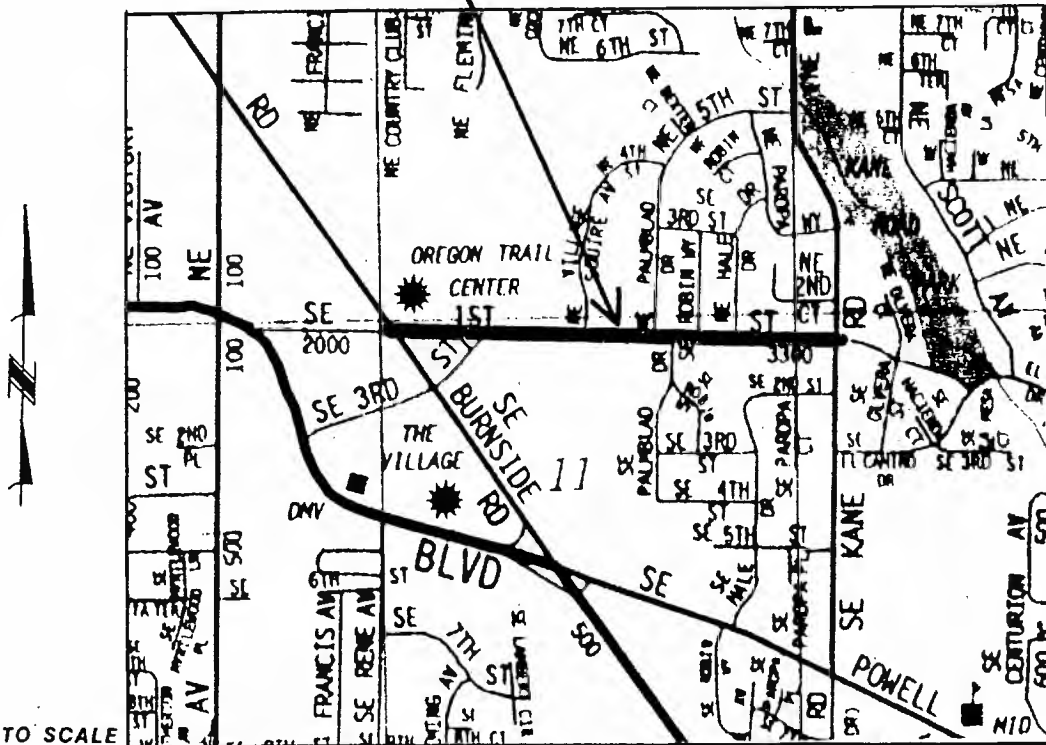
Map No.: 521

Project: Bull Run St. (Burnside Rd - SE 257th Dr.)

Program: Transportation Capital

Project Description: Construct Bull Run St. to collector standards with a center turn lane, sidewalk and drainage improvements.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☒ILLUMINATION: ☐INTERSEC. IMPROVE: ☐SIGNAL: ☐SIDEWALK: ☒BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☒SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☒STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☒

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:		\$600,000				\$600,000
Federal:						
State:						
Local:						
Total:		\$600,000				\$600,000
Costs:						
ROW Cost:						
Const. Cost:		\$600,000				\$600,000
Total:		\$600,000				\$600,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 18

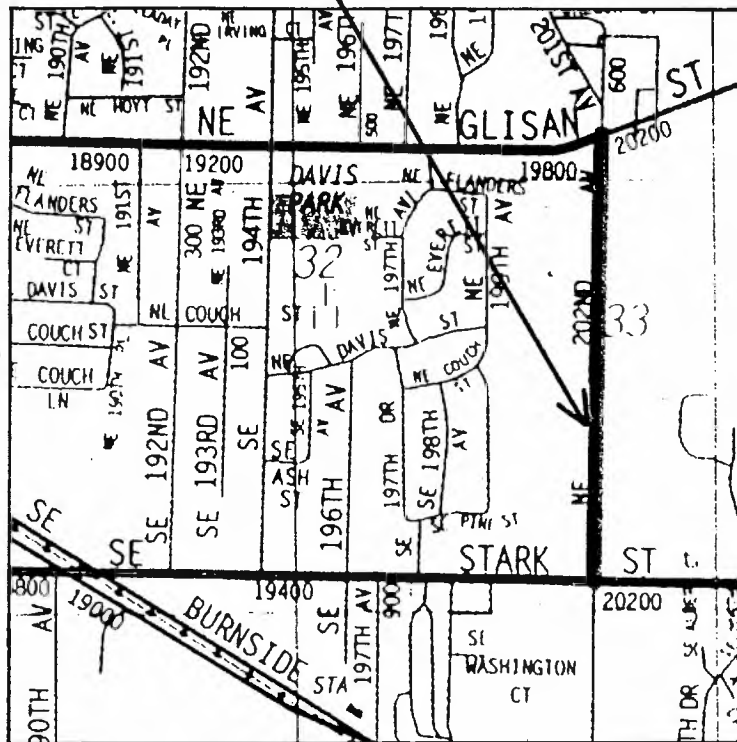
Map No.: 210

Project: NE/SE 202nd Ave (Stark St to Glisan St)

Program: Transportation Capital

Project Description: Construct 202nd Ave to collector standards with bike lanes and sidewalks.

CONST. SITE

STRUCTURES: ☐ROAD CONSTRUCTION: ☒ILLUMINATION: ☐INTERSEC. IMPROVE: ☐SIGNAL: ☐SIDEWALK: ☒BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☒SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☒STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☒

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:				\$1,220,000		1,220,000
Federal:						
State:						
Local:						
Total:				\$1,220,000		1,220,000
Costs:						
ROW Cost:				\$130,000		\$130,000
Const. Cost:				\$1,090,000		1,090,000
Total:				\$1,220,000		1,220,000

Program: Transportation Capital

Project Description:	Improve SE 190th Ave to collector standard from 2,400' south of Yamhill St to Division St. with two travel lanes, center turn lane and sidewalks.
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[illegible]

MAP NOT TO SCALE

STRUCTURES: ☐

ROAD CONSTRUCTION: ☒

ILLUMINATION: ☒

INTERSEC. IMPROVE: ☐

SIGNAL: ☐
DEWALK: ☒
BRIDGES: ☐
BICYCLE: ☐

DRAINAGE

STORM DRAIN LINES: ☒ STREAM/CREEK: ☐
SUMP/DRY WELL INSTALL.: ☐ DITCH: ☐
ROADSIDE GRADING: ☒ CATCH BASIN: ☒

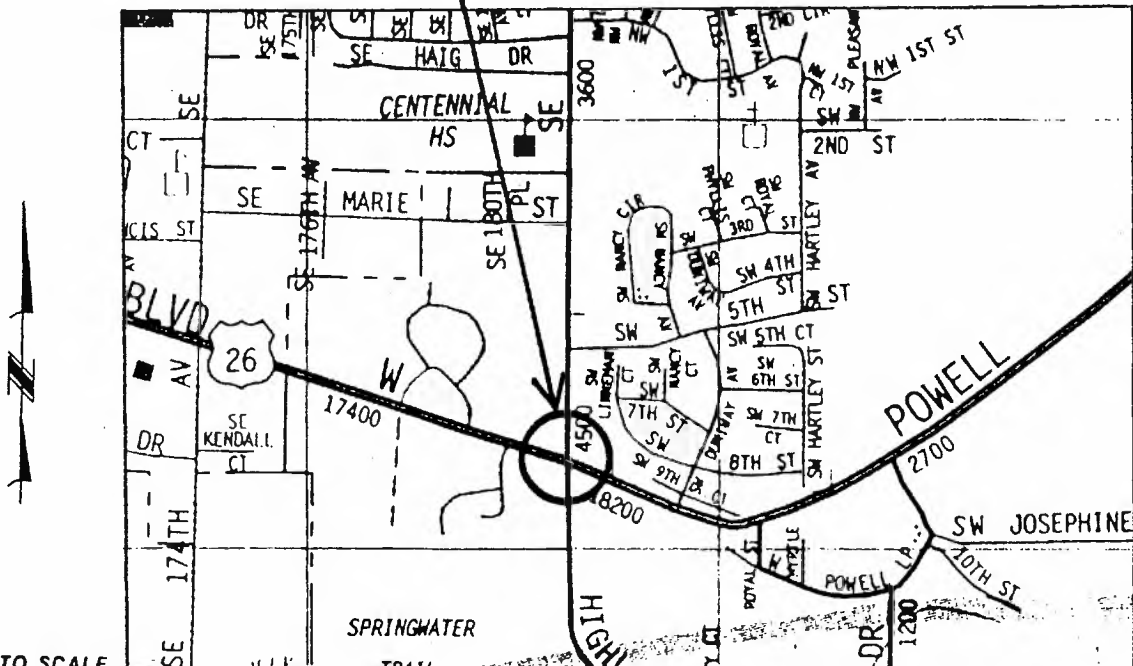
Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$700,000					\$700,000
Federal:						
State:						
Local:						
Total:	\$700,000					\$700,000
Costs:						
ROW Cost:						
Const. Cost:	\$70,000					\$70,000
Total:	\$70,000					\$70,000

Project: SE Powell Blvd / SE 182nd Ave

Program: Transportation Capital

Project Description:	Construct intersection improvements including additional turn lanes.
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CONST. SITE



MAP NOT TO SCALE

STRUCTURES: 

SIGNAL: ☒

DRAINAGE

ROAD CONSTRUCTION: ☐

SIDEWALK:

STORM DRAIN LINES:

STREAM/CREEK: ☐

ILLUMINATION: ☐

BRIDGES:

SUMP/DRY WELL INSTALL.: ☐

DITCH:

INTERSEC. IMPROVE: ☒

BICYCLE: ☒

ROADSIDE GRADING: ☐

CATCH BASIN:

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:				\$340,000		\$340,000
Federal:						
State:						
Local:						
Total:				\$340,000		\$340,000
Costs:						
ROW Cost:				\$50,000		\$50,000
Const. Cost:				\$290,000		\$290,000
Total:				\$340,000		\$340,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 21

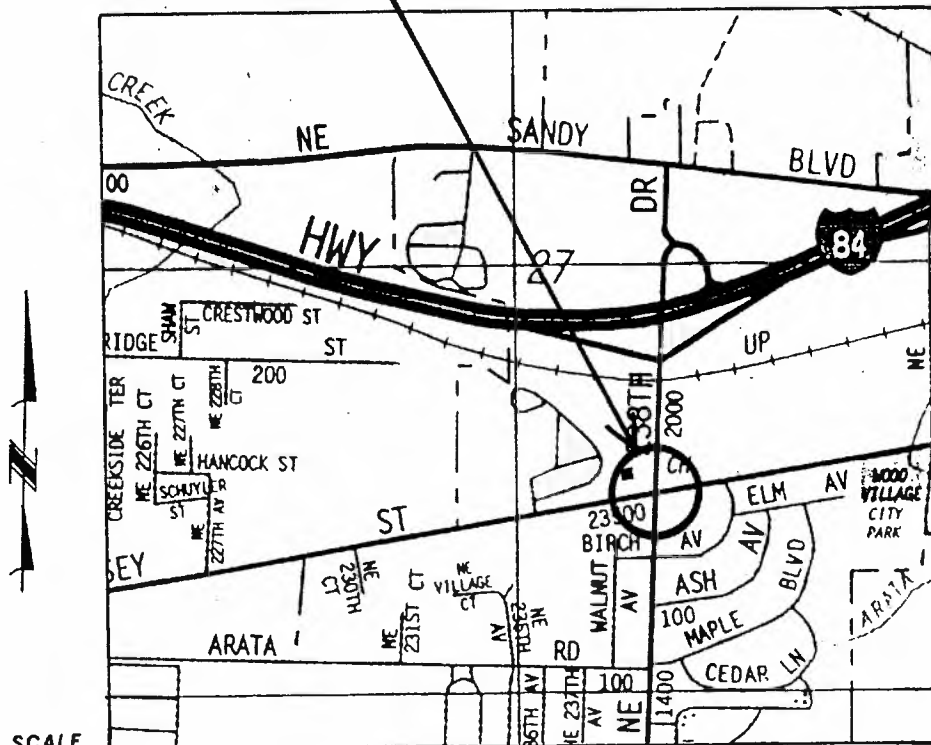
Map No.: 451

Project: NE Halsey St / 238th Ave.

Program: Transportation Capital

Project Description: Install new traffic signal at the intersection of NE Halsey St and 238th Ave, including new sidewalks, turn lane improvement, and street lights. Project will be coordinated with ODOT interchange improvements at I-84.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☐ILLUMINATION: ☒INTERSEC. IMPROVE: ☒SIGNAL: ☒SIDEWALK: ☒BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☐SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☐STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$244,000					\$244,000
Federal:	\$246,000					\$246,000
State:						
Local:						
Total:	\$490,000					\$490,000
Costs:						
ROW Cost:						
Const. Cost:	\$490,000					\$490,000
Total:	\$490,000					\$490,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 22

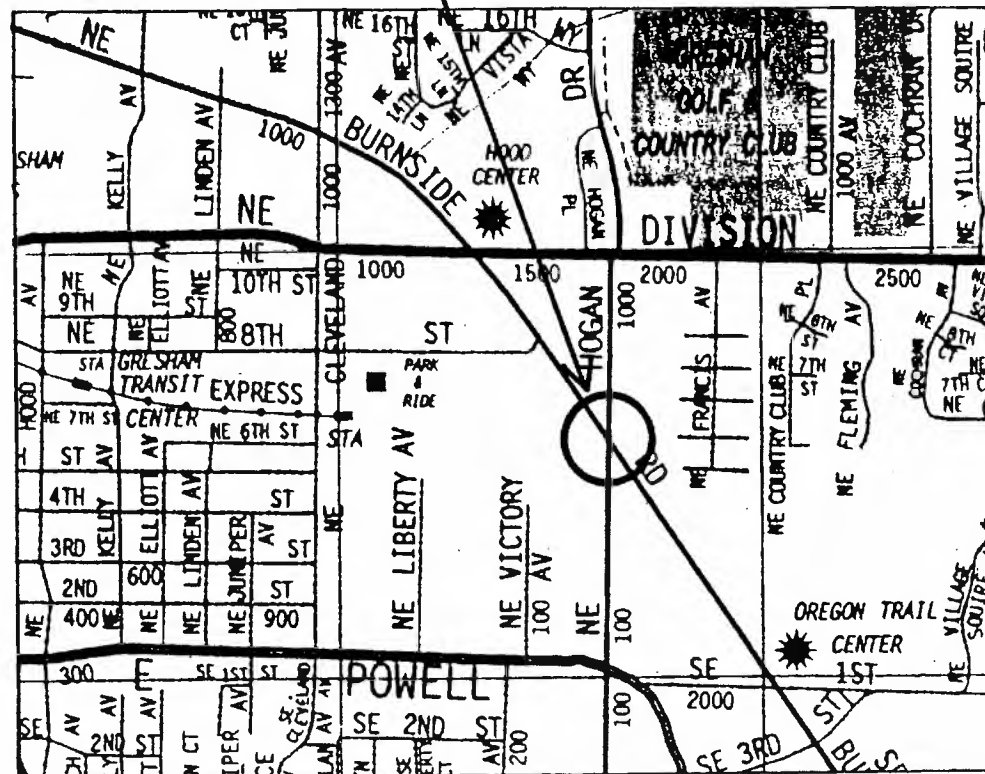
Map No.: 559

Project: Burnside Rd / 242nd Dr Signal

Program: Transportation Capital

Project Description: Construct intersection improvements with turn lanes and new signals.

CONST. SITE

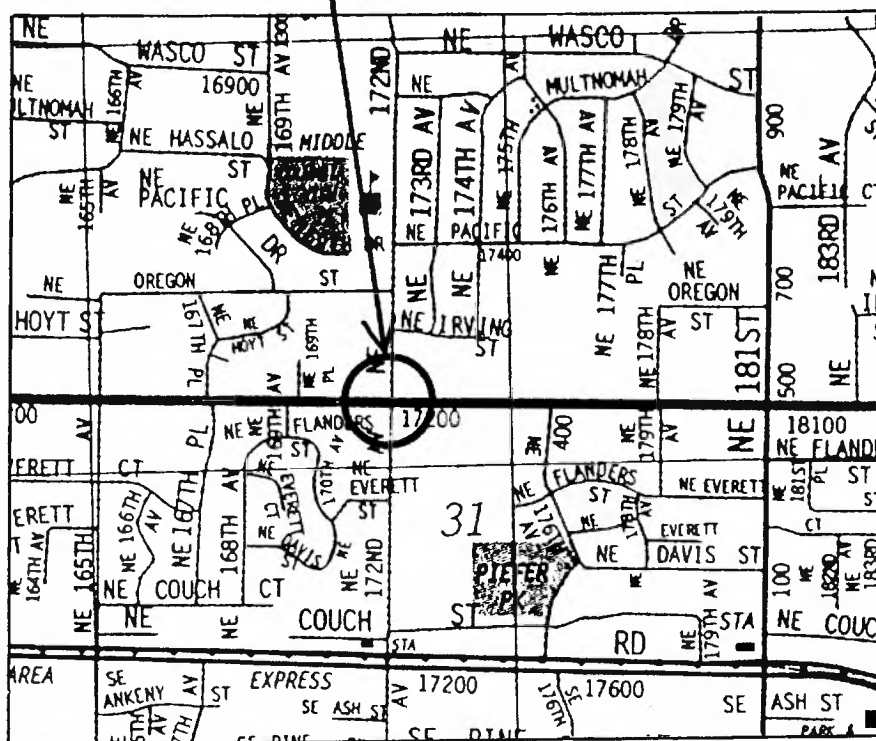
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DRAINAGE

STORM DRAIN LINES: ☐SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☐STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:		\$370,000				\$370,000
Federal:						
State:						
Local:						
Total:		\$370,000				\$370,000
Costs:						
ROW Cost:						
Const. Cost:		\$370,000				\$370,000
Total:		\$370,000				\$370,000

Project Description:	Upgrade traffic signal.
-----------------------------	-------------------------



STRUCTURES:

SIGNAL: ☒

SIDEWALK:

BRIDGES:

BICYCLE: ☐

DRAINAGE

STORM DRAIN LINES:

SUMP/DRY WELL INSTALL.: ☐

ROADSIDE GRADING: ☐

STREAM/CREEK: ☐

DITCH:

CATCH BASIN:

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:			\$165,000			\$165,000
Federal:						
State:						
Local:						
Total:			\$165,000			\$165,000
Costs:						
ROW Cost:			\$5,000			\$5,000
Const. Cost:			\$160,000			\$160,000
Total:			\$165,000			\$165,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 24

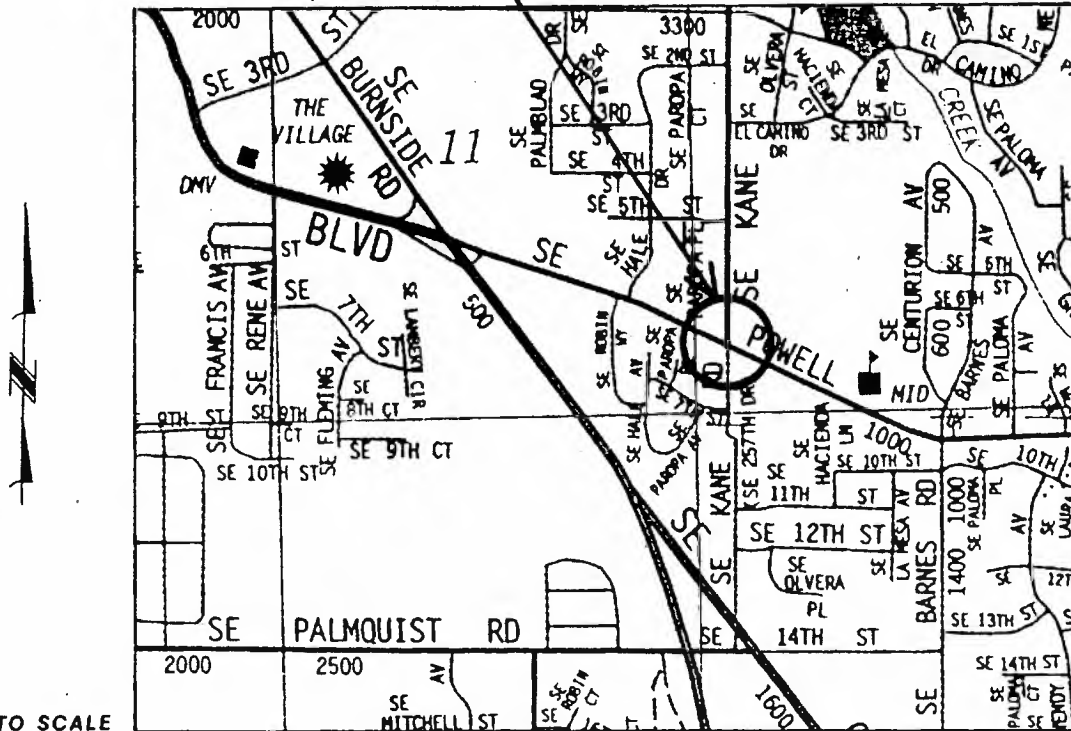
Map No.: 551

Project: SE Powell Valley Rd / SE 257th Dr

Program: Transportation Capital

Project Description: Construct intersection improvements with turn lanes, traffic signal, bike lanes and sidewalks.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☐ILLUMINATION: ☐INTERSEC. IMPROVE: ☒SIGNAL: ☒SIDEWALK: ☒BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☒SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☒STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☒

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:			\$560,000			\$560,000
Federal:						
State:						
Local:						
Total:			\$560,000			\$560,000
Costs:						
ROW Cost:			\$65,000			\$65,000
Const. Cost:			\$495,000			\$495,000
Total:			\$560,000			\$560,000

New Project: ☒

Project Detail

Page No.: 25

Carryover: ☐

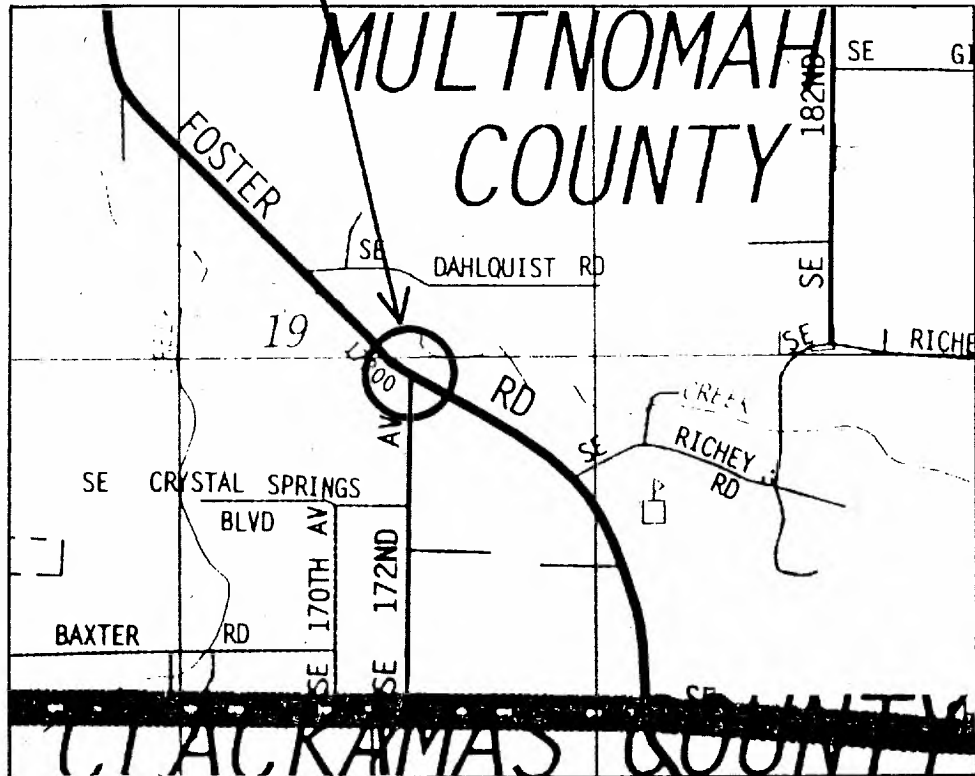
Map No.: 358

Project: SE Foster Rd at 172nd Ave

Program: Transportation Capital

Project Description: Install traffic signal and construct bike and pedestrian improvements.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐SIGNAL: ☒

DRAINAGE

ROAD CONSTRUCTION: ☐SIDEWALK: ☐STORM DRAIN LINES: ☐STREAM/CREEK: ☐ILLUMINATION: ☐BRIDGES: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐INTERSEC. IMPROVE: ☒BICYCLE: ☒ROADSIDE GRADING: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:				\$370,000		\$370,000
Federal:						
State:						
Local:						
Total:				\$370,000		\$370,000
Costs:						
ROW Cost:				\$10,000		\$10,000
Const. Cost:				\$360,000		\$360,000
Total:				\$370,000		\$370,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 26

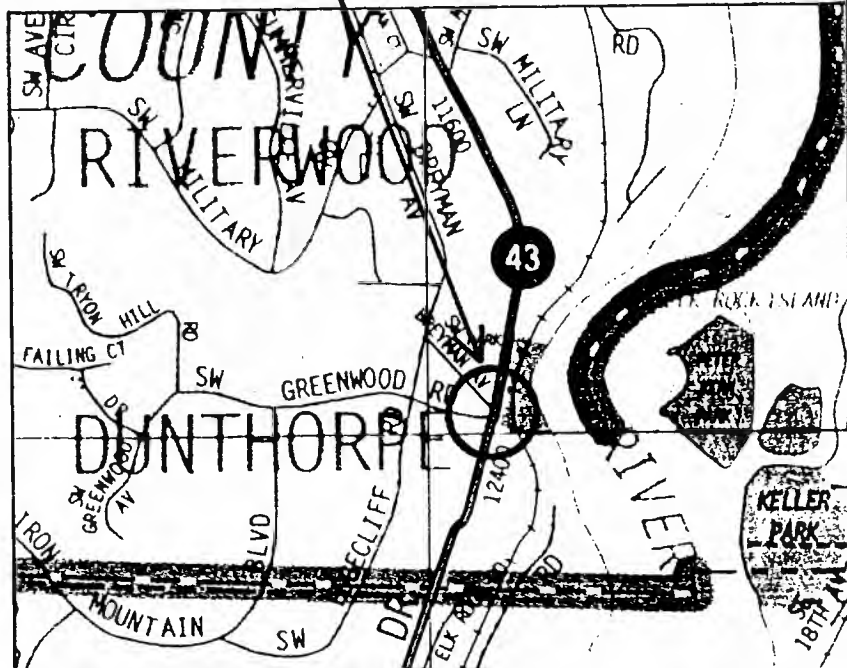
Map No.:

Project: SW Breyman & Greenwood Rd @ US 43

Program: Transportation Capital

Project Description: Install new traffic signal and construct safety improvements by reconfiguring intersection.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☐ILLUMINATION: ☐INTERSEC. IMPROVE: ☒SIGNAL: ☒SIDEWALK: ☐BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☐SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☐STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:						
Federal:	\$50,000					\$50,000
State:						
Local:						
Total:	\$50,000					\$50,000
Costs:						
ROW Cost:	\$10,000					\$10,000
Const. Cost:	\$40,000					\$40,000
Total:	\$50,000					\$50,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 27

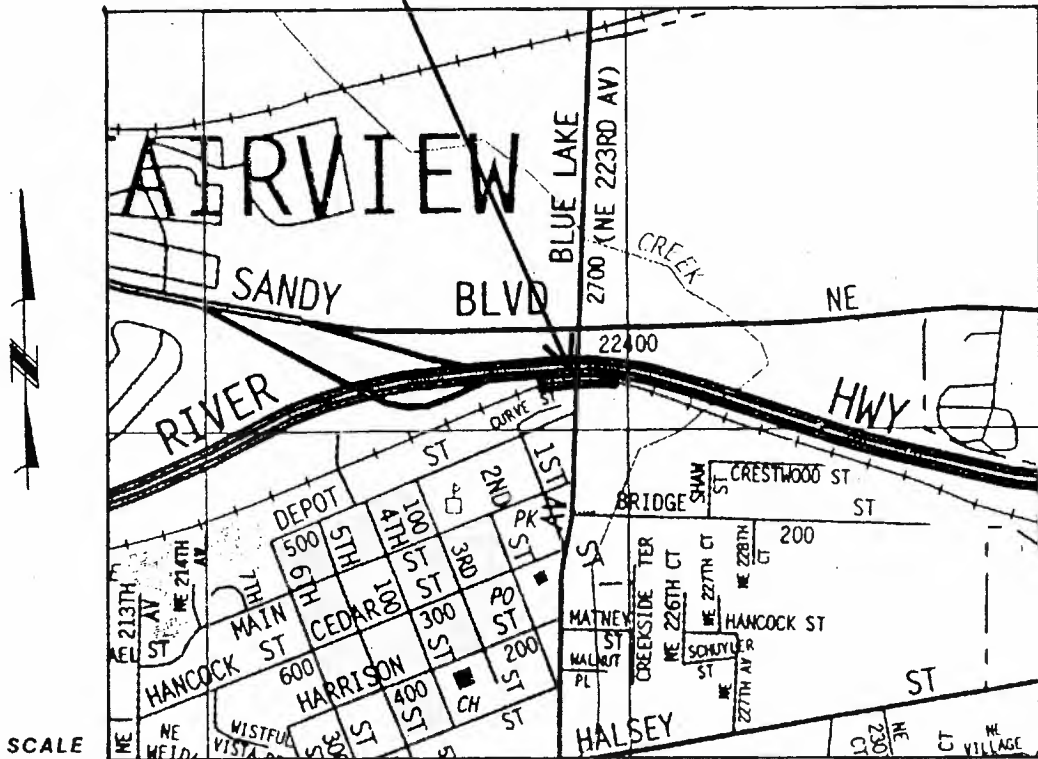
Map No.: 438

Project: NE 223rd Ave Railroad Bridge @ I-84

Program: Transportation Capital

Project Description: Construct new railroad bridge to accommodate 223rd Ave with bike lanes and sidewalks.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☒ILLUMINATION: ☐INTERSEC. IMPROVE: ☐SIGNAL: ☐SIDEWALK: ☒BRIDGES: ☒BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☐SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☐STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:			\$900,000			\$900,000
Federal:						
State:						
Local:						
Total:			\$900,000			\$900,000
Costs:						
ROW Cost:			\$10,000			\$10,000
Const. Cost:			\$890,000			\$890,000
Total:			\$900,000			\$900,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 30

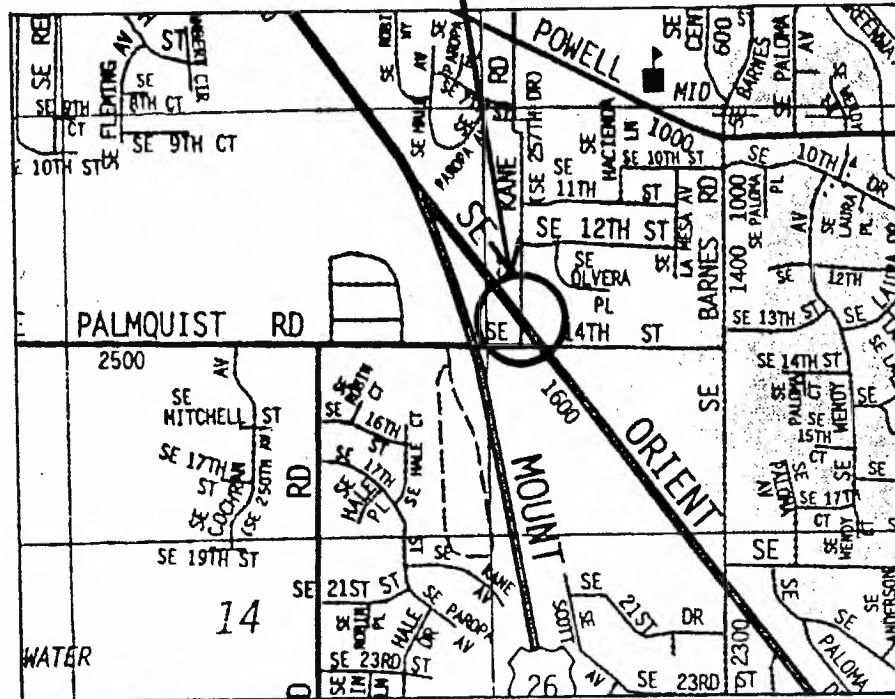
Map No.: 554

Project: SE Orient Dr / 257th Dr.

Program: Transportation Capital

Project Description: Realign intersection at SE Orient DR and 257th Dr. and install new signal.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☒ILLUMINATION: ☐INTERSEC. IMPROVE: ☒SIGNAL: ☒SIDEWALK: ☒BRIDGES: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☒SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☒STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☒

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$750,000					\$750,000
Federal:						
State:						
Local:						
Total:	\$750,000					\$750,000
Costs:						
ROW Cost:						
Const. Cost:	\$750,000					\$750,000
Total:	\$750,000					\$750,000

New Project: ☐

Project Detail

Page No.: 31

Carryover: ☒

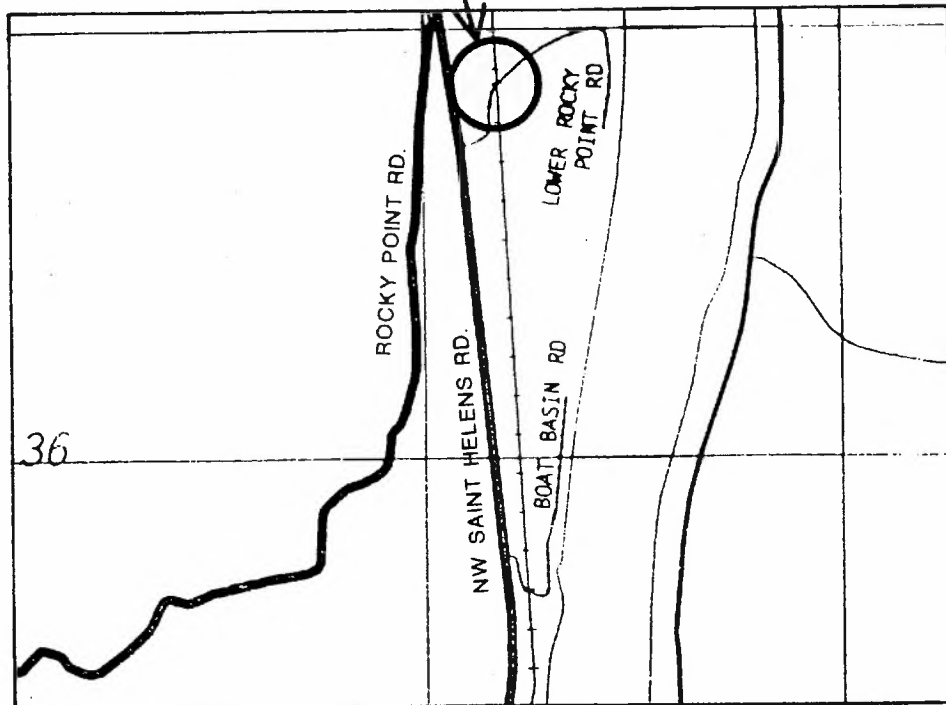
Map No.: 120

Project: NW Lower Rocky Point Rd @ BNRR Crossing

Program: Transportation Capital

Project Description: Undertake safety improvements of BNRR crossing on Lower Rocky Point Rd.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐SIGNAL: ☒

DRAINAGE

ROAD CONSTRUCTION: ☒SIDEWALK: ☐STORM DRAIN LINES: ☐STREAM/CREEK: ☐ILLUMINATION: ☐BRIDGES: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐INTERSEC. IMPROVE: ☐BICYCLE: ☐ROADSIDE GRADING: ☒CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:						
Federal:	\$100,000					\$100,000
State:						
Local:						
Total:	\$100,000					\$100,000
Costs:						
ROW Cost:						
Const. Cost:	\$100,000					\$100,000
Total:	\$100,000					\$100,000

New Project: ☐

Project Detail

Page No.: 32

Carryover: ☒

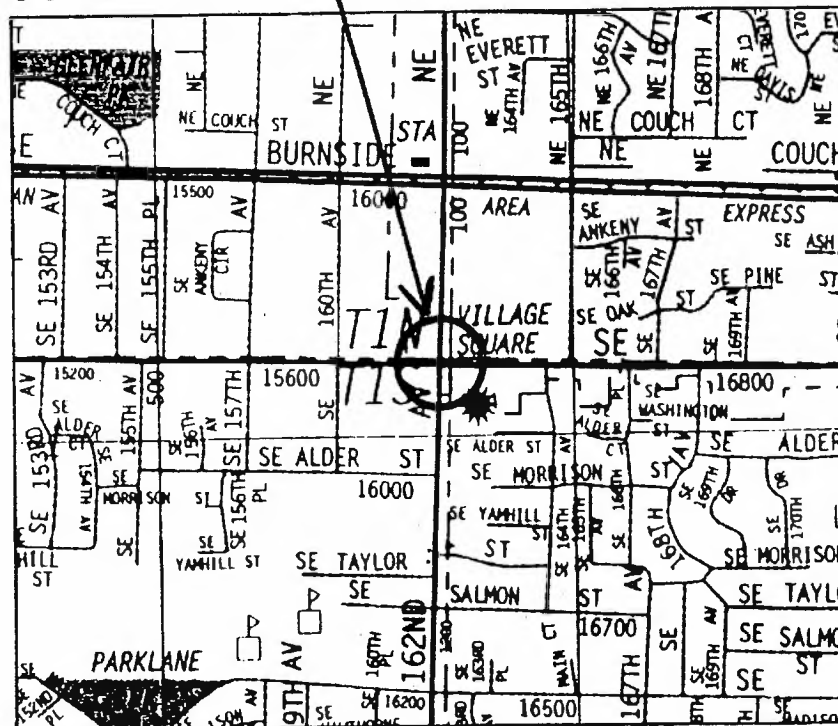
Map No.: 271

Project: SE Stark St. / SE 162nd Ave.

Program: Transportation Capital

Project Description: Improve traffic signal at the intersection of Stark Street and 162nd Avenue, including turn lane improvement.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐SIGNAL: ☒

DRAINAGE

ROAD CONSTRUCTION: ☐SIDEWALK: ☐STORM DRAIN LINES: ☐STREAM/CREEK: ☐ILLUMINATION: ☐BRIDGES: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐INTERSEC. IMPROVE: ☒BICYCLE: ☐ROADSIDE GRADING: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$100,000					\$100,000
Federal:						
State:						
Local:						
Total:	\$100,000					\$100,000
Costs:						
ROW Cost:						
Const. Cost:	\$100,000					\$100,000
Total:	\$100,000					\$100,000

BIKEWAY CAPITAL IMPROVEMENT PROGRAM

5. 257th Ave: Bull Run Rd to Powell Valley Rd

This project will add bike lanes to 257th Ave continuing north/south access from Troutdale to southern Gresham.

Estimated Cost: \$140,400

6. Traffic Signal Loop Detectors in Bike Lanes

There are 75 signalized intersections on the bikeway system in Multnomah County requiring 242 loops. Loops in the bike lanes will enhance the system for bicyclists. Each loop costs approximately \$1,000. Beginning in fiscal year 1997-98, \$10,000 is allocated to installing loops in bike lanes at intersections that are not scheduled to be reconstructed in the near future.

Table 8

**1996-2000 Bikeway Capital Improvement Plan
Evaluated Bikeway Projects**

Project	Termini	Distance (miles)	Facility	Funding or Constraint	Cost	Points
Hogan Rd.	Powell Blvd / Palmquist Rd	0.74	Shldr Bkwy	BCIP	\$39,100	35
242nd Ave.	Burnside Rd / Powell Blvd	0.26	Bike Lane	BCIP	\$91,300	30
49th Ave	Stephenson St / County Line	0.74	Bike Lane	BCIP	\$259,800	20
Blue Lake Rd.	223rd Ave / Blue Lake Park Entrance	0.44	Shldr Bkwy	BCIP	\$23,200	19
242nd Ave.	Glisan St / Stark St	0.58	Bike Lane	BCIP	\$101,800	18
257th Ave - 40 Mile Loop	Bull Run Rd / Powell Valley Rd	0.40	Bike Lane	BCIP	\$140,400	18
Subtotal		3.16			\$655,600	
Division St	UGB / Troutdale Rd	0.36	Shldr Bkwy	unfunded	\$19,000	19
Division St.	257th Ave / UGB	0.86	Bike Lane	unfunded	\$302,000	19
257th Ave. - 40 Mile Loop	Powell Valley Rd / Palmquist Rd	0.33	Bike Lane	unfunded	\$115,900	18
Orient Dr.	Palmquist / Salquist Rd	0.56	Bike Lane	unfunded	\$196,600	18
223rd Ave.	RR south of I-84 / Halsey St	0.45	Bike Lane	unfunded	\$158,000	17
282nd Ave.	Troutdale Rd / Orient Dr	1.29	Shldr Bkwy	unfunded	\$68,100	17
Cherry Park Dr.	242nd Dr / 257th Dr	0.72	Bike Lane	unfunded	\$252,800	17
Cornelius Pass Rd.	St. Helens Rd / Mile Post 2	2.00	Shldr Bkwy	unfunded	\$105,600	17
Sauvie Island Rd.	600' S of Reeder Rd / Ferry Rd	0.40	Shldr Bkwy	unfunded	\$140,400	17
Sauvie Island Rd.	Gillihan Rd / 600' S of Reeder Rd	1.70	Bike Path	unfunded	\$596,900	17
190th Ave.	Highland Dr / Butler Rd	0.76	Bike Lane	unfunded	\$266,900	16
209th Ave. (Towle Ave)	SW Binford Pkwy / Butler Rd	0.70	Bike Lane	unfunded	\$245,800	16
Hewett Blvd.	Humphrey Blvd / 5200' W of Patton Rd	0.60	L.S. Bikeway	unfunded	\$210,700	14
Hogan Rd.	Springwater Trail / County Line	1.05	Shldr Bkwy	unfunded	\$55,400	14
Cornell Rd.	5400' W of Thompson Rd / Skyline Blvd	1.47	Shldr Bkwy	unfunded	\$77,600	13
Mershon Rd	Ogden Rd / Crown Point Hwy	2.06	Shldr Bkwy	unfunded	\$108,800	13
Skyline Blvd.	1000' S of Cornell Rd / 450' E of Greenleaf	0.85	L.S. Bikeway	unfunded	\$298,500	13
Skyline Blvd.	200' N of McNamee Rd / Cornelius Pass Rd	1.45	Shldr Bkwy	unfunded	\$76,600	13
Woodard Rd	Crown Point Hwy / Mershon Rd	1.10	Shldr Bkwy	unfunded	\$58,100	13
Skyline Blvd.	Cornelius Pass Rd / Rocky Point Rd	7.70	Shldr Bkwy	unfunded	\$406,600	12
Foster Rd.	300' E of Jenne Rd / County Line	1.13	Shldr Bkwy	unfunded	\$59,700	10
Orient Dr.	Welch Rd / Dodge Park Rd	1.04	Shldr Bkwy	unfunded	\$54,900	9
Orient Dr.	Salquist Rd / Welch Rd	0.62	Bike Lane	unfunded	\$217,700	9

**1996-2000 Bikeway Capital Improvement Plan
Evaluated Bikeway Projects**

Project	Termini	Distance (miles)	Facility	Funding or Constraint	Cost	Points
Scholls Ferry Rd.	Hewitt Blvd / County Line	1.34	Bike Lane	unfunded	\$470,500	9
302nd Ave.	Division St / Orient Dr	2.12	Shldr Bkwy	unfunded	\$111,900	8
McKinley Rd.	174th Ave / 182nd Ave	0.50	Shldr Bkwy	unfunded	\$26,400	8
Patton Rd.	Scholls Ferry Rd / 400' S of Hewitt Blvd	0.84	L.S. Bikeway	unfunded	\$294,900	8
Shattuck Rd.	Patton Rd / Windsor Ct	0.25	L.S. Bikeway	unfunded	\$87,800	8
Troutdale Rd.	Strebin Rd / 282nd Dr	1.39	Shldr Bkwy	unfunded	\$73,400	8
Larch Mountain Rd	Crown Point Hwy / Larch Mtn	14.75	Shldr Bkwy	unfunded	\$778,800	7
Butler Rd.	190th Ave / Regner Rd	1.86	Shldr Bkwy	unfunded	\$98,200	6
Giese Rd.	182nd Ave / 190th Ave	0.40	Shldr Bkwy	unfunded	\$21,100	6
Humphrey Blvd.	420' W of Patton Rd / 1286' E of Hewitt Blvd	0.27	L.S. Bikeway	unfunded	\$94,800	6
Oxbow Dr.	Division Dr / Oxbow Pkwy	2.26	Shldr Bkwy	unfunded	\$119,300	6
Knieriem Rd	Littlepage Rd / Cown Point Hwy	3.50	Shldr Bkwy	unfunded	\$184,800	4
Ogden Rd	Mershon Rd / Crown Point Hwy	1.14	Shldr Bkwy	unfunded	\$60,200	4
Oxbow Park Road	Oxbow Pkwy / Oxbow Park	1.22	Shldr Bkwy	unfunded	\$64,400	4
Oxbow Parkway	Oxbow Dr / Oxbow Park Rd	1.34	Shldr Bkwy	unfunded	\$70,800	4
Springville Rd.	200' W of Skyline Blvd / County Line	2.32	Shldr Bkwy	unfunded	\$122,500	4
Subtotal		64.70			\$6,772,400	
Total		67.86			\$7,428,000	

Revenue and Budget Forecast

Revenue

Multnomah County dedicates one percent of state gas tax receipts to the Bicycle and Pedestrian Program. In addition, grants are occasionally available to the Bicycle Program. The County has received two grants to implement bikeway projects:

- \$80,000 grant from the Oregon Department of Transportation; and
- \$1 million Congestion Management/Air Quality grant to implement the Willamette River Bridges Accessibility Projects* (WRBAP).

The forecasted revenue for Multnomah County's Bicycle Program for Fiscal Years 1996-2000 is based on the estimated County share of the State Highway Trust Fund minus the percentage share transferred to the City of Portland per annexation agreements. Bikeway capital improvements are programmed based on the forecasted Bicycle Program revenues and project rankings.

Budget

The budget for bikeway capital improvements for the 5 year period is forecasted to be \$225,000 (exclusive of grants) based on the estimates for the Bicycle Fund revenues.

Fiscal Year:	1996-97	1997-98	1998-99	1999-00	2000-01
Revenue:	\$85,000	\$35,000	\$35,000	\$35,000	\$35,000

The revenues shown above are the minimum one percent that is spent on bikeway facilities in Multnomah County. In addition, the Roadway program, the Paving program and the Maintenance program each contribute to expanding the County bikeway system.

Table 9
Multnomah County
1996-2000 Bikeway Capital Improvement Program

	FY 1996-97	FY 1997-98	FY 1998-99	FY 1999-00	FY 2000-01
PROJECT NAME					
Bike Loops		\$10,000	\$10,000	\$10,000	\$10,000
Hogan/242nd (Burnside/Springwater Tr)	\$85,000				
Blue Lake Rd (223rd Ave/Interlachen Ln)		\$25,000			
49th Ave (Stephenson St/County Line)			\$260,000		
242nd Ave (Glisan St/Stark St)				\$101,800	
257th Ave (Bull Run Rd/Powell Valley Rd)					\$140,448
BIKEWAY CAPITAL BUDGET	\$85,000	\$35,000	\$270,000	\$111,800	\$150,448

* See Willamette River Bridges Accessibility Project chapter.

1996-2000 Project Detail Sheets - Index

1. Traffic Signal Loop Dectors--Various Intersections
2. 242nd Ave (Burnside Rd to Palmquist Rd)
3. Blue Lake Rd (223rd Ave to Blue Lake Park entrance)
4. SW 49th Ave (Stephenson St to County Line)
5. 242nd Ave (Glisan St to Stark St)
6. 257th Ave (Bull Run Rd to Powell Valley Rd)

New Project: ☒Carryover: ☐

Project Detail

Page No.: 1

Map No.:

Project: Various Signalized Intersections

Program: Bicycle Capital

Project Description: Install traffic signal loop detectors in bike lanes at signalized intersections.

STRUCTURES: ☐ROAD CONSTRUCTION: ☐ILLUMINATION: ☐INTERSEC. IMPROVE: ☐SIGNAL: ☐SIDEWALK: ☐BRIDGES: ☐BICYCLE: ☒**DRAINAGE**STORM DRAIN LINES: ☐SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☐STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:		\$10,000	\$10,000	\$10,000	\$10,000	\$40,000
Federal:						
State:						
Local:						
Total:		\$10,000	\$10,000	\$10,000	\$10,000	\$40,000
Costs:						
ROW Cost:						
Const. Cost:		\$10,000	\$10,000	\$10,000	\$10,000	\$40,000
Total:		\$10,000	\$10,000	\$10,000	\$10,000	\$40,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 2

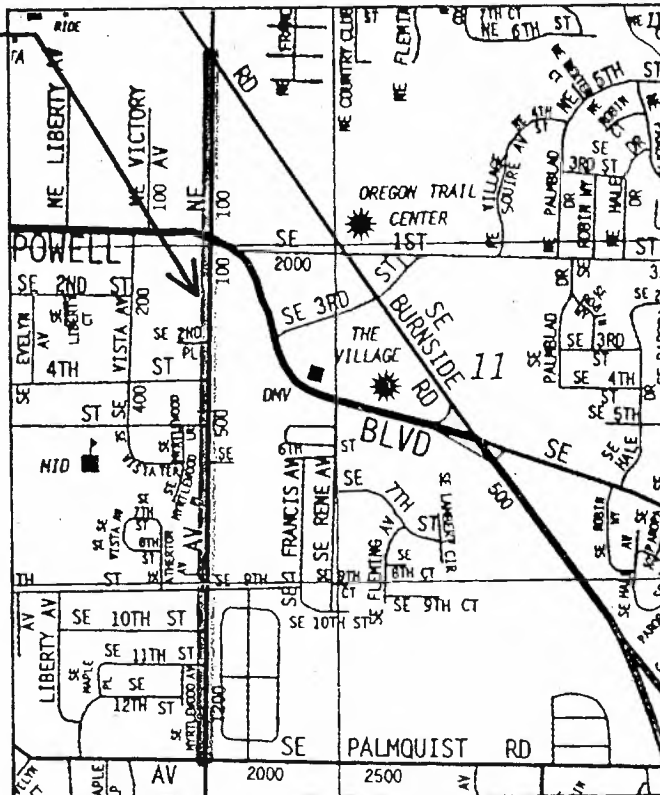
Map No.:

Project: SE 242nd (Hogan Rd) (E Burnside Rd to Palmquist Rd)

Program: Bicycle Capital

Project Description: Construct sidewalks and bike lanes from Burnside Rd to Powell Blvd. Construct shoulder bikeways from Powell Blvd to Palmquist Rd. Local Assistance grant received for \$80,000.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐SIGNAL: ☐ROAD CONSTRUCTION: ☒SIDEWALK: ☐ILLUMINATION: ☐BRIDGES: ☐INTERSEC. IMPROVE: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☐STREAM/CREEK: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐ROADSIDE GRADING: ☐CATCH BASIN: ☐

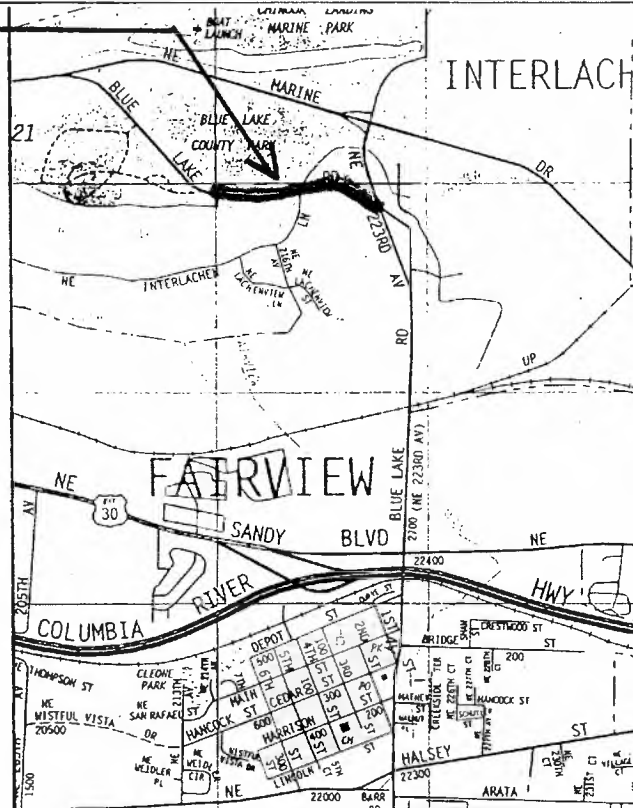
Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
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Federal:						
State:	\$80,000					\$80,000
Local:						
Total:	\$165,000					\$165,000
Costs:						
ROW Cost:						
Const. Cost:	\$165,000					\$165,000
Total:	\$165,000					\$165,000

Project: Blue Lake Rd (223rd Ave to Blue Lake Park entrance)

Program: Bicycle Capital

Project Description: Construct shoulder bikeway from NE 223rd Ave to existing bike lane, providing access to Blue Lake Park from cities of Fairview and Wood Village.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐SIGNAL: ☐ROAD CONSTRUCTION: ☒SIDEWALK: ☐ILLUMINATION: ☐BRIDGES: ☐INTERSEC. IMPROVE: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☐STREAM/CREEK: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐ROADSIDE GRADING: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:		\$25,000				\$25,000
Federal:						
State:						
Local:						
Total:		\$25,000				\$25,000
Costs:						
ROW Cost:						
Const. Cost:		\$25,000				\$25,000
Total:		\$25,000				\$25,000

New Project: ☒

Project Detail

Page No.: 5

Carryover: ☐

Map No.:

Project: SE 242nd Ave (Glisan St to Stark St)

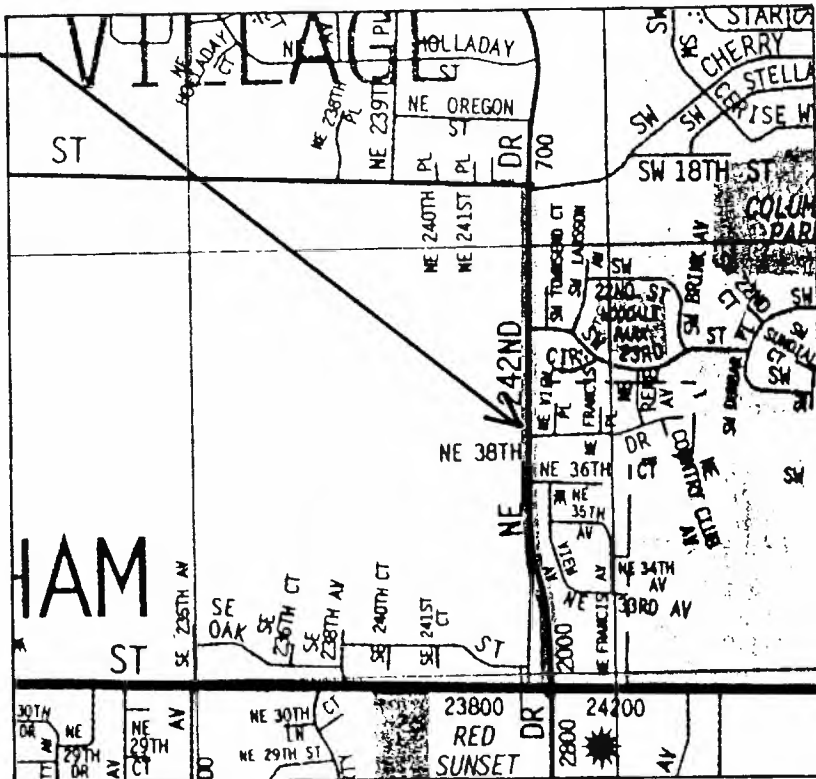
Program: Bicycle Capital

Project Description: Extend bike lanes along 242nd Ave to connect to bike lanes on Glisan St. and Cherry Park Rd.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐SIGNAL: ☐

DRAINAGE

ROAD CONSTRUCTION: ☐SIDEWALK: ☐STORM DRAIN LINES: ☐STREAM/CREEK: ☐ILLUMINATION: ☐BRIDGES: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐INTERSEC. IMPROVE: ☐BICYCLE: ☒ROADSIDE GRADING: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:				\$102,000		\$102,000
Federal:						
State:						
Local:						
Total:				\$102,000		\$102,000
Costs:						
ROW Cost:						
Const. Cost:				\$102,000		\$102,000
Total:				\$102,000		\$102,000

New Project: ☒Carryover: ☐

Project Detail

Page No.: 6

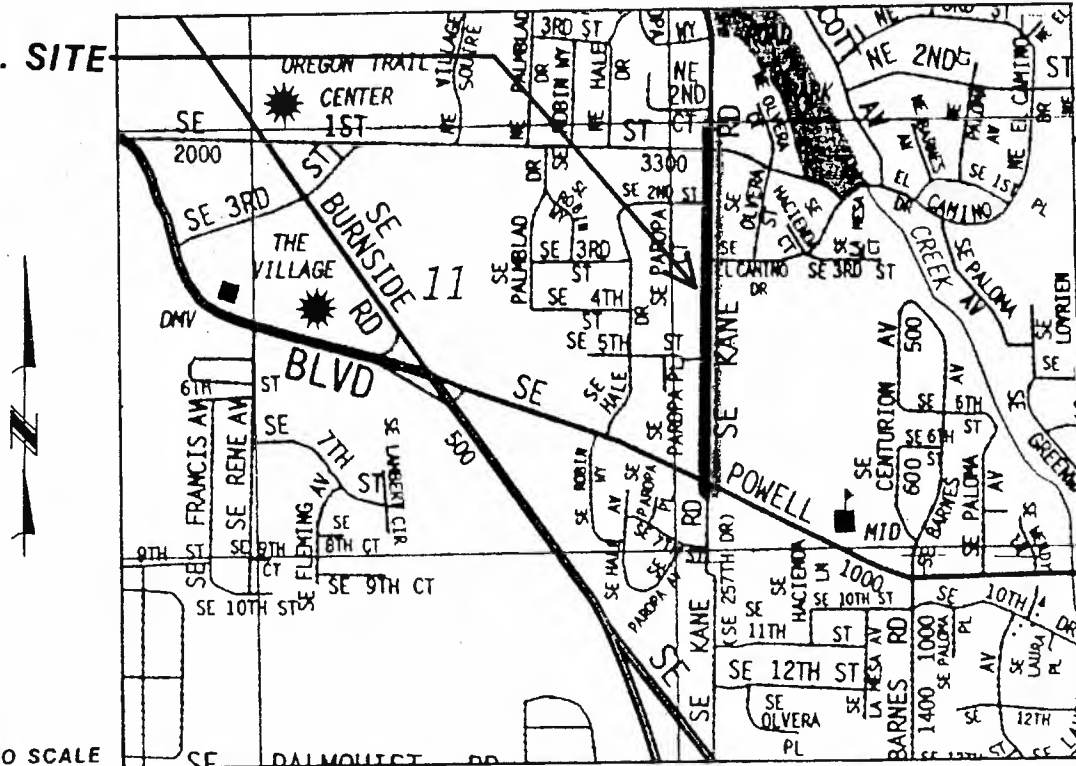
Map No.:

Project: SE 257th Ave (Bull Run Rd to Powell Valley Rd)

Program: Bicycle Capital

Project Description: Construct bike lanes on 257th Ave connecting bikeways on Powell Valley Rd and Bull Run Rd.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐SIGNAL: ☐ROAD CONSTRUCTION: ☐SIDEWALK: ☐ILLUMINATION: ☐BRIDGES: ☐INTERSEC. IMPROVE: ☐BICYCLE: ☒

DRAINAGE

STORM DRAIN LINES: ☐STREAM/CREEK: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐ROADSIDE GRADING: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:					\$140,400	\$140,400
Federal:						
State:						
Local:						
Total:					\$140,400	\$140,400
Costs:						
ROW Cost:						
Const. Cost:						
Total:						

PEDESTRIAN CAPITAL IMPROVEMENT PROGRAM

1996-2000 Pedestrian Capital Improvement Program

The total capital need identified in the Pedestrian Capital Improvement Plan is \$3.3 million for 20 miles of sidewalk infill projects. Included in the Pedestrian CIP are only those urban roadways that have curbs and drainage facilities in place but no sidewalks. Over three miles of sidewalks are programmed to be completed through this program by 2000.

The Roadway CIP contributes to expanding the pedestrian system as well. Streets being reconstructed to urban standards through the Transportation CIP will include sidewalks. The Transportation CIP will add an additional seven miles of sidewalks by 2000.

Multnomah County has an Implementation Plan for constructing curb ramps to meet ADA standards. The County has allocated \$50,000 per year to accomplish this program. Specific ramps are not listed per year but will be completed based on 1) high use, 2) in conjunction with other projects and 3) when the public identifies a specific problem.

The following seven projects are programmed for 1996-2000. They are the highest ranked projects based on the adopted evaluation.

1. Stark St: 202nd Ave to 223rd Ave Estimated cost: \$110,100

North side: 1,517'
South side: 2,154'
Total length: 3,671'

Sidewalks will provide continuous pedestrian facilities from 162nd Ave to Troutdale Rd.

2. Division St: 175th Ave to 182nd Ave Estimated cost: \$36,100

North side: 823'
South side: 380'
Total length: 1,203'

This project will connect residential areas to schools and commercial areas.

3. Division St: 242nd Ave to 257th Ave Estimated cost: \$46,900

North side: 966'
South side: 597'
Total length: 1,563'

Sidewalks on this section of Division St provide access to the Gresham Regional Center.

4. Division St: Eastman Pkwy to Main St Estimated cost: \$9,200

North side: 111'
South side: 195'
Total length: 306'

This project is part of Gresham's Ped to MAX program, providing better access to MAX stations. Multnomah County will provide \$9,200 to Gresham as part of the match for the grant that funds this project.

5. Glisan St: 162nd Ave to 181st Ave Estimated cost: \$75,300

North side only: 2508'

Sidewalks will provide residential areas with access to transit routes.

6. Glisan St: 181st Ave to 202nd Ave Estimated cost: \$136,500

North side: 2,961'
South side: 1,589'
Total length: 4,550'

This project will provide the last missing section on Glisan St from 162nd Ave to 257th Ave.

7. Division St: 182nd Ave to 202nd Ave Estimated cost: \$131,000

North side: 1,514'
South side: 2,852'
Total length: 4,336'

Sidewalks will provide connections from residential areas to commercial areas and transit.

Revenue and Budget Forecast

Revenue

Multnomah County dedicates one percent of state gas tax receipts to the Bicycle and Pedestrian Program. The County's Transportation budget allocates \$100,000 annually exclusively for pedestrian projects. In addition, grants are occasionally available to the Pedestrian Program. The County has received two grants to implement pedestrian projects:

- \$80,000 grant from the Oregon Department of Transportation; and
- \$1 million Congestion Management/Air Quality grant to implement the Willamette River Bridges Accessibility Projects* (WRBAP).

The forecasted revenue for Multnomah County's Pedestrian Program for Fiscal Years 1996-2000 is based on the estimated County share of the State Highway Trust Fund minus the percentage share transferred to the City of Portland per annexation agreements. Pedestrian capital improvements are programmed based on the forecasted Pedestrian Program revenues and project rankings.

Budget

The budget for pedestrian capital improvements for the 5-year period is forecasted to be \$500,000 (exclusive of grants) based on the estimates for the Pedestrian Fund revenues.

Fiscal Year:	1996-97	1997-98	1998-99	1999-00	2000-01
Revenue:					
Sidewalk Infill	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
ADA Implementation	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Total Revenue	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000

The revenues shown above are allocated from the County's Transportation budget for sidewalk infill and retrofitting curb ramps in Multnomah County. In addition, the Roadway program contributes to expanding the pedestrian system in the urban area and the Paving program contributes to widening shoulders in the rural area for use by pedestrians and other non-motorized modes.

* See Willamette River Bridges Accessibility Project chapter.

Table 10

Evaluated Pedestrian CIP Projects

Location	Termini	Side of Roadway	Distance (feet)	Cost*	Points	Funding	Program Year
Division St	Eastman Pkwy to Main St	Both	306	\$9,200	18	PCIP	97-98
Stark St	202nd Ave to 223rd Ave	Both	3,671	\$110,100	16	PCIP	96-97
Division St	175th Ave to 182nd Ave	Both	1,203	\$36,100	15	PCIP	97-98
Glisan St	162nd Ave to 181st Ave	North	2,508	\$75,200	15	PCIP	98-99
Glisan St	181st Ave to 202nd Ave	Both	4,550	\$136,500	15	PCIP	99-00
Division St	182nd Ave to 202nd Ave	Both	4,366	\$131,000	14	PCIP	00-01
Division St	242nd Ave to 257th Ave	Both	1,563	\$46,900	14	PCIP	97-98
Subtotal			18,167	\$545,000			
Division St	202nd Ave to Eastman Pkwy	Both	5,636	\$169,100	14	unfunded	
Powell Valley Rd	257th Ave to 282nd Ave	Both	518	\$155,400	13	unfunded	
49th Ave	McNary Pkwy to Stephenson St	East	401	\$12,000	12	unfunded	
Halsey St	162nd Ave to 181st Ave	Both	1,483	\$44,500	12	unfunded	
257th Ave/Kane Rd	Orient Dr to Powell Valley Rd	Both	327	\$9,800	10	unfunded	
181st Ave	Halsey St to Sandy Blvd	Both	3,339	\$100,200	9	unfunded	
182nd Ave	Linneman Ave to 11th St	West	502	\$15,100	9	unfunded	
242nd Ave	Stark St to Glisan St	West	248	\$7,400	9	unfunded	
Stark St	Evans Ave to 35th St	South	116	\$3,500	9	unfunded	
Troutdale Rd	Beaver Cr Ln to Cherry Park Rd	Both	512	\$15,400	9	unfunded	
162nd Ave	Halsey St to Russell St	East	702	\$21,100	8	unfunded	
162nd Ave	Wasco St to Halsey St	East	227	\$6,800	8	unfunded	
209th Ave	31st st/Willow to 23rd St	West	47	\$1,400	8	unfunded	
Arata Rd	223rd Ave to 238th Ave	Both	344	\$10,300	8	unfunded	
Canyon Ct	Skyline to Dead end	South	1,320	\$39,600	7	unfunded	
Cherry Park Rd	242nd Ave to 18th Way	South	53	\$1,600	7	unfunded	
Hist Co River Hwy	244th Ave to Halsey St	North	1,515	\$45,500	7	unfunded	
Orient Dr	14th St to Salquist Rd	North	95	\$2,900	7	unfunded	
Troutdale Rd	Sweetbriar Rd to Sweetbriar Ln	East	21	\$600	7	unfunded	
58th Ave	Canyon Ct to Montgomery St	East	37	\$1,100	6	unfunded	
61st Ct	61st Dr to Dead end	Both	644	\$19,300	6	unfunded	
64th Pl	Bucharest Ct to Dead end	Both	670	\$20,100	6	unfunded	
Bucharest Ct	Dead end to Benz Farm	Both	1,140	\$34,200	6	unfunded	
Canyon Ct	Wash. Co Line to Highland Rd	North	2,403	\$72,100	6	unfunded	
Riverwood Rd	Riverside Dr to Military Rd	West	401	\$12,000	6	unfunded	
223rd Ave	Sandy Blvd to Marine Dr	Both	638	\$19,100	5	unfunded	
Burnside Rd	202nd Ave to Fariss Rd	North	3,933	\$118,000	5	unfunded	
Butler Rd	Eastwood Pl to Rodlun Rd	South	32	\$1,000	5	unfunded	
Butler Rd	St Andrews to Augusta Loop	North	174	\$5,200	5	unfunded	
Fairview Blvd	Knights Blvd to Kingston Ave	South	322	\$9,700	5	unfunded	
Graham Rd	Sundial to I-84	South	6,046	\$181,400	5	unfunded	
Interlachen Lane	Marine Dr to Blue Lake Rd	Both	4,203	\$126,100	5	unfunded	
48th Pl	Windsor Ct to Downsview Ct	Both	1,662	\$49,900	4	unfunded	
50th Ave	Windsor Ct to Downsview Ct	Both	1,900	\$57,000	4	unfunded	
52nd Pl	Thomas St to Downsview Ct	Both	2,729	\$81,900	4	unfunded	
54th Pl	Thomas St to Dead end	Both	580	\$17,400	4	unfunded	
55th Ave	Patton Rd to 55th Dr	Both	1,078	\$32,300	4	unfunded	
55th Dr	55th Ave to Dead end	Both	2,934	\$87,700	4	unfunded	
55th Dr	Dead end to Patton Rd	Both	4,109	\$123,300	4	unfunded	
57th Ave	55th Dr to Windsor Ct	Both	1,816	\$54,500	4	unfunded	
57th Ave	Westdale Dr to Patton Rd	Both	1,019	\$30,600	4	unfunded	
Downsview Ct	52nd Pl to 48th Pl	Both	1,199	\$36,000	4	unfunded	
Downsview Ct	57th Ave to 55th Dr	Both	1,194	\$35,800	4	unfunded	
Grover Ct	Dead end to 55th Dr	Both	518	\$15,500	4	unfunded	

Evaluated Pedestrian CIP Projects

Location	Termini	Side of Roadway	Distance (feet)	Cost*	Points	Funding	Program Year
Madison Rd	Salmon St to Dead end	Both	876	\$26,300	4	unfunded	
Raab Rd	Dead end to Scholls Ferry Rd	North	306	\$9,200	4	unfunded	
Salmon St	61st Dr to 57th Ave	Both	1,251	\$37,500	4	unfunded	
Scholls Ferry Ct	Dead end to Scholls Ferry Rd	Both	1,004	\$30,100	4	unfunded	
Sweetbriar Ct	64th Pl to Scholls Ferry Rd	North	813	\$24,400	4	unfunded	
Taylor St	61st Dr to 57th Ave	Both	2,080	\$62,400	4	unfunded	
Thomas St	Dead end to Shattuck Rd	Both	1,832	\$55,000	4	unfunded	
Westdale Dr	57th Ave to Dead end	Both	1,499	\$45,000	4	unfunded	
Windsor Ct	52nd Pl to Shattuck Rd	Both	2,150	\$64,500	4	unfunded	
Windsor Ct	Dead end to Dead end	Both	1,340	\$40,200	4	unfunded	
Woods Ct	55th Dr to Dead end	Both	888	\$26,600	4	unfunded	
Graham Rd	Sundial to Harlow	North	6,157	\$184,700	3	unfunded	
Sundial Rd	Marine Dr to Graham Circle	West	396	\$11,900	3	unfunded	
Subtotal			79,379	\$2,521,200			
Total			97,546	\$3,066,200			

* Cost estimated at \$30/lineal foot, rounded to nearest hundred.

Table 11

**Multnomah County
1996-2000 Pedestrian Capital Improvement Program**

PROJECT NAME	FY 1996-97	FY 1997-98	FY 1998-99	FY 1999-00	FY 2000-01
Stark St (202nd Ave/223rd Ave)	\$110,100				
Division St (175th Ave/182nd Ave)		\$36,100			
Division St (242nd Ave/257th Ave)		\$46,900			
Division St (Eastman Pkwy/Main St)		\$9,180			
Glisan St (162nd Ave/181st Ave)			\$75,300		
Glisan St (181st Ave/202nd Ave)				\$136,500	
Division St (182nd Ave/202nd Ave)					\$131,000
Subtotal	\$110,100	\$92,180	\$75,300	\$136,500	\$131,000
Ramp retrofit	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
PEDESTRIAN CAPITAL BUDGET	\$160,100	\$142,180	\$125,300	\$186,500	\$181,000

1996-2000 Project Detail Sheets--Index

1. Stark St (202nd Ave - 223rd Ave)
2. Division St (175th Ave to 182nd Ave)
3. Division St (242nd Ave to 257th Ave)
4. Division St (Eastman Parkway to Main St)
5. Glisan St (162nd Ave to 181st Ave)
6. Glisan St (181st Ave to 202nd Ave)
7. Division St (182nd Ave to 202nd Ave)

New Project: ☒

Project Detail

Page No.: 1

Carryover: ☐

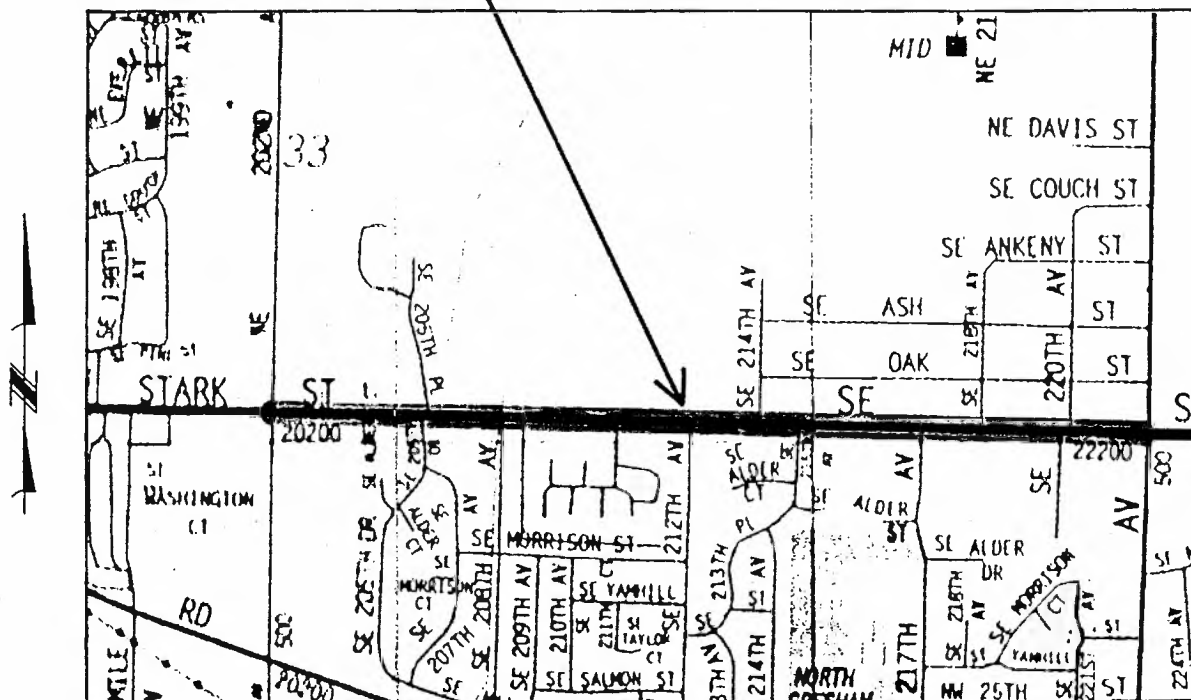
Map No.:

Project: SE Stark St (202nd Ave to 223rd Ave)

Program: Pedestrian Capital

Project Description: Sidewalk infill of approximately 3700 feet. Project includes curb ramp retrofit as needed.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ SIGNAL: ☐
 ROAD CONSTRUCTION: ☐ SIDEWALK: ☒
 ILLUMINATION: ☐ BRIDGES: ☐
 INTERSEC. IMPROVE: ☐ BICYCLE: ☐

DRAINAGE
 STORM DRAIN LINES: ☐ STREAM/CREEK: ☐
 SUMP/DRY WELL INSTALL.: ☐ DITCH: ☐
 ROADSIDE GRADING: ☐ CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:	\$110,100					\$110,100
Federal:						
State:						
Local:						
Total:	\$110,100					\$110,100
Costs:						
ROW Cost:						
Const. Cost:	\$110,100					\$110,100
Total:	\$110,100					\$110,100

New Project: ☒Carryover: ☐

Project Detail

Page No.: 3

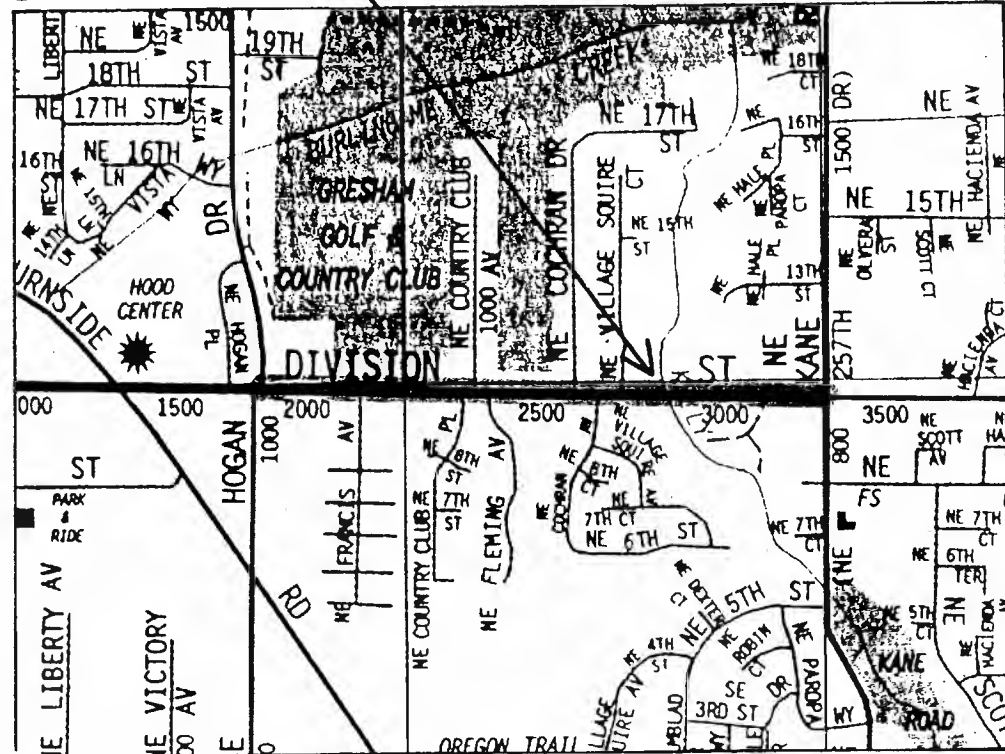
Map No.:

Project: SE Division St. (242nd Ave to 257th Ave)

Program: Pedestrian Capital

Project Description: Sidewalk infill of approximately 1600 feet. Project includes curb ramp retrofit as needed.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐SIGNAL: ☐ROAD CONSTRUCTION: ☐SIDEWALK: ☒ILLUMINATION: ☐BRIDGES: ☐INTERSEC. IMPROVE: ☐BICYCLE: ☐

DRAINAGE

STORM DRAIN LINES: ☐STREAM/CREEK: ☐SUMP/DRY WELL INSTALL.: ☐DITCH: ☐ROADSIDE GRADING: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:		\$46,900				\$46,900
Federal:						
State:						
Local:						
Total:		\$46,900				\$46,900
Costs:						
ROW Cost:						
Const. Cost:		\$46,900				\$46,900
Total:		\$46,900				\$46,900

New Project: ☒Carryover: ☐

Project Detail

Page No.: 4

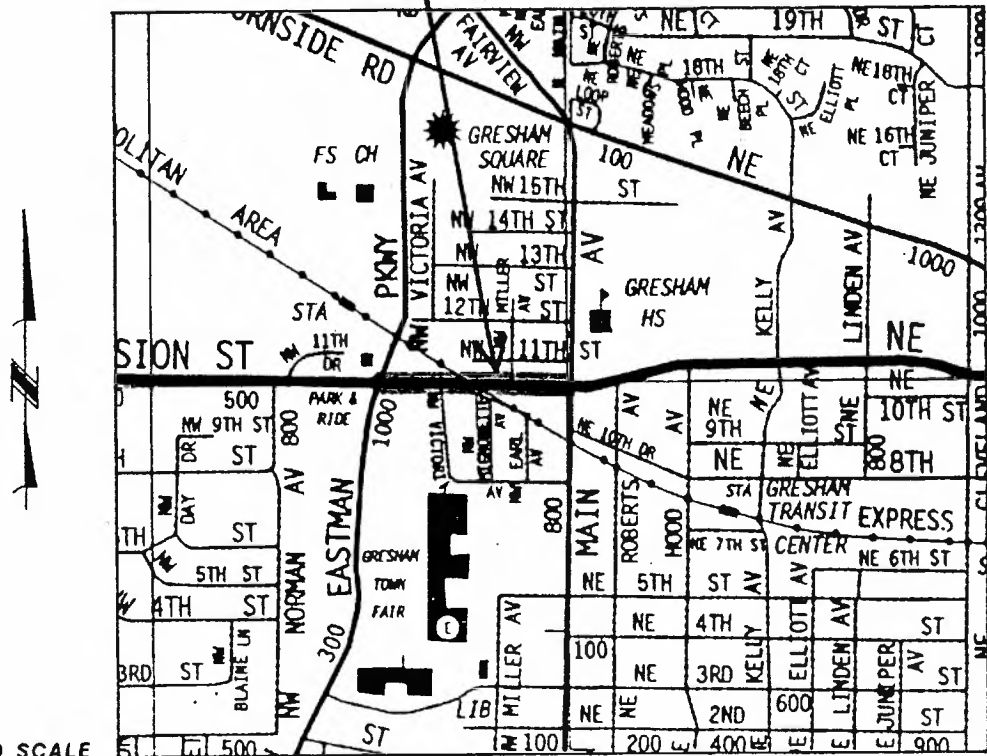
Map No.:

Project: Division St (Eastman Parkway to Main St.)

Program: Pedestrian Capital

Project Description: Gresham will construct 300 feet of sidewalk as part of a Ped to MAX project. The County will transfer the cost of the sidewalk improvement to Gresham for local grant match.

CONST. SITE



MAP NOT TO SCALE

STRUCTURES: ☐ROAD CONSTRUCTION: ☐ILLUMINATION: ☐INTERSEC. IMPROVE: ☐SIGNAL: ☐SIDEWALK: ☒BRIDGES: ☐BICYCLE: ☐

DRAINAGE

STORM DRAIN LINES: ☐SUMP/DRY WELL INSTALL.: ☐ROADSIDE GRADING: ☐STREAM/CREEK: ☐DITCH: ☐CATCH BASIN: ☐

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:		\$9,200				\$9,200
Federal:						
State:						
Local:						
Total:		\$9,200				\$9,200
Costs:						
ROW Cost:						
Const. Cost:		\$9,200				\$9,200
Total:		\$9,200				\$9,200

New Project: ☒Carryover: ☐

Project Detail

Page No.: 6

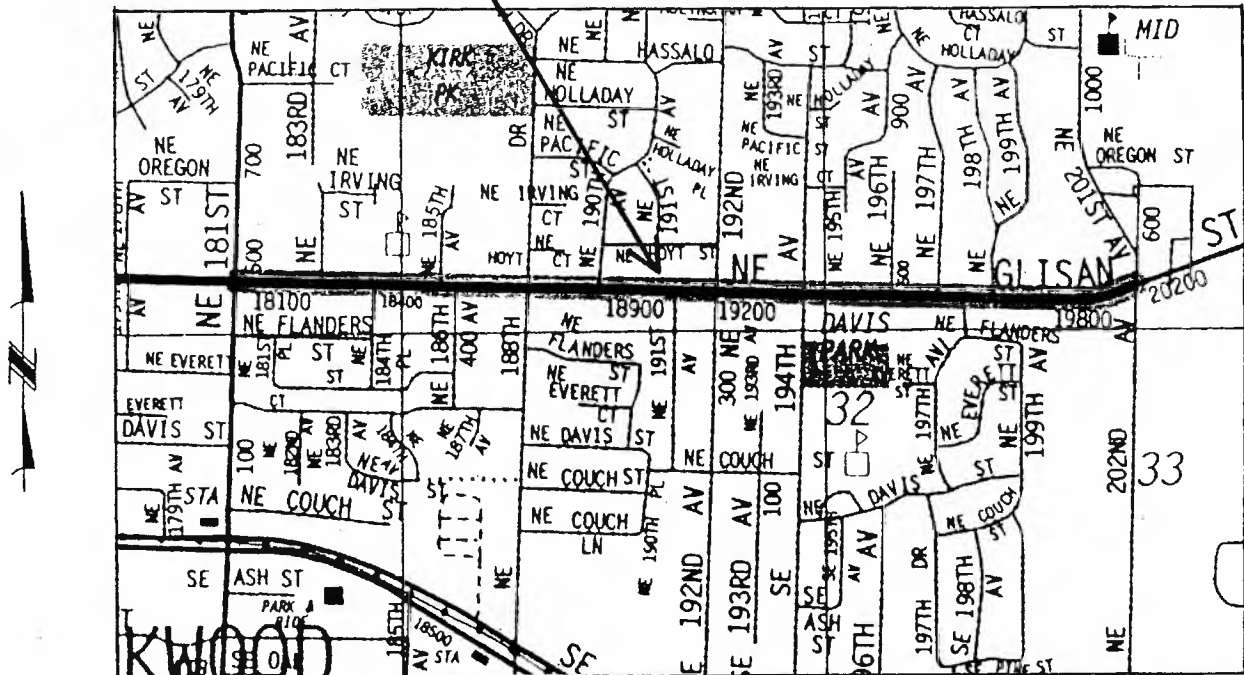
Map No.:

Project: NE Glisan St (181st Ave to 202nd Ave)

Program: Pedestrian Capital

Project Description: Sidewalk infill of approximately 4500 feet. Project includes curb ramp retrofit as needed.

CONST. SITE



MAP NOT TO SCALE

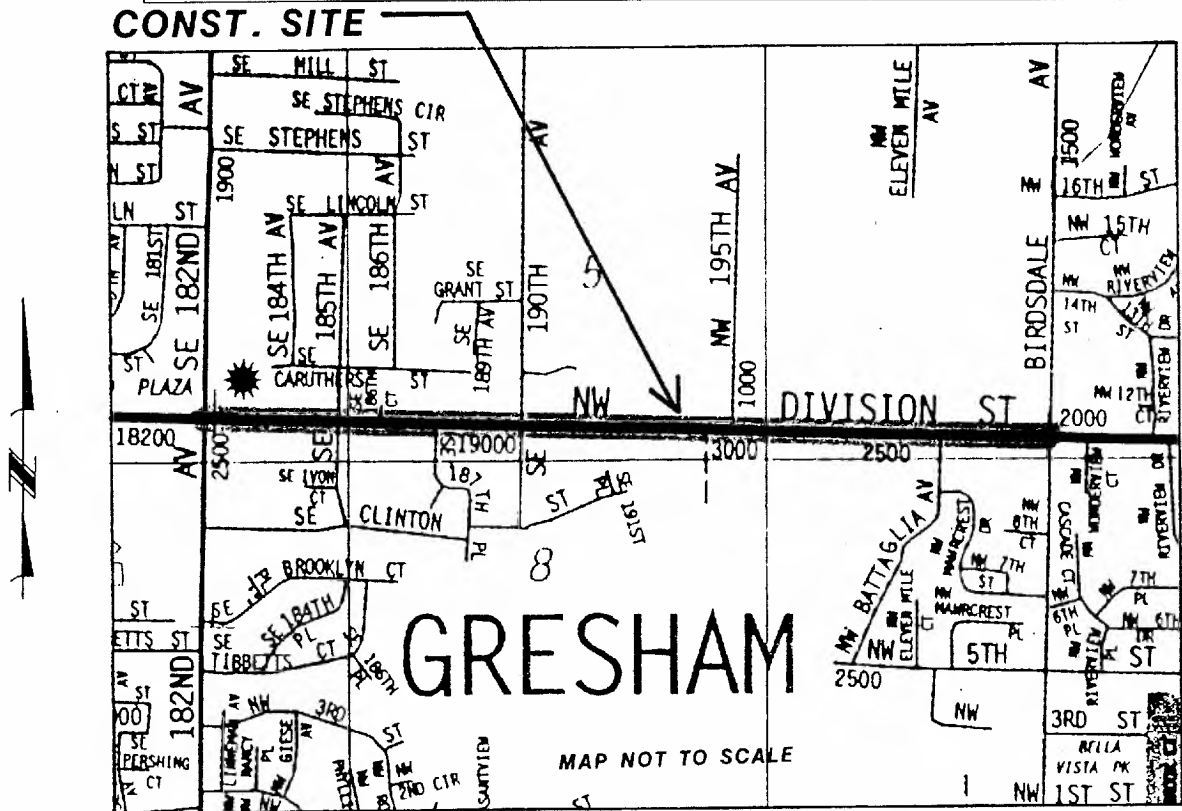
STRUCTURES: <input type="checkbox"/>	SIGNAL: <input type="checkbox"/>	DRAINAGE	
ROAD CONSTRUCTION: <input type="checkbox"/>	SIDEWALK: <input checked="" type="checkbox"/>	STORM DRAIN LINES: <input type="checkbox"/>	STREAM/CREEK: <input type="checkbox"/>
ILLUMINATION: <input type="checkbox"/>	BRIDGES: <input type="checkbox"/>	SUMP/DRY WELL INSTALL.: <input type="checkbox"/>	DITCH: <input type="checkbox"/>
INTERSEC. IMPROVE: <input type="checkbox"/>	BICYCLE: <input type="checkbox"/>	ROADSIDE GRADING: <input type="checkbox"/>	CATCH BASIN: <input type="checkbox"/>

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:				\$136,500		\$136,500
Federal:						
State:						
Local:						
Total:				\$136,500		\$136,500
Costs:						
ROW Cost:				\$136,500		\$136,500
Const. Cost:				\$136,500		\$136,500
Total:				\$136,500		\$136,500

Project: SE Division St (182nd Ave to 202nd Ave)

Program: Pedestrian Capital

Project Description:	Sidewalk infill of approximately 4300 feet. Project includes curb ramp retrofit as needed.
-----------------------------	--



STRUCTURES:

SIGNAL:

DRAINAGE

ROAD CONSTRUCTION: ☐

SIDEWALK:

STORM DRAIN LINES: ☐

STREAM/CREEK: ☐

ILLUMINATION:

BRIDGES: 1

SUMP/DRY WELL INSTALL.: ☐

DITCH: ☐

INTERSEC. IMPROVE: ☐

BICYCLE: ☐

ROADSIDE GRADING: ☐

CATCH BASIN: 

Fiscal Year	1996 - 97	1997 - 98	1998 - 99	1999 - 00	2000 - 01	Totals
Funding Sources:						
County:					\$131,000	\$131,000
Federal:						
State:						
Local:						
Total:					\$131,000	\$131,000
Costs:						
ROW Cost:						
Const. Cost:					\$131,000	\$131,000
Total:					\$131,000	\$131,000

CAPITAL IMPROVEMENT PLAN AND PROGRAM

for the

WILLAMETTE RIVER BRIDGES

**20 Year 1996 -- 2015
Capital Improvement Plan and Program
for the
Willamette River Bridges**

The Multnomah County Transportation Division has instituted a process for establishing capital improvement needs projected over the next 20 years. This process follows the policies established in the County Comprehensive Framework Plan. These policies are to plan and develop a timely and efficient arrangement of public facilities and services, and to maintain a safe, efficient and convenient public transportation system.

This plan and program is concerned specifically with capital needs of the six Willamette River Bridges: Sellwood, Hawthorne, Morrison, Burnside, Broadway and Sauvie Island.

The intent of the Capital Improvement Plan for the Willamette River Bridges is to recommend and prioritize improvements and alternate solutions for each improvement for each bridge and indicate specific repairs and replacement to insure safe and reliable operation. Cost estimates are allocated to a specific period; immediate to short range (0-4 years), intermediate (5-9 years), and long range (10-20 years) projects.

The intent of the Capital Improvement Program for the Willamette River Bridges is to assign revenue and to establish a schedule for the construction year of identified high priority projects.

Capital Project Identification

By agreement with the County, consultant services were employed to perform an in-depth inspection and prepare engineering reports on (1) the present condition and recommendation for repair and rehabilitation of each of the six Willamette River Bridge main structures, and (2) the results of a detailed field inspection and structural analysis of each of the approach ramps to four of the Willamette River Bridges: Hawthorne, Morrison, Burnside and Broadway.

Working with the County, Sverdrup & Parcel and Associates, (Consultants) performed complete field inspections of (1) bascule and vertical lift bridge mechanical systems, (2) bascule and vertical lift bridge electrical systems, and (3) bridge superstructure and substructure to the water level to detect any structural deficiencies of the main structures of the four Willamette River Movable Bridges: Hawthorne, Morrison, Burnside and Broadway.

The OBEC Consulting Engineers performed detailed field inspections and structural analysis on the Sellwood and Sauvie Island Bridges and on each of the approach ramps to the Sellwood, Hawthorne, Morrison, Burnside and Broadway Bridges.

Underwater foundation inspections and investigations were performed by the Oregon Department of Transportation (ODOT). Results were then provided to consultants and the County.

By agreement with the County, consultant services of W.L. Bangert, Structural Painting Coordinator (retired), ODOT, were employed to prepare engineering reports on the condition and recommendation for rehabilitation of corrosion protection systems (paint) on the Willamette River Bridge main structures and approach ramps.

In addition to identifying bridge, ramp, and paint improvement requirements, the aforementioned reports prioritized improvement needs. Prioritization is determined by means of an objective rating system (see Rating Criteria Section). Cost estimates, as recommended by the consultant, were also included in the reports but, they have proved to be unreasonably low and when combined with the many changes in procedures and product costs since the consultant reports were written, are no longer relevant. Final cost estimates in 1996 dollars shown in the "Plan and Program" section have been prepared by the Bridge Engineering Section.

The following source documents and consultant reports were used:

Willamette River Bridges Investigation, Summary Report, prepared by Sverdrup & Parcel and Associates, Inc., in association with Moffatt, Nichol and Bonney, Inc., and Milton C. Stafford, October 1986.

Willamette River Bridge Ramp Investigation, Executive Summary Report by OBEC Consulting Engineers, Eugene, Oregon, January 1988.

Inspection and Cost Estimates for Contract Maintenance Painting, Multnomah County Structural Steel Bridges, prepared by W.L. Bangert, November 1987.

Willamette River Bridges 20-Year Capital Works Needs, Multnomah County Transportation Division, May 1988.

Oregon Coding Guide for the Inventory and Appraisal of Oregon Bridges, OR State Highway Division, 1985.

Manual for Maintenance Inspection of Bridges, American Association of State Highway and Transportation Officials (AASHTO), 1983.

Bridge Inspector's Training Manual 70, U.S.D.O.T., FHWA.

Bridge Inspector's Manual for Movable Bridges, U.S.D.O.T., FHWA.

Oregon State Highway Division, 1991 (Paint) Specifications.

Conceptual Engineering Analysis of Light Rail Service for the Sellwood Bridge, November 1990, CH2M Hill.

Willamette River Bridges Safety Evaluation Report, January 1996, DeEtta Burrows, MSPH, CIH, Wise Steps, Inc.

After reviewing these documents, Multnomah County Transportation Division, Bridge Capital Section, identified 33 construction projects and 14 separate corrosion protection (painting) projects in the 20-year plan ending in the year 2016. In updating this list for the present report, we have deleted the construction projects that have been completed along with those that are no longer applicable and have added new or revised projects to the list for a current total of 33 construction projects. Fourteen Corrosion Protection (Painting) projects remain on the list for a total of 47 projects that will continue to enable us to provide for safe and reliable use of the bridges.

In addition to the 47 specific projects, two general projects are included for seismic retro-fitting and in-depth inspections which are not ranked on the prioritized list but do represent a cost requirement for the Capital Improvement Program. A third unranked project has been added for compliance with Oregon OSHA standards.

Willamette River Bridges Accessibility Project

In 1994 Multnomah County completed the Willamette River Bridges Accessibility Project (WRBAP). Seven non-interstate bridges span the Willamette River in downtown Portland. Five of these bridges are the property of Multnomah County; the others are owned and operated by the Oregon Department of Transportation.

For several years the community has expressed concerns about poor access to the bridges for people using alternative modes of travel. In response to these concerns, Multnomah County developed WRBAP.

As part of the WRBAP study, alternative mode access to each bridge was carefully analyzed and possible improvements identified. The resulting project Accessibility Plans show 38 projects to improve access to and across the seven Willamette River bridges owned by Multnomah County and the State of Oregon.

Recommended projects include installation of more than 3 miles of bicycle ramps, 3,500 linear feet of sidewalks, more than 20 crosswalks, and almost 30 curb ramps. The total cost of the 38 projects is \$7.63 million. When the projects are completed, four county bridges will be fully accessible to

disabled persons, bicyclists, and pedestrians, and major multi-modal improvements will have been installed on the remaining three bridges.

Project Evaluation

The framework used to evaluate, classify, and prioritize identified projects is a sophisticated rating system which relies heavily on component evaluation criteria. Five different criteria and some 45 or more pieces of information are required for each identified project. It should be noted here that pedestrian/bike accommodation is a possible 20 point consideration under the aforementioned "Component Evaluation Criteria." Multnomah County is committed to the Bicycle Master Plan developed by the Transportation Division and approved by the board as a component of the Master Transportation Plan and the Comprehensive Framework Plan. One objective of this plan is that the Willamette River Bridges under the jurisdiction of Multnomah County be made safe and accessible to bicyclists. In meeting this objective, advantage of every opportunity will be taken to provide for safe bicycling on any new or rehabilitated Willamette River Bridge or bridge ramp where accommodation is a realistic possibility. Projects identified in the WRBAP Phase 1 Project implementation are included in the Willamette River Bridge Capital Improvement Plan and Program under a separate category.

In general, project rating criteria for the bridges and ramps include a national-standard bridge sufficiency rating, bridge historical significance, outside funding availability for each project, type of project, and time-line considerations. Project rating criteria for corrosion protection (painting) include, in general, existing corrosion damage, area rust breakthrough, quality of paint, weather exposure and visual considerations. (Refer to Criteria Rating Section for detailed project rating criteria and examples of painting review.)

Projects are classified by use of a point system. The point system used for bridge and ramp construction projects is necessarily distinct from that used for corrosion protection classification. A point score for each project is assigned to each significant criteria. Total criteria points are added to determine a total point rating for each project.

Projects designated with the highest total points are the most critical repair or rehabilitation projects. (See Plan Section Format for description of projects and point determination.) Bridge structural improvements are grouped as construction projects within the same project rating criteria framework. Corrosion control (paint) projects are grouped as painting needs within their distinct rating criteria framework.

For construction projects, in general, a rating of 95 or more points (out of a possible 135 point total) indicates attention within 0-4 years of the 20-year program period. Ratings of 75 and above indicate attention is needed within the first 10 years. Projects rated 60 to 74 are necessary during the 10-20 year period. Some project schedules are shifted slightly because of the need to effectively allocate and manage annual resources and to coordinate with maintenance scheduling.

WRBAP projects are rated and ranked in the WRBAP Final Report, August, 1994. Those projects are identified in the WRBAP sub-section.

Note: Seismic restrictions have been tightened considerably but retro-fitting has not been added to the project rating criteria since the policy for inclusion is not yet finalized. Besides adding considerable cost to the construction of new bridges, seismic retro-fitting will be required on existing bridges under a possible scenario as follows:

Of the 5 Willamette River bridges maintained by Multnomah County in the urban area of Portland, one bridge will be selected as the primary access across the river in the event of an earthquake and first priority for retro-fitting will be given this bridge and its approach structures. Priorities in order beyond this initial bridge and as funds become available would be the approach structures on the remaining four bridges in order of priority. Retro-fitting all the approach structures plus one crossing structure is estimated, at a minimum, to cost \$20 million. Retro-fitting the remaining crossing structures is estimated to cost an additional \$20 million, but is projected beyond the 20 year plan.

For paint projects, those with the highest rating are generally expected to be completed first. As there is less of a cost spread for the paint projects, the estimated total painting cost can be more evenly distributed as an annual requirement.

Plan Report

The Report, "Willamette River Bridges 20-Year Capital Improvement Needs," has been prepared by the Multnomah County Transportation Division, Bridge Capital Section. This report is the 20-Year Capital Plan, listing bridge construction projects, including seismic retro-fitting along with costs for in-depth and semi-in-depth inspections and corrosion protection projects in order of rank (high to low).

At the end of the report, the combined estimated costs for construction and corrosion protection projects are presented for each of four designated periods in the 20-year program. Figures are presented for the average annual need for the entire 20-year period. Estimated figures are presented for the grand total cost, and total County cost for the 20-year period.

The plan report represents the Transportation Division's recommendation for the 20-year Capital Improvements Program for Willamette River Bridges.

A description of the bridge and summary of the investigative engineering reports process for each of the six Willamette River Bridges (Hawthorne, Morrison, Burnside, Broadway, Sellwood, and Sauvie Island) can be found in Appendices I-VI.

Capital Improvements Plan and Program Update Process for the Willamette River Bridges

As a necessary element of the safe and reliable public use of Willamette River Bridge structures, inspections and sufficiency ratings are routinely conducted by the County. Any changes in component need involving repair, scheduling and cost will be incorporated into the CIP 20-Year Plan Update Process. The Multnomah County Inspection policy is as follows:

In-Depth and Semi-In-Depth Inspections - These inspections will be conducted on a routinely regular basis, usually a 10-year frequency for the in-depth inspection and a 5-year maximum interval for the semi-in-depth inspection as dictated by Multnomah County Bridge inspection policy and the Willamette River Bridges Operation and Maintenance Manual. The **in-depth inspection** is a complete inspection and evaluation of all mechanical, electrical and structural elements involved for each individual bridge. From this inspection, a complete list of short term and long term needs can be established, along with identifying appropriate projects. The **semi-in-depth inspection** is a general inspection of all mechanical, electrical and structural components with special emphasis on confirmation and updating of needs and projects identified through the in-depth inspection. New projects may result from this inspection.

Inspection for Structure Inventory and Appraisal - Every 2 years - This inspection is a visual inspection of all elements of each bridge structural component. The result of this inspection is an overall condition rating for the bridge with related comments and possible recommendations for action required.

General Monitoring of all Bridge Components by Multnomah County Bridge Maintenance Crew - This monitoring includes specifically designed measurements taken to track the progress of any suspicious defect, crack or deviation in structural, mechanical or electrical operation along with visual observations by the maintenance crew in the course of their daily maintenance activities. Input from this monitoring can provide beneficial information in preparing reports on other inspections or may add short term maintenance projects to the agenda.

The Program itself will be reviewed on an annual basis by staff with a scheduled full update process involving all interested parties every two years. These reviews will ensure every consideration is made to appropriate funds for the wisest use of limited resources needed to carry out the 20-Year CIP.

As part of the update process, estimated costs will be re-evaluated every two years to take into consideration any changes in federal, state or local regulations regarding for example, pollution damage control restrictions which are expected to dramatically increase over the next few years.

**WILLAMETTE RIVER BRIDGES 20 - YEAR
CAPITAL IMPROVEMENT NEEDS**

Table 13

CORROSION PROTECTION (PAINTING)
 100% SP-6 Commercial Blast Preparation
 100% Containment, Hazardous Waste Disposal,
 Moisture Cured Urethane Coating System

All Cost Based on 1996 Dollars
 Line Item Costs Include 15% Construction Contingencies
 Bridge Section Overhead not Included

Ra	BR	STR	BRIDGE #	Cat	DESCRIPTION	EST COST	Corr	Area	Qty	Weath	Vi-	TOT	0-4 years FY 95-96 through FY 99-00	5-9 years FY 00-01 through FY 04-05	10-14 years FY 05-06 through FY 09-10	15-20 years FY 10-11 through FY 15-16
							Damg	Rust	of	Expos	sual	PTS				
1	Hawthorne	MS	2757	P	HAWTHORNE BR. - Thru Truss/ Lift Entire Bridge	14354	4.0	4.0	3.0	2.0	2.0	15	14354			
2	Broadway	MS	6757	P	BROADWAY BR. - Thru Truss/ Bascule (Floor System) (Minus Floor System)	6419 12888	4.0	4.0	3.0	2.0	2.0	15	6419			
3	Burnside	MS	0511	P	BURNSIDE BR. - Steel Deck Truss/ Bascule Entire Bridge	5416	4.0	4.0	3.0	2.0	1.0	14		12888		
4	Sellwood	MS	6879	P	SELLWOOD BRIDGE - Trusses	4123	4.0	3.0	2.0	2.0	2.0	13		5416		
5	Broadway	R	6757A	P	BROADWAY ST. RAMP - Steel Deck on Steel Col.	2314	3.0	3.0	2.0	1.0	2.0	11		4123		2314
6	Morrison	R	2758B	P	W. MORRISON Trans. Struc. - Steel 'I'-Beam	2804	2.0	4.0	2.0	1.0	2.0	11		2804		
7	Broadway	R	6757B	P	LOVEJOY RAMP - Steel Deck on Steel Col.	1421	3.0	3.0	2.0	1.0	2.0	11			1421	
8	Morrison	MS	2758	P	MORRISON BR. - Steel Deck Truss/ Bascule	10452	3.0	3.0	1.0	2.0	1.0	10		10452		
9	Hawthorne	R	2757A	P	HAWTHORNE ST. VIADUCT E.B. - Steel 'I'-Beam	1776	2.0	2.0	1.0	1.0	2.0	8			1776	
10	Hawthorne	R	2757B	P	MADISON ST. VIADUCT W.B. - Steel 'I'-Beam	1822	2.0	2.0	1.0	1.0	2.0	8			1822	
11	Sauvie Island	MS	2641	P	SAUVIE IS. BR. - Steel Deck Truss/ Thru Truss	1240	2.0	2.0	1.0	2.0	1.0	8			1240	
12	Morrison	R	8589	P	MORRISON ST. VIADUCT W.B. - Steel 'I'-Beam	2337	1.0	1.5	0.5	2.0	1.5	7				2337
13	Morrison	R	2758A	P	BELMONT ST. VIADUCT E.B. - Steel 'I'-Beam	2254	1.0	1.5	0.5	2.0	1.5	7				2254
14	Morrison	R	8589Z	P	Water Ave OFF Ramp E.B. - Steel 'I'-Beam	240	1.0	1.5	0.5	2.0	1.5	7				240
ESTIMATED PAINTING COST						69861							20773	35683	6259	7145
Design Engineering (3%)						2096							623	1070	188	214
Construction Engineering (15%)						10479							3116	5352	939	1072
ESTIMATED TOTAL PAINTING COST						82436							24512	42106	7386	8431
AVERAGE YEARLY COST TO PAINT						4122							6128	8421	1477	1405
=====																
SUMMARY: COMBINED CONSTRUCTION & PAINTING COST																
COMBINED ESTIMATED CONSTRUCTION & PAINTING COST						201982							38456	51017	87607	24902
DESIGN ENGINEERING						21914							3276	3371	12390	2878
CONSTRUCTION ENGINEERING						26334							5238	7193	10701	3203
COMBINED ESTIMATED GRAND TOTAL COST						250229							46970	61580	110697	30982
COMBINED ESTIMATED AVERAGE YEARLY COST						12511							11742	12316	22139	5164

Estimated Construction Cost Table

A. Format - Construction

20-YEAR CAPITAL IMPROVEMENT NEEDS FOR THE WILLAMETTE RIVER BRIDGES						All Cost Based on 1996 Dollars Line Item Costs Include 28% Construction Contingencies Bridge Section Overhead not Included							All Estimated Costs Represent Thousands of Dollars			
CONSTRUCTION PROJECTS																
RANK	BR	STR	BRIDGE #	Cat	DESCRIPTION	EST COST	Suf Rat 20	His Sig 5	Out Fun 10	Comp Cri 60	TL 40	TOT PTS	0-4 years FY 95-96 through FY 99-00	5-9 years FY 00-01 through FY 04-05	10-14 years FY 05-06 through FY 09-10	15-20 years FY 10-11 through FY 15-16
1	Hawthorne	MS	2757	S	Replace Deck Grating	4048	5	5	10	60	40	120	4048			
2	Broadway	MS	6757	S	Guardrail	288	10	5	0	60	40	115	288			
3	Broadway	MS	6757	S	Liftspan Sidewalk Replacement	155	10	5	0	60	40	115	155			
4	Broadway	MS	6757	M	Anchor/Operating Strut Mech Rehab (Phase II)	383	10	5	0	60	40	115	383			
5	Broadway	MS	6757	M	Span Drive Mechanical Renovation (Phase II)	612	10	5	0	60	40	115	612			
6	Burnside	MS	0511	M,E	Buffer Cylinder & Control Equipment	333	10	5	0	60	40	115	333			
7	Sauvie Island	MS	2641	S	Southeast On-ramp Widening	288	10	5	5	50	40	110	288			
8	Burn/Morrison	MS	0511,275	M	Replace two traffic gates on each bridge	218	10	5	0	50	40	105	218			
9	Broadway	R	6757A	S	Sidewalk Rehabilitation	195	5	0	0	60	40	105	195			
10	Broadway	MS/	6757&A	L	Replace 2300 V Lighting W/ 480 Vac System	196	10	5	0	50	40	105	196			

Data items described below are taken from the top margin of each page of the Willamette River Bridges 20-Year Capital Improvements Needs Report, Construction Projects.

Rank. The report print-out ranks projects according to total criteria rating points received.

Bridge. Locational description: bridge involved for each project is identified. (Hawthorne, Burnside, Morrison, Broadway, Sellwood, Sauvie Island.)

Structure. Identifies project as Main Structure = MS or Ramp = R.

Bridge No. The state and county designated identification number for bridge or ramp.

Category. The system identified for capital work, i.e., Structural = S, Mechanical = M, Electrical = E, Lighting = L, Resurface = R, Paint = P.

Description. Brief project description.

Estimated Cost. Estimated cost represented in thousands of dollars. All costs are based on 1996 dollars. Line item costs include 28% construction contingencies.

Bridge Sufficiency Rating. The basis of the bridge sufficiency rating system is the ODOT sufficiency rating system (Oregon Coding Guide for the Inventory and Appraisal of Oregon Bridges - 1985). The rating system comprises three elements: structural adequacy and safety, serviceability and functional obsolescence, and essentially for public use.

Historical Significance. Rating points (5) were assigned for projects on bridges of historical significance. The three bridges are Broadway, Burnside and Hawthorne. Bridges with no historical significance received (0) points.

Outside Funding Availability. Projects known to have outside funding available received 10 points. Projects for which outside funding availability is anticipated received 5 points. Most projects have no outside funding availability and received (0) points.

Component Evaluation Criteria. A critical item, structural, mechanical or electrical item received highest ratings, depending on primary or secondary importance. A maximum of 60 points can be assigned to this categorical criteria.

Replacement/Repair Time-line. Completion dates as recommended by consultants investigation reports and confirmed or updated by the County Engineer were assigned points (40 points maximum) with immediate need projects receiving highest points.

Total Points. Above 5 criteria were totaled. This column was used to rank projects. Highest total points were ranked most critical.

1996-2015. Twenty years represented in 20-Year Plan. Project costs in thousands of dollars will appear in appropriate year. Projects capable of schedule shifting are indicated by straight horizontal lines.

Estimated Corrosion Cost Table

B. Format - Painting

CORROSION PROTECTION (PAINTING) 100% SP-8 Commercial Blast Preparation 100% Containment, Hazardous Waste Disposal, Moisture Cured Urethane Coating System						Line Item Costs include 15% Construction Contingencies Bridge Section Overhead not included										
Ra	BR	STR	BRIDGE #	Cat	DESCRIPTION	EST COST	Corr Damg	Area Rust Thru	Qty of Paint	Weath Expos	Visual	TOT PTS	0-4 years FY 95-96 through FY 99-00	5-9 years FY 00-01 through FY 04-05	10-14 years FY 05-06 through FY 09-10	15-20 years FY 10-11 through FY 15-16
1	Hawthorne	MS	2757	P	HAWTHORNE BR. - Thru Truss/ L/R Entire Bridge	14354	4.0	4.0	3.0	2.0	2.0	15		14354		
2	Broadway	MS	6757	P	BROADWAY BR. - Thru Truss/ Bascule (Floor System)	6419	4.0	4.0	3.0	2.0	2.0	15		6419		
					(Minus Floor System)	12688									12688	
3	Burnside	MS	0511	P	BURNSIDE BR. - Steel Deck Truss/ Bascule Entire Bridge	5416	4.0	4.0	3.0	2.0	1.0	14				
4	Sellwood	MS	6679	P	SELLWOOD BRIDGE - Trusses	4123	4.0	3.0	2.0	2.0	2.0	13				4123
5	Broadway	R	6757A	P	BROADWAY ST. RAMP - Steel Deck on Steel Col.	2314	3.0	3.0	2.0	1.0	2.0	11				
6	Morrison	R	2756B	P	W. MORRISON Trans. Struc. - Steel "I"-Beam	2604	2.0	4.0	2.0	1.0	2.0	11			2604	

Data items described below are taken from the top margin of each page of the Willamette River Bridges 20-Year Capital Improvements Needs Report, Painting Projects.

Rank. The report print-out ranks projects according to total criteria rating points received.

Bridge. Locational description: Bridge involved for each project is identified. (Hawthorne, Burnside, Morrison, Broadway, Sellwood, Sauvie Island.)

Structure. Identifies structure as Main Structure = MS or Ramp = R.

Bridge No. The state and county designated identification number for bridge or ramp.

Category. The system identified for capital work, i.e., P = Paint.

Description. Brief project description.

Estimated Cost. Estimated cost represented in thousands of dollars. All costs are based on 1996 dollars. Line item costs include 15% construction contingencies.

Corrosion Damage. Criteria rating points were assigned for corrosion damage to the steel, either existing or potentially imminent. Higher numbers indicate a more serious defect.

Area of Rust Breakthrough. Criteria rating points were assigned as to the actual area or degree of rust breakthrough. Higher numbers indicate heavier rust.

Quality of Paint. The quality of the existing paint was a third criteria. Conditions which affect the paint's present quality were degrees and thoroughness of cleaning of the steel surface prior to painting, the quality of the paint, the surface exposure to weather and environmental surroundings.

Weather Exposure. Surface exposure to moisture (rain, leakage, drainage) and u-v light were rated to classify exposure conditions. Higher points indicate higher degree of weather exposure.

Visual (Public Exposure). The overall appearance and exposure to public view varies for each structure as to the structure's location, the traffic volume or population surrounding the site, and whether traffic passes through, over or under the structure. Higher points indicate more public exposure.

PROJECT RATING CRITERIA

A. CONSTRUCTION PROJECTS

B. CORROSION CONTROL (PAINT) PROJECTS

Construction Project Rating Criteria

A. Bridge Sufficiency Rating (20 points maximum)

<u>ODOT</u>	<u>County</u>
0 - 25	20 points
26 - 50	10 points
51 - 80	5 points
81 - 100	0 points

B. Bridge Historical Significance (5 points maximum).

Ranked on National and/or State Historic Registers

Significant	5 points	Broadway #6757
		Burnside #0511
		Hawthorne #2757

Not Ranked on Historic Register(s)

No Importance 0 points

C. Outside funding availability (10 points maximum).

Available	10 points
Anticipated	5 points
Not Available	0 points

D. Component Evaluation Criteria (60 points maximum).

Critical Item	60 points	
Structural Item	50 points Primary	40 Secondary
Mechanical Item	50 points Primary	40 Secondary
Electrical Item	50 points Primary	40 Secondary
Deck	40 points	
Illumination	40 points	
Component Life		
Extension	35 points	
Traffic Control	20 points	
Pedestrian/Bike		
Accommodation	20 points	

E. Recommended Replacement/Repair Time-line (40 points maximum).

0 - 4 years	40 points
5 - 9 years	30 points
10 - 14 years	20 points
15 - 20 years	10 points

Summary of Bridge Sufficiency Rating Factors Used By ODOT

1. Structural Adequacy and Safety

$$S_1 = 55\% \text{ Max.}$$

59 Superstructure
60 Substructure
62 Culvert
66 Inventory Rating

2. Serviceability and Functional Obsolescence

$$S_2 = 30\% \text{ Max.}$$

12 Defense Highway
28 Lanes on Structure
29 ADT
32 Appr. Rdwy. Width
43 Structure Type
51 Bridge Rdwy. Width
53 VC over deck
58 Deck Condition
67 Structural Condition
68 Deck Geometry
69 Under-clearances
71 Waterway Adequacy
72 Appr. Rdwy. Align.

3. Essentially for Public Use

$$S_3 = 15\% \text{ Max.}$$

12 Defense Highway

19 Detour Length

29 ADT

4. Special Reductions

$$S_4 = 13\% \text{ Max.}$$

19 Detour Length

36 Traffic Safety Features

43 Structure Type, Main

$$\text{SUFFICIENCY RATING} = S_1 + S_2 + S_3 - S_4$$

Sufficiency Rating shall not be <0 nor >100

Corrosion Control (Paint) Rating Project Criteria

PROJECT RATING CRITERIA EXAMPLE

CORROSION CONTROL (PAINT) PROJECTS

BR. NO. 6879 NAME Sellwood Bridge COUNTY Multnomah

LOCATION FAU 9704 INSP. BY Bangert Davis DATE 9/29/87

STRUCT. DESCRIPTION 2 - 245'6" & 2 - 300' steel deck trusses

STEEL SPANS Wt. est. by Co. 10-87

WT. STRUCT. STEEL 1,060 tons EST. AREA STEEL 318,000 sq. ft.

EXIST. PAINT TYPE: LAST PAINTED 1962 BY J I Hass 1400-G-63

Prime: Red Lead

Int.: Red Lead

Top: Alkyd

	Severe	Moderate	Light	None	
<u>Corrosion Damage</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>	<u>= 4</u>
	Heavy	Moderate	Scattered	None	
<u>Area Rust Breakthrough</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>	<u>= 3</u>
	Loose	Dead	Moderate	Live	
<u>Quality of Paint</u>	<u>3</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>= 2</u>
	Wet	Moderate	Dry		
<u>Weather Exposure</u>	<u>3</u>	<u>2</u>	<u>1</u>		<u>= 2</u>
	High	Low	None		
<u>Visual (Pub. Exposure)</u>	<u>2</u>	<u>1</u>	<u>0</u>		<u>= 2</u>

(Rate) Total = 13

Span 20 and one panel of span 19 were painted in 1984 by County maintenance forces. Although much old paint remains, the overall condition is good and should last several years without serious failure. The remaining steel is sustaining serious corrosion damage and should be repainted within the next two or three years. There are structures under both ends of the bridge which will require protection.

Blast clean to steel and repaint 1988-1989 seasons.

BRIDGE SUMMARIES

HAWTHORNE BRIDGE

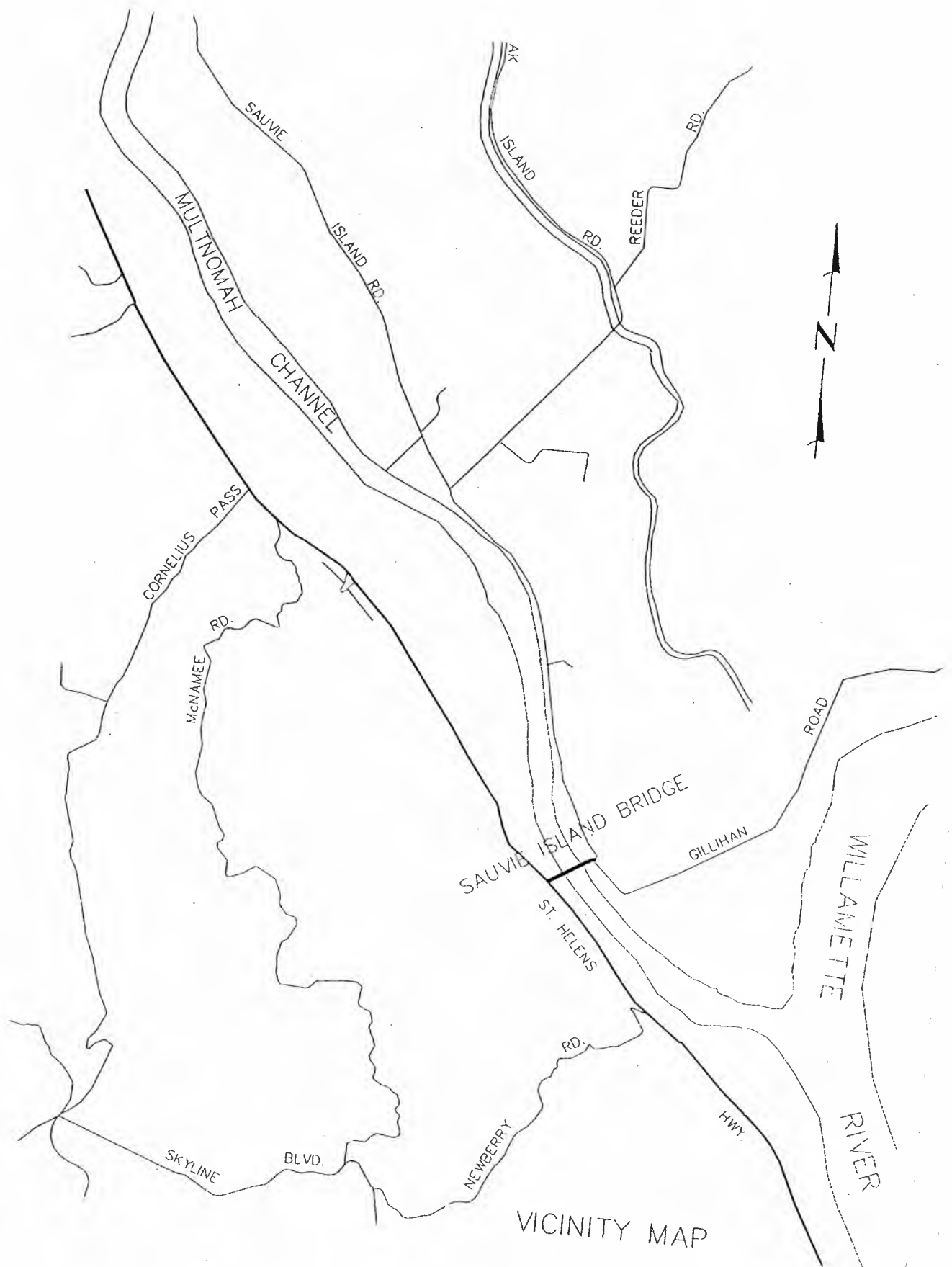
MORRISON BRIDGE

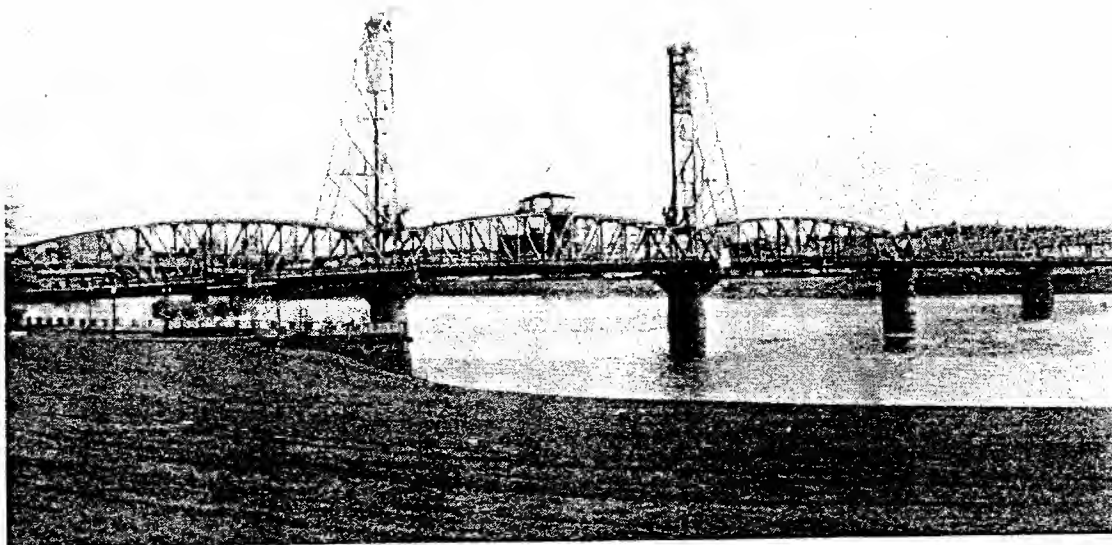
BURNSIDE BRIDGE

BROADWAY BRIDGE

SELLWOOD BRIDGE

SAUVIE ISLAND BRIDGE





HAWTHORNE BRIDGE SUMMARY

Structure Number 2757

Madison Street-Hawthorne Boulevard

Portland, Multnomah County

Constructed - 1910

Steel Through Truss (Parker) Vertical Lift

Ownership - Multnomah County

WILLAMETTE RIVER BRIDGES: HAWTHORNE

The Hawthorne Bridge is the oldest remaining highway structure across the Willamette River. The main span is a 244-foot steel through truss (Parker) vertical lift span, capable of a vertical movement of 110 feet and providing a lateral waterway clearance of 230 feet. Two electric motors lift the vertical deck lift span. The two towers are 165 feet tall. The bridge includes five steel through truss (Parker) secondary spans, each 220 feet in length, and thirteen concrete approach spans. The Hawthorne Bridge is the lowest of the Willamette River Bridges in Portland, with 53 feet of clearance at low water, and consequently is raised more than any of the other drawbridges. This structure replaced a timber drawspan structure (Madison Street Bridge) built in 1891 and destroyed by fire in 1902. The Hawthorne Bridge has little architectural or decorative treatment. It was designed by Waddell and Harrington, Kansas City, and constructed by the Pennsylvania Steel Company, Portland, for a total cost of \$511,000.

Description

The Hawthorne Bridge is one of the eight major bridges that connect east and west Portland. It is maintained by Multnomah County. Originally built in 1910 to carry rail traffic, the Hawthorne Bridge now carries about 27,000 vehicles daily in four traffic lanes. Vertical clearance for river traffic is limited. Approximately 150 openings per month are required for the vertical lift span.

Modifications

Major structural modifications have included removal of the original timber deck and sidewalk and installation of open steel grating deck and concrete sidewalks. The outbound lanes of Span 6 have been widened near the west approach to the bridge.

Analysis

Structural, mechanical and electrical field inspections, investigation of mechanical and operating sequences, and structural analysis for the six main truss spans were made by Sverdrup & Parcel and Associates, consultants, in 1985 and 1986.

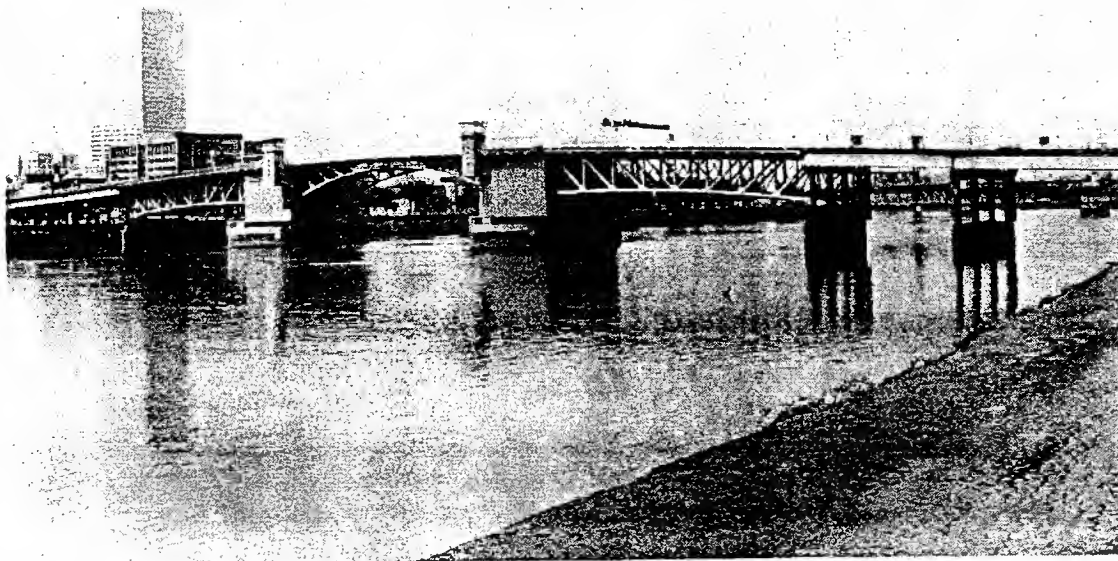
Detailed field inspection and structural analysis of the Hawthorne approach ramps on both sides of the main river span were completed by OBEC Consulting Engineers in 1988.

Within the framework of the CIP process, consultant's reports for the Hawthorne Bridge were analyzed by the appropriate County Engineers, projects were identified, and cost estimates were verified to produce the Hawthorne Bridge part of the Willamette River Bridges 20-Year Capital Improvements Needs Plan (see Report Section).

The structural, mechanical, and electrical deficiencies and estimated costs for repairs were summarized for Contract Repair Recommendations in the Sverdrup Investigation Summary Report. A summary of the Contract Repair suggestions, estimated costs, and target years for construction for the Hawthorne ramps were submitted by OBEC Consulting Engineers in 1988.

The paint investigation report and cost estimates from consultant W.L. Bangert for the Hawthorne Bridge and ramps were for cleaning and painting only. Based on risk factor, an additional construction cost was added to cover such items as traffic protection, mobilization, special insurance, and environmental control measures. These considerations are reflected in the CIP Plan (see Report, Painting Section).

Projects for replacement of the east approach ramp structures and for Phase II Structural and Electrical Rehabilitation, as recommended in the consultants investigation report, have been completed and are not included in the current CIP.



MORRISON BRIDGE SUMMARY

Structure Number 2758

Morrison/Belmont-Front/Alder/Washington
Portland, Multnomah County

Constructed - 1958

Steel Double Leaf Strauss Bascule
Ownership - Multnomah County

WILLAMETTE RIVER BRIDGES: MORRISON

The Morrison Bridge is a six-lane, three-span, steel deck truss structure. The main spans consist of two 206'-8" side span steel deck trusses and a 262'-0" double-leaf Strauss trunnion bascule draw span. The cantilever sections supporting the roadway are divided into six 18'-8" panels with the truss height varying from 6'-0" at the center break to 26'-0" at live load support. The first Morrison Bridge, a wooden bridge built in 1887 with many short spans was the first bridge across the Willamette River into Portland. It was designed by the Pacific Bridge Company and was operated as a toll bridge. In 1905, the second Morrison Bridge, a steel swing span structure was built. It was dismantled in 1958 to make way for the existing Morrison Bridge.

Description

The Morrison Bridge is a major travel corridor linking SE Portland and Interstate 5 to inner-city Portland. It is maintained by Multnomah County.

Built in 1958, the Morrison Bridge accommodates six lanes of traffic with an average daily traffic volume of 41,000 vehicles. Vertical clearance of the closed bascule span is adequate for the majority of river traffic. Approximately 15 openings per month are required for the bascule draw span.

Modification

The only major modifications to the bridge have been a rebuild of the main pier fendering system in 1965, complete deck replacement of the easterly side span in 1980, and the west span in 1994.

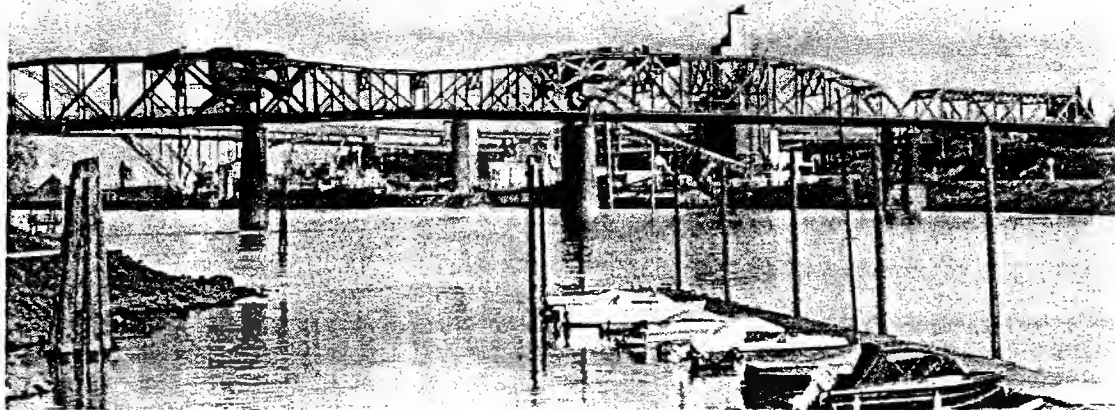
Analysis

Structural, mechanical and electrical field inspections, investigation of mechanical and operating sequences, and structural analysis for the three main river truss spans were made by Sverdrup & Parcel and Associates between May and August 1985. Detailed field inspection and structural analysis of the Morrison Bridge approach ramps on both sides of the river spans were done by OBEC Consulting Engineers in 1987.

Within the framework of the CIP process, consultant's reports for the Morrison Bridge were analyzed by the appropriate County Engineers, projects were identified, and cost estimates were verified to produce the Morrison Bridge part of the Willamette River Bridges 20-Year Capital Improvements Needs Plan.

The structural, mechanical and electrical deficiencies and estimated costs for repairs were summarized for Contract Repair Recommendations in the Sverdrup Investigation Summary Report. Complete details of the inspection and structural rating are contained in the Morrison Bridge Investigation Engineering Report, dated June 1986. A summary of the repair suggestions, the estimated costs, and the target years for construction of the Morrison Bridge approach ramps were presented by OBEC Engineers in 1988.

The paint investigation report and cost estimates from consultant W.L. Bangert for the Morrison Bridge and approaches were for cleaning and painting only. Based on risk factor, an additional construction cost was added to cover such items as traffic protection, mobilization, special insurance, and environmental control measures. The considerations are reflected in the CIP Plan (see Report, Painting Section).



BROADWAY BRIDGE SUMMARY

Structure Number 6757
Broadway Street
Portland, Multnomah County

Constructed - 1913
Steel Through Truss (Pennsylvania-Petit)
Double-Leaf Bascule
Ownership - Multnomah County

WILLAMETTE RIVER BRIDGES: BROADWAY

The Broadway Bridge, designed by the internationally famous bridge designer Ralph Modjeski, is cited as "an important example of the Rall-type bascule span" by David Plowden in Bridges: The Spans of North America (1974). The rarity and uniqueness of the Rall bascule structure add considerable technological interest to this structure. Built over a period of two years by the Pennsylvania Steel Company at a cost of \$1.6 million, the bridge was the longest double-leaf bascule drawbridge in the world when constructed. The central span is a 297-foot steel through truss double-leaf bascule drawspan, providing 250 feet of lateral waterway clearance. The five secondary spans, four Pennsylvania-Petit steel through trusses and one Pratt steel through truss total 1,736 feet in length. An ornate vintage wrought iron bridge railing adjoins the sidewalks.

Description

The Broadway Bridge is one of the eight major Willamette River bridges. It connects NE Portland to NW Portland. The Broadway Bridge is maintained by Multnomah County.

The Broadway Bridge was one of the first movable span bridges in Portland. Built in 1911 and 1912, the bridge was originally designed for rail traffic and vehicular traffic. The bridge presently accommodates four lanes of vehicular traffic with an average daily traffic volume of 26,000 vehicles. Vertical clearance of the closed bascule span is adequate for the majority of river traffic. Approximately 30 openings per month are required primarily to accommodate grain terminal ships.

Modification

Major structural modifications have included the replacement of the original timber plank deck on the approach spans with a concrete deck slab in 1927. The bascule span deck was replaced with open steel grating in 1948, where the street car rails were removed. Machinery renovations include the addition of automatic traffic gates in 1971, and major repairs to the struts in 1982.

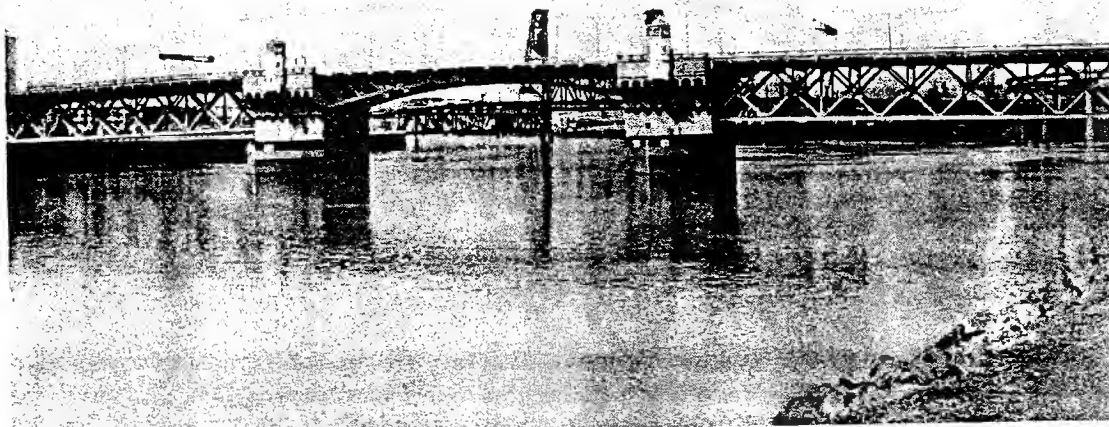
Analysis

Structural, mechanical, and electrical field inspections, investigation of mechanical and operating sequences, and structural analysis for the six main river truss spans of the Broadway Bridge were made by the Sverdrup Consultant group in 1985 and 1986. Detailed field inspection and structural analysis of the Broadway Bridge east and west approaches were completed by OBEC Consulting Engineers in 1988.

Within the framework of the CIP process, consultant's reports for the Broadway Bridge were analyzed by the appropriate County Engineers, projects were identified, and cost estimates were verified to produce the Broadway Bridge part of the Willamette River Bridges 20-Year Capital Improvements Needs Report.

The structural, mechanical and electrical deficiencies, recommendations for rehabilitation or improvements, and estimated costs associated with these items are included in the Sverdrup Investigation Summary Report. Recommendations for repairs and estimated costs associated with those repairs were determined by OBEC Consulting Engineers and reported in their Engineering Report to the County in 1988. Projects for electrical renovations, including a new submarine cable along with mechanical renovations on the east side as recommended in the consultant's investigation report, have been completed and are not included in the CIP.

The paint investigation report and cost estimates from consultant W.L. Bangert for the Broadway Bridge and approaches were for cleaning and painting only. Based on variable risk factor, an additional construction cost was added to projects to cover such items as traffic protection, mobilization, special insurance, and environmental control measures. These considerations are reflected in the CIP Plan (see Report, Painting Section).



BURNSIDE BRIDGE SUMMARY

Structure Number 511
Burnside Street
Portland, Multnomah County

Constructed - 1926
Steel Double-Leaf Bascule
Ownership - Multnomah County

WILLAMETTE RIVER BRIDGES: BURNSIDE

The Burnside Bridge is a double-leaf bascule drawspan. It replaced the original 1894 wrought iron truss swing span structure. Two spans of the 1894 structure were moved to new locations and are the oldest highway bridges in Oregon (Bull Run River Bridge and the Sandy River Bridge on Lusted Road, both in Clackamas County). The Burnside Bridge has two 266-foot steel deck truss secondary spans and thirty-four steel deck girder approach spans for a total structure length of 2,308 feet. The bascule system for the bridge was designed by Joseph B. Strauss, who later designed San Francisco's Golden Gate Bridge. The principal engineer for the Burnside Bridge was noted engineer Gustav Lindenthal. The original design concept is credited to I.G. Hendrick and Robert Kremers of Multnomah County, who were later replaced by Lindenthal. The Pacific Bridge Company constructed the bridge. Architectural treatment of the bridge includes an ornate spindle-type balustrade railing (wrought iron on the bascule section) and turreted operator shelters cantilevered from the massive main piers. The Burnside Bridge is distinguished as one of the most visually appealing of Portland's Willamette River Bridges.

Description

The Burnside Bridge is one of the four major movable Willamette River Bridges maintained by Multnomah County. It connects east Portland to west Portland and divides south and north Portland. The bridge was originally built in 1926 and carries about 44,000 vehicles daily in five lanes of traffic. Vertical clearance of the closed bascule span is adequate for most river traffic. Approximately 15 openings per month are required of the draw span.

Modifications

Minor modifications have been made to the Burnside Bridge since its original construction. The east and west approaches have undergone deck resurfacing and joint rehabilitation.

Analysis

Structural, mechanical and electrical field inspections, investigation of mechanical and operating sequences, and structural analysis for the three main river spans of the Burnside Bridge were made by Sverdrup & Parcel and Associates, Inc., in 1985. Detailed field inspection and structural analysis of the east and west approach spans of the Burnside Bridge were conducted by OBEC Consulting Engineers in August 1987.

Within the framework of the CIP process, consultant's reports for the Burnside Bridge were analyzed by the appropriate County Engineers, projects were identified, and cost estimates were verified to produce the Burnside Bridge part of the Willamette River Bridges 20-Year Capital Improvements Needs Report.

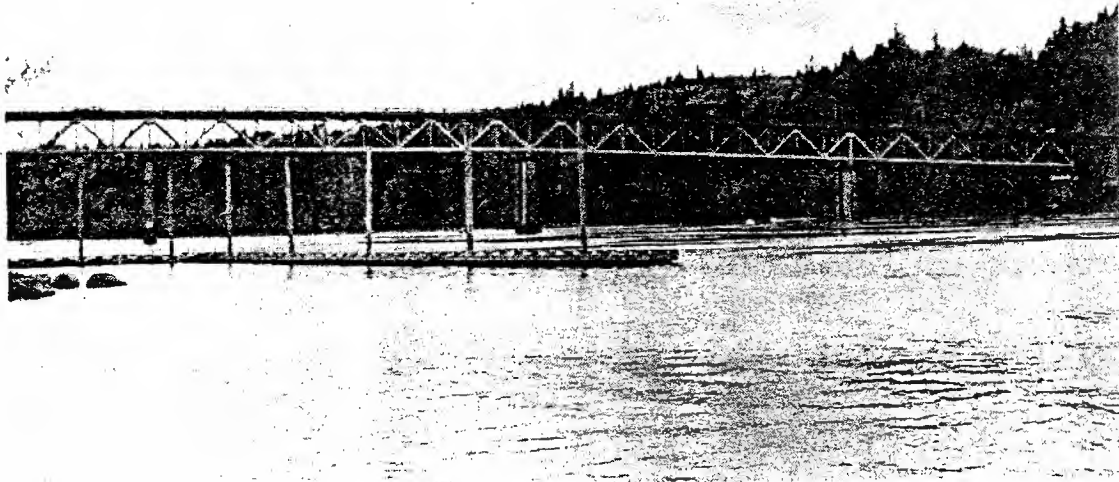
The structural, mechanical and electrical deficiencies and estimated costs for repairs and rehabilitation associated with these items can be found in the Sverdrup & Parcel and Associates Investigation Summary Report. Complete details of the inspection and structural rating are contained in the Burnside Bridge Investigation Engineering Report, dated June 1986, by Sverdrup.

A summary of the Contract Repair suggestions, estimated costs, and target years for construction were submitted for the Burnside Bridge east and west approaches by OBEC Consulting Engineers in 1988.

The paint investigation report and cost estimates from consultant W.L. Bangert for the Burnside Bridge and approaches were for cleaning and repair only. Based on risk factor, an additional construction cost was added to cover such items as traffic protection, mobilization, special insurance, and environmental control measures. These considerations are reflected in the CIP Plan, Painting Section.

The following projects were recommended in the aforementioned consultant's investigation report and have now been completed. They are not included in the current CIP:

1. Sidewalk and railing rehabilitation.
2. Electrical renovations.
3. Counterweight link modifications.
4. E/W approach rehabilitation and rocker bearing replacement on three piers.



SELLWOOD BRIDGE SUMMARY

Structure Number 6879
SW Macadam-SE Tacoma
Portland, Multnomah County

Constructed - 1925
Steel Deck Truss
Ownership - Multnomah County

WILLAMETTE RIVER BRIDGES: SELLWOOD

The Sellwood Bridge is a Warren steel truss structure. It has an overall length of 1,971 feet and provides a 24' roadway with one 4'-3" sidewalk on the downstream side. The main river spans consist of a 1,092' four span continuous steel Warren truss. The two interior spans of 300' in length, and the two end spans of 246' carry a 6-1/2" thick concrete deck. The truss is supported on five major concrete piers and footings, of which two are founded on piles, and three are founded on hard pan material. The Sellwood Bridge replaced the Sellwood Ferry and is the only major bridge crossing of the Willamette River in a 10-mile stretch.

Description

The Sellwood Bridge is the only major bridge crossing of the Willamette River in a 10-mile stretch of heavily populated area. The Sellwood Bridge is maintained by Multnomah County. Built in 1925, it has served as a major link for people traveling to west Portland from SE Portland and Milwaukie. It carries about 27,800 vehicles daily. The Sellwood Bridge is a non-movable bridge, i.e., vertical clearance is sufficient for river traffic.

Modifications

In 1960 the structural integrity of the bridge was greatly reduced when the west-side approach spans moved an estimated 18-inches toward the river. Repairs were immediately implemented. In 1961, a 25-foot prestressed concrete girder span was added, new columns and pile foundations were needed.

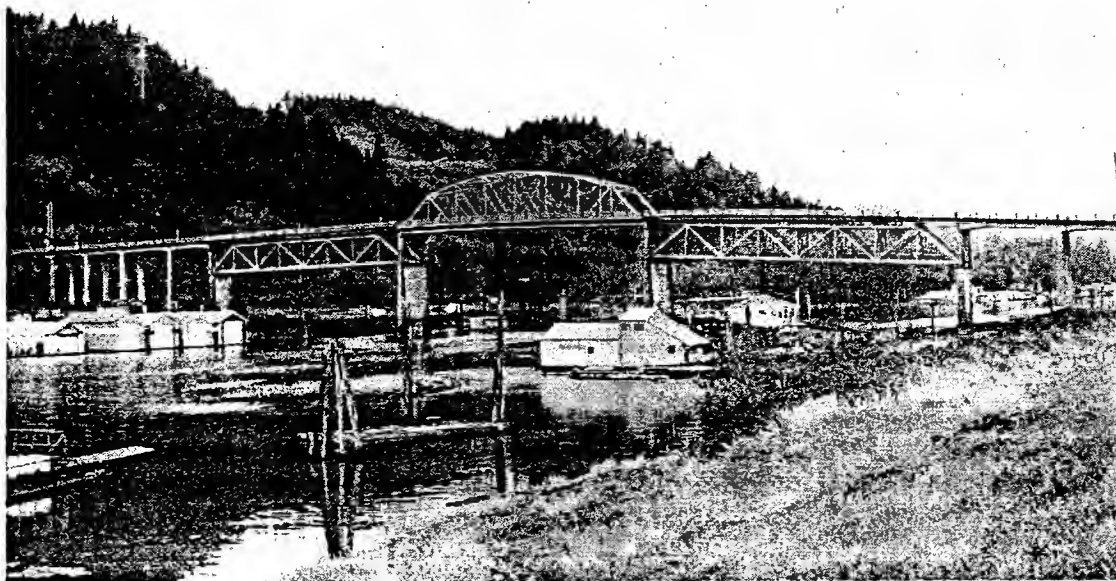
Analysis

Bridge inspection, geo-technical investigation and structural analysis of the main river spans, and the east and west approaches were presented by Sverdrup & Parcel and Associates in 1986. The detailed engineering report used by the Sverdrup group of consultants was submitted to Multnomah County by OBEC Consulting Engineers in August 1985.

Within the framework of the CIP process, consultant's recommendations for the Sellwood Bridge were analyzed by the appropriate County Engineers and cost estimates were verified for two different scenarios, rehabilitation and replacement. Scenario 1 involves replacement of the existing bridge with a new bridge, having a minimum of four travel lanes. Scenario 2 envisions rehabilitation of the existing bridge (by placing a new superstructure on the existing foundation), plus building a new two-lane bridge. The recommended alternative is replacement and is included in the Willamette River Bridges 20-Year Capital Improvements Needs Report.

Significant structural deficiencies and estimated costs for repair and replacement were summarized in the Sverdrup Investigation Summary Report. Functionally, the Sellwood Bridge is considered "OBSOLETE" because of the substandard 24-foot roadway that carries 27,800 vehicles daily.

The paint investigation report and cost estimates from consultant W.L. Bangert for the Sellwood Bridge were for cleaning and painting only. Based on risk factor identified by consultant, an additional construction cost was added to cover such items as traffic protection, mobilization, special insurance, and environmental control measures. These considerations are reflected in the CIP Plan (see Report, Painting Section).



SAUVIE ISLAND BRIDGE

Structure Number 2641

Oregon Highway 30-Sauvie Island

Portland, Multnomah County

Constructed - 1948

Steel Through Truss, Concrete Approach Spans

Ownership - Multnomah County

WILLAMETTE RIVER BRIDGES: SAUVIE ISLAND

The Sauvie Island Bridge is 1,198' long and consists of two separate types of construction. The first six spans (totaling 272') are reinforced concrete deck girders set on concrete piers. The following five spans (totaling 326') are also reinforced concrete deck girders designed as three span continuous followed by two span continuous. The roadway width is 26' with sidewalks on both sides. The bridge was designed by the state and is the only access for the largely agricultural community on the island.

Description

The Sauvie Island Bridge crosses the Multnomah Channel just before it enters the Willamette River. It is maintained by Multnomah County. Built in 1948, the bridge is the only access for the largely agricultural community on Sauvie Island. The Sauvie Island Bridge is a non-movable structure, i.e., river traffic is not restricted.

Modifications

Major structural modifications have not occurred.

Analysis

Structural inspections and load ratings of the bridge and approach spans were conducted by OBEC Consulting Engineers in September 1987. A summary of recommendations for repairs and estimated costs associated with repair projects were determined and presented by OBEC Consulting Engineers in January 1988.

Within the framework of the CIP process, the consultant's reports for the Sauvie Island Bridge were analyzed by appropriate County Engineers, projects were identified, and cost estimates were verified to produce the Willamette River Bridges 20-Year Capital Improvements Needs Report.

The paint investigation report and cost estimates from consultant W.L. Bangert for the Sauvie Island Bridge and approach spans were for cleaning and painting only. Based on risk factor identified by consultant, an additional construction cost was added to cover such items as traffic protection, mobilization, special insurance, and environmental control measures. These considerations are reflected in the CIP Plan (see Report, Painting Section).

WILLAMETTE RIVER BRIDGES ACCESSIBILITY PROJECT

User Objectives and Criteria

The CAC worked closely with Multnomah County staff to develop objectives and criteria relating to bridge users. These objectives can serve as long-term goals for accessible facilities, particularly in the case of new bridge construction. The objectives and criteria for bicycles, pedestrians, and disabled persons follow:

Bicycles

Objective: To provide safe, direct and convenient bicycle access to and across the Willamette River with minimal conflicts with motor vehicles.

Criteria:

Separate rights-of-way for bicycles should be provided in the bridges' main spans and ramps, wherever practicable.

Planned bikeways should offer direct connection to bridge ramps. Bikeway facilities should be appropriate to the functional classification of the bikeway system.

Bikeways should have minimal uncontrolled conflicts with motor vehicles.

Direct and convenient routing is vital to bicyclists; access routes to the Willamette River Bridges should be planned so that they are as direct and convenient as practicable, with sufficient signage.

There will continue to be bikeways shared with pedestrians in the foreseeable future; on shared facilities, travelways and protocol among users should be indicated with clear signage.

Bikeway design should accommodate use by motorized wheelchairs.

Pedestrians

Objective: To provide safe, direct, and convenient pedestrian access to and across the Willamette River with minimal conflict with motor vehicles.

Criteria

Sidewalks should be of adequate width to accommodate anticipated pedestrian and wheelchair traffic.

Sidewalks should be a minimum of 72 inches wide, where practicable.

Pedestrian underpasses should be replaced with at-grade pedestrian crossings, where practicable.

To ensure pedestrian safety, at-grade crossings should provide measures to control traffic.

To ensure the continuity of the pedestrian system, pedestrian rights-of-way at bridgeheads should be delineated. (The bridgehead is the transition area between the bridge ramp and the surface streets.)

To reduce conflict between bicyclists and pedestrians, travelways should be separated, where practicable.

If separated travelways are not possible, shared bicycle and pedestrian two-way travelways should be a minimum of 12 feet wide, per AASHTO standards, where practicable.

Safe pedestrian routes to and across the river should be indicated by directional signage.

Safe pedestrian routes to popular destinations should be indicated by informational signs.

To increase personal safety, all pedestrian facilities should be well lighted.

Disabled Persons

Objective: To provide safe, direct, and convenient access for disabled persons to and across the Willamette River with minimal conflict with motor vehicles.

Criteria

New construction planned by the WRBAP must comply with the American with Disabilities Act.

To improve accessibility for the physically disabled, ramps with stairs should be included on pedestrian ways, wherever practicable.

To reduce obstacles to the physically disabled, curb ramps should be placed appropriately in the project area.

Signage should indicate safe and convenient routes for the physically disabled to cross the river.

To increase safety, visually impaired persons should be alerted to hazards by means of textured sidewalks.

To increase the safety of hearing impaired persons, there should be pedestrian-activated signals and other appropriate traffic controls in the project area to provide visual cues.

Project Performance Criteria

A. Mode Benefit

The proposed project provides significant benefit to at least one project mode (i.e. bicycles, pedestrians and disabled persons). The alternative should not deteriorate conditions for other project modes. Projects that provide benefit to more than one mode will receive additional points.

- Provides significant* benefit to more than one mode. 4 Points
- Provides significant benefit to one mode and marginal* benefit to one or more other modes. 3 Points
- Provides marginal benefit to more than one mode, or significant benefit to one mode. 2 Points
- Provides marginal benefit to one mode. 1 Point
- Provides no benefit. 0 Points
- Limits accessibility for one or more modes. -3 Points

***Significant:** Provides direct access from street system or recreational amenity, or provides increased accessibility across the main span. Provides increased safety and user comfort.

***Marginal:** Provides improved access but does not eliminate all conflicts and problems. Does not necessarily increase user comfort but does increase safety.

B. Removes Barriers

The goal of the project should be to plan for increased access on Willamette River Bridges. The project should assure that access to the bridges does not represent a barrier to project modes travel.

- Project removes or circumvents a significant barrier to alternative modes travel across a particular bridge (i.e., a barrier which precludes or severely limits access on an otherwise accessible bridge). 4 Points
- Project removes or circumvents a significant barrier, however other minor barriers still exist. 3 Points
- Project removes or circumvents one of a number of barriers, however a significant barrier still exists. 2 Points
- Project removes or circumvents a barrier, however several significant barriers still exist. 1 Point
- Project does not remove or circumvent a barrier. 0 Points

C. Facilities Connections

The project should provide a necessary addition to existing bike and pedestrian systems. The project should not be isolated from other systems or other proposed projects.

- Provides critical system additions* for more than one mode. 4 Points
- Provides critical system additions for one mode. 3 Points
- Provides minor system additions* for more than one mode. 2 Points
- Provides minor system additions for one mode. 1 Point
- Does not provide a system addition. 0 Points

*Critical system additions: Addition to system that connects to a developed circulation system for the benefitted mode, project provides a vital connection.

*Minor system additions: Addition that does not necessarily connect with a well developed circulation system.

D. Traffic System Performance

Some decrease to traffic system performance may result from the project, however increases to traffic congestion that will negatively affect goods movement and transit service are not acceptable.

- Project will not degrade traffic system performance. 0 Points
- Project will cause minor degradation to traffic system performance. -1 Point
- Project will cause significant degradation to traffic system performance. -2 Points
- Project will cause capacity decrease which could lead to failure of traffic system links or intersections on streets important to goods movement. -3 Points
- Project will cause capacity decrease which could lead to failure of traffic system links or intersection on streets heavily used by transit. -4 Points

E. Potential Users

Relative number of users of a project

High Use: 5 Points

Moderate Use: 3 Points

Low Use: 1 Point

F. Cost benefit Analysis

Project score divided by project cost.

Lowest 20% cost per unit. 4 Points

Next lowest 20% cost per point. 3 Points

Middle 20% cost per point. 2 Points

High 20% cost per point. 1 Point

Highest 20% cost per point. 0 Points

Implementation Plan

After applying the evaluation criteria to the 80 preliminary projects, the CAC and TAC selected 38 multimodal projects for implementation. The total cost of the 38 projects is estimated at \$7.63 million.

WRBAP will receive \$1 million from the Congestion Management/Air Quality program in 1996. The \$1 million grant plus additional local funding will be directed toward construction of 25 of the 38 projects. The Phase One projects consist of improvements costing \$5,000 to \$200,000.

Thirteen future phase projects are anticipated to be included in the regional transportation plan, transportation improvement plans, and local jurisdiction capital improvement plans. If Phase One project costs are lower than estimated, some Phase two projects may be shifted to Phase One.

Funding Sources

There are several possible sources of additional funding, both local and federal.

Local Funds:

The Oregon Department of Transportation, city of Portland and Multnomah County all have funds set aside for constructing pedestrian, bicycle and disabled access projects. All three jurisdictions will consider construction projects before 1996. County funds used to maintain the Willamette River Bridges must go to continued maintenance of bridge facilities.

Federal Funds:

Most grant funds from the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) Implementation Strategy have already been allocated; however, Congress is expected to begin consideration of a new ISTEA in the next year. The new legislation should include programs for alternative modes of transportation. Completion of WRBAP will position the involved jurisdictions to compete for available funds.

Multnomah County Phase I Project Implementation

Of the 25 projects identified for Phase I Implementation, 4 projects are solely Multnomah County's responsibility, several other projects are joint responsibility between Portland and the County. The total cost of implementing Multnomah County's portion is \$460,000, as follows:

Table 14

WILLAMETTE RIVER BRIDGES ACCESSIBILITY PROJECT PHASE I PROJECT IMPLEMENTATION

PROJECT NAME	COST
Broadway Bridge	
Lift Span Sidewalks (3)*	\$50,000
Burnside Bridge	
Burnside Rd/MLK Intersection (\$20,000
Morrison Bridge	
Front Ave Ramp Sidewalk (5B)	\$200,000
Hawthorne Bridge	
Clay St Ramp (2)	\$10,000
Madison St Viaduct Sidewalk	\$200,000
TOTAL	\$460,000

* Project number as identified in WRBAP Study

APPENDICES

Priority 3 Projects (No Immediate Need)

1. An acceptable level of service exists of A through D; and
2. No reconstruction is needed within the five year planning period; and
3. No hazardous condition currently exists; and
4. No traffic increases are anticipated within the five year planning period that would result in a level of service below D; or,
5. The facility currently meets County street standards.

APPENDIX II
1996-2000 CAPITAL IMPROVEMENT PLAN

PROJECT BACKGROUND DATA

Data Describing Proposed Projects

Reconstruction of the facility is required
Installation or upgrading of traffic signals
Sign upgrading
Stripe upgrading
Widen Pavement
Installation of turn lanes
Intersection improvements
Provide drainage facilities
Provide sidewalks
Provide bikeways
Provide lighting
Provide additional right-of-way width
Provide additional pavement width
Provide additional travel lanes
Project source (Who identified the project.)
Estimated project cost
Federal funding source
Federal share of funding
County share of funding
Jurisdiction
Map number

Data Describing Existing Conditions

Existing right-of-way width
Existing pavement width
Existing number of lanes
Existing sidewalks
Existing bikeways
Existing street lighting
Existing drainage facilities

Street Classifications

As designated on the County Functional Classification of Trafficways Map.

Current Peak Hour Daily Traffic Volume

Current traffic counts were provided by the Multnomah County Traffic Engineering Section.

Projected Two and Five Year Peak Hour Traffic Volumes

Metro forecasts and traffic studies were used to project traffic volumes over the program period.

Existing Peak Hour Road Capacity

Two sources were used to determine the design capacity for street segments and intersections: Gresham/East County Traffic Impact Fee Study, 1992 and County traffic studies. Where capacity information was not available, estimates were made by Transportation Division staff.

Levels of Service

Levels of service were calculated by Transportation Division staff or provided by the Gresham/East County Traffic Impact Fee Study.

Number of Accidents

The total number of accidents for the previous three year period (1991-93) were compiled from Oregon Dept. of Transportation reports.

Hazardous Locations

Project locations were investigated to determine if hazardous conditions exist.

Transit Relationship

Existing and future bus routes, light rail transit routes, and street access to Max park-and-ride lots were identified in conjunction with Tri-Met.

Land Use

Land use designations were gathered from local zoning maps and comprehensive plan maps.

Bicycle/Pedestrian Facilities

The Multnomah County Bicycle Master Plan and local comprehensive plans were used to identify bikeways and pedestrian facilities.

Reconstruction Needs

The Multnomah County Pavement Management Program was used to identify road segments that will require reconstruction within the program period.

Traffic engineering staff identified traffic signal equipment needing to be replaced or upgraded.

Project Length

The length of each project (in feet) was derived from the Multnomah County Master Road List report.

Economic Development Relationship

Local jurisdictions and Multnomah County planning staff determined the scale of development anticipated for large vacant parcels within their jurisdiction. Parcels were classified using the following typology:

- Regional Scale Industrial

- Large Industrial Areas (100 acres and above)

- Other Industrial

- Regional Retail Centers (such as Portland CBD, Lloyd Center, Mall 205)

- Major Retail Center (Dept. of Commerce definition)

- Clustered Commercial (as noted by land use plans)

- Regional Community Service & Office (Major hospitals, community colleges,
large scale government facilities)

- Major Community Service & Office (Hospitals, community college branches,
medium scale government facilities)

Outside Funding Potential

Projects listed in the ODOT Six Year Program the Metro Transportation Improvement Plan were identified as having outside funding potential.

Environmental Impact

Projects which would require additional right-of-way, noise mitigation or building demolition were identified by Multnomah County Transportation Division staff.

Community Support

Projects listed in local comprehensive plans, the Regional Transportation Plan or community plans were identified by Multnomah County and local jurisdiction planning staffs.

APPENDIX III
1996-2000 CAPITAL IMPROVEMENT PLAN

SCHEDULE OF POINT ASSIGNMENTS

BASE POINT ASSIGNMENT

<u>Street Priority</u>	<u>Arterial/ Transit Corridor</u>	<u>Collector/ Scenic Route</u>	<u>Local</u>
1	400	300	200
2	300	200	100
3	0	0	0

BONUS POINT ASSIGNMENT

Transit

· Bus Route	10
· Future Bus Route	5
· Park & Ride Access	10
· Light Rail Transit	10
· Future LRT	5

Designated
Land Use

· Light Manufacturing	8
· Heavy Manufacturing	8
· Regional Commercial	10

Central Commercial	10
Other Commercial	5
Reg Community Service	10
Other Community Service	4
High Density Residential	5
Other Residential	2

Economic Development

Regional Scale Industrial	10
Large Ind. Area (100 Ac+)	7
Other Industrial	5
Regional Retail	10
Major Retail	7
Clustered Commercial	5
Reg. Com. Service & Office	10
Major Community Service	3

Outside Funding

Committed	10
Potential	5

Environmental Impact

Right-of-Way Acquisition

Building -15

Land Only -10

Noise Problem -10

Community Support

Local Plans 10

Written Support 5

Bicycle Related 5

Street Importance (see below) 1-10

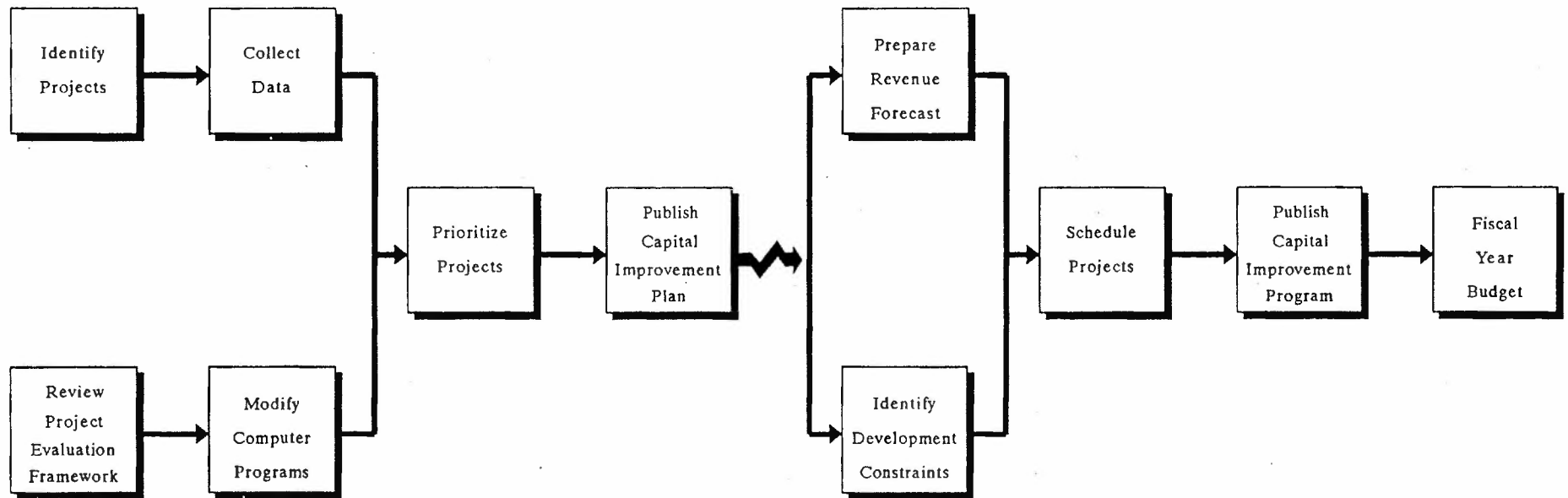
Land Use

Street Length (ft.)

	<u>500</u>	<u>1000</u>	<u>2000</u>	<u>3000</u>	<u>4000</u>	<u>4001+</u>
Reg/Cent. Commercial	5	6	7	8	9	10
Community Service	4	5	6	7	8	9
Other Commercial	3	4	5	6	7	8
Residential	2	3	4	5	6	7
Manufacturing	1	2	3	4	5	6

CAPITAL IMPROVEMENT PLAN & PROGRAM

Flow Chart



Capital Improvement Plan

Capital Improvement Program

CIP 1996-2000 PROJECT CONSTRAINTS
MULTNOMAH COUNTY DES, TRANSPORTATION DIVISION

PRIORITY 1 PROJECTS	CONSTRAINTS				
	Sewer Projects	Water Projects	Storm Projects	Assoc Project	EIS/EA Corridor Study Req
ARTERIAL STREETS					
NE Halsey St (207th Ave-223rd Ave)					
Stark St (257th Ave-Troutdale Rd)				T	
207th Connector (Halsey St-Glisan St/223rd Ave)		95/96 R		F	
NE Halsey St (190th Ave-207th Ave)		R	96/97 F		
257th Ave (Bull Run Rd-Division St)			97/98 G		Study G
223rd Ave (Glisan St-Halsey St)		96/97 W			
Powell Valley Road (Burnside Rd-Kane Rd/257th Ave)					EIS
Glisan St (3500' E of 223rd Ave/242nd Ave)	G	96/97W/G	G		
Glisan St (223rd Ave/3500' E of 223rd Ave)	G	95/96W/G	G	F	
Glisan St (202nd Ave/207th Ave)	F/G	R			
Jenne Rd (2050' NE of Foster-800' S of Powell Blvd)					
Corbett Hill Rd (1200' S of I-84-2200' S of I-84)					
COLLECTOR STREETS					
201st Ave (Halsey St-Sandy Blvd)					Study
Troutdale Rd (Streb Rd-Stark St)					
190th Ave (Division St-2400' S of Yamhill)	96/97 G				
201st (Halsey St-Glisan St)	96/97 G				Study
Bull Run St (Burnside Rd-257th Ave)					
202nd Ave (Stark St-Glisan St)	96/97 G			R	Study
Hensley Rd (257th Ave-Troutdale Rd)	T	T	T		
BRIDGES					
223rd Ave (RR Bridge at I-84)					
SIGNALS/INTERSECTIONS					
Halsey St/223rd Ave				F	
Stark St/Troutdale Rd					
Halsey St/238th Ave					
Glisan St/172nd Ave	97/98 G				
Powell Blvd/182nd Ave					
Foster Rd/172nd Ave					
Breyman and Greenwood/US 43					
Halsey St/201st Ave					
Orient Dr/257th Ave		G			
Burnside Rd/242nd Ave					EIS
Powell Valley Rd/257th					

G=Gresham

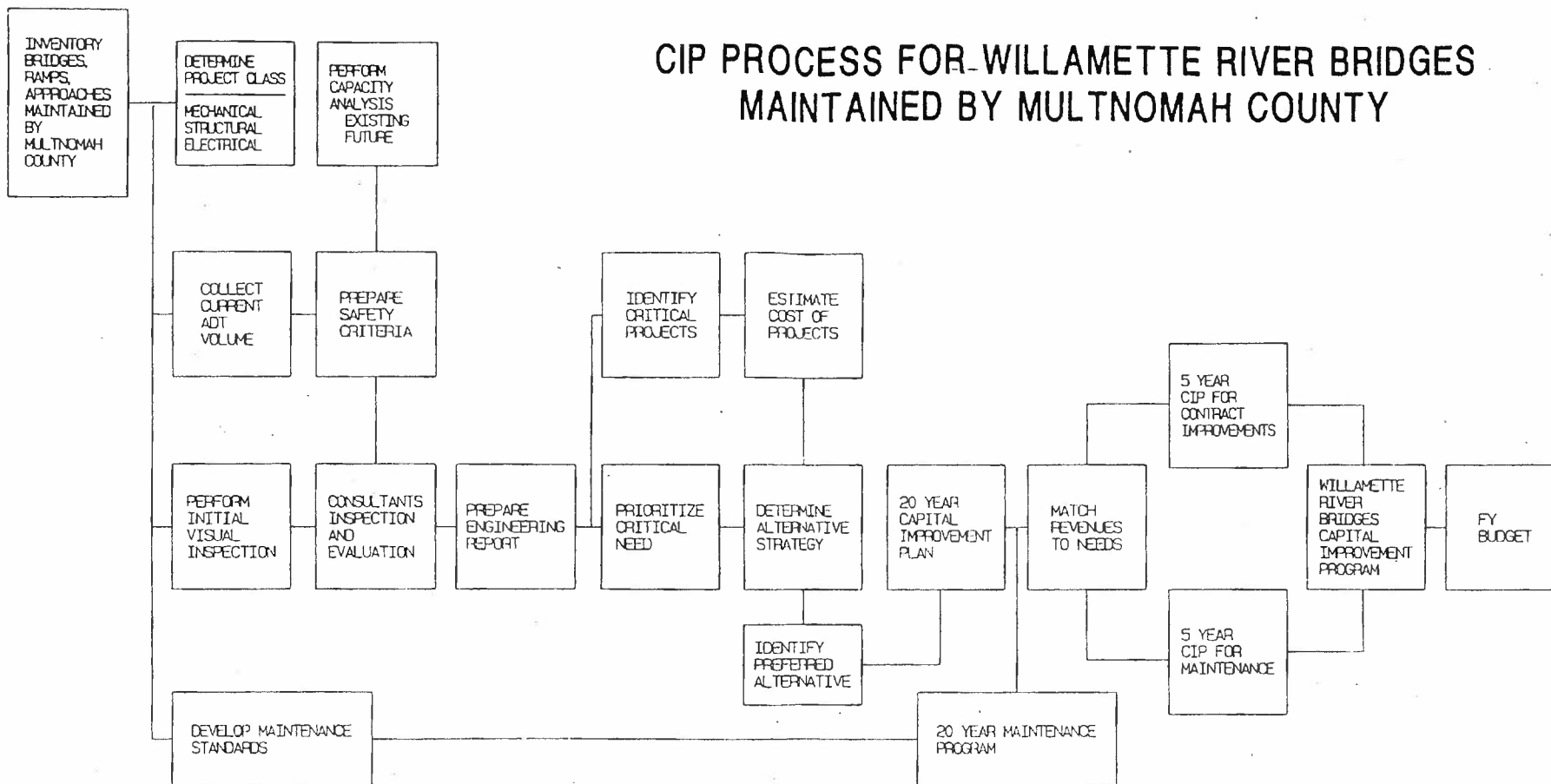
F=Fairview

W=Woodvillage

T=Troutdale

R=Rockwood Water District

CIP PROCESS FOR WILLAMETTE RIVER BRIDGES MAINTAINED BY MULTNOMAH COUNTY



1996-2000 CAPITAL IMPROVEMENT PLAN & PROGRAM

PROJECT LOCATION MAP



MULTNOMAH COUNTY
DEPARTMENT OF ENVIRONMENTAL SERVICES
TRANSPORTATION DIVISION
1620 S.E. 190th Ave. PORTLAND, ORE.



LEGEND:

- (241) Capital Improvement Plan Project Number
- (440) Capital Improvement Program Project Number
- Road Project
- Intersection Project
- Bridge Project

