Multnomah County Application (cont.)
Question #8

Training. Multnomah County conducted 153 countywide trainings for 3,272 participants in FY 08/09. Although e-learning has been embraced conceptually by the County as a strategy to efficiently meet training needs and reduce our "carbon footprint", classroom training still makes up all of the learning hours delivered and has a significant impact on the environment in the areas of travel, facilities, and materials. Multnomah County has within the past two years greatly increased its budget for investing in employee talent, development and training – a move understood as a key strategy for advancing the county's business goals. However, with that increased investment in traditionally delivered training, the organization has also seen an increase in car, facility and paper usage. By reducing the need to travel for training, Multnomah County could see a dramatic reduction in its carbon emissions.

Cross-Organizational Meetings. With a renewed appreciation for the importance of cross-organizational collaborations, Multnomah County has seen a surge in partnerships that take managers and employees away from their work site and to other county facilities. Particularly as it relates to services provided generally throughout the organization—Human Resources, Information Technology, Business Services, Budget, and Contracting—these increases are evident and the result is increased car travel to attend meetings at diverse county work sites. The average Multnomah County manager is asked to participate in five to eight outside meetings in an average work week.

*Judicial Arraignments. .*Additionally, Multnomah County judges, attorneys, and county staff at the Justice Center, Mead Probation, Juvenile Detention Housing, Public Metropolitan Defenders, Rose City Defenders and Squires & Barnett, currently utilize traditional video conferencing methods to communicate and hold arraignments or hearings with inmates at Inverness Jail and in other counties and cities across the United States on a regular basis. However, due to our aged equipment we continually have technical problems causing an increased number of arraignments to be rescheduled and in some cases, transports must occur. This wastes time of judges, attorneys, county judicial and IT staff, overall increasing cost each time this occurs.

Outdated technologies. Multnomah County currently maintains an outdated legacy teleconferencing system that includes 20 camera units located across 12 buildings. Each conferencing location is routed through the County's telephone network via older, dial-up ISDN circuits. Due to budget constraints, there have been no systematic upgrades or maintenance activities performed on the equipment currently in use. As a result, almost all units are considered "end of life" by the vendor and are no longer supported. Because the County's current teleconferencing infrastructure is based on outdated equipment, the scope of services it provides is limited, expensive and inefficient.

All of these factors contribute to a significant detrimental impact on the environment. Multnomah County's environmental footprint can be calculated using the average

12/14/2009

distance that employees and trainers travel in order to attend training courses and also the paper usage.

- Travel, Materials: Multnomah County's Learning Footprint has been calculated as follows[1]:

  Tons of CO2 used by participants attending courses per year: *12.06*
       Over 5 years, this would be: *60.32*
  Tons of CO2 used in paper per year: *0.56*
       Over 5 years, this would be: *2.78*
  Tons of CO2 used by trainers attending courses per year: *1.06*
       Over 5 years, this would be: *5.32*

  Total CO2 usage, in tons, per year: ***13.68***

In total, training participants travel about 40,800 miles by car per year.
In total, trainers travel about 3,600 miles by car per year.
In total, Multnomah County uses about 122,400 pieces of paper per year.

<u>Multnomah County's Pilot Project</u>
Implementation of the pilot project began in August 2009 with the purchase of a one-year hosted Adobe Connect Pro Meetings application and evaluation of IP-based teleconferencing solutions.

The primary purpose of the **Adobe Connect** is for desktop meetings and e-learning initiatives (virtual and self-paced learning). The pilot project is testing virtual capabilities by training staff, offering classes and via an online meeting function for teleconferences. In some instances, due to unavoidable schedule conflicts, critically important meetings can be videotaped for historical purposes and future viewing. For the Pilot Project 100 licenses of the Adobe Connect Meeting module were purchased for $45,000[2].

The primary purpose of **teleconferencing equipment** is for meetings and conferences with Multnomah County judges, attorneys, and county staff. Unfortunately, budget reductions in the current fiscal year have not allowed us to procure teleconferencing equipment.

<u>ARRA grant request</u>
ARRA grant funding is sought to greatly expand the reach of Multnomah County's trainings, meetings and conferences, increase its ability to meet face to face without worrying about travel or geographic barriers, and reduce the county's carbon output.

The primary components of this proposal are to 1) increase the Adobe Connect licenses, 2) expand Adobe Connect functionalities, and 3) replace teleconferencing equipment that is based on Internet Protocol (IP) communication protocol standards.

---

[1] http://www/learningfootprint.com to estimate Multnomah County's learning footprint

[2] Project Proposal request of $96,750 negotiated to $45,000 – see Desktop Meeting Rooms

12/14/2009

Adobe Connect Pro

- Expansion of Adobe Connect functionalities. Adobe Connect Pro consists of three functionalities: Meetings, Presenter and Training modules. Multnomah County purchased 100 licenses for a one-year hosted system of the Meetings module. ARRA funding is requested to purchase a 300 license of the Meeting and Training Modules and 2 licenses for the Presenter functionality.

  The Meeting Module is the technology that facilitates any live meeting. The Training Module will enable us to measure and track training and compliance initiatives and course effectiveness. The Presenter functionality is a plug-in with Microsoft Power Point that allows a non-technical user to very easily turn a set of power point slides into e-learning content.

- Increased Adobe Connect licenses from 100 licenses to 300 licenses.

- Purchase of Adobe Green Meter. The Green Meter is an automatic calculator inside the web conferencing software that tracks CO_2, cost, and travel reductions accrued by meeting and training online rather than traveling.

Adobe Connect Pro	Feb. 2010	Feb. 2011	TOTAL REQUEST
License Purchase Cost/300 Licenses – Meeting Module	$69,202	$72,662*	$141,864
License Purchase Cost/300 Licenses – Training Module	$55,000	$57,750*	$112,750
License Purchase Cost/ 2 Licenses – Presenter Module	$ 500	$ 515*	$ 1,015
Webcams & Headphones for Trainers/Presenters	$ 5,000		$ 5,000
Adobe Green Meter	$ 5,000		$ 5,000
*A modest increase is projected in 2011 for inflation.			$265,629

Teleconferencing Equipment

Procure four new IP-based camera units for key Justice locations and the management application required to provision and service them, then utilize a State of Oregon bridge service to allow them to connect to all legacy locations. Grant funding will allow for the replacement of all ISDN camera units and a bridge for connection to other jurisdictions using disparate equipment.

Equipment	Unit Cost	Units	TOTAL REQUEST
Tandberg MCU	$69,913	1	$69,913
Tandberg Edge 75 MXP endpoints	$5,991	13	$77,883
Tandberg Edge 95 MXP endpoints	$8,850	3	$26,550
		17	$174,346

12/14/2009

Teleconferencing Equipment Location		
Location	**Address**	**# of Units**
Inverness Jail	11540 NE Inverness Drive	4
Donald E. Long	1401 NE 68th	1
Justice Center	1120 SW 3rd	4
Kelly Building	4747 E Burnside	2
Lincoln Building	421 SW Oak	1
McCoy Building	426 SW Stark	2
Mead Probation	421 SW Fifth Avenue	1
Multnomah Building	501 SE Hawthorne	1
Children's Center	New Location	1
TOTAL		17 Units

Technology Training Coordinator

Addition of 1 FTE Technology Trainer Coordinator. By bringing on a full-time, limited-duration Technology Training Coordinator to train the workforce in the new equipment and software and to disseminate information relevant to virtual attendance at meetings and e-learning and web-based training design. These activities will assist with the necessary organizational culture change that will encourage employees to embrace contemporary technologies. Multnomah County will promote this innovative, time-efficient, and environmentally friendly option.

Position	Feb. 2010	Feb. 2011	TOTAL REQUEST
Technology Trainer *An increase is projected for 2011 based on County contractual obligations.*	$118,222.56	$124,133.68*	$242,356

TOTAL PROJECT REQUEST: $682,331

Multnomah County plans to offer 25% of our current classroom trainings, meetings and conferences online by FY 11-12.

	Current:	**Reduced:**	**Saved:**
Participants incur:	12.06 Tons	9.05 Tons	3.01 Tons
Paper usage incurs:	0.56 Tons	0.42 Tons	0.14 Tons
Trainers incur:	1.06 Tons	0.80 Tons	0.26 Tons
Total CO_2 over 1 year:	13.68 Tons	10.26 Tons	3.42 Tons
Total CO_2 over 5 years:	68.41 Tons	51.31 Tons	17.10 Tons

This equates to a saving of 1.35 Tons over 1 year.
This equals 6.73 Tons over 5 years.

80T

T
o
n
n
e
s

o
f

C
O
2

60T

40T

20T

0T

Year 1   Year 2   Year 3   Year 4   Year 5
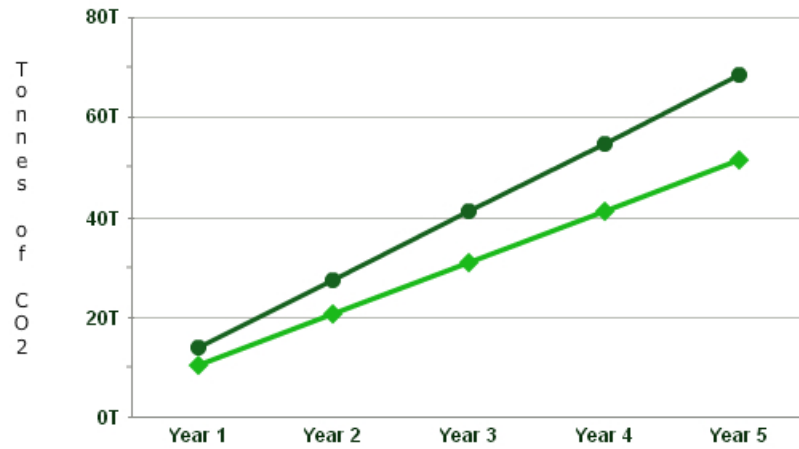
Countywide trainings and meetings targeted for e-learning and web conferencing are primarily those that ensure compliance with federal and local policies and rules and include: Drug & Alcohol Policy Training for Managers/Supervisors, Drug & Alcohol Policy training for all employees, New Employee Orientation, HIPAA Training, Risk Management's Defensive Driving, Hazard Communication, Hazard Identification and Accident Analysis. Making these trainings available on-demand online will increase the county's overall compliance and reduce its risk across multiple areas.

12/14/2009