



Oregon Department of Transportation

PC Lifecycle Management Program

PC Lifecycle Replacement 03-05

P290S Costs and Benefits

Version 0.1

Claudia Light

Last Save Date: September 4, 2003

History

Version	Description	Signature/Outcome	Date
0.1 draft	Original Draft	n/a	08/28/03

Table of Contents

- 1. Costs of Development.....4
 - 1.1 Costs to Change Business Operations.....4
 - 1.2 Sources of Funding4
- 2. Costs of Operations.....5
 - 2.1 Office Space and Equipment Costs.....5
 - 2.2 Technology Infrastructure Costs.....5
 - 2.3 Maintenance Costs5
 - 2.4 Operations Support Costs5
 - 2.5 Sources of Funding6
- 3. Benefits7
- 4. Risks and Contingencies.....8
- 5. Analysis and Recommendation.....9

Purpose

- To determine the value to the business of the information system or information system release.

1. Costs of Development

1.1 Costs to Change Business Operations

The PC Lifecycle management program is an ongoing effort that has been used for the 99-01 and 01-03 biennium. No additional changes to business operations are expected for the 03-05 biennium.

1.2 Sources of Funding

No additional funding needed for program development efforts. Funding for all ODOT PC replacement is from the Highway Fund. These items are included in budget documents as a normal part of ODOT spending on Information Technology.

2. Costs of Operations

2.1 Office Space and Equipment Costs

N/A

2.2 Technology Infrastructure Costs

The following is the current expected outlay for PC and laptop purchases for 03-05:

Section of ODOT	Estimated cost	Number of units
DMV	\$ 757,922.64	876
Motor Carrier	\$ 161,292.46	148
Central Services	\$ 364,749.24	319
Highway	\$1,996,197.50	1,363
<u>All other areas of ODOT</u>	<u>\$ 165,595.64</u>	<u>140</u>
Total	\$3,445,757.48	2,846

2.3 Maintenance Costs

Each unit purchased comes with a standard 3-yr warranty. Additional Maintenance Service Packs may be purchased over and above the warranty. P270 PC Replacement Strategy 03-05 contains the costs for these service packs and the conditions under which purchase is recommended. Since extra support is not recommended in all cases, this cost is not included in the estimates provided under this cost benefit analysis.

2.4 Operations Support Costs

For the ODOT business areas, the effort involved in planning for new equipment is part of standard business operations. The IS Field Services Unit (FSU) is responsible for support of PCs and laptops for ODOT. The cost for support is built into the internal Information Systems charge back assessments.

The PC Lifecycle Program allows for scheduling preparation and installation of PCs and Laptops throughout the biennium. As long as the replacement workload can be paced, internal staffing can meet the business needs. If additional contracting effort is needed, the charge for preparation and installation is \$120 per unit.

Since this charge is not applicable to all units to be purchased, this cost is not included in the estimates provided under this cost benefit analysis.

2.5 Sources of Funding

The Highway Fund provides the overall funding source for PC Purchases. Each section and unit budgets for purchase of PC's and Laptops. .

3. Benefits

Desktop and laptop equipment replacement is driven by both customer and IT vendor needs. As customers demand more functionality and processing throughput, their needs exceed present capacity. As vendors market faster machines and greater functionality, it becomes less feasible and more expensive to support older equipment. As software vendors drop support for products that run on older equipment and operating systems, agencies must keep pace to be able to support business continuity.

ODOT is now experiencing a push like this with the move from NT to the XP operating system. The NT operating system is no longer supported by Microsoft and software is not being developed for NT anymore. XP is only certified for specific older models.

The benefit of replacing outdated PCs and laptops is that ODOT users can continue to operate with minimum disruption of service and new functions can be provided. ODOT can keep pace with business partners so that system-to-system interactions can be maintained.

The benefit of using a lifecycle approach to PC replacement is that purchases and installations can be planned and monitored for efficiency and effectiveness. The workload for support staff can be kept at an optimum rate and volume discounts can be negotiated.

The strategy for PC Replacement for 03-05 is contained in P270S Strategy for 03-05.

4. 03-05 Summary Risks and Contingencies

The PC Lifecycle Management Program is itself a risk mitigation against costs associated with making many small unmanaged purchases.

The risks associated with older equipment is that it will become obsolete, breakdown more often, and potentially increase maintenance costs and maintenance contracts. As the hardware ages, it can no longer meet software vendors' requirements, or customer demands for functionality and reliability.

5. Analysis and Recommendation

One of ODOT's key strategies is to continue to increase the efficiency of its internal operations in order to make more funding available to Oregon's transportation system. Business areas within ODOT have undertaken projects to automate internal functions to reduce costs to their sections. These new projects often require functionality that cannot be provided by existing PC's and Laptops.

Hardware and Software vendor market strategies continue to increase available speed and functionality. As new hardware and software is developed, support is dropped for older hardware and software. Organizations must keep pace or risk not being able to provide adequate customer service and business continuity.

The cost of PC replacement is a standard infrastructure cost and is budgeted at high organization levels and paid at the unit or section level. In order for PC purchasing to be efficient, predictable, and manageable the strategy for PC Lifecycle Management was developed. The lifecycle approach allows roll up of individual planned expenditures that account for a significant amount of funds. By managing these purchases and reporting monthly against this plan, ODOT can demonstrate fiscal responsibility and meet its commitment to efficiency.

It is recommended that DAS approve this purchase.