



**ADOA - ASET**

Arizona Strategic Enterprise Technology

**Project Investment Justification**

**Version 01.01**

**A Statewide Standard Document for Information Technology Projects**

**PC Refresh**

<b>Agency Name:</b>	Arizona Department of Transportation
<b>Date:</b>	July 30, 2014
<b>Agency Contact Name:</b>	Jesse MacDonough
<b>Agency Contact Phone:</b>	602.712.4433
<b>Agency Contact Email:</b>	jmacdonough@azdot.gov

## I. Management Summary

The PC Refresh project addresses ADOT's ongoing technology equipment replacement needs. The hardware replacements will ensure that the Agency's technology services and resources satisfy the business requirements for all who use them.

Our computing infrastructure is comprised of thousands of hardware components including desktop and laptop computers, monitors and printers. Over time, these resources wear, age and/or become obsolete causing performance degradation, excessive support and repair activity, and loss of reliability. In order to manage these impacts, we propose to employ a cost-effective equipment upgrade and replacement program.

The goal of this project is to replace 3,408 desktop and laptop PCs that are older than five years. Additionally, peripheral equipment such as monitors and printers will be acquired within the scope of this project. Rather than purchasing new equipment as was done in the past, ADOT's Information Technology Group plans on employing a 5-year third-party financed purchase for the above-mentioned equipment. Professional services will be used to manage all aspects of equipment handling, including receiving, storage, configuration, deployment and disposal of all retired hardware in compliance with the State of Arizona Surplus Property Management Office's policies and procedures.

## II. Project Investment Justification (PIJ) Type

Yes  No Is this document being provided for a Pre-PIJ / Assessment phase?

If Yes,

Identify any cost to be incurred during the Assessment phase.	\$
Based on research done to date, provide a high-level estimate or range of development costs anticipated for the full PIJ.	\$

Explain:

[Click here to enter text.](#)

Yes  No Will a Request for Proposal (RFP) be issued as part of the Pre-PIJ or PIJ?

## III. Business Case

### A. **Business Problem**

ADOT has not executed a PC Refresh program since 2006. Of the 5,548 desktop and laptop computers used by the Agency, over 60% are 5-13 years old, yet still in operation and running Windows XP, which is no longer supported by Microsoft. Impact to employee productivity is chronic due to slow performance and frequent hardware failures. Additionally, there are application and software compatibility issues with PCs running older operating systems and web browsers. As ADOT's business practices adapt and change, more complex applications and operating systems are required. However, out of warranty and older equipment does not provide the flexibility, performance and reliability currently needed.

**B. Proposed Business Solution**

In order to consistently provide for all of ADOT’s technology needs, the Agency recommends a five year hardware refresh cycle program via a five year third-party financed purchase. This will enable us to continue to provide reliable and up to date agency technology services, while keeping the costs predictable and manageable.

A business-area needs assessment was conducted. The output of this analysis was used to produce the detailed device type needs and counts for this project. The current counts identified herein are estimates based on ADOT’s current computer equipment greater than five years old. Peripheral hardware such as monitors, printers and scanners will also be included in the project’s scope to replace older equipment as specified by ADOT’s business area managers.

With this refresh, desktop software needs will also be addressed to ensure compatibility with the new operating systems, giving ADOT the opportunity to shed old, unneeded and/or unsupported titles and start a formal software asset management program. Titles found to be incompatible with the latest Windows operating system will be replaced with the most current versions.

“Turn-key” professional services will be used to accelerate project delivery and success, and provide rapid relief from the department’s current, ailing equipment issues.

**C. Quantified Benefits**

<input checked="" type="checkbox"/>	Service enhancement
<input type="checkbox"/>	Increased revenue
<input checked="" type="checkbox"/>	Cost reduction
<input checked="" type="checkbox"/>	Problem avoidance
<input checked="" type="checkbox"/>	Risk avoidance

Explain:

- **Service Enhancements:**
  - Newer PC equipment will run software and applications faster and without error, avoiding many of the performance and compatibility issues with older hardware and unsupported operating systems.
- **Cost Reduction:**
  - Support costs for older PC equipment are greatly reduced.
- **Problem Avoidance:**
  - Computers replaced every five years will not require the maintenance typically required for equipment older than five years.
  - Avoiding problems associated with older operating systems no longer being supported, along with necessary security updates.
- **Risk Avoidance:**
  - Assist in mitigating the risk of equipment failure and help balance the trade-offs between the total cost of ownership and operating efficiency.
  - New hardware will allow the department to move to Microsoft’s fully-supported latest operating systems and resume critical security patching routines.

## IV. Technology Approach

### A. *Proposed Technology Solution*

We propose to procure the following hardware needed to support the five year IT refresh cycle plan, This project focuses on refreshing equipment which has greater than five years of use, using commodity units sourced from a major hardware manufacturer. Table 1 provides an overview and estimate of the equipment types and counts that will be acquired.

Table 1

EQUIPMENT DESCRIPTION	QUANTITY
Standard Desktop	1,828
Power Desktop/Workstation	313
Standard Laptop	651
Ultralight Laptop	387
Rugged Laptop	151
Mobile Workstation	78
Laser Printer	500
Monitor	2,186
Scanner	300

### B. *Technology Environment*

ADOT proposes to finance the purchase of the equipment outlined above and incorporate it into the existing ADOT information technology infrastructure. ADOT's end-user computing environment consists predominately of a base Windows operating system and locally installed applications. Desktop and laptop computers will be deployed with either Windows 7 or Windows 10, depending on application compatibility. All devices will include Office 2010 Professional and required up-to-date, compatible software as specified by business area managers.

### C. *Selection Process*

A Request for Quote (RFQ) was issued to determine which vendor the Agency will use. The primary factors that determined our selection were:

1. Method of Approach
  - a) Plan of Execution for Project Completion
  - b) Ability to conform to Department Timeline
2. Overall Cost of the Project
  - a) Hardware Purchase
  - b) Professional Services
3. Experience of the Firm and Staff in Providing Similar Hardware and Services (including references)
  - a) Previous Projects Completed
  - b) Experience of Personnel and Management Team
  - c) References
4. Overall Organization and Completeness of Proposal

## V. Project Approach

### A. Project Schedule

Project Start Date: 9/25/2015      Project End Date: 3/16/2016

### B. Project Milestones

Major Milestones	Start Date	Finish Date
Design (Finalize schedule & approach with services vendor)	9/25/2015	9/30/2015
Construction (Provide vendor customer contact information, detailed user-based hardware/software requirements, operating system and software source files and license keys. Manage vendor conformance to specifications.)	10/1/2015	10/23/2015
Testing & Implementation (Manage vendor conformance to specifications)	10/26/2015	2/26/2016
Closing	2/29/2016	3/16/2016

## VI. Roles and Responsibilities

### A. Project Roles and Responsibilities

Role	Responsibility	Team member
Project Sponsor	Resolution of management escalation issues and approval of project deliverables.	Rich Nacinovich
Project Manager	Manage project schedule, cost and scope. Provide communication to key stakeholders and coordinate project to completion.	Bruce Bosco
In-House Resources	The ITG PCLAN team will act as the technical point for project deployment	Jeff Hazel

### B. Project Manager Certification

- Project Management Professional (PMP) Certified  
 State of Arizona Certified  
 Project Management Certification not required

### C. Full-Time Employee (FTE) Project Hours

Total Full-Time Employee Hours	2,344
Total Full-Time Employee Cost	

## VII. Risk Matrix, Areas of Impact, Itemized List, PIJ Financials



## VIII. Project Approvals

### A. Agency CIO Review

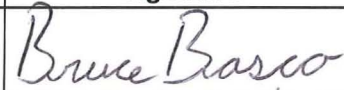
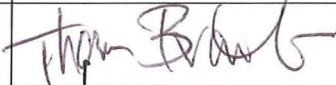

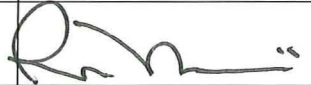
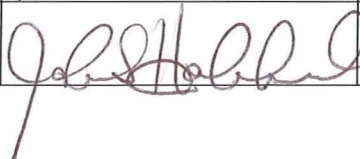
Key Management Information	Yes	No
1. Is this project for a mission-critical application system?	X	
2. Is this project referenced in your agency's Strategic IT Plan?	X	
3. Is this project in compliance with all agency and State standards and policies for network, security, platform, software/application, and/or data/information as defined in <a href="http://aset.azdoa.gov/security/policies-standards-and-procedures">http://aset.azdoa.gov/security/policies-standards-and-procedures</a> , and applicable to this project? If <b>NO</b> , explain in detail in the "XI. Additional Information" section below.	X	
4. Will this project transmit, store, or process sensitive, confidential or Personally Identifiable Information (PII) data? If <b>YES</b> , in the "XI. Additional Information" section below, describe what security controls are being put in place to protect the data.		X
5. Is this project in compliance with the Arizona Revised Statutes (A.R.S.) and GRRC rules?	X	
6. Is this project in compliance with the statewide policy regarding the accessibility to equipment and information technology for citizens with disabilities?	X	

### B. Project Values\*

The following table should be populated with summary information from other sections of the PIJ.

Description	Section	Number or Cost
Assessment Cost (if applicable for Pre-PIJ)	II. PIJ Type - Pre-PIJ Assessment Cost	\$
Total Development Cost	VII. PIJ Financials tab	\$1,657,615.18
Total Project Cost	VII. PIJ Financials tab	\$6,704,079.57
FTE Hours	VI. Roles and Responsibilities	2,344

### C. Agency Approvals

Contact	Printed Name	Signature	Email and Phone
Project Manager:	Bruce Bosco		bbosco@azdot.gov 602.712.7300
Agency Information Security Officer:	Thomas Branham		rbranham@azdot.gov 602.712.7300
Agency CIO:	Doanh Bui		dbui@azdot.gov 602.712.7300
Project Sponsor:	Rich Nacinovich		rnacinovich@azdot.gov 602.712.7300
Agency Director:	John Halikowski		jhalikowski@azdot.gov 602.712.7200

IX. Optional Attachments

**A. *Vendor Quotes***

X. Glossary

XI. Additional Information

Links:

[ADOA-ASET Website](#)

[ADOA-ASET Project Investment Justification Information Templates and Contacts](#)

Email Addresses:

[Strategic Oversight](#)

[ADOA-ASET\\_Webmaster@azdoa.gov](mailto:ADOA-ASET_Webmaster@azdoa.gov)



## ADOA-ASET - Arizona Strategic Enterprise Technology

### Project Investment Justification - Risk Matrix

**Project ID:**

To Be Provided by ADOA-ASET

**Date Accepted:**

To be Provided by ADOA-ASET

#### Project Information

Agency Name	Project Name	Date Submitted
Arizona Department of Transportation	PC Refresh FY15	07/29/14

Project Questions	Agency Response (Y/N)
Does the project involve customized software not previously implemented by your agency?	N
Does the project involve a customized application not previously developed by your agency?	N
Does the project involve any technology that is new and/or unfamiliar to your agency?	N
Does the project involve multi-agency and/or multiple vendor coordination?	N
Is there any possibility that project implementation costs could reach \$1 million or more? (Include professional services, hardware, software, license fees, taxes, shipping, etc.)	Y
Will the project require that a Request for Proposal (RFP) be issued?	Y
Are there any known schedule or budget constraints?	Y
Does this system interface among 2 or more applications?	N
Will the implementation involve major end user view or functionality changes?	Y
Will the project involve the use of any Personally Identifiable information (PII) or Protected Health Information (PHI)?	N
Are there other high risk project items not identified? If so, please explain below:	N
Does the project fall into one of the following categories: - hardware technology refresh, e.g., PCs, laptops, radios, peripherals, etc.? - software version refresh, e.g., MS Office 2010 replacing 2007? - enhancements to an existing application, e.g., web app, internal system?	Y
Will the technology and all required services be acquired off existing State contract(s)?	N
Does the project have the correct skillset and number of in-house resources assigned to meet the objectives?	Y
Will a dedicated Project Manager (PM) be assigned?	Y
Does your agency have experience with the vendor (if used), and does the vendor have professional experience with similar projects?	Y

Investment Sustainability Questions	Agency Response (Y/N)
Are ongoing/5-year support costs, once the project has been implemented, reflected in the operational costs for the PIJ?	Y
Has your agency addressed supporting components to ensure the investment can be sustained, e.g., documentation, application ownership, portability, plans upon contract/support termination?	Y
Does the production site have sufficient failover and disaster recovery plans in place to assure your agency will be able to recover from an unplanned incident?	Y
Does your agency and/or the proposed vendor have the resources and supporting infrastructure currently in place to sustain the proposed investment?	Y

Agency Questions	Agency Response (Y/N)
Are all current agency projects in "Green" status, with no outstanding issues that ADOA-ASET is monitoring?	Y
Does your agency currently have any projects that are in "Red" status?	N
Has your agency demonstrated a consistent reporting relationship with ADOA-ASET Oversight, e.g. reports submitted on time and accurate (verified by CIO)?	Y
Is this your agency's first PIJ?	N
Has it been more than 2 years since your agency submitted a PIJ?	N
Does your agency have a formal project methodology in place?	Y

# ADOA-ASET - Arizona Strategic Enterprise Technology

## Areas of Impact

Please check which of the following technology areas will be included in the proposed solution - check all that apply:

### Application Systems

- Application Enhancements
- New Application Development

### Database Systems

- Data Warehouse/Mart
- Database Consolidation/Migration/Extract Transform and Load Data
- Database Products and Tools

### Hardware

- LAN/WAN Infrastructure
- Mainframe Infrastructure
- PC Purchases, Peripherals
- Public Safety Radios, Systems
- Storage Area Network Devices
- All Other Hardware

### Software

- COTS Application Acquisition
- COTS Application Customization
- Mainframe Systems Software
- Open Source
- PC/LAN Systems Software
- All Other Software

### Telecommunications

- Network Communications Infrastructure
- Telephony Upgrade-Business-Specific
- Telephony Upgrade-EIC Solution
- Videoconferencing

### Web

- az.gov Web Portal Interface
- Internal Use Web Application
- Mobile App Business-Specific Acquisition
- Mobile App Development

### Specialty Products

- Business Intelligence System
- Disaster Recovery/ Business Continuity Plan
- Document Management/Imaging
- eLicensing
- E-Signatures
- Geographic Information System
- Management Systems - Financial, Grants, Asset
- Multi-agency project

- Other Imaging - Photos, Fingerprints, etc.
- RFP Required
- Security
- Statewide/Enterprise Solution
- Thin Client/Virtual
- Wireless
- All Other

Services

- Contract Project Mgmt Services
- Contractor Support Services
- Install/Configuration Contract Services
- Outsource/Hosting
- All Other

Other - Please specify:

- Enter text below.

**ADOA-ASET - Arizona Strategic Enterprise Technology  
Project Investment Justification - Itemized List**

**Project ID:** To Be Provided by ADOA-ASET

**Date Accepted:** To be Provided by ADOA-ASET

**Project Information**

Project Name	Agency Name	Date Submitted
PC Refresh FY15	Arizona Department of Transportation	08/31/15

**Project Cost - Itemized**

Item	Description	Category	Development or Operational	Qty or Hours	Unit Cost	Tax (if app)	Extended Cost
1	Standard Desktop	Hardware	Operational	1,828	\$ 645	\$97,861.98	\$1,276,921.98
2	Power Desktop/Workstation	Hardware	Operational	313	\$ 1,135	\$29,486.17	\$384,741.17
3	Standard Laptop	Hardware	Operational	651	\$ 1,042	\$56,302.39	\$734,644.39
4	Ultralight Laptop	Hardware	Operational	387	\$ 1,233	\$39,605.19	\$516,776.19
5	Rugged Laptop	Hardware	Operational	151	\$ 2,795	\$35,029.74	\$457,074.74
6	Mobile Workstation	Hardware	Operational	78	\$ 2,060	\$13,336.44	\$174,016.44
7	Desktop Laser Printer	Hardware	Operational	500	\$ 243	\$10,104.42	\$131,844.42
8	Monitor	Hardware	Operational	2,186	\$ 164	\$29,755.83	\$388,259.83
9	Scanner	Hardware	Operational	300	\$ 1,647	\$41,015.53	\$535,178.53
10	Arizona Highways' Hardware - Specialized Function	Hardware	Operational	1	\$ 31,808	\$2,640.06	\$34,448.06
11	Hardware Financing	Other	Operational	5	\$ 52,512		\$262,558.65
12	Estimated Computer Installation Services	Prof & Outside Services	Development	3,408	\$ 373		\$1,272,751.68
13	Estimated Data Destruction Services	Prof & Outside Services	Development	1	\$ 115,680		\$115,679.50
14	Estimated Retired Equipment Pickup/Disposal Services	Prof & Outside Services	Development	3,408	\$ 14		\$47,712.00
15	Estimated Computer Software - Years 2 and 3	Software	Operational	2	\$ 75,000		\$150,000.00
16	Estimated Computer Software Purchases	Software	Development	1	\$ 221,472		\$221,472.00

Total of Development Cost	\$1,657,615.18
Total of Operational Cost	\$5,046,464.39
<b>Total Itemization of Costs:</b>	<b>\$6,704,079.57</b>

**ADOA-ASET - Arizona Strategic Enterprise Technology**  
**Project Investment Justification - Financials**

**Project ID:**

To Be Provided by ADOA-ASET

**Date Accepted:**

To be Provided by ADOA-ASET

**Project Information**

Agency Name	Project Name	Date Submitted
Arizona Department of Transportation	PC Refresh FY15	07/29/14

**PIJ Development & Operational Cost Summary**

Description	Type	Year 1	Year 2	Year 3	Year 4	Year 5	Extended Cost
Professional & Outside Services	Development	\$1,436,143.18					\$1,436,143.18
	Operational						\$0.00
Hardware	Development						\$0.00
	Operational	\$979,292.87	\$979,292.88	\$979,292.88	\$979,292.88	\$979,292.88	\$4,896,464.39
Software	Development	\$221,472.00					\$221,472.00
	Operational		\$75,000.00	\$75,000.00			\$150,000.00
Communications	Development						\$0.00
	Operational						\$0.00
Facilities	Development						\$0.00
	Operational						\$0.00
Licensing & Maintenance Fees	Development						\$0.00
	Operational						\$0.00
Other	Development						\$0.00
	Operational						\$0.00

**Development Cost:** \$1,657,615.18  
**Operational Cost:** \$5,046,464.39  
**Total Cost:** \$6,704,079.57

**Project Funding (add sources as appropriate)**

Funding Source Category	Fund Name	Development Budget (\$)		Operational Budget (\$)		Total (\$)
		Currently Available	New Request	Currently Available	New Request	
General Funds						\$0.00
Federal Funds						\$0.00
Other Appropriated Funds	State Highway Fund	\$1,657,615.18		\$5,046,464.39		\$6,704,079.57
Other Non-Appropriated Funds						\$0.00
<b>Total Funding</b>		\$1,657,615.18	\$0.00	\$5,046,464.39	\$0.00	\$6,704,079.57