

2005 Showcase in Excellence Awards Recipient

Program & Project Management Section – ADOT

“Active Project Status Update (APSU) Process”



Program & Project Management
Section (PPMS) Team

Company Information:

Highest Ranking Official:
Victor Mendez
Director

Contact Person:
Hari Khanna, Manager
Program & Project Management
Section
(602) 712-7334
hkhanna@azdot.gov

Type of work:
The Arizona Department of Transportation (ADOT) was founded in 1974 to “provide for an integrated and balanced state transportation system,” and is a public governmental agency operating under the State of Arizona laws. ADOT’s primary functions requiring the greatest percentage of its resources are: 1) providing for the design and construction of transportation facilities pursuant to a priority plan and 2) registering motor vehicles, collecting revenues, and licensing drivers.

Workforce: 20 Employees

Testimonial of Value of the AZ State Quality Awards Program

“AQA Programs encourage participants to excel in service to their customers. The feedback AQA provides identifies areas of further improvement.”

-Robert Miller, Assistant State Engineer, Statewide Project Management Group

Highlights of Organizational Process:

ADOT’s stated mission is “*To provide products and services for a safe, efficient, cost-effective transportation system that links Arizona to the global economy, promotes economic prosperity and demonstrates respect for Arizona’s environment and quality of life.*” In 1995, the Intermodal Transportation Division (ITD) established the Program and Project Management Section (PPMS) whose mission is “*To help ADOT plan and deliver the 5-Year Program by providing reliable cost and time management information in a timely basis, and to provide the necessary training to the customers in appropriate use of the information.*” It is apparent that PPMS’s mission fulfills the ADOT mission requirements.

PPMS is under the Statewide Project Management Group to support improved project management goals. Three major functions which integrate the work performed by the Section are: 1) Project Scheduling, 2) Construction Management Program (CMP), and 3) Database Administration & Programming. All three functions serve as the ADOT Program & Project Management information source. The PPMS team is responsible for coordinating project schedules, helping estimate ADOT resource requirements, and for providing project time and cost management information. This helps ADOT keep the transportation system safe and efficient.

The detailed schedule information in the Active Project Status Update (APSU) process originates from targeted Primavera Critical Path Method (CPM) project schedules and monthly schedule updates on a timely basis. During initial project kickoff activities, the project scheduler helps each project development team develop a detailed project schedule customized for the unique project scope.

Key participants in the target schedule development process include each technical leader who will produce project deliverables, such as plans, reports, specifications, estimates, permits and clearances. Input is required from all applicable ITD development and operations groups which include: Survey, Photogrammetry and Mapping, Bridge Design, Geotechnical Design and Operations, Pavement Services, Environmental and Enhancement Group, Right of Way, Roadway Engineering, Drainage Design, Roadside Development, Utilities and Railroads, Contracts and Specifications, Traffic Engineering, Transportation Technology, Value Analysis, District Operations, Maintenance, and Valley and Statewide Project Management Groups. Each project team determines its scheduled project activities, estimated durations and logical relationships. The draft schedule is distributed to the project team and stakeholders for review and any necessary revisions or adjustments are made. Once the team agrees on the schedule the target dates for eighteen key milestone dates are recorded for performance measurement and comparison with actual completion dates.

In 2003, a web-based interface was implemented for Schedule Update Request Form (SURF) data collection. This breakthrough process improvement significantly increased the accuracy and reliability of updates compared with the previous error-prone process based in spreadsheets and email. At the same time, the implementation of the Primavera RA engine and streamlined database integration created a robust platform to facilitate more flexible reporting capability for various customer needs.

The web-based SURF is a monthly process feedback tool. Technical leaders update the status of activities within the current month and the next two months with actual activity start and finish dates and/or the estimated remaining durations. The project team has access to view the current status of the entire schedule for each project. Technical leaders also have the opportunity to comment on the SURF concerning activity status.

After quality review and schedule recalculation, the draft Project Manager (PM) Report is issued so that project managers can verify accuracy, review project progress and technical leader comments and provide their comments to appear in the final PM reports on the internet. The customers of the final PM report include the entire project team, interested stakeholders, and the public.

The project team may initiate schedule, scope, and budget changes via the Project Review Board (PRB) request process throughout the project development process. Upon PRB, Priority Planning Advisory Committee (PPAC) and Board approval, the team revises the schedule and the remaining key milestone target dates are refreshed for performance measurement.

Upon the completion of the SURF and PM Report updates, the Active Project Status Report (APSR) and related reports are assembled, electronic copies are published to the internet, and limited hard copies are distributed. Monthly data files are shared with other ADOT sections to maximize database accuracy. Performance measurement data are analyzed and published to the internet. APSU customers include the project development teams, technical managers, other sections of ITD, ADOT District operations, construction firms, and the general public.

PPMS processes are continually directed toward customer service and satisfaction. Blind and open surveys, focus groups, progress meetings, and specialized training are tools being utilized, along with the philosophy that every employee has the opportunity to bring the “voice of the customer” back to PPMS for process improvement.

Key requirements for the APSU process and Project Management Information Services include: relevance, accuracy, reliability, efficiency, effectiveness, and accelerated process cycle to provide more timely updated and easy to understand information. The utility of the APSU process is also time sensitive. Each requirement is critical to operate a strategic information system used by the entire organization for resource planning and optimization. Each requirement is uniquely important. The PPMS team utilizes a true “systems approach” toward continuous improvement.