

ARIZONA DEPARTMENT OF TRANSPORTATION
Intermodal Transportation Division (ITD) Strategic Plan
FY 2010 – 2014

Intermodal Transportation Program

Vision:

The standard of excellence in the design, construction and maintenance of Arizona’s highway infrastructure and intermodal connectors.

Mission:

To provide the leadership and support to all Intermodal Transportation Division (ITD) entities in order to improve the safety, efficiency and quality of Arizona’s highway infrastructure and intermodal connectors while exhibiting a high regard for the preservation of the State’s environment.


General Description and Overview:

The Intermodal Transportation Division (ITD) serves as the State’s public entity responsible for the design, construction and maintenance of a quality highway system. These activities are achieved through the following subprograms:

- ✚ Construction – includes all full time equivalent positions located statewide, which are appropriated from the State Highway Construction Fund. This subprogram is responsible for the administration of a statewide five year construction program totaling \$6.5 billion.
- ✚ Maintenance – includes all funding statewide for appropriated full time equivalent positions and the asset management related to 29,300 maintenance lane miles of highway. Highway maintenance is a multi-million dollar operation which involves more than seventy organizational units located throughout Arizona working in nine engineering districts and a central maintenance office.
- ✚ Development and Administration – includes all statewide full time equivalent positions that are appropriated from the Administrative Operating Budget. The ITD Core Staff, which consists of the State Engineer, four Deputies and a Chief Administrative Officer, provides key leadership by encouraging all employees to exceed customer expectations through the timely delivery of quality products and services within budget. Their responsibilities include a close liaison with customers, public and private partners and other stakeholders in an effort to garner support in addressing the strategic issues related to growth, climate change and public safety. There is open communication with project managers and teams in the various engineering districts and development groups in order to resolve the short-term needs and plan for the long-term requirements of the Division. This team also is accountable for the project development and operations of the highway infrastructure.

The three subprograms are administered through the State Engineer's Office (SEO), which is ITD's headquarters organization. Its *mission* is to provide leadership, expertise and counsel in assisting the Construction, Maintenance, Development and Environmental organizations to successfully deliver their programs. The State Engineer's Executive Staff is comprised of skilled professional and technical employees who provide direct support to the State Engineer in executing the many responsibilities of the Office. Since the SEO functions in a dynamic environment, the staff is challenged constantly to ensure that all projects are designed, built and maintained; all applicable standards and procedures are developed, implemented and maintained; funding is expended efficiently; and, state-of-the-art technology and quality are incorporated into the equipment and environmentally compliant materials and processes used in product delivery. The State Engineer's Office also ensures that the responsibilities related to managing the Division's budget and strategic planning processes, drafting legislative proposals and analyzing proposed legislation, researching and developing new policies and rules, and monitoring cost savings derived from improved use of media technology are performed ethically and achieved in compliance with current, established policies.

The Intermodal Transportation Program has identified two critical strategic initiatives: delivery of the Five-Year and regional highway construction program and maintenance of Arizona's transportation facilities. Also addressed in the critical program initiatives and associated strategies are strategic issues related to growth, climate change and public safety.

 **Deliver the 5-Year and Regional Highway Construction Program on Time and Within Budget:** Annually, the 5-year Transportation Facilities Construction Program and the MAG Area Life Cycle Program are updated through a series of public hearings conducted around Arizona. The hearings provide the public with an opportunity to comment on the direction of the highway construction program, while earning trust through truthful, open and ethical discourse.

As Arizona continues to experience a high rate of growth, the efficient movement of goods, services and people will continue to be a significant challenge. The Department of Economic Security (DES) projects statewide population to increase by 923,000 new residents (13.6%) through the FY 2010 – 2014 planning cycle. Of the number of new residents forecast, Maricopa, Pima and Pinal Counties will account for 84.3% of the increase. Keeping pace with the growth rate will require the full utilization of innovative financing, building core competencies, recruiting and retaining engineering and management expertise and partnering with both public and private parties. This is particularly significant for the successful implementation of the voter approved 20-year extension of the Maricopa County ½ cent sales tax through 2026. The sales tax extension is forecast to generate a little more than \$14 billion in current dollars for new or expanded freeway corridors to accommodate long term growth in the region and improvements to the existing system. The sales tax extension also will provide \$13 million per year earmarked to address noise mitigation, landscaping care and restoration, general highway maintenance and litter control.

In order to meet the growth challenge, ITD is projecting to program an additional 1,000 travel lane miles statewide through calendar year 2014 for a total of 19,800 travel lane miles by the end of the planning cycle. This translates to an additional 1,150 maintenance lane miles for the planning period bringing the 2014 calendar year end total maintenance lane miles to 29,300.

As a result of the projected growth, ITD will look for ways to maximize the delivery of the 5-year and regional construction program during the current economic downward trend and within the parameters permissible relative to future revenue streams. After two years of the actual Transportation Excise Tax Revenues outpacing forecasts, revenue growth eased to the point where it is projected to lag current forecasts through the midpoint of the planning period before leveling off and beginning to trend upward over the final two years of the planning period. Although the projected upward trend in revenues will be offset by inflationary pressures in the form of increased costs for steel, concrete, fuel and other commodities, the costs will level off as demand decreases. Meanwhile, real estate values will take longer to recover resulting in lower right of way acquisition costs.

ITD maintains a strong commitment to the environment and the potential impact on climate change in its delivery of the Construction Program. One example is the Division's aggressive pursuit of new Best Management Practices related to dust mitigation, waste water and storm water compliance issues, which must be addressed both during and after completion of each construction project. These are not one-time expenses and the Arizona Department of Environmental Quality monitors ADOT's compliance. ITD also staffs each engineering district with a District Environmental Coordinator (DEC) responsible for assessing encroachment permit practices and issues; monitoring district installed and maintained storm water and other water program Best Management Practices; and assisting with storm water pollution protection plan preparation and proper submission of all types of notifications.

Another example is the use of rubberized asphalt surfacing on both newly constructed roads and existing concrete roads. The rubberized asphalt's porous top layer cools down quicker than concrete, cooling the roads and diminishing the heat island effect, thereby controlling climate change. One of the materials used in the manufacture of rubberized asphalt is crumb rubber, which is made from the recycling of worn out tires. Since it takes approximately 2,000 used tires to produce enough crumb rubber to surface one lane mile, it creates an environmentally friendly and safe process for their disposal.

The use of rubberized asphalt also contributes to public safety. The porous surface of the rubberized asphalt acts like a sponge, soaking water in, dispersing it to the roadsides from the crowned base level and diminishing retained street water. The tackier road surface provides good traction during wet weather, significantly decreasing the chance of hydroplaning, while improving skid resistance and keeping roads safer overall. In addition to the rubberized asphalt, ITD uses improved reflective signs, lane striping material and state-of-the-art traffic management technology (e.g. dynamic message boards, cameras and traffic sensors) to further enhance its commitment to public safety. Currently, ITD is taking the lead in developing a comprehensive action plan which will outline the effective allocation of its resources in providing a safe and efficient transportation system.

Looking ahead, the Intermodal Transportation Division will continue to focus its efforts on improving safety, mobility, accessibility, congestion relief and travel times, while incorporating its strong environmental commitment into the design and construction processes.

✚ Maintain the State's Investment in Transportation Facilities: Arizona taxpayers have made a significant investment in the State's transportation infrastructure, the value of which is approximately \$18 billion at the end of FY 2009. The value of the highway system will continue to increase with the planned addition of approximately 1,150 maintenance lane miles over the planning period. As this roadway network continues to be expanded and enhanced statewide, protecting the investment becomes increasingly more critical to the State's economic growth and prosperity.

Every year, highway safety issues, the addition of new features to the State highway system and material cost increases require the submission of requests for additional maintenance funding. This process will continue as the existing system ages and also is expanded through the addition of HOV lanes, general-purpose travel lanes, turning and auxiliary lanes, frontage roads, roundabouts and traffic interchanges.

Additional funding is required to operate and maintain new miles that are added to the State highway system each year as a result of new construction. Currently, there is no funding link between the construction of these new highway miles and the cost to maintain them. New miles of urban freeway require additional in-house resources and contracts to maintain landscaping, perform litter pick-up, repair cable crash barriers, sweep roadside debris, maintain signs and pavement striping, repair guardrail and crash attenuators, maintain drainage facilities and respond to motor vehicle accidents. The addition of center line miles also increases electricity costs for new roadway lighting and signals. As new features and safety enhancements are added, ITD still is required to properly maintain the existing feature inventory in order to extend the life cycle of the entire system. Any delays or deferrals in preventive maintenance decrease the life cycle of the items in the feature inventory.

The maintenance staff consistently is challenged to meet the needs of maintaining new features with invariable or declining resources, while preserving the existing system. Highway maintenance contracts for roadway surface materials such as ERA – Bituminous and Cold Mix have increased from the previous fiscal year by 33% and 48%, respectively. In addition, service contract prices have increased 113% for concrete repair, 41% for rest area maintenance and 38% for asphalt overlay over the previous year. The recent increases in the costs for materials and services have not only further encumbered an already under funded maintenance budget, but they also have diminished ITD's ability to maintain a level of service standard that is acceptable to the public. If these conditions continue to persist, maintenance will become increasingly reactive and the current decreased frequency of routine maintenance relative to litter, landscaping and vegetation control, pavement repair, roadside work and drainage repair, when safe to delay, will continue.

Summary of Funding and Full Time Equivalent (FTE) Positions
Fiscal Year 2009
(Dollars in Thousands)

	Appropriated Funding:	
1.	General Operations	\$ 266,464.9
2.	Capital Projects (excl. Building Renewal)	7,639.2
3.	Highway Construction (incl. STAN Funding)	1,364,184.0
	Total Appropriated Funding	\$ 1,638,288.1
	Funded FTEs Assigned To:	
4.	Maintenance	932.0
5.	Construction	616.0
6.	Administrative	707.0
	Total FTE Positions Funded	2,255.0
7.	Web Address:	www.azdot.gov/itd/index.asp

Goals, Objectives, Strategies, Action Plans & Performance Measures

ITD Program Goal # 1: Enhance the movement of people and products throughout Arizona.

Construction Subprogram Goal # 1: Same as the ITD Program Goal

- Objective 1.1:** Increase total center line miles open to traffic statewide to 6,910 by the end of CY 14.
- Objective 1.2:** Increase total travel lane miles open to traffic statewide to 19,800 by the end of CY 14.
- Objective 1.3:** Increase total center line miles open to traffic in Phoenix Metro to 580 by the end of CY 14.
- Objective 1.4:** Increase total travel lane miles open to traffic in Phoenix Metro to 3,040 by the end of CY 14.
- Objective 1.5:** Increase total center line miles in the Regional Transportation Plan open to traffic to 8 by the end of CY 14.
- Objective 1.6:** Increase total travel lane miles in the Regional Transportation Plan open to traffic to 385 by the end of CY 14.

Action Plan

Strategies to Achieve Objectives 1.1 – 1.6:

- Accelerate the delivery of the statewide construction program to the extent allowable by the available resources.
- Coordinate planning with the Citizens Transportation Oversight Committee (CTOC).
- Advance right-of-way acquisition as early in the planning process as allowable.
- Increase the number of open forums and public meetings to obtain maximum input.
- Analyze population projections, employment growth and demographic trends.
- Identify the extent of local public and private funding participation.
- Construct segments that provide connectivity with other elements of the Regional Transportation System.
- Pursue process improvement changes between the Operations and Development Groups.
- Identify alternative funding opportunities as sources for new highway construction.

No.	Action Step	Org(s)/Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Maintain lane miles and center line miles data in worksheet format	SEO/Districts	Monthly	Existing
2.	Reconcile projects and update status	SEO/Districts	Monthly	Existing
3.	Construction RE's and TES's review plans for constructability	SEO	On-going	Existing
4.	Reconcile lane mile data to Highway Log	SEO	Quarterly	Existing

Performance Measures

#	Description of the Measurement	CY 07 Act.	CY 08 Est.	CY 09 Est.	CY 10 Est.	CY 11 Est.	CY 12 Est.	CY 13 Est.	CY 14 Est.
1.1.1	Total Center Line Miles statewide	6,822	6,826	6,871	6,894	6,896	6,896	6,900	6,910
1.2.1	Total Travel Lane Miles statewide	18,660	18,805	19,210	19,405	19,470	19,550	19,675	19,800
1.3.1	Total Center Line Miles – Phx. Metro	570	574	579	579	579	579	580	580
1.4.1	Total Travel Lane Miles – Phx. Metro	2,579	2,694	2,812	2,880	2,934	2,982	2,982	3,040
1.5.1	Total Center Line Miles – RegTransPln	-	-	4	4	4	5	5	8
1.6.1	Total Travel Lane Miles - RegTransPln	-	9	175	183	317	317	335	385

ITD Program Goal # 2: Optimize the quality, timeliness and cost effectiveness of our products and services.

Construction Subprogram Goal # 2: Same as the ITD Program Goal

- Objective 2.1:** Achieve the total construction contract cost for completed projects within 10% of the original contract budget, inclusive of award, contingency and incentive payments through FY 12.
- Objective 2.2:** On a scale of “1 low – 4 high”, achieve a Partnering Program Rating weighted average of 3.10 for construction projects by FY 14.
- Objective 2.3:** Achieve potential cost growth, inclusive of inflation, for the Regional Transportation Plan (RTP) construction projects at 3.0% or less through FY 12.

Action Plan

Strategy to Achieve Objectives 2.1 – 2.3:

- Accelerate the delivery of the statewide construction program to the extent allowable by the available resources.
- Continue to hold partnering sessions at beginning and end of each project and also at mid-project on larger construction projects.
- Be pro-active with required communication tools to help increase PEP scores.
- Reduce number of change orders on construction projects – reduce unplanned work.
- Improve design reviews on all construction projects.

No.	Action Step	Org(s)/Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Schedule partnering meetings	CCP/Districts	On-going	Existing
2.	Ensure PEP forms are completed and submitted	CCP/Districts	On-going	Existing
3.	Maintain a short history of PEP scores	CCP/Districts	On-going	Existing
4.	Coordinate and conduct group design review meetings throughout the year	Districts	On-going	Existing
5.	Monitor design review comments to ensure inclusion in each design phase	Districts	On-going	Existing

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
2.1.1	Percent (%) difference of the final contract cost from the original bid	10.3%	10.3%	10.2%	10.1%	10.0%	10.0%	10.0%
2.2.1	Partnering Evaluation Program Rating	3.29	3.20	3.20	3.20	3.15	3.15	3.10
2.3.1	Percent (%) of cost growth related to RTP construction projects	-	5.0%	6.0%	4.5%	3.0%	3.0%	3.0%

ITD Program Goal # 4: Use innovative and creative techniques to optimize the use of all resources.

Construction Subprogram Goal # 4: Same as the ITD Program Goal

Objective 4.1: Maintain an average construction engineering rate of 9% or less on Phoenix Metro construction projects administered by ADOT through FY 14.
Objective 4.2: Maintain an average construction engineering rate of 15% or less on other than Phoenix Metro construction projects administered by ADOT through FY 14.

Action Plan

Strategy to Achieve Objectives 4.1 – 4.2:

- Monitor all CE costs.
- Improve the design plans review process in order to reduce construction change orders.
- Open projects ahead of schedule, whenever possible.
- Manage projects with adequate resources focusing on options to adjust manpower needs to accomplish the work while containing CE costs.
- Evaluate data collection to determine validity of CE costs.

No.	Action Step	Org(s)/Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Provide a quality review of plans	Districts	On-going	Existing
2.	Monitor the CE costs	Districts	Monthly	Existing
3.	Review all data	Districts	Monthly	Existing
4.	Manage project staffing	Districts	On-going	Existing
5.	Prepare and distribute tracking reports	Districts	Monthly	Existing
6.	Exercise any necessary corrective action	Districts	On-going	Existing

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
4.1.1	Construction engineering rate (percent) for Phoenix Metro construction projects	6.7%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
4.2.1	Construction engineering rate (percent) for construction projects outside of the Phoenix Metro area	10.1%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%

ITD Program Goal # 1: Enhance the movement of people and products throughout Arizona.

Maintenance Subprogram Goal # 1: Same as the ITD Program Goal

- Objective 1.1:** Increase the total maintenance lane miles open to traffic to 29,300 by the end of CY 14.
- Objective 1.2:** Increase the Phoenix Metro maintenance lane miles open to traffic to 5,200 by the end of CY 14.
- Objective 1.3:** Increase the total maintenance lane miles in the Regional Transportation Plan open to traffic to 385 by the end of CY 14.

Action Plan

Strategies to Achieve Objectives 1.1 – 1.3:

- Link funding to levels of service.
- Apply Life Cycle Costing to the maintenance operation based on the new features added to the system.
- Link future maintenance requirements to new highway construction projects.

No.	Action Step	Org(s)/Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Develop maintenance work plan	Districts	Annually	Existing
2.	Update features inventory with new road/ lane mile data	Districts	On-going	Existing
3.	Improve PeCoS reporting and tracking	Central Mtce.	On-going	Existing
4.	Coordinate efforts with Procurement Gp.	Central Mtce.	On-going	Existing
5.	Inspect equipment	Districts	Monthly	Existing
6.	Conduct/attend design and field reviews	Districts	On-going	Existing

Performance Measures

#	Description of the Measurement	CY 07 Act.	CY 08 Est.	CY 09 Est.	CY 10 Est.	CY 11 Est.	CY 12 Est.	CY 13 Est.	CY 14 Est.
1.1.1	Total Maintenance Lane Miles statewide	27,837	28,050	28,570	28,830	28,920	29,010	29,150	29,300
1.2.1	Total Maintenance Lane Miles – Phoenix Metro	4,602	4,735	4,890	4,965	5,020	5,070	5,150	5,200
1.3.1	Total Maintenance Lane Miles – Reg. Transp. Plan	-	33	190	205	240	335	355	385

ITD Program Goal # 2: Optimize the quality, timeliness and cost effectiveness of our products and services.

Maintenance Subprogram Goal # 2: Same as the ITD Program Goal

Objective 2.1: Attain an IRI smoothness rating factor of less than 171 (good) on 98.5 % of the State Highway System by the end of CY 14.

Action Plan

Strategies to Achieve Objective 2.1:

- Continue to overlay freeway road surfaces with rubberized asphalt.
- Increase the frequency of inspections of road surface conditions, especially in the northern part of Arizona.
- Shorten the intervals for chip seal and overlay applications on rural State routes.

No.	Action Step	Org(s)/Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Maintain aging schedule for routes that have rubberized asphalt	Districts	Annually	Existing
2.	Inspect road surfaces	Districts	Quarterly	Existing
3.	Develop work plan and schedule for various overlay applications	Districts	Annually	Existing
4.	Coordinate the purchase of materials with the Procurement Group	Districts/Central Mtce.	Semi-annually	Existing
5.	Coordinate the overlay work with striping crews to ensure efficient timing	Districts	On-going	Existing

Performance Measures

#	Description of the Measurement	CY 07 Act.	CY 08 Est.	CY 09 Est.	CY 10 Est.	CY 11 Est.	CY 12 Est.	CY 13 Est.	CY 14 Est.
2.1.1	Percent (%) of State Highway System with an IRI smoothness rating < 171	96.7%	97%	97%	97.5%	97.5%	98 %	98 %	98.5%

ITD Program Goal # 4: Use innovative and creative techniques to optimize the use of all resources.

Maintenance Subprogram Goal # 4: Same as the ITD Program Goal

Objective 4.1: Achieve an average on-scene response time of 60 minutes or less for incidents in rural districts by the end of FY 14.

Objective 4.2: Achieve an average on-scene response time of 45 minutes or less for incidents in the Phoenix Metro area (Phoenix District) by the end of FY 14.

Action Plan

Strategies:

- Deploy technologies which will improve incident response.
- Provide construction support for an ER Link in Tucson.
- Deploy AVL technology for the response units in Phoenix Metro.
- Implement DPS-to-ADOT radio patch.

No.	Action Step	Org(s)/Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Maintain tracking records for response times	Districts	Monthly	Existing
2.	Maintain incident response records and crash calls from TOC and ALERT	Districts	Monthly	Existing
3.	Track Level of Service (LOS) measures	Districts	Monthly	Existing
4.	Continue to develop a communication liaison with DPS	Districts	On-going	Existing
5.	Review 5-year Construction Program	Districts	Annually	Existing

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
4.1.1	Avg. response time (min.) – Rural	34	40	44	50	53	56	60
4.2.1	Avg. response time (min) – Phoenix	30	32	35	38	41	43	45
4.2.2	Avg. call back time (min) – Statewide	6	7	9	11	12	13	15

ITD Program Goal # 1: Enhance the movement of people and products throughout Arizona.

Development and Administration Subprogram Goal # 1: Same as the ITD Program Goal

Objective 1.1: Ensure the advertised or awarded construction program exceeds 95% of the revised Construction Program by the end of FY 14.

Action Plan

Strategies to Achieve Objective 1.1:

- Prepare monthly monitoring reports.
- Review and update program per Transportation Board approved revisions.

No.	Action Step	Org(s)/Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Obtain monthly tracking reports and key measurement data from the ADOT Budget Office	SEO/Budget Office	Monthly	Existing
2.	Review Transportation Board Packet and Meeting Minutes	SEO	Monthly	Existing
3.	Obtain monthly tracking for project awards and related dollars from the Engineering Technical Group	SEO/ETG	Monthly	Existing

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
1.1.1	Percent (%) of dollars awarded versus the revised Construction Program	100	95	90	90	92	93	95
1.1.2	Percent (%) of dollars awarded versus the Planned (original) Program	85	82	80	81	83	85	86

ITD Program Goal # 1: Enhance the movement of people and products throughout Arizona.

Development and Administration Subprogram Goal # 1: Same as the ITD Program Goal

Objective 1.2: On a scale of “1 low – 4 high”, achieve a Partnering Evaluation Program (PEP) rating of 3.50 for all Development projects by the end of FY 14.

Action Plan

Strategies to Achieve Objective 1.2:

- Work with consultants and contractors to ensure that they understand the significance of the partnering activity and how to use the data generated for improvements.
- Monitor progress and effectiveness of teams using PEP through the Flags Report and consultant follow-ups.
- Rewrite the software in order to update and use current Internet technology.

No.	Action Step	Org(s)/Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Obtain tracking reports for the activities performed by the Partnering Group	Partnering/SEO	Monthly	Existing
2.	Review reports/information resulting from follow-up with project teams	Partnering/SEO	Quarterly	Existing

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
1.2.1	Percent (%) of projects using PEP compared to the total number of active projects	80%	81%	82%	84%	85%	88%	90%
1.2.2	Average evaluation rating based on the “7 Standard PEP” goals (1.00 – 4.00)	3.33	3.35	3.35	3.40	3.42	3.45	3.50

ITD Program Goal # 1: Enhance the movement of people and products throughout Arizona.

Development and Administration Subprogram Goal # 1: Bridge Scour Retrofit Program – Prioritize, program, and manage all bridge scour retrofit projects ensuring their delivery within scope, budget, and schedule. FHWA Memorandum, HIBT-20 dated July 16, 2003 details the follow up actions necessary for scour critical bridges.

Objective 1.3:

1.3.a For FY 2010, manage all scour retrofit projects ensuring 100% on schedule delivery.

Action Plan

Strategies to Achieve Objective 1.3:

- Bridges requiring scour retrofit have been identified and prioritized through the accomplishment of an earlier Bridge Group goal.
- Bridge scour retrofit projects are programmed 2 years ahead from a \$2 million a year subprogram lump sum.
- Utilize the Bridge Group Integrated Document Management System to monitor all project documents and provide for a single point of storage for said documents.

No.	Action Step	Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Program bridge scour retrofit projects	Asst. State Bridge Engineer – Operations	on-going	
2.	Scope all projects based on hydraulic analysis and field review	Bridge Hydraulic Section’s staff	on-going	
3.	Manage projects following ADOT project mgt. guidelines	Bridge Hydraulic Section’s staff	on-going	
4.	Prepare Plan of Action for scour vulnerable bridges	Bridge Hydraulic Section’s staff	on-going	
5.	Prepare / review bridge hydraulics reports	Bridge Hydraulic Section’s staff	on-going	

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
1.3.1	Number of bridges designed in-house	5	6	6	6	6	6	6
1.3.2	Construction cost for bridges designed in-house, in millions	.5	1.0	1.5	1.5	1.5	1.5	1.5
1.3.3	Number of bridges designed by consultants	5	4	3	2	2	2	2
1.3.4	Construction cost for bridges designed by consultants, in millions	1.7	2.3	3	1	1	1	1
1.3.5	% of scour retrofit programmed in advance by 2 years	100%	100%	100%	100%	100%	100%	100%
1.3.6	% of projects delivered on schedule	100%	100%	100%	100%	100%	100%	100%

ITD Program Goal # 1: Enhance the movement of people and products throughout Arizona.

Development and Administration Subprogram Goal # 1: Bridge Inspection Program – Conduct all bridge inspections in their scheduled quarters.

Objective 1.4:

- 1.4.a. For FY 2010, conduct 2000 routine bridge inspections using in-house staff.
- 1.4.b. For FY 2010, assign task orders to on-call bridge inspection consultants to conduct in-depth inspections of 100 State owned bridges at a cost of \$500,000.

Action Plan

Strategies to Achieve Objective 1.4:

- Through the use of the 4 in-house bridge inspection teams and the 3 bridge inspection on-call consultants ensure that bridge inspections are performed according to an established schedule.
- Utilize the Arizona Bridge Inventory Storage System (ABISS) to record all inventory and inspection data, and to produce all required reports.

No.	Action Step	Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Perform routine bridge inspections	ADOT Bridge Inspection Teams / Cnslts	on-going	
2.	Perform in-depth bridge inspections	Consultants	on-going	
3.	Conduct quality assurance/review on all inspection reports	Bridge Management Office staff	on-going	

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
1.4.1	Routine Inspection – Number of bridges inspected by ADOT staff	1400	2000	2000	2000	2000	2000	2000
1.4.2	Routine Inspection – Cost of ADOT staff inspections, in thousands	350	500	500	500	500	500	500
1.4.3	Routine Inspection – Number of bridges inspected by consultants	360	300	300	300	300	300	300
1.4.4	Routine Inspection – Cost of consultants insps., in thousands	245	240	240	240	240	240	240
1.4.5	In-Depth Inspection – Number of bridges inspected by consultants	225	100	100	100	100	100	100
1.4.6	In-Depth Inspection – Cost of consultants insps., in thousands	1305	500	500	500	500	500	500

ITD Program Goal # 1: Enhance the movement of people and products throughout Arizona.

Development and Administration Subprogram Goal # 1: Right of Way Program - Acquire necessary rights to provide non-conditional right of way clearance for all projects based on the schedule bid date.

Objective 1.5: On projects for which design does not change subsequent to the 30% stage increase the number of non-conditional clearances by 20% on an annual basis up to 80%.

Action Plan

Strategies to Achieve Objective 1.5:

- Identify all projects meeting established parameters.
- Identify areas of responsibility.
- Identify problem areas.
- Develop methods of improving process.

No.	Action Step	Person(s) Responsible	Due Dates / Timeline	Resources Required
1	Monitor project clearances for conditions	R/W Coordinators	Continuous	
2	Identify by project issues for delays	R/W Coordinators	Continuous	
3	Summarize issues	R/W Coordinators	Continuous	
4	Develop and implement internal process changes	Project Mgmt. Manager	Continuous	
5	Advise upper management of issues outside of R/W Group control	Chief R/W Agent	Continuous	

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
1.5.1	Projects with no new r/w	102	160	160	160	160	160	160
1.5.2	Projects with no conditions	95	115	115	115	115	115	115
1.5.3	Projects with conditions	15	25	25	25	25	25	25

ITD Program Goal # 2: Optimize the quality, timeliness and cost effectiveness of our products and services.

Development and Administration Subprogram Goal # 2: Same as the ITD Program Goal

Objective 2.1: Achieve a 75% increase over FY 08 in the use of video-conferencing technology by the end of FY 2014.

Action Plan

Strategies to Achieve Objective 2.1:

- Advertise the availability and locations of the video-conferencing facilities.
- Develop a user-friendly guidebook for video-conferencing i.e. describing how to use the equipment, reserve the facilities and the potential cost savings to be realized.
- Encourage the use of video-conferencing and stress the cost savings in quantifiable terms.
- Expand video-conferencing service to the districts which do not have the service.
- Collect usage data in order to calculate the incremental gains realized.

No.	Action Step	Org(s)/Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Distribute a promotional notice to use video-conferencing	SEO	Quarterly	Existing
2.	Train a staff member on the video-conference process and use of the equipment as an alternate	SEO	June/July	Existing
3.	Maintain a monthly log with the number of video-conferences held, the number of attendees and the cost savings	SEO	Monthly	Existing
4.	Prepare a year end summary from the monthly report	SEO	June/July	Existing

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
2.1.1	Number of video-conferences conducted	221	250	275	300	330	355	390
2.1.2	Average number of attendees per video-conference	12	12	14	14	15	16	18
2.1.3	Cost savings realized in thousands (attendee cost - equip. cost + recurring service charge)	N/A	\$250	\$290	\$335	\$370	\$395	\$450

ITD Program Goal # 2: Optimize the quality, timeliness and cost effectiveness of our products and services.

Development and Administration Subprogram Goal # 2: Same as the ITD Program Goal

Objective 2.2: Bring 50% of the highway signs into compliance with the new MUTCD standards by the end of FY 2014.

Action Plan

Strategies to Achieve Objective 2.2:

- Obtain funding from the HES Program.
- Explore alternatives to increase subprogram funding.
- Leverage existing funding.
- Implementing job order contracting and Department furnished materials.

No.	Action Step	Person(s) Responsible	Due Dates / Timeline	Resources Required
1	Replace all signs not meeting new FHWA retro-reflectivity standards.	Amavisca/Manthey	On-going	HES subprogram

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
2.2.1	% Sign replacement	15	23	28	32	38	44	50

ITD Program Goal # 4: Use innovative and creative techniques to optimize the use of all resources.

Development and Administration Subprogram Goal # 4: Same as the ITD Program Goal

Objective 4.1: Achieve a federal funding level of \$21 million for delivery of the HES Program by the end of FY 2014.

Strategies to Achieve Objective 4.1:

- Sustain a consistent delivery of the HES Program with no lapse in federal funds.
- Continue to generate HES projects.
- Prioritize the HES Projects based on the cost/benefit ratio

No.	Action Step	Person(s) Responsible	Due Dates / Timeline	Resources Required
1	Submit projects for FHWA approval	Kolacia	On-going	None
2	Submit projects to Scoping APSR	Kolacia	On-going	None
3	Submit projects to Design APSR	Kolacia	On-going	None
4	Submit projects to PRB	Kolacia	On-going	None

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
4.1.1	FHWA approval - \$M	15.9	13.2	14.5	15.8	17.1	20	21
4.1.2	Scoping APSR - \$M	10.3	13.2	14.5	15.8	17.1	20	21
4.1.3	Design APSR - \$M	12.8	13.2	14.5	15.8	17.1	20	21
4.1.4	PRB, or obligation - \$M	9.8	13.2	14.5	15.8	17.1	20	21

ITD Program Goal # 4: Use innovative and creative techniques to optimize the use of all resources.

Development and Administration Subprogram Goal # 4: Same as the ITD Program Goal

Objective 4.2: Reduce the Injury Incidence Rate to 4.5 per 100 employees by the end of CY 13.

Action Plan

Strategies to Achieve Objective 4.2:

- Increase awareness of appropriate safety clothing and safe equipment operating procedures.
- Review and discuss OSHA, ADOT and SAF policies.
- Provide instruction on the proper use of equipment and tools.
- Reinforce the importance of accident and injury reporting.
- Report and share information on all near-misses (accident and injury-related).
- Keep current on all safety advisories.

No.	Action Step	Org(s)/Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Identify safety training requirements	Districts/Groups	On-going	Existing
2.	Monitor safety training	Districts/Groups	Monthly	Existing
3.	Review all injury statistics	Districts/Groups	Quarterly	Existing
4.	Conduct timely incident reviews	Districts/Groups	Quarterly	Existing
5.	Conduct accident review boards	Districts/Groups	On-going	Existing
6.	Monitor the use of protective equipment	Districts/Groups	On-going	Existing

Performance Measures

#	Description of the Measurement	CY 07 Act.	CY 08 Est.	CY 09 Est.	CY 10 Est.	CY 11 Est.	CY 12 Est.	CY 13 Est.	CY 14 Est.
4.2.1	Injury Incidence Rate per 100 employees	5.64%	5.50%	5.38%	5.15%	4.85%	4.70%	4.50%	4.50%
4.2.2	Percent (%) of injuries that result in lost time on the job	36%	32%	28%	24%	21%	18%	17%	15%

ITD Program Goal # 4: Use innovative and creative techniques to optimize the use of all resources.

Development and Administration Subprogram Goal # 4: Same as the ITD Program Goal

Objective 4.3: Identify, manage or dispose of all right of way not under use for the operation of the highway system.

Action Plan

Strategies to Achieve Objective 4.3:

- Develop and utilize inventory system
- Obtain Department approvals/clearances for disposal
- Market and sell excess land parcels

No.	Action Step	Person(s) Responsible	Due Dates / Timeline	Resources Required
1	Identify parcels of excess land	Pauline Fears	Continuous	
2	Circulate approval documents	Lucy Mellema	Continuous	
3	Obtain necessary clearances	Pauline Fears	Continuous	
4	Obtain appraisals/values for disposal parcels	Pauline Fears	Continuous	
5	Advertise available property	Jane DeMenna	Continuous	
6	Hold sale of excess properties	Jane DeMenna	Continuous	
7	Report results of sales	Manager Prop. Management	Monthly	

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11	FY 12 Est.	FY 13 Est.	FY 14 Est.
4.3.1	Parcels offered for sale	59	40	45	50	50	50	50
4.3.2	Parcels sold	25	20	22	30	40	45	50

ITD Program Goal # 1: Enhance the movement of people and products throughout Arizona.

Office of Environmental Services Goal # 1: Improve the movement of people and products throughout Arizona by ensuring that ADOT natural resource management responsibilities within or near rights of way support and promote traffic safety standards.

Objective 1.1: Support ADOT compressed construction and road improvement schedules and design related activities by completing needed environmental clearances expeditiously while still meeting all required regulatory obligations.

Action Plan

Strategies to Achieve Objective 1.1:

- Communicate and coordinate with other ADOT, federal, state and local entities.
- Communicate and coordinate with ITG, ADOT/OES groups and other ADOT resources to effectively upgrade OES environmental planning and clearance processing data systems.
- Communicate and coordinate as necessary with other ADOT groups to ensure new ADOT specific requirements generated by newly issued regulatory permits are incorporated into OES environmental planning and clearance procedures and practices.
- Assess existing development planning procedures and practices for streamlining opportunities; develop programmatic agreements to reduce administrative friction, improve departmental efficiency, and reduce processing time. Performance measures cited below are preliminary estimates subject to revision.

No.	Action Step	Person(s) Responsible	Due Dates / Timeline	Resources Required
1	Continue use, upgrade and maintain OES clearance monitoring/tracking database in coordination with PPMS and ITG	OES/Other ITD staff	On going	Existing
2	Use OES database to track development projects, problems and deadlines.	OES Staff	On going	Existing
3	Continue to define and refine processes and track and evaluate improvements.	OES Staff	On going	Existing
4.	Assess existing planning clearance practices; develop programmatic agreements.	OES Staff	FY08-FY09	Existing

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
1.1.1	Number of projects cleared by OES environmental planning staff	165	185	195	195	195	195	195
1.1.2	Percentage of OES managed environmental planning projects meeting established deadlines	100	98	98	98	98	98	98
1.1.3	Average number of active projects assigned to OES planning staff	338	350	350	350	350	350	350

ITD Program Goal # 2: Optimize the quality, timeliness and cost effectiveness of our products and services.

Office of Environmental Services Goal # 2: Increase the environmental quality, timeliness and cost effectiveness of ADOT managed right-of-way design, construction, maintenance services and practices through sound natural resource data collection and analysis procedures.

Objective 2.1: Ensure that ADOT identifies less harmful alternatives to, and thereby reduce, the amount of applied chemicals (herbicides) along the right-of-way.

Action Plan

Strategies to Achieve Objective 2.1:

- Reduce right of way vegetation by carrying out prescribed fires or other fuel reduction techniques to remove weeds, brush and tree seedlings to improve effectiveness of seasonal de-icing campaigns.
- Replace tall-growing species, weeds and brush with lower-growing native species which do not interfere with sight distance on curves, sign and delineator visibility. Evaluate existing selection of vegetation removal equipment in light of noxious and invasive weeds propagation.
- Evaluate herbicide effectiveness through test plots and GPS data capture devices and GIS mapping capabilities. Explore the use of this technology as a way to improve assessment of roadside application of herbicides and other chemicals. Implement effective chemical reduction techniques through evaluation of improved material management procedures.
- Explore the GPS tracking and GIS mapping of mowers and other vegetation removal equipment to develop just-in-time mowing schedules to develop vegetation control maps, reduce seed propagation, and improve emergent vegetation management.
- Communicate with research organizations, universities, national and international governmental entities to assess the current science of and the state of the art in noxious weed control.

No.	Action Step	Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	Develop a statewide Integrated Natural Resources Management Plan (INRMP); this plan to incorporate vegetation management principles and practices	OES, Districts and other ADOT staff	FY 09	Internal and consultant resources are required.
2.	Assess effectiveness of INRMP and incorporated RW vegetation control and maintenance program through measurable means, e.g., herbicide applied, acres controlled, material quantity burnt, meetings held, agreements reached and internal audits held.	OES, District and other ADOT staff	On going	Internal and consultant resources are required.
3.	Continue to use PeCoS as a prime group maintenance planning tool.	OES, District Staff	On-going	Existing

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
2.1.1	RW Shoulder Acres Treated by OES annually 3.5% increase per year	8126	14,836	15,356	15,893	16,450	17,025	17,350
2.1.2	Off-shoulder Acres Treated by OES annually 3.5% increase per year	247	2,346	2,428	2,513	2,601	2,692	2,770
2.1.3	Total Acres Seeded by OES annually 3.5% increase per year	6	165	171	177	183	190	198

ITD Program Goal # 3: Strive to develop and retain a high performing, successful workforce that is competitively paid.

Office of Environmental Services Goal # 3: Identify and prioritize ADOT environmental needs and organizational resource constraints to meet rapidly changing statewide multi-modal transportation planning, operational and maintenance requirements as established by the State Transportation Board, ADOT executive team directives and SEO policy and guidance.

Objective 3.1: Communicate and coordinate with districts on a monthly basis in order to identify environmental needs, training requirements and district priorities.

Action Plan

Strategies to Achieve Objective 3.1:

- Establish and maintain scheduled OES communication methods with District environmental staff to identify and resolve environmental issues in a timely manner.
- Maintain current staff environmental, health and safety training plans.

No.	Action Step	Person(s) Responsible	Due Dates / Timeline	Resources Required
1	Hold bi-monthly meetings with District Environmental Coordinators.	OES Compliance other Groups as required.	Bi-monthly	In-state travel required
2	Ensure that all OES employees receive both technical and mandatory general training.	OES Staff	On-going	Existing
3	Each Staff member identifies in-state training session, external training session or similar travel opportunities, e.g. Weeds and Seeds, Biological assessment training through BLM/USFS.	OES Staff	On going	In-state and Out of state travel resources required
4	Staff members attend training and represent report back to others in group.	OES Mgt and OES staff	Within two Weeks	In-state resources.
5	Submit training staffing plan and budget to OES/SEO management.	OES Group Mgt	Annually	In-state and out of state travel resources required
6	Schedule training with OES related staff (DECs) and other relevant staff on environmental topics through the use of ADOT and consultant services.	OES Group Mgt	As Required	In-state and out of state resources required.
7	Respond as directed by OES Director.	OES Staff	Ongoing	Internal Resources required

Performance Measures

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
3.1.1	Number of training proposals/conferences attended	6	15	15	15	15	15	15
3.1.3	Bi-monthly DEC meetings	4	6	6	6	6	6	6

ITD Program Goal # 5: Build the public and political support necessary to meet Arizona’s transportation needs.

Office of Environmental Services Goal # 5: Same as ITD Program Goal.

Objective 5.1: Communicate to internal and external stakeholders all matters of environmental importance relative to ADOT operations.

Action Plan

Strategies to Achieve Objective 5.1

- Coordinate with ADOT communications and outreach staff on a routine basis on environmental matters.
- Communicate to appropriate regulatory agencies any results taken by ADOT against third-party contractors for environmental non-compliance.
- Meet with NEPA and non-NEPA planning consultants to plan public meetings and hearings as necessary.
- Coordinate, at the direction or OES management, legal communication and consultation as required in furtherance of OES and ITD goals and objectives.

No.	Action Step	Person(s) Responsible	Due Dates / Timeline	Resources Required
1.	OES staff and management communicate with CCP and other public relations branches of ADOT in accordance with department policy and practice.	OES, District and other ADOT staff	On going	Internal and External Resources Required
2.	OES staff meets as required with NEPA and non-NEPA planning and operations consultants to plan public meetings and hearings as necessary.	OES, District and other ADOT staff	As Required	Internal and External Resources Required
3.	OES staff meets as required with non-NEPA planning and operations consultants to plan public meetings and hearings as necessary.	OES, District and other ADOT staff	As Required	Internal and External Resources Required
4.	Coordinate, per OES direction, legal communication and consultation as required in furtherance of OES and ITD goals and objectives.	OES, District and other ADOT staff	As Required	Internal and External Resources Required

Performance Measures 5.1

#	Description of the Measurement	FY 08 Act.	FY 09 Est.	FY 10 Est.	FY 11 Est.	FY 12 Est.	FY 13 Est.	FY 14 Est.
5.1.1	Maintain and preserve records of NEPA meetings held and meeting attendance numbers	50	50	50	50	50	50	50
5.1.2	Maintain and preserve records of –non-NEPA meetings held and meeting attendance numbers	20	20	20	20	20	20	20
5.1.3	Prepare and submit to appropriate regulatory agencies as required, a descriptive list of all enforcement cases taken by ADOT against third parties under construction contracts for environmental violations.	None	None	100%	100%	100%	100%	100%