Expediting Project Delivery Webinar – Agency Commitments to Internal Coordination and Delivery

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U.S. Department of Transportation
Federal Highway Administration

AMERICAN ASSOCIATION
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SHRP2 & Its Focus Areas

Safety: Fostering safer driving through analysis of driver, roadway and vehicle factors in crashes, near crashes, and ordinary driving.

Renewal: Rapid maintenance and repair of the deteriorating infrastructure using already-available resources, innovations, and technologies.

Capacity: Planning and designing a highway system that offers minimum disruption and meets the environmental, and economic needs of the community.

Reliability: Reducing congestion and creating more predictable travel times through better operations.

Expediting Project Delivery

- Expediting Project Delivery identifies 24 strategies for addressing or avoiding 16 common constraints in order to speed delivery of transportation projects.

- Strategies Grouped Under Six Objectives:
    1. Improve internal communication and coordination;
    2. Streamline decision-making;
    3. Improve resource agency involvement and collaboration;
    4. Improve public involvement and support;
    5. Demonstrate real commitment to the project; and
    6. Coordinate work across phases of project delivery.

Expediting Project Delivery

Strategy	Stage of Project Planning or Delivery				
	Early Planning	Corridor Planning	NEPA	Design/ROW/ Permitting	Construction
1. Change-control practices			●	●	●
2. Consolidated decision council		○	●	●	
3. Context-sensitive design and solutions	○	○	●	●	○
4. Coordinated and responsive agency involvement	○	●	●	●	●
5. Dispute-resolution process		○	●	●	○
6. DOT-funded resource agency liaisons		○	●	●	
7. Early commitment of construction funding	●	●	●		
8. Expedited internal review and decision-making	●	●	●	●	
9. Facilitation to align expectations up front	○	●	●		
10. Highly responsive public engagement	●	●	●	●	○
11. Incentive payments to expedite relocations				●	
12. Media relations manager		●	●	●	○
13. Performance standards	○	●	●	●	
14. Planning and environmental linkages	●	●	●		
15. Planning-level environmental screening criteria	●	●			
16. Programmatic agreement for Section 106			●	●	
17. Programmatic or batched permitting			●	●	
18. Real-time collaborative interagency reviews	○	○	●	○	
19. Regional environmental analysis framework	○	●	●	●	
20. Risk management	●	●	●	●	●
21. Strategic oversight and readiness assessment	○	●	●		
22. Team co-location		○	●	●	
23. Tiered NEPA process	○	●	●		
24. Up-front environmental commitments		●	●	●	

Implementation Award Recipients

- Arizona Department of Transportation (ADOT)
- Arkansas State Highway and Transportation Department (AHTD)
- Association of Monterey Bay Area Governments (AMBAG)
- California Department of Transportation (Caltrans)
- Florida Department of Transportation (FDOT)
- Idaho Transportation Department (ITD)
- Maricopa Association of Governments (MAG)
- Massachusetts Department of Transportation (MassDOT)
- Nebraska Department of Roads (NDOR)
- South Carolina Department of Transportation (SCDOT)
- South Dakota Department of Transportation (SDDOT)
- Vermont Agency of Transportation (VTrans)

SHRP2 on the Web

- **GoSHRP2**
  www.fhwa.dot.gov/GoSHRP2

  Apply for Implementation assistance

  Learn how practitioners are using
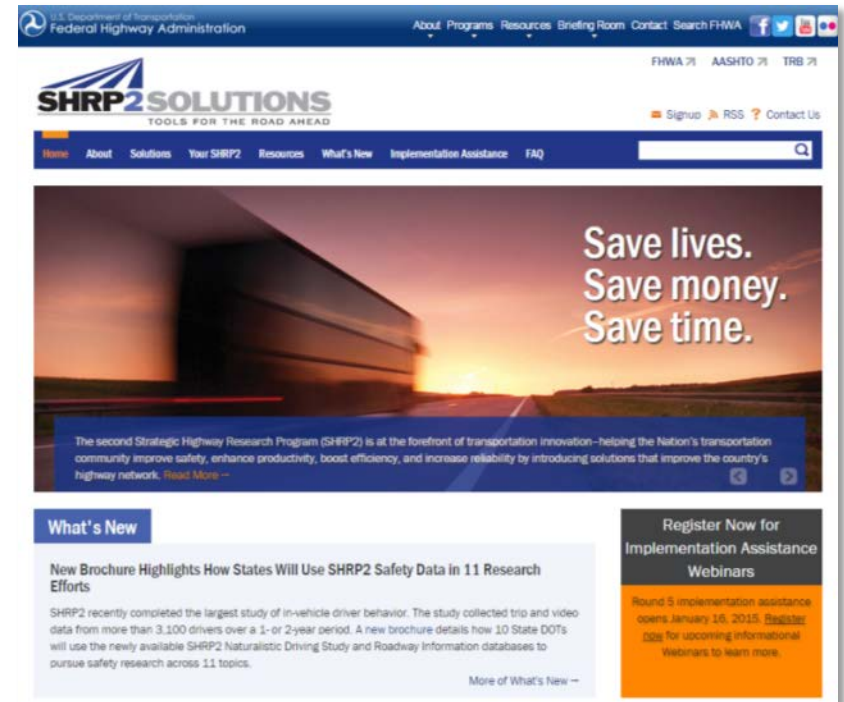
  SHRP2 products

- **SHRP2 @AASHTO**
  http://SHRP2.transportation.org

  Implementation information for

  AASHTO members

- **SHRP2 @TRB**
  www.TRB.org/SHRP2

  Research information

- **FHWA C19 Website**
  https://www.environment.fhwa.dot.gov/strmlng/shrp2-c19/default.asp

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C19: Expediting Project Delivery

A Self-Assessment on Project Delivery in Arkansas

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Federal Highway Administration

SHRP2 SOLUTIONS
TOOLS FOR THE ROAD AHEAD

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Why Expediting Project Delivery (C19)?

C19 Strategies Targeted:

- Improve Public Involvement and Support
- Improve Resource Agency Involvement and Collaboration
- Demonstrate Real Commitment to the Project
- Improve Internal Communication and Coordination
- Streamline Decision Making
- Integrate Across all Phases of Project Delivery

History in Arkansas

- Award Date - October 17, 2013
- Awarded - $50,000
- Assessment Workshop - $20,000

Expediting Project Delivery – Assessment Workshop

- Facilitated by FHWA on July 30-31, 2014
- 30 Attendees
- Topics
  - ➤ Overview of the Expediting Project Delivery and the Expediting Project Delivery Assessment Tool
  - ➤ Overview of "Current State" and "Desired State" of Project Development and Delivery Processes and Practices
  - ➤ Collaboration and Coordination Challenges and Opportunities
    - ✓ "What works well?"
    - ✓ "What needs work?"

What works well at ARDOT?

- Administration Open to Change
- Recent Organizational Changes
- Creation of Preliminary Engineering Squad
- Hiring Qualified Personnel
- Open Communication
- Improved Teamwork
- Good Relationship between ARDOT and FHWA
- Public Engagement

Challenges and Opportunities

- Project Development Process Documentation
  - ➢ Personnel changes and work load
  - ➢ Project Change Communication
- Early Project Decision Making:
  - ➢ Defining the Purpose and Need
  - ➢ Project Scoping
- Local Agencies Communication
  - ➢ Need for standardization and streamline process

Action Plan

- Developed an Action Plan in March 2015 to facilitate the activities identified in the Workshop
- Five Steps of Implementation:
  - ➢ Refine Scoping Procedure
  - ➢ Enhancing Purpose and Need Statements
  - ➢ Improving Information and Data
  - ➢ Improving Internal and External Communication and Coordination
  - ➢ Evaluating Resource Allocation

Refine Scoping Procedures

- A draft project initiation form
  - ➢ Developed in coordination with internal stakeholders.
  - ➢ Expected to be complete and approved in September 2016.
- Changes to the Project Initiation Form:
  - ➢ Incorporate the Project Initiation Form into the internal Staff Minutes.
  - ➢ This will reduce a duplication of efforts.
  - ➢ This will also allow each division to add, remove and update their part of the minutes as they deem necessary in real-time.
  - ➢ The Staff Minutes are used Department-wide and every employee has access to them. Updated within an Access Database.

Refine Scoping Procedures

- A project planning study process has been developed.
  - ➢ This documented process will help ensure consistency, accuracy, and transparency of the decision making and scoping process.
  - ➢ Planning study procedure manual. ARDOT is using the planning study procedures/guide on all new planning studies and this information is also provided to consultants that work on planning studies for ARDOT.
- A data-driven, performance-based approach to better identify system needs.
  - ➢ These documented processes are being refined and updated.
- A project prioritization system has recently been implemented to assist decision makers on which projects to prioritize.
  - ➢ The methods to quantify needs and outcomes will be refined.

Action Steps - 2

Enhance Purpose and Need Statements

- The project planning study procedure manual will be modified and updated as needed to ensure project P&N statements are tied to the performance-based planning process.
- A data-driven, performance-based approach is being implemented to better identify system needs.
- A project prioritization system has recently been implemented to assist decision makers on which projects to prioritize.
- We conducted a NEPA and Enhanced Purpose and Need Training. Provide guide to consultants and starting communications with locals earlier in process.
- Environmental and planning staff are working more closely together on the purpose and need (more collaboration and communication).

Improve Information Exchange and Data Sharing

- Improve Communication/Coordination (Internal and External)
  - ➢ A comment documentation process has been recently created for planning studies.
  - ➢ This process will be modified to better document comment resolutions, thereby improving the transparency and documentation of the decision-making process.
- Improve Resource Allocation (Internal and Consultant Staff)
  - ➢ The Department's consultant selection process will be updated in the near future to allow for stream-lined process for non-engineering services.
  - ➢ TPP along with the Department's Enterprise Data Committee, is currently testing the enterprise information warehouse that was recently established, to ensure that the server will indeed serve as our replication database department wide.

Facilitate Communication & Coordination

Training

- Alternative Development, Purpose and Needs Statements – 40 Attendees
- Technical Writing – 75 Attendees
- Public Involvement – 18 Attendees
- NEPA and Enhanced Purpose and Need Training.

Facilitate Communication & Coordination

- Development of a Local Public Agency Manual
  - ➢ Completing Date of Winter 2017
- Increased the tracking and disbursement of project related information after all supplemental staff meetings.
- Still in the process of creating a line of communication for tribes, local public officials, and affected landowners to use throughout the project development process.
- Transportation Planning & Policy Division (TPP) has been working more collaboratively with other divisions – not just Environmental, but also Roadway Design, Maintenance, etc. Better communication at the staff level expedites project delivery.

Evaluate resource allocation

- Utilize the Department's Achieving Career Excellence (ACE) program to assist in training on all of these new processes and procedures.
  - ➢ First year of evaluations will be completed October 2017.
- Still developing a plan on Managing Consultant Resources.
- TPP Division has been working with the Consultant Contracts office to modify the Department's Consultant Selection Procedures to allow for non-design related services (currently, the Department has procedures intended for engineering services only). Having a simpler procedure would expedite project delivery.

Steps Forward

- Incorporate the Project Initiation Form into our Staff Minutes.
- Buy in from all participants.
- Develop training programs on the ACE platform.
- Update the process to allow for stream-lined process for non-engineering services.
- Create an on-line format for tribes, local public officials, and affected landowners to use throughout the project development process.
- Establish a rotational program to improve coordination between all Divisions.
- Develop and implement a plan on Managing Consultant Resources.

Overall

- Assessment Workshop Successful

- Opportunities for Improvement Identified and started to implement these improvements

- **Increased Communications**
  - ➢ Internal
  - ➢ External

Lessons Learned

- The constant turnover of employees makes it difficult to complete tasks that are handed off each time a person changes positions.

- Employee workloads also have a large impact on task completion.

- Rome wasn't built in a day.

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SHRP2 SOLUTIONS

TOOLS FOR THE ROAD AHEAD

Quick Reference Guide
for expediting project delivery of
Local Public Agency (LPA) Federal-Aid
Projects

Paul O'Brien, P.E.
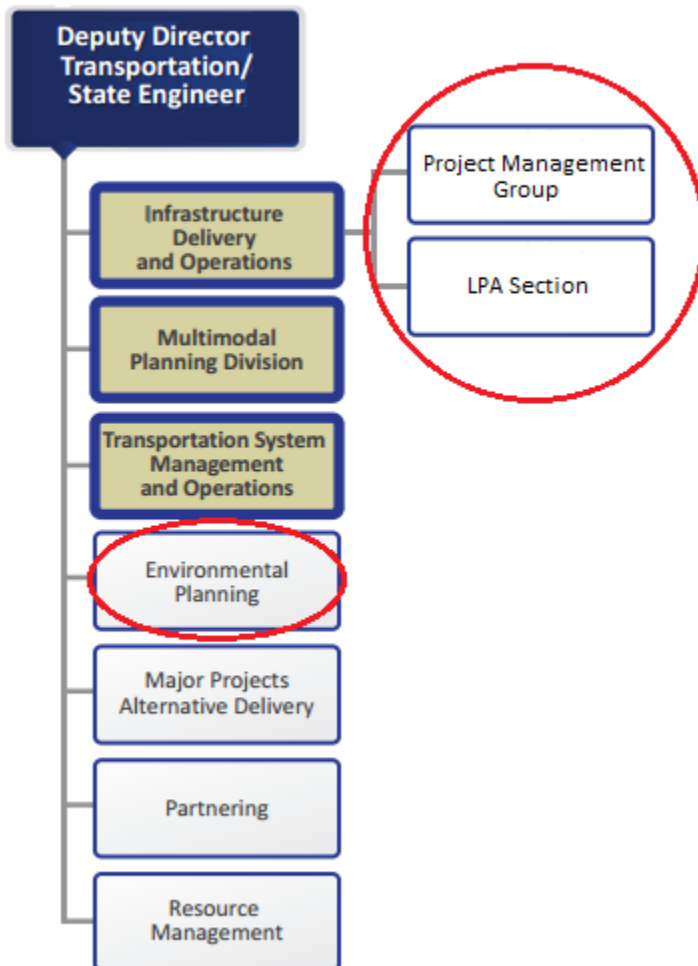**Arizona Department of Transportation**
(ADOT)

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Overview – ADOT Process for FAHP

- ❑ The *LPA* is the project sponsor and has staff and consultants

- ❑ The ADOT *LPA Section* is tasked with the administration of LPAs

- ❑ ADOT *Project Management Group* oversees Design (Project Admin.)

- ❑ ADOT *Environmental Planning* is responsible for NEPA compliance (LPA prepares) - can't be delegated

- ❑ ADOT *Technical Groups*

- ❑ More "layers" of agencies and staff than an "ADOT Project"

Overview - SHRP2, C19 Report

❑ ADOT is a recipient of SHRP2 Implementation Assistance Program for *Expediting Project Delivery* (Report C19)

❑ SHRP2 research areas focused on:

   ❑ *Renewal, Safety, Reliability, and;*

   ❑ ***Capacity*** – develop approaches and tools for systematically integrating environmental … into the analysis, planning , and design of new highway capacity

❑ ADOT's SHRP2 project was based on "***Capacity***" within Report C19

❑ The report identified 24 "strategies" for addressing 16 common "constraints" to speed up delivery of transportation projects.

Purpose of ADOT's SHRP2 Project

❑ ADOT's SHRP2 project focused on two constraints outlined in Report C19:

  ❑ Constraint 16 – *"unusually large scale and complex program"*
- ➤ The LPA Program is a large scale and complex program

  ❑ Constraint 5 – **"ineffective internal communication"**
- ➤ Ineffective internal and external communication impacts the delivery of the LPA Program

Purpose of ADOT 's SHRP2 Project

❑ SHRP2's 24 "strategies" were considered

❑ ADOT's SHRP2 project utilized one strategy theme outlined
   in Report C19:

   ❑ Strategy 21 – ***"Strategic readiness and oversight assessment"***

     ➢ Program and project management protocols.

     ➢ Streamlined environmental review through agreements

❑ ADOT's goal for use of the SHRP2 assistance was to provide a project development tool for expediting LPA project delivery in lieu of formal agreements outlined in Strategy 21

❑ Holistic approach with focus on overall administration

     ➢ Better overall administration leads to improved environmental review

ADOT 's SHRP2 Project Model

- ☐ General Eisenhower - Supreme Allied Commander in WWII
- ☐ Promoted over many senior Generals ("SMEs") – Why?
- ☐ He was recognized for his skills as a:
- ☐ Collaborator
- ☐ Communicator
- ☐ Coordinator
- ☐ Supply trucks and bulldozers win wars, not just tanks
    - ☐ Logistics and administration
    - ☐ "Basics" underlying the glorious

Example - Communication Breakdown

Sample LPA Project – "Why did it take a year to do the CE?"

2013 –

November - LPA initiated project

December 9 – FHWA authorized PE funds

2014 –

August 19 – LPA asked for the status of the environmental. There was no awareness of the project at Environmental Planning. When did it start? No one communicating?

September 9 – Environmental Planning informed the PM that they need basic project information to prepare a clearance

November 14 – Environmental Planning sent an email to the LPA Section noting that they had been *waiting* for the a scope of work. Why the wait?

November 25 – CE was prepared and sent to LPA Section for project info confirmation

December 15 – CE was approved

Identification of issues

❑ ADOT LPA Section has developed the **Local Public Agency Project Manual** which provides information and guidance for FAHP delivery – Informative but large

❑ Many basic things have to be "learned" with each new project:

- ❑ What are the steps?
- ❑ Who is responsible for what?
- ❑ Who needs to communicate to who?
- ❑ Can the LPA consultant communicate with ADOT directly?
- ❑ Initial consultant scope of work is inadequate (or even over-done).
- ❑ Additional scope identified, but the need not timely communicated.
- ❑ Project work on the project is delayed or stops until the funds are available.

Identification of issues

❑ We needed a new tool to help bridge the gaps for managing project development in the LPA Program and improving communication.
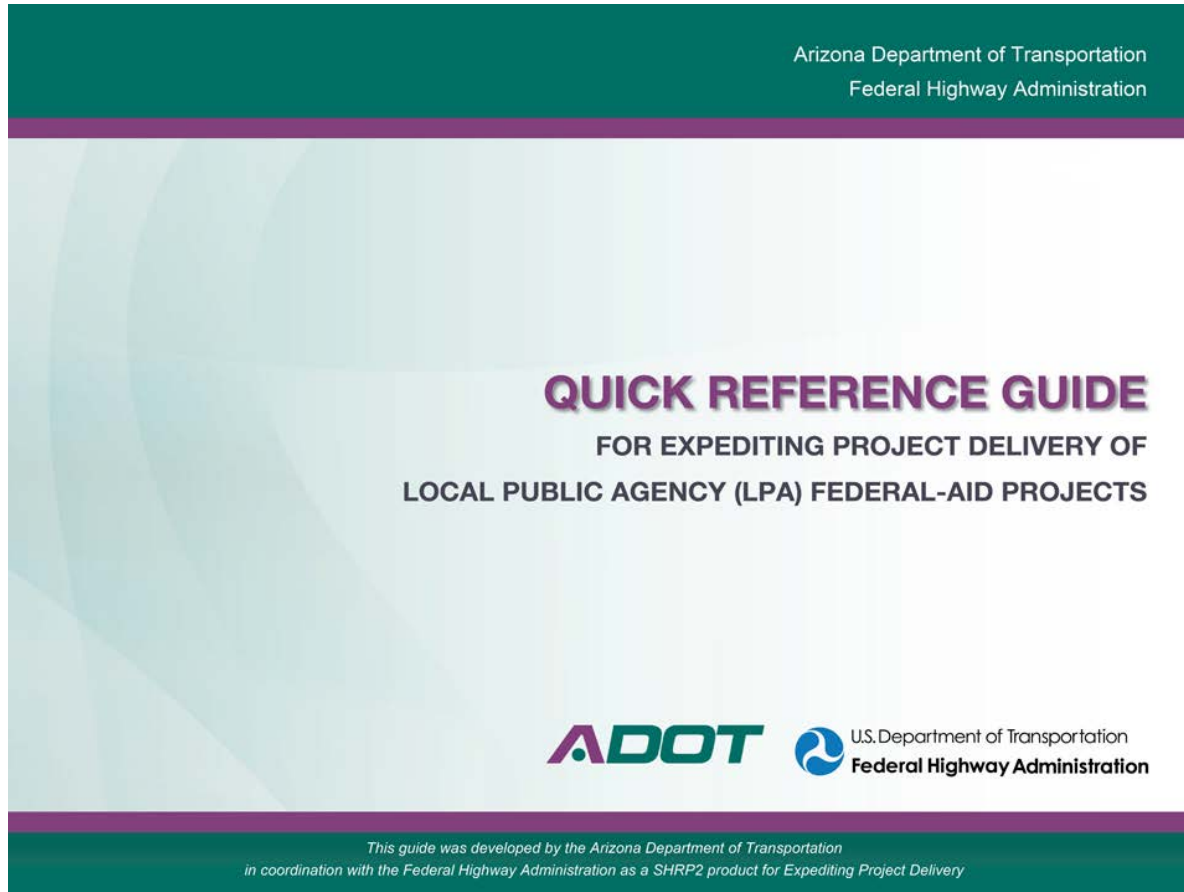
Arizona
Department of
Transportation ✓
@AZDOT

Addressing the Constraints

❑ <u>**Quick Reference Guidance (QRG)**</u>

Addressing the Constraints

- ❑ The **Quick Reference Guidance (QRG)** was developed to present simplified strategies of the project development process.

- ❑ The **QRG** quickly conveys key point of the ADOT Local Public Agency Projects Manual.

- ❑ The **QRG** serves the LPA PMs, ADOT PMs, consultants, and everyone involved in the LPA projects.

- ❑ Throughout the **QRG** responsible parties identified with different colors

- ❑ Throughout the **QRG** communication and coordination between all the players emphasized

RESPONSIBLE PARTY

- ADOT
- LPA
- FHWA
- Consultant

Delegation Authority for LPA projects

❑ The **QRG** identifies the flow of the delegation authority.

❑ ADOT delegates administration of FAHP either through Self –Administration Agreement (SA) or Certification Acceptance Agreement (CA).

DELEGATION OF AUTHORITY

FHWA

Stewardship Agreement

ADOT

PROJECT ADMINISTRATION

AA

Application/ Assessment

SA

Assessment Process

CA

LPA

KEY POINT: There is no delegation of NEPA approval (Categorical Evaluations (CEs)) from FHWA to the LPA. FHWA delegates that authority only to ADOT for certain NEPA approvals (CEs).
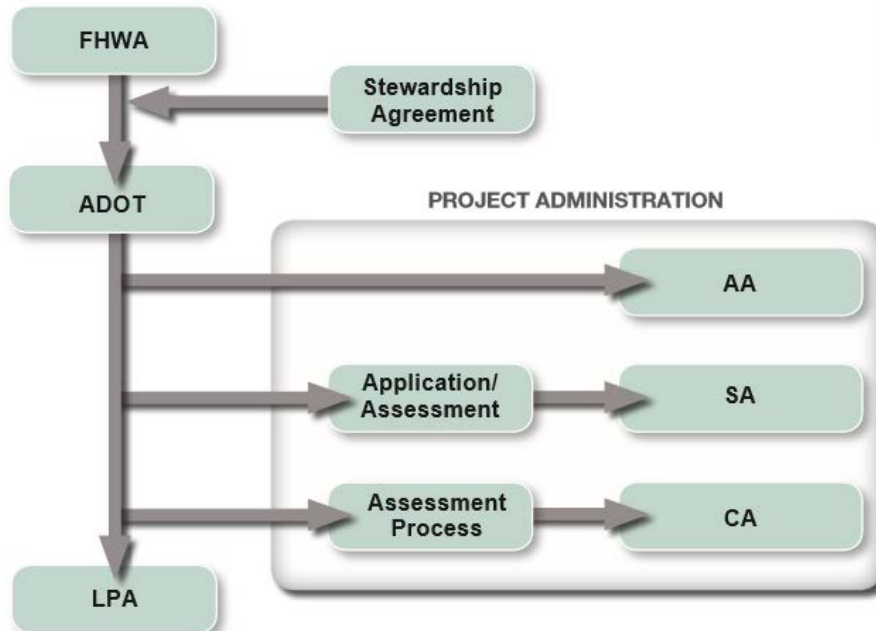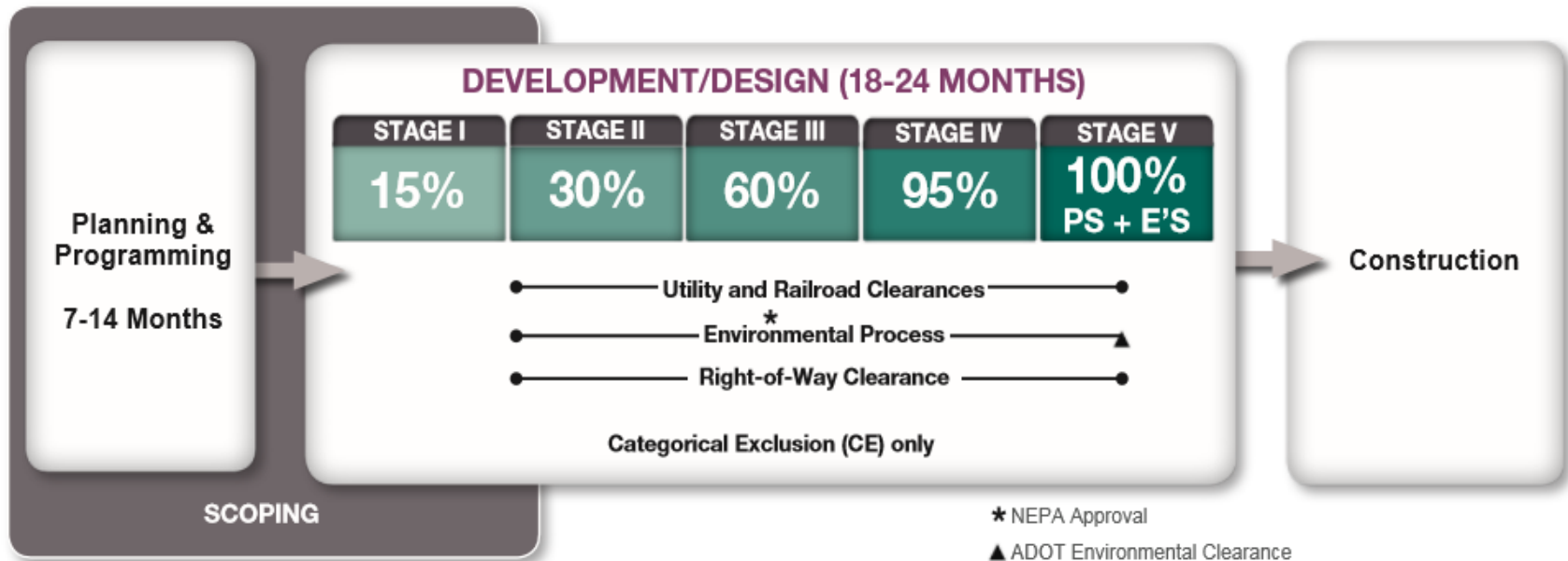
Overview- ADOT Project Development Process

❑ The **<u>QRG</u>** presents an overview of the anticipated timelines for the project development process including NEPA Approval and ADOT Environmental Clearance.

SCOPING

DEVELOPMENT/DESIGN (18-24 MONTHS)

Planning & Programming

7-14 Months

STAGE I	STAGE II	STAGE III	STAGE IV	STAGE V
15%	30%	60%	95%	100% PS + E'S

Utility and Railroad Clearances
* Environmental Process
Right-of-Way Clearance

Categorical Exclusion (CE) only

Construction

★ NEPA Approval
▲ ADOT Environmental Clearance

NEPA Approval and ADOT Environmental Clearance

❑ The **<u>QRG</u>** highlights "Key Points" in the process
  ❑ Clarifies the definitions and actions involved with the NEPA Approval and ADOT Environmental Clearance

NEPA APPROVAL AND ADOT ENVIRONMENTAL CLEARANCE:

NEPA Approval and the **ADOT Environmental Clearance** for final approval of environmental actions are separate approval steps.

NEPA Approval is the completion of the federal NEPA process as indicated by the approval of a CE, Environmental Assessment (EA), or Environmental Impact Statement (EIS). The NEPA Approval date is also the date after which FHWA can authorize right-of-way (ROW) acquisition and construction funding.

ADOT Environmental Clearance is an internal ADOT approval document sent from Environmental Planning to ADOT Contracts and Specifications Section for an ADOT construction administered project, to certify that the environmental process and documentation is complete, has been approved by the responsible agencies, and that the project is ready to advertise for bid.

The Environmental Clearance can be issued concurrently or after the NEPA Approval date.

Initiating ADOT Administered LPA project

❑ The **QRG** introduces a ***New Step*** in the process:
  ❑ Notification of the project initiation and identification of the ADOT Environmental Planner early on
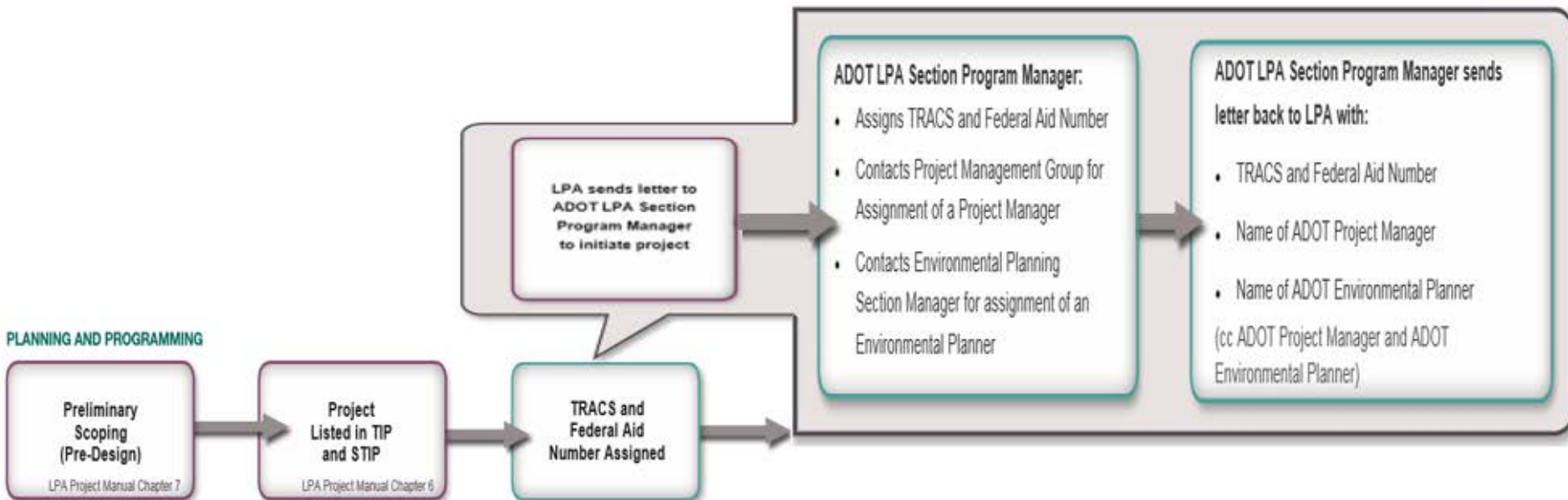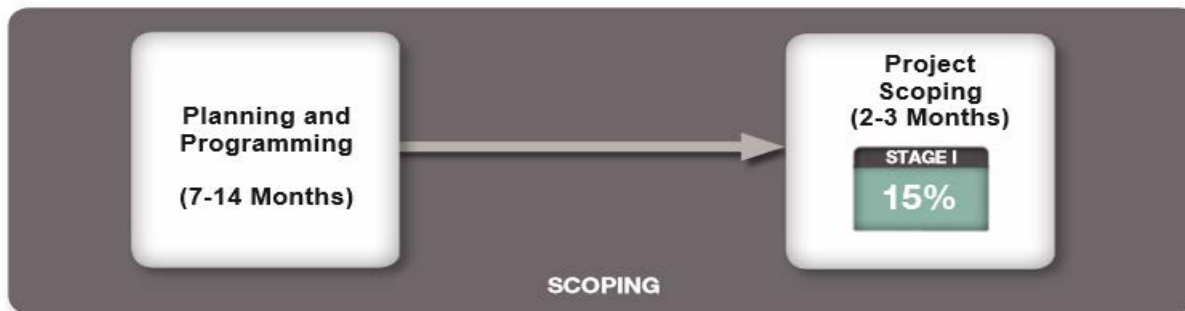
ADOT IGA and Consultant Procurement

❑ The **QRG** highlights that consultant procurement is dependent on the type of project administration.

❑ The **QRG** introduces a ***New Step*** in the process: ADOT Environmental Planner can review the consultant proposal.

KEY POINT: In addition to the ADOT PM and LPA PM, ADOT Environmental Planners can review proposals from an environmental perspective. Though not required, LPAs that are CA and SA can send their project's scope of work to ADOT Environmental Planning for review to ensure that it is not under or over-scoped.

Assistance During Scoping Phase

❑ The **QRG** stresses that ADOT Environmental Planning involvement in LPA projects ***can begin as early as preliminary scoping*** during planning and programming phase.

❑ ADOT encourages LPAs to conduct preliminary scoping early and as thoroughly as possible to evaluate cost estimates before the projects are included in a TIP to ensure that sufficient funding is secured.

❑ ADOT Environmental Planning can be contacted during scoping pre-TIP and post-TIP to provide assistance on NEPA requirements.

Assistance During Development Phase

DEVELOPMENT/DESIGN (18-24 MONTHS)

STAGE I	STAGE II	STAGE III	STAGE IV	STAGE V
15%	30%	60%	95%	100% PS + E'S

*
Environmental Process
Categorical Exclusion (CE) projects only

- ❑ Preliminary Engineering , the environmental review process, and NEPA approval occur within the Development/Design Phase

- ❑ Various environmental analysis may be required and coordination between disciplines is essential.

- ❑ Identifying and managing the project critical path, meaning accounting for the "other environmental laws" such as NHPA, ESA, CWA, Section 4(f), is also essential, because these typically dictate the environmental component of a project schedule. Communicate changes to the Project Team.

Coordination and Communication
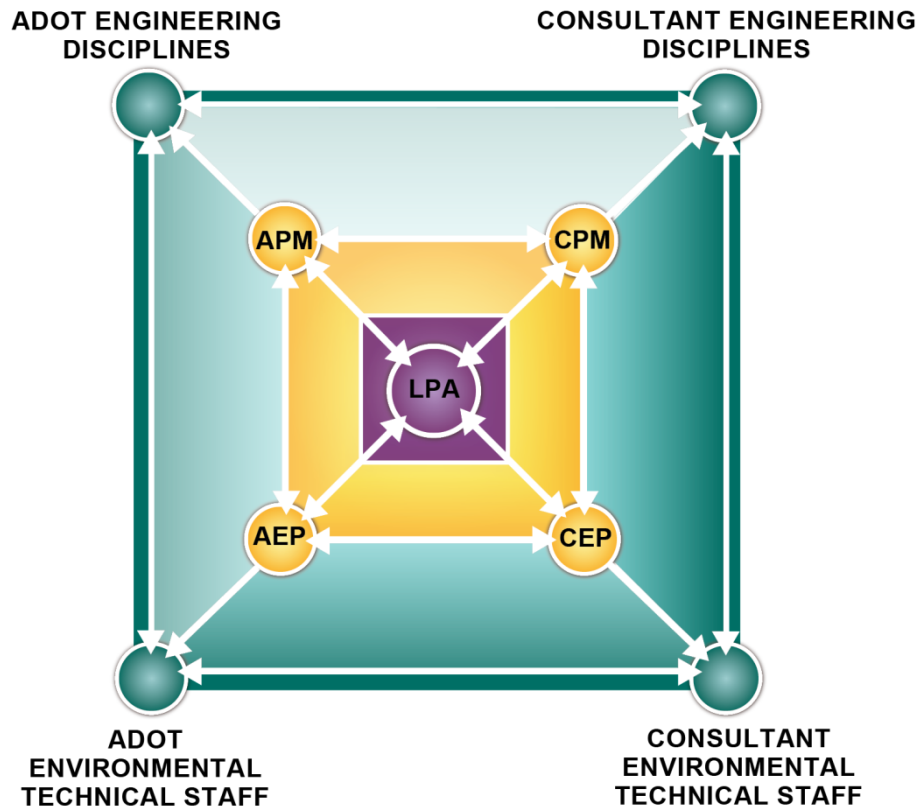
APM - ADOT Project Manager
CEP - Consultant Environmental Planner
AEP - ADOT Environmental Planner
CPM - Consultant Project Manager

There are many different stakeholders that make up the project team, and each play a key role throughout the LPA project development process. **Communication between all players is essential in order to stay on schedule and within budget.**

Coordination and communication between all key players should be constant and ongoing throughout project development. When a project requires a change of scope or an environmental issue arises, notify the design team. These issues may affect schedule, budget, and/or scope.

Coordination, Communication, Documentation, QA/QC

❑ The QRG introduces a New Step in the process:
❑ Creating a *communication protocol* upfront for all projects, so all team members know the communication chain.

❑ The **QRG** lays out the steps to be taken when communication breakdown occurs. Don't wait!

❑ LPAs and consultants are encouraged to consult the ADOT Environmental Planning Quality Control Plan.
http://azdot.gov/business/environmental-planning/additional-resources

❑ The approach to project should always be to keep quality in mind from the beginning.

Summary – Expediting Project Delivery

❑ Challenge – expediting environmental review for LPA Program

❑ ADOT SHRP2 took a holistic approach to the solution – Look at "constraints" in overall process not just "environmental"

❑ **QRG** created as a tool for all members of a Project Team

❑ **QRG** – easy access to key points of the process

  ❑ Emphasize earlier involvement of key Project Team staff
  ❑ Emphasize early scoping and budgets to support Design
  ❑ Emphasis on the importance of communication – connected Project Team to overcome additional "layers" with LPA Projects
  ❑ Highlight Key Points for easy access to Project Team

❑ Result: *Expediting Project Delivery*

Arizona DOT Contacts and References

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Additional Information:

FHWA (SHRP2) C19 Product: Expediting Project Delivery

https://www.environment.fhwa.dot.gov/strmlng/shrp2-c19/default.asp

ADOT Environmental Planning Website

https://www.azdot.gov/business/environmental-planning

Questions?

Please remember to type in your questions to the question prompt.

Thank you for participating!

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