



Scoping a PD&E Study

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Purpose of this Presentation

Present revised procedure (*Part 1, Chapter 4*) for scoping process for PD&E studies

Outline changes to the *Standard Scope of Services for PD&E studies*

Share Next Steps...

Why Rewriting Part 1, Chapter 4

- Separate Process from Analysis requirements
 - Process (Part 1 of PD&E Manual)
 - Analysis and Documentation (Part 2 of PD&E Manual)
- Need for pre-PD&E guidance
 - Planning Process
 - Planning and Environmental Linkages
 - Project Scoping (NOT EIS Scoping)
- Transformation of Pre-construction Process (SWAT)

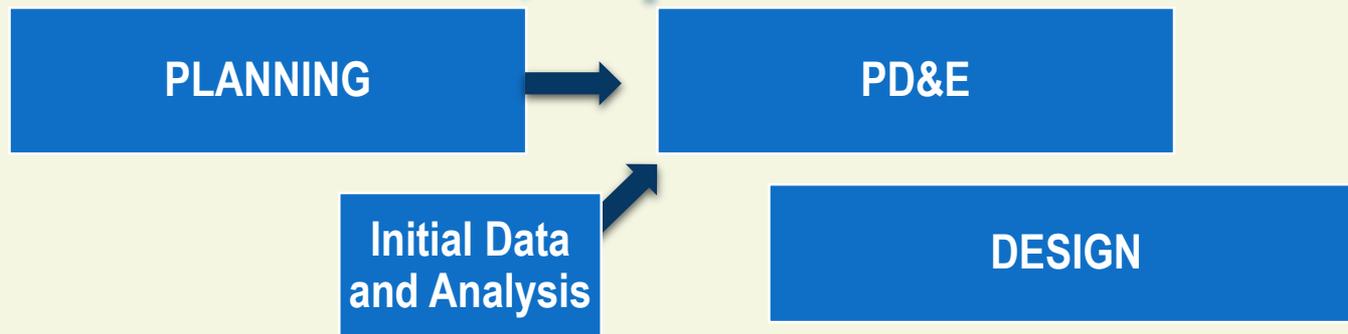
(The Chapter is Under Final Approval)

Project Development Process

Conventional Process



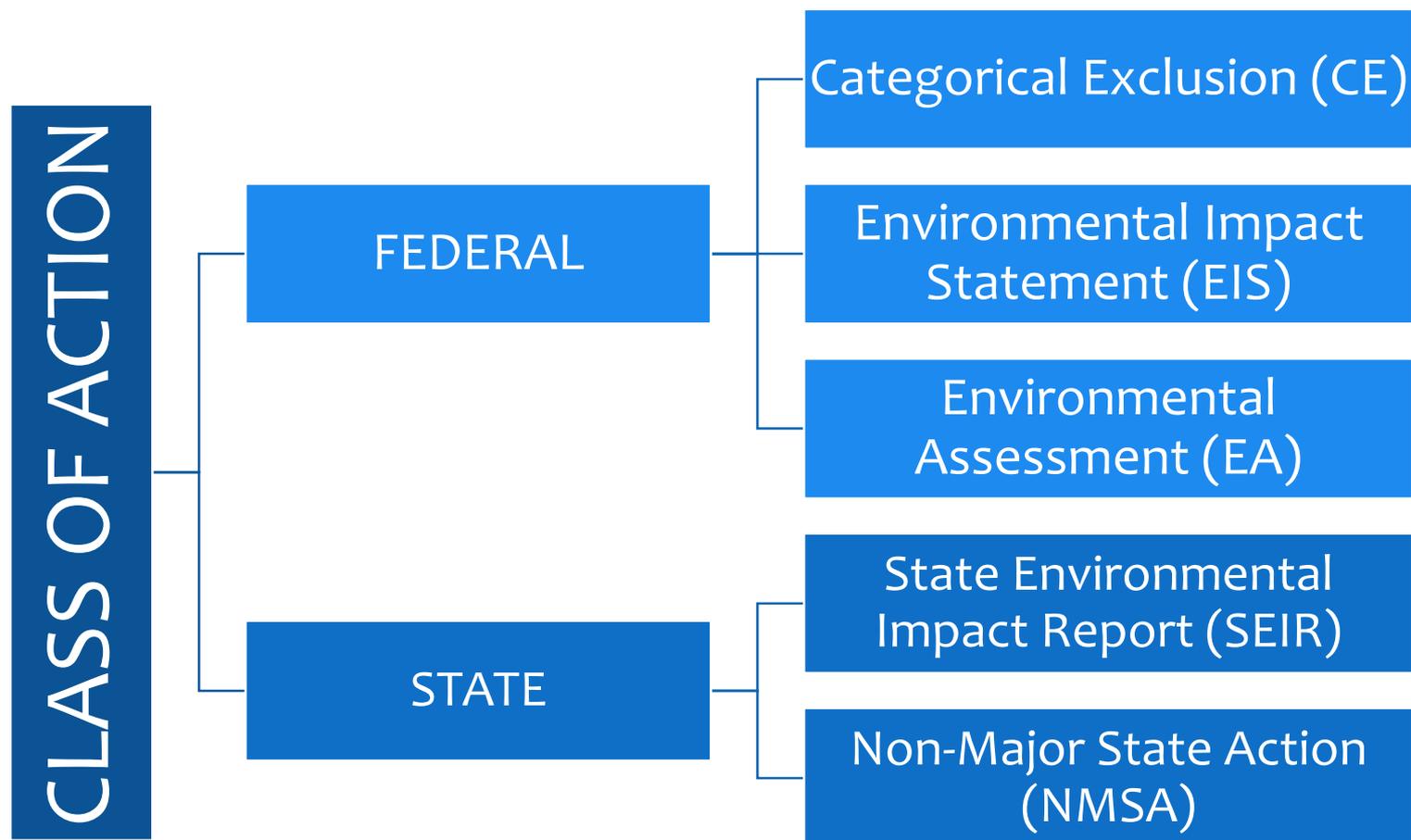
Enhanced/Improved Process



PD&E Procedural Guidance

- **Part 1, Chapter 4 of the PD&E Manual**
 - rewritten to provide procedure guidance for scoping a PD&E Study.
 - address the project development process with emphasis on Planning and PD&E processes.
- Emphasize use of Planning Decisions and Products in PD&E
- Renamed **Project Development Process**
- Similar process for SEIR, documented in **Part 1, Chapter 10** (*under final approval*)

Anticipated Class of Action

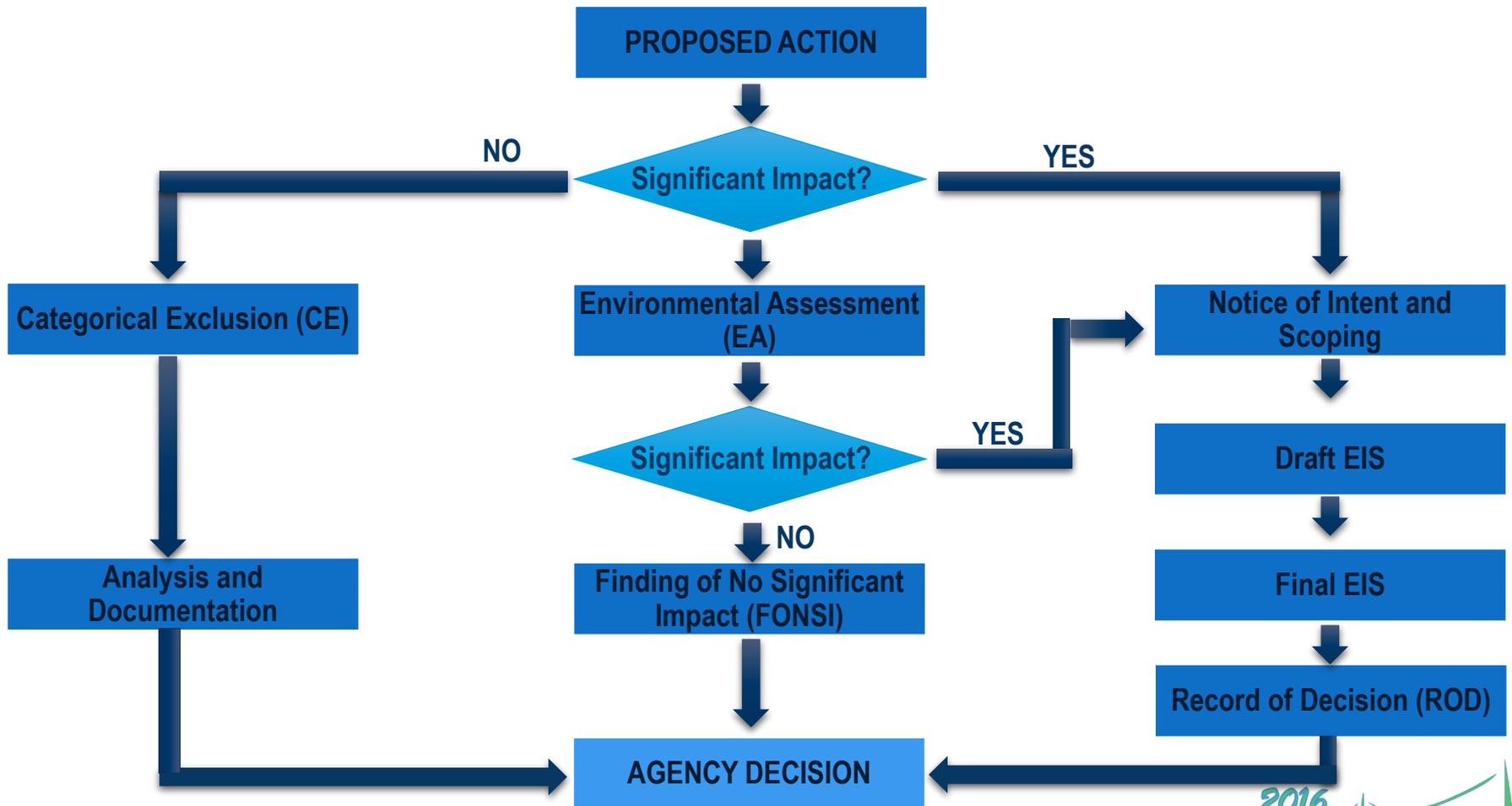


Federal vs State Projects

A federal project

- Federal funding
- Federal permit
- Federal lands
- Federal program (e.g. Interstate)

Federal Classes of Action



Planning and PD&E Linkages

Allowed by Federal Regulations

- 23 USC 139
- 23 USC 168
- 23 CFR 450

Revised **Part 1, Chapter 4 of PD&E Manual** will detail the process

Major Benefit

Streamlining environmental review process by eliminating duplication of effort and delay

Planning and PD&E Linkages

Planning decisions that can be adopted

- Tolling and private financial assistance
- Decision to choose travel corridor or mode
- Purpose and need
- Screening of alternatives
- Analysis methodology
- Programmatic Mitigation

Planning and PD&E Linkages

Planning products that can be adopted

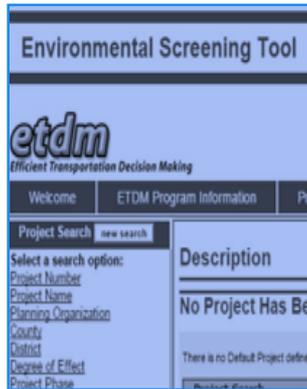
- Travel demand/ Traffic forecasting
- Regional development and growth
- Local land use, growth and development
- Population and employment
- Natural and build environmental conditions
- Environmental Resource
- Potential environmental effects
- Mitigation needs

Planning and PD&E Linkages

- Conditions to adopt or incorporate by reference a planning product
- Lead Federal Agency must be consulted when making decision to adopt planning products

How does the information, analysis, and decision from the planning meet the standards applicable to NEPA?

Planning and PD&E Linkages



Efficiency Transportation Decision Making (ETDM)

Incorporates environmental considerations and streamline project delivery while getting feedback from resource agencies



Alternatives Corridor Evaluation (ACE)

Identifies, evaluates and eliminates alternative corridors on qualifying projects prior to the PD&E phase.

ACE guidance will now be in Part 1, Chapter 4

Use ETDM Screening Reports and ACE Report to the scope the PD&E project

Scoping Form

- SWAT Scoping Form for both federal and state projects
- SWAT Planning and Kickoff Meetings to
 - Plan and investigate project parameters and requirements
 - Decide on project development approach
 - Activities that may start ahead of PD&E
 - Preliminary project schedule
 - Level of design effort
 - Overlapping design phase with PD&E
 - Project delivery method

SWAT is NOW applicable to both Federal and State project

SECTION B

1. POTENTIAL PROJECT IMPACTS TO ENVIRONMENTAL RESOURCES

Resource Categories	Substantial Impacts?				State Basis for Decision
	Yes	No	Enhance	* <i>NoInv.</i>	
A. SOCIAL and ECONOMIC					
1. Social	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Economic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Land Use Changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Mobility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Aesthetic Effects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Relocation Potential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B. CULTURAL					
1. Historic Sites/Districts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Archaeological Sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Recreation Areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
C. NATURAL					
1. Wetlands and Other Surface Waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Aquatic Preserves and Outstanding FL Waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Water Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Drainage and Floodplains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Coastal Barrier Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Protected Species and Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Essential Fish Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
D. PHYSICAL					
1. Highway Traffic Noise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Contamination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Utilities and Railroads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Bicycles and Pedestrians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

* *NoInv.* = Issue absent, no involvement.

2. ACTIVITIES TO BE ADVANCED PRIOR TO PD&E

List the data collection, technical reports, and survey that can be advanced ahead of PD&E start.

3. LEVEL OF DESIGN EFFORTS

State whether design phase activities will be concurrent with PD&E. State level of design effort anticipated with PD&E.

4. PROJECT DELIVERY METHOD

State the anticipated delivery method.

5. SCHEDULE

List the project activities (their durations, milestones and constraints), deliverables, and estimated time they will be accomplished.

6. RISK ASSUMPTIONS AND CONSTRAINTS

List current or potential risks, constraints, or assumptions that may affect the project and set any contingency.

Figure 4-2 SWAT Scoping Form (Page 3 of 3)

SWAT SCOPING FORM

SECTION A

- Purpose and Need
- Funding
- Anticipated Permits
- Anticipated Class of Action

SECTION B

- Potential Impacts to Env. Resources
- Activities to be Advanced ahead of PD&E
- Level of Design Effort
- Project Delivery Method
- Milestones Schedule
- Risk Assessment



Activities that may Start Ahead of PD&E

- Design survey
- Traffic data collection and traffic analysis
- Geotechnical investigation
- Existing condition analysis
- Public involvement plan, including public outreach
- Long lead species surveys, if the time of year is right
- Cultural resources assessment survey
- Contamination assessment
- Other technical studies or coordination as project characteristics allow

Level of Design Detail in PD&E

- PD&E and Preliminary Design can begin **concurrently** provided that the preliminary design activities comply with **23 CFR 771** and **40 CFR §§ 1500-1508**
- Preliminary Design activities must not limit the choice of reasonable alternatives, **40 CFR §1506.1(a) and (b)**
- State process have more flexibility in advancing Design phase activities to the PD&E phase

Overlapping PD&E and Design

- Overlap by procuring both phases concurrently
- Not all projects can benefit this approach
- PM need to consider and manage risks
 - What if No Build Alternative is selected?
 - Number of alternatives analyzed
 - FHWA may prohibit preliminary design activities

Overlapping PD&E and Design

Three Options under SWAT to consider

- One contract for both PD&E and Design funded together
- One contract for PD&E with an option for Design
- Two overlapping contracts procured simultaneously or separately

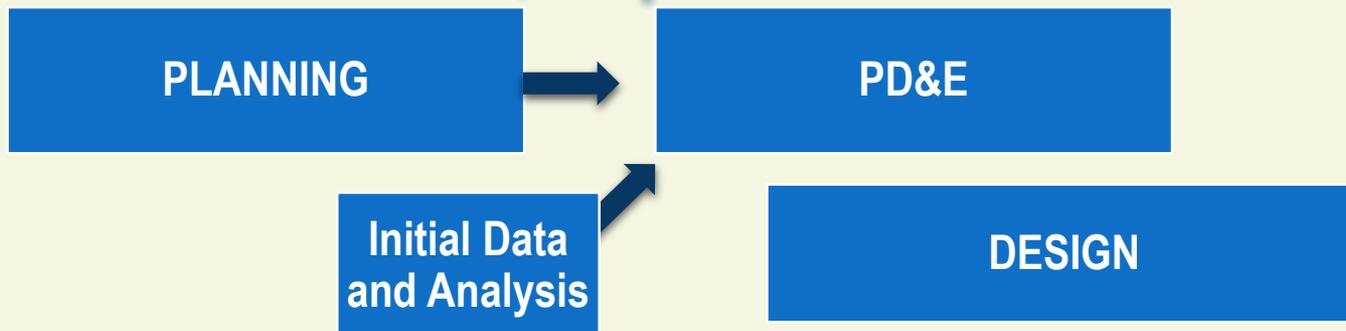
Districts will decide which one to use

Scope of Services for PD&E Studies

Why Revising?

- Current language is outdated
- Changes brought forth by SWAT
- Changes in PD&E Manual

Enhanced/Improved Process



Standard Scope of Services for PD&E Studies

Existing Standard Scope of Services

FEBRUARY 2015

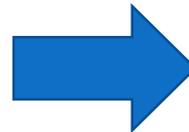
EXHIBIT A



SCOPE OF SERVICES
FOR
PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDIES

Financial Project ID: 000000 0 22 00
Work Program Item No.: 0000000 [If applicable]
Federal Aid Project No.: 000000X [If applicable]
County Section No.: 00000
Description: SR 000 from [N, S, E, W of] _____ to [N, S, E, W of] _____
_____, _____ County
Bridge No.: 000000

NOTE: Italicized text is included as narrative or instructions to assist in the preparation of the scope of services, and should not be included in the final scope of work. WHEN EDITTING, CHANGE THE STYLE FROM "PDE SoS CAPTION" TO "PDE SoS NORMAL" OF THIS TEXT.



Revised Standard Scope

Rewritten and reorganized to be SWAT Centric

Incorporates Enhanced Process

Three options under SWAT process PLUS standalone PD&E Study

Activities completed ahead of PD&E or conducted by others

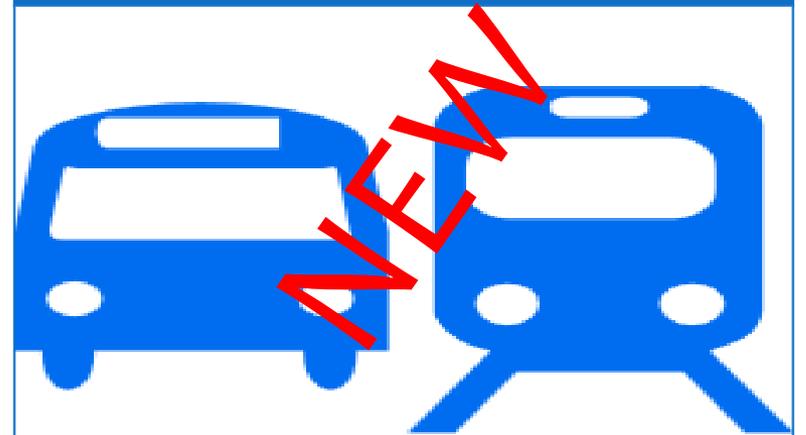
Interactive web-based tool

Standard Scope of Services for PD&E Studies

Highway
Projects



Transit
Projects



Standard Scope of Services for PD&E Studies

Three contract options under SWAT

- One contract for both PD&E and Design funded together
- One contract for PD&E with an option for Design
- Two overlapping contracts procured simultaneously or separately

Standard Scope of Services for PD&E Studies

- Project Manager's flexibility to modify task if
 - The task was completed ahead of PD&E
 - The task will be conducted by others (in-house staff or separate contract)
 - Environmental resource is absence or present but will not be impacted
 - The Design Phase will overlap PD&E Phase
- The CONSULTANT must document the statement of such effect if a resource is absent or will not be impacted

Standard Scope of Services for a PD&E Study with Design

- Eliminate overlaps of activities in the PD&E and Design Scopes of Services
- Place activities where they logically fit, e.g.:
 - What activities overlap between PD&E and Design phases?
 - Can we place them in a single phase only?
 - Which phase make sense the most for a particular activity?
- Adjust scope language and staff hours accordingly in each phase

Standard Scope of Services for a PD&E Study with Design

- Roadway Analysis
- Drainage Analysis
- Utilities
- Environmental Permits
- Structure Analysis
- Signalization Analysis
- ITS Analysis
- Lighting Analysis
- Landscape Analysis
- Survey and Photogrammetry
- Mapping
- Geotechnical

PD&E Tasks

Design Tasks

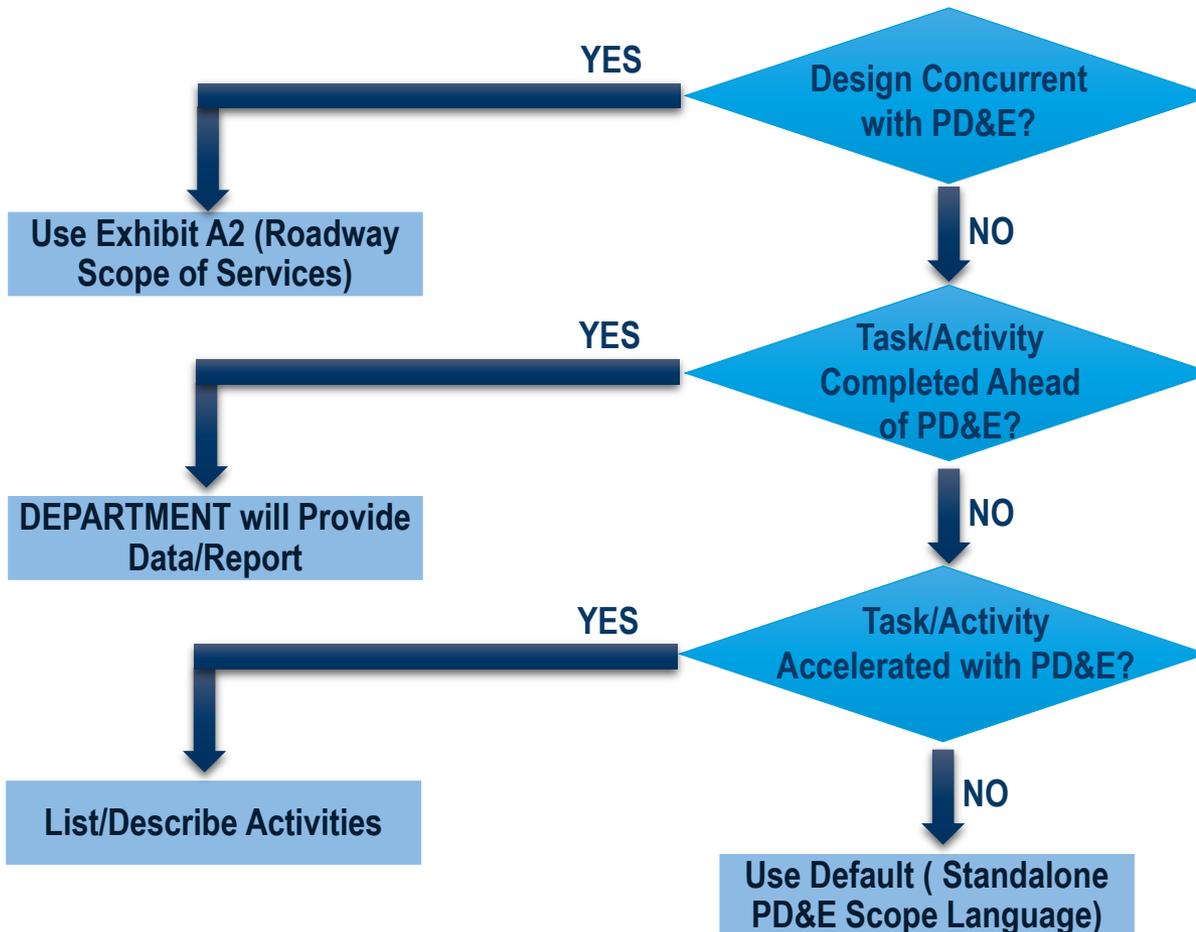
- Public Involvement
- Environmental Analysis
- Environmental Document
- Planning Consistency
- Project Commitment
- Traffic Analysis
- Concept Development
- Alternatives Evaluation
- Construction Cost
- Value Engineering
- Risk Management

Moving the task from PD&E to Design (and vice versa) does not mean the task is delayed or accelerated

Standard Scope of Services for a PD&E Study with Design

- Interim – Two-Part Scope of Services
 - Part 1 of Exhibit A (Exhibit A1) –PD&E
 - Part 2 of Exhibit A (Exhibit A2) –Design
 - Cross reference A1 and A2 appropriately
- Goal is ONE (combined) Scope of Services for projects with design overlap

Standard Scope of Services for a PD&E Study with Design



- Roadway Analysis
- Drainage Analysis
- Utilities
- Environmental Permits
- Structure Analysis
- Signalization Analysis
- ITS Analysis
- Lighting Analysis
- Landscape Analysis
- Survey
- Photogrammetry
- Geotechnical

Environmental Analysis

Resource is absent or is present but will not be impacted == No Involvement

This resource is not present or will not be impacted by the project. The CONSULTANT must verify and record in the Environmental Document.

The activity was completed prior to PD&E by others or will be done by others concurrent with this PD&E.

The DEPARTMENT will provide report and the CONSULTANT will summarize the results in the Environmental Document.

Resource will be impacted and will require analysis under this study.

Display the default text.

Environmental Document

One of four Options to be automatically selected

- Type 2 Categorical Exclusion (Type 2 CE)
 - Environmental Assessment (EA)
 - Environmental Impact Statement (EIS)
 - State Environmental Impact Report (SEIR)
-
- There are two options one of which should be selected automatically based on
 - Highway Projects
 - Transit Projects

Scoping an EA

If after completing the Environmental Assessment(EA), FHWA determines that there are no significant impacts resulting from the project, the CONSULTANT will prepare a Finding of No Significant Impact (FONSI) in accordance with **Part 1, Chapter 7** of the **PD&E Manual** for review and approval by FHWA. **If the EA discovered that the project would result in significant impacts, the DEPARTMENT will upgrade the project to an Environmental Impact Statement (EIS).**

Next Steps...

- Develop a web based scoping tool
- Develop Instructions to Scope of Services
- Update Staff Hour Estimation Guidelines
- Update Staff Hour Estimation Forms
- Conduct Training/Workshop for Scope of Services
- Update Chapter 2 of Part 2 of the Project Management Handbook
- Develop standard schedules by Class of Action

Next Steps...

Web based scoping tool

State Wide Environmental Project Tracker

The screenshot displays the State Wide Environmental Project Tracker web application. On the left is a navigation menu with the following items: Project Dashboards (with a dropdown arrow), Project Input / Setup (highlighted in green with a dropdown arrow), Overview, Scope of Services, Type 1 Categorical Exclusion Checklist, Project Documents (with a dropdown arrow), Quality & Performance Management, Reports (with a dropdown arrow), and Help. The main content area features three large icons: Project Dashboards, Project Input / Setup, and Project Documents. Below these is an Alerts section with a blue header, a message in Latin, and a notification that 3 items need attention. A table follows with columns for Project, Status, and Action Needed, listing three projects with their respective statuses and actions.

Project Dashboards

Project Input / Setup

Project Documents

Alerts

Curabitur nec leo dictum, mattis libero nec, fermentum nibh.

3 items need your attention.

Project	Status	Action Needed
# 101	On Time	Lorem ipsum dolor
# 305	On Time	Aenean venenatis nulla ante
# 217	Lagging	Suspendisse et elementum leo

Thank You

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Arrive Alive

