



Training Workbook

Spring 2018



The background of the page is an abstract composition of overlapping, semi-transparent blue geometric shapes, primarily triangles and polygons, in various shades of blue. The shapes are layered, creating a sense of depth and movement. The colors range from a deep, dark blue to a very light, almost white blue. The overall effect is modern and professional.

SWAT Training Workbook

What is the Purpose of this Workbook?

This training workbook was created to help District project managers and Statewide Acceleration Transformation (SWAT) Team participants understand the SWAT process and how the recommended steps streamline process and expedite project delivery. Other beneficiaries might include local government officials and MPO/TPO staffs who are integral to project screening and selection – as well as other pertinent stakeholders.

The narrative portion of this workbook is arranged in separate Training Modules, with corresponding PowerPoint presentations affixed and tabbed just behind. The PowerPoint slides reserve space for personal note-taking. Training participants are encouraged to remove the narrative section as a reference, while taking notes in the rear, and so the two products interact together.

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MODULE 1

INTRODUCTION TO SWAT

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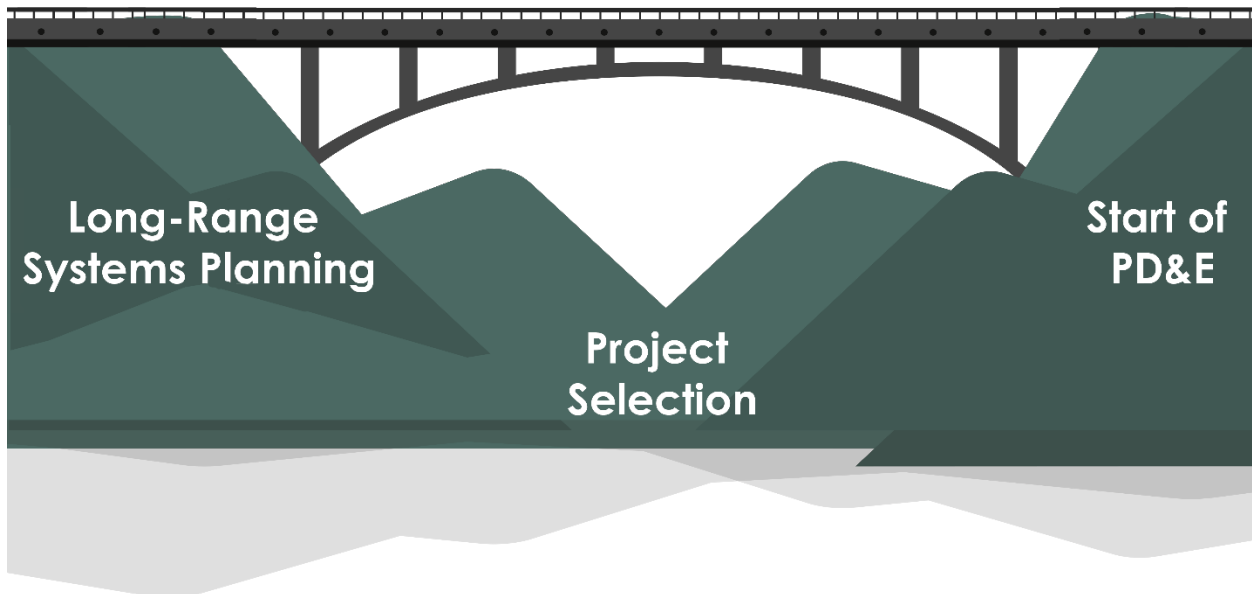
INTRODUCTION

The Florida Department of Transportation (FDOT) has established a transformational process to improve the way we work and shorten the timeframe in which we deliver projects. This proactive measure, known as the **Statewide Acceleration Transformation (SWAT)** process, is the beginning of continued innovation. SWAT represents a project start-up process that bridges the multi-year gap between long range planning, selection of projects to the Five-Year Work Program, and the actual start of the Project Development and Environment (PD&E) phase. Yet, SWAT considers all project phases until the end of construction.

The SWAT Process is simply a proactive project management tool. It provides a consistent, yet flexible approach to inform and assist District and Turnpike practitioners as they make strategic project decisions.

Given its success on pilot projects, **SWAT has quickly evolved into a project management approach that affects almost every project – regardless of funding source or the Environmental Document Class of Action (COA).**

The SWAT Process



HISTORY

In 2014, FDOT completed an analysis of its funding mechanisms, which revealed that approximately 75% of funds originate from state and local sources, with the remaining 25% from federal funding. This indicated that FDOT has considerable flexibility to select projects that are best-suited for state funding. However, FDOT in the past has chosen to federalize almost all projects, regardless of funding source, to maintain flexibility for use of federal funds in later stages of the project. FDOT sought to understand the effect of federal requirements on its portfolio of road projects. The 2014 McKenzie Report evaluated the time and cost of planning, designing, and constructing road projects using both the federal and state processes.

The 2014 McKenzie Report concluded that, although PD&E phase is the least costly – it requires the greatest amount of time.

The report identified several key themes regarding the nature of federal interaction and project characteristics - and its cost and schedule impacts on project delivery. The evaluation coupled with FDOT's experience revealed that during the PD&E phase, several issues can delay a project:

- Lack of consideration for history and earlier planning products
- Improper scoping
- Multiple reviews, comments, and revisions with the review of a federal Environmental Document
- Linear, finish-to-start scheduling of PD&E, then Design, then Right of Way (ROW) phases
- Considering a larger range of alternatives, analysis, and approvals than is necessary
- Achieving planning consistency prior to project approval [i.e., Location Design Concept Acceptance (LDCA)]
- Outdated environmental-study data was affecting permit and re-evaluation efforts

Utilizing the results from the evaluation and FDOT's experience, the SWAT process was created in 2014 and implemented on 11 pilot projects across the state for state-funded projects. After several years of progressing these projects, the results from the new approach projects showed considerable time savings. The initial time savings was chiefly attributed to overlapping of project phases and accelerating the start of key planning and pre-PD&E activities. However, and with pursuing a state-funded process instead of a federal process - the projects derived a greater time savings from the reduction of review layers and additional documentation requirements. Given this early success, the SWAT Process was then endorsed by the FDOT Secretary. See **Figure 1-1**.

Highly-experienced, District SWAT Teams were formed by Secretary appointment.



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JIM BOXOLD
SECRETARY

February 5, 2015

FDOT colleagues,

As you know, we have set out on a transformational change effort to meaningfully improve the way we work and to shorten the timeframe in which we can deliver our projects.

We see huge value for the public in the improvements we are making – we have estimated an opportunity to get roads and bridges built up to six years faster than we would have under the Federal Highway process, which means Florida families and businesses see more immediately the benefits of our investments.

State-Wide Acceleration and Transformation teams (SWAT teams) across the state have focused so far on a set of 11 projects that are already going through the improved state process – and because of their commitment to innovation, creative thinking, and problem solving, I am happy to say that in a few short months, the SWAT teams have already found ways to save 50-60% of time for these 11 projects. This is major progress, and I am proud of what we have done together so far.

Our work together to date is just the beginning of continued innovation in our processes – we want to keep getting better in delivering our mission, and you are critical to doing so.

We believe there's an opportunity to take our overall reduction in pre-construction project delivery times to 60-75%. To get there, we need all members of the FDOT team – Project Managers, SWAT Teams, Work Program, Planning, PD&E, Design, Construction, consultants, experts – to look for ways to streamline our processes and change the way we work. We also need to ensure we continue to nominate a meaningful number of new projects each year to be state funded.

I know that changing the way we work takes significant effort and can present difficulties, but I want you to know that your work is appreciated and valued by FDOT leadership and by the public, the true beneficiaries of our efforts.

The SWAT teams at each District and this Quick Guide are in place to support you and to make this transition to an improved state process easier. Please don't hesitate to reach out to the Central SWAT team for support, as well.

Thank you for your continued support of FDOT's important mission.

A handwritten signature in black ink, appearing to read "Jim Boxold".

Jim Boxold
Secretary

www.dot.state.fl.us

Figure 1-1 SWAT Endorsement Letter

The efficiencies and strategic decisions that stem from the SWAT process were quickly recognized as beneficial to all projects – regardless of funding source. Therefore, FDOT expanded the SWAT Process' role to be used for both Federal and State-funded projects.

The SWAT Process applies to ALL projects, both State and Federal

THE WAITING YEARS

The SWAT Process provides an excellent opportunity to engage with project progression during those “waiting years” between project selection into the Five-Year Work Program, and the actual start of the PD&E phase. Certain tasks can be identified which will expedite project delivery – either by reducing duration of the PD&E phase or otherwise helping to “jumpstart” phase activities. Typical examples of helpful “pre-PD&E activities” might include traffic forecasts & analysis, digital terrain mapping. A host other potential activities exists, with many listed in this Workbook.



WHAT IS THE STATEWIDE ACCELERATION TRANSPORTATION PROCESS?

The SWAT process is a systematic project management approach that streamlines project delivery while meeting legal and regulatory requirements.

The SWAT Process provides a framework for Success

The goals of the SWAT process are centered on efficiently advancing projects through the pre-construction process by:

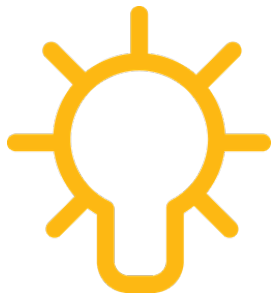
- Preserving District and Turnpike decision-making flexibility
- Early engagement of project staff to identify issues and apply critical thinking

-
- Strategically-timed project reviews by veteran staff
 - Providing tools and templates to assist Practitioners and promote program consistency
 - Evaluate “candidate projects” for selection to the Five-Year Work Program
 - Evaluate pre-PD&E Activities to expedite overall project delivery
 - Develop schedules that appropriately match the level of available information
 - Support Scope of Services development for PD&E and Design phases
 - Overlapping of project phases, as able (PD&E, Design, ROW)
 - Enhancing internal District communication between managers & subject matter experts.
 - Providing Central Office support
 - Informing the Work Program
 - Simplified documentation with minimal redundancy

The cornerstone of the SWAT Process is the formation of cross-functional SWAT Teams, comprised of experienced practitioners at every District. The groups focus on shortening the timeframe in which projects can be delivered. SWAT promotes early team efforts to coordinate/collaborate and gather/consider project information - several years prior to the start of PD&E Studies. The goal is to identify project challenges, key environmental features, recommend an appropriate Environmental Document COA, and then select appropriate funding. The Teams develop realistic (and streamlined) project schedules, and then support the Project Manager (PM) to generate an appropriate PD&E scope of services. The SWAT Process also identifies and schedules pre-PD&E activities that shorten overall project delivery.

The FDOT Quick Guide

Transforming our State Pre-Construction Process, or Quick Guide, was created in February 2015 to help establish the context of the accelerated process and provide a general framework. The FDOT Quick Guide also includes sample projects and training that are based on the early evolution of the process. The FDOT Quick Guide is superseded by tenets presented in this workbook. This workbook presents the “NEW” SWAT process which has expanded to include both Federal and State projects.



“SWAT is simply a proactive project management approach.”

QUICK OVERVIEW OF THE WORKBOOK

The SWAT Process is tied to the FDOT Work Program (WP) Development Cycle and Long Range Planning activities. Thus, Module 2 provides a foundational description these activities.

Module 3 provides an Overview of the SWAT Process, followed by Modules 4-8 which describe components in detail.

Finally, Module 8 concludes with recommendations and clarifications on good project management practices.

WORKBOOK MODULES

Module 1 – Introduction to SWAT

Module 2 – FDOT's Long Range Planning and Work Program Development Cycle

Module 3 – Overview of the SWAT Process

Module 4 – SWAT Planning Meeting

Module 5 – SWAT Strategy Meeting

Module 6 – SWAT Kick-off Meeting

Module 7 – Post-Kick-off Meeting

Module 8 – SWAT as a Project Management Process

From the entire workbook, three figures stand-out as best representing the SWAT Process and its seamless mesh with existing FDOT protocols. Figures are presented to support classroom overview discussion; however, Modules 2 and 3 will discuss these in detail:

Figure 2-6 Work Program Development Cycle

Depicts the flow of decision-making for FDOT's annual Work Program Development Cycle, and then shows where SWAT components are strategically-placed to inform and assist project selection by FDOT Districts/Turnpike.

Figure 3-1 SWAT Process Components

Provides an overview of the three key SWAT Meetings and where they fit into the project development process. For an individual project, SWAT activities typically begin as the "candidate project" is evaluated and then selected for the Five-Year Work Program. During the ensuing years prior to the start of PD&E studies, progressively-refined SWAT analysis provides forward-thinking to structure the project approach and then advance activities which expedite project delivery.

Figure 3-2 Example of an Individual Progression using the SWAT Process

Using a calendar timeline, this graphic depicts an individual project's progression from initial Work Program selection, through to the beginning of the PD&E phase and design activities. The three SWAT Meetings and their timeframes are shown.

NEPA Assignment: A NEPA Assignment Memorandum of Understanding (MOU) between FDOT and Federal Highway Administration (FHWA) was executed on December 14, 2016. This allowed FDOT to assume most of FHWA's project decision responsibilities for all NEPA classes of action. Numerous benefits to FDOT include: eliminating one layer of governmental review; direct consultation with federal regulatory agencies; consolidating all NEPA reviews under FDOT; time and cost savings; and in general: FDOT decision making authority. With the NEPA Assignment Program, there is no reduction of environmental considerations. FHWA still retains authority of engineering decisions (i.e. Interchange Access Requests on Interstate facilities); government to government Tribal Consultation; and United States Department of Transportation (USDOT) responsibilities for statewide and metropolitan planning. FHWA audits FDOT on an annual basis to determine program adherence to the MOU, and to gage implementation consistency across Districts and Turnpike. Audits will occur for the first four years, after which FDOT will conduct self-assessment reporting.

The SWAT Process is designed to work seamlessly with NEPA Assignment

More information on NEPA Assignment can be found at the following website:

<http://www.fdot.gov/environment/NEPAAssignment.shtm>

NOTES:

END OF MODULE 1

MODULE 2

FDOT'S LONG-RANGE PLANNING AND WORK PROGRAM DEVELOPMENT CYCLE

The SWAT Process begins prior to the selection of “candidate projects” into the FDOT Five-Year Work Program, with its activities and decisional-effects extending to Construction Let. Initially, the purpose and timing of SWAT activities significantly inter-twine with the annual Work Program Development Cycle. To operate a proactive and successful SWAT process, it is therefore vital that practitioners fully comprehend various components of the cycle and its timetables. Module 2 provides such an overview.

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TRANSPORTATION SYSTEMS MANAGEMENT - FDOT

Florida's Department of Transportation (FDOT) maintains dedicated staff to work with citizens, Metropolitan Planning Organizations (MPO), regional Transportation Planning Organizations (TPO) and Transportation Planning Agencies (TPA), city/county and other local governments, and environmental, economic, and transportation partners to develop the state's long range transportation plan, the Florida Transportation Plan (FTP). FDOT also participates in the development of MPOs'/TPOs'/TPAs' Long Range Transportation Plans (LRTPs) as well as coordinates with local governments' transportation components of Comprehensive Plans (often co-labeled as Local Government Comprehensive Plans).

Ultimately, statewide and regional transportation planning efforts culminate with the selection and funding of individual "candidate projects" – which are defined as any unfunded project that a stakeholder

advocates for inclusion to FDOT's Five-Year Work Program.

This workbook will refer to the collective assembly of MPOs, TPOs, and TPAs simply as "MPO" or "MPOs." As well, Government Comprehensive Plans and Growth Management Plans (GMPs) will collectively be termed as Comprehensive Plan. This workbook refers to local governments in terms of county and municipal governments – and is inclusive of MPOs – since for transportation planning MPOs typically represent a regional collective of municipal and county governments. Efforts by the entire transportation community reflect a continuous and cyclical progression of planning products and priorities. Throughout Module 2, references will be made to the Work Program Development Cycle (see **Figure 2-6**) with excerpts from the figure as they are explained in the subsequent sections.

FLORIDA TRANSPORTATION PLAN

The Florida Transportation Plan (FTP) is a policy-based document that defines the statewide plan guiding Florida's transportation future. The FTP defines goals, objectives, and strategies to accomplish a 25-year transportation vision; as well, it provides a longer-term view of major trends, uncertainties, and opportunities shaping the transportation system during the next 50 years. To be effective, the FTP must incorporate the broad systemic needs of all transportation modes while also incorporating strategies to address safety, maintenance, economic development, fiscal management, civil rights, input from citizens and local government and private stakeholders, environmental impact, and other considerations. While individual projects can address these aspects on a small-scale, the FTP addresses these aspects in a consolidated and comprehensive manner – on a Statewide scale.

TIPS!

This training includes only a broad overview of the Florida Transportation Plan. More detailed information can be found on FDOT's website at:

<http://floridatransportationplan.com/>

THE FTP IS COMPRISED OF THREE POLICY-BASED ELEMENTS:

- **The Vision Element** Provides a longer-term view of major trends, uncertainties, opportunities, and desired outcomes shaping the future of Florida's transportation system during the next 50 years.



Vision Element (August 2015)

Trends, uncertainties, and themes that will shape the future of transportation in Florida (50 years)

- **The Policy Element** This document defines goals and objectives for Florida's transportation system over the next 25 years. The Policy Element establishes the policy framework for expenditure of state and federal transportation funds flowing through FDOT's Work Program. The Policy Element also provides guidance to other transportation partners as they develop and implement policies, plans, and projects.



Policy Element (December 2015)

Goals and objectives to guide the Florida Department of Transportation and partners toward the vision (25 years)

As part of the Policy element, seven-long range goals were identified that support the transportation system performance and statewide priorities:

- Safety & security for residents, visitors, and businesses
 - Agile, resilient, and quality infrastructure
 - Efficient and reliable mobility for people and freight
 - More transportation choices for people and freight
 - Transportation solutions that support Florida's global economic competitiveness
 - Transportation solutions that support quality places to live, learn, work, and play
 - Transportation solutions that support Florida's environment and conserve energy
- **The Implementation Element** This element will define the roles of state, regional, and local transportation partners in implementing the FTP, including specific short- and medium-term actions and performance measures that will build on the Indicators to Watch identified in this document.

STRATEGIC INTERMODAL SYSTEM



The policies and goals from the FTP affects the projects along the Strategic Intermodal System (SIS). The SIS is a transportation network that includes the state's largest and most significant commercial service and general aviation airports, spaceports, public seaports, intermodal freight terminals, interregional passenger terminals, urban fixed guideway transit corridors, rail corridors, waterways, and highways. SIS facilities are the workhorses of Florida's transportation system and account for a dominant share of the people and freight movement to, from, and within Florida.

The SIS network includes transportation facilities owned by FDOT, local governments, independent authorities, and the private sector (see **Figure 2-1**). To be designated as part of the SIS, transportation facilities must meet criteria related to transportation or economic activity, as well as screening factors related to potential community and environmental impacts. SIS facilities generally are the largest and most strategic facilities in the state. The SIS also includes facilities that are emerging in importance, such as those located in fast growing areas or rural areas, and planned facilities anticipated to meet these criteria once operational.

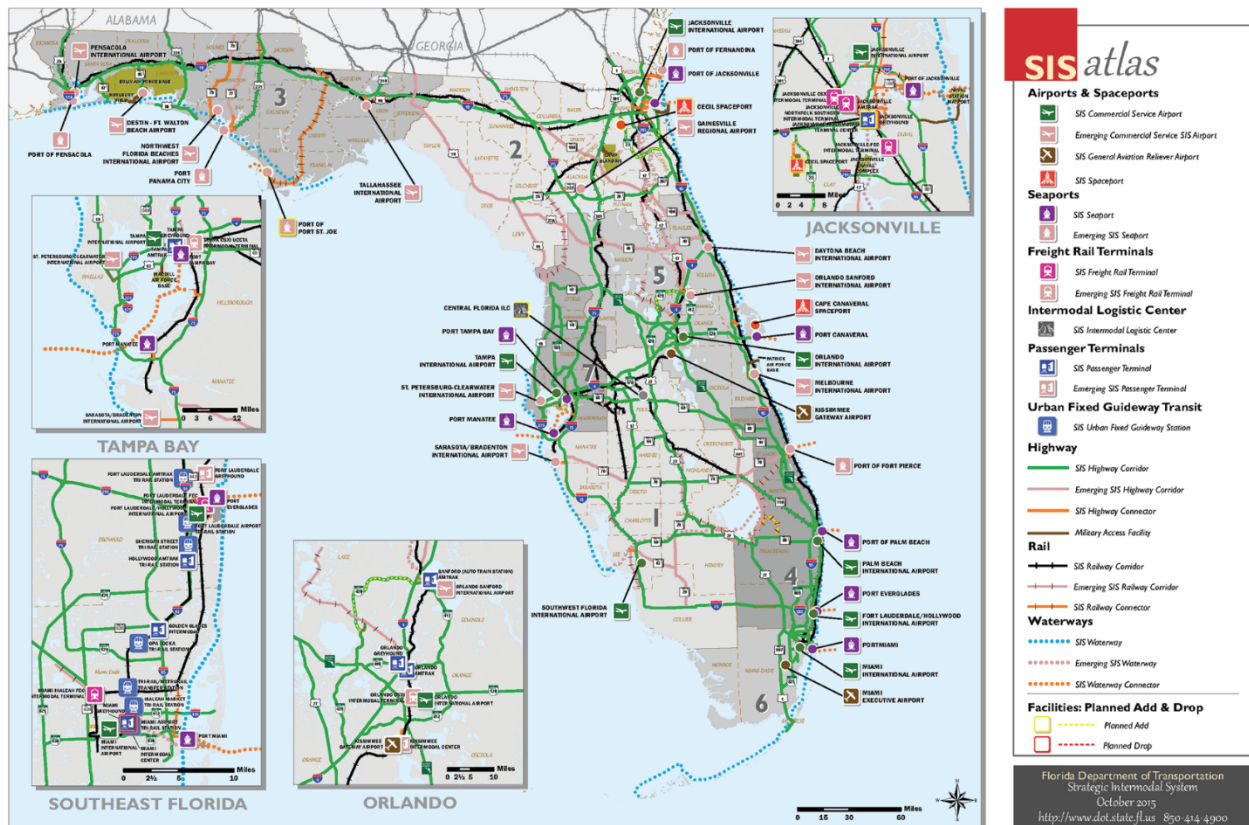


Figure 2-1 Strategic Intermodal System Network Map

SIS PLANS

The projects on the SIS that are considered financially feasible for the next 25 years are documented in the SYS Funding Strategy which includes three inter-related sequential documents. The document set includes projects that are funded for year 1 through 5; planned to be funded in years 6 through 10; and considered financially feasible based on State revenues for years 11 through 25.

- **SIS Adopted Five-Year Plan**
 - Years 1 - 5
- **SIS Approved Second Five-Year Plan**
 - Years 6 - 10
- **SIS Cost Feasible Plan (CFP)**
 - Years 11 – 25



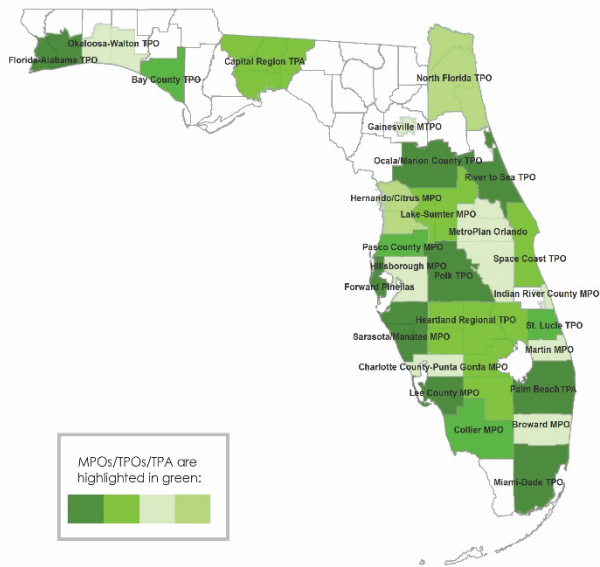
TIPS!

This training includes only a broad overview of these elements and the Cost Feasible Plan. More detailed information can be found on FDOT's website.
<http://www.fdot.gov/planning/systems/programs/mspi/plans/>

SIS UNFUNDED NEEDS PLAN

FDOT also maintains the [SIS Multi-Modal Unfunded Needs Plan](#). The Unfunded Needs Plan identifies transportation projects on the SIS which help meet mobility needs, but where funding is not expected to be available during the 25-year period of the SIS Funding Strategy. Projects in the Unfunded Needs Plan could move forward into the SIS CFP as funds become available.





MPOs, TPOs, and TPAs

- ✓ Ensure that federally-funded projects undergo credible planning process
- ✓ Required by federal law for urbanized areas with over 50,000 people
- ✓ Can include multiple urbanized areas
- ✓ Addresses local priorities
- ✓ Conduct public outreach
- ✓ Develop LRTPs, TIPs and Unified Planning Work Programs (UPWP)

TRANSPORTATION PLANNING BY LOCAL GOVERNMENTS AND MPOS

MPOs are federally-mandated transportation policy-making organizations. They are comprised of representatives from local governments and transportation authorities. In Florida, MPOs are also referred to as TPOs and TPAs. Florida presently has 27 planning organizations: 15 MPOs, 11 TPOs, and one TPA. The MPO's role is to develop and maintain the necessary transportation plans for the area to ensure that federal funds support these locally-developed plans. MPOs involve the public in this process through citizen participation efforts.

The 1973 Federal-Aid Highway Act mandated the creation or designation of MPOs for urbanized areas with populations greater than 50,000 people. While every urbanized area greater than 50,000 people must be represented by an MPO, there can be multiple urbanized areas within a single MPO and an urbanized area can be included in the boundary of more than one MPO. The US Department of Transportation (USDOT) relies on MPO-type organizations to ensure highway and transit projects that use federal funds are products of a credible planning process, while addressing local priorities.

Within an MPO area, USDOT [through Florida Highway Administration (FHWA) and FTA] will not approve federal funding for urban highway and transit projects unless they are consistent with the MPO's LRTP and Transportation Improvement Program (TIP).

IN FLORIDA, THE MPOS CARRY OUT THREE MAJOR WORK ACTIVITIES:

1. The development and maintenance of the LRTP which addresses no less than a 20-year planning horizon. A planning horizon is defined as the amount of time an organization will consider the future when preparing strategic plans. Planning horizons are typically selected to ensure consistent planning across Florida (i.e.; year 2035, 2040). As of this 2017 training initiative, the current planning horizon is 2040.
2. Annual update and approval (no later than July 1st) of a TIP, which in Florida is a Five-Year program of projects. This list should reflect only those projects with funding commitments – either by FDOT, grants, or local government funding.
3. The development and adoption of a Unified Planning Work Program (UPWP) is a biennial approval which identifies activities to be undertaken in the metropolitan planning area by the MPO.

<i>Broward MPO Transportation Improvement Program - FY 2017 - 2021</i>							
Phase	Fund Source	2017	2018	2019	2020	2021	Total
I-595/SR-862/ P3 FROM E. OF I-75 TO W. OF I-95 - FM# 4208093 (TIP#)					Length: 9.815 mi		*SIS*
Type of Work: ADD LANES & RECONSTRUCT					Lead Agency: FDOT		
Project Type: State Managed					LRTP#: Pg. 43		
I-595/SR 862 FROM EAST OF I-75 TO WEST OF I-95 DESIGN-BUILD-FINANCE OPERATE AND CONSTRUCTION							
DSB	DIH	125,500	129,700	0	0	0	255,200
OPS	PKM1	176,753	183,823	191,176	198,823	206,775	957,350
PE	GMR	125,000	125,000	125,000	125,000	125,000	625,000
OPS	TOBF	5,762,000	6,572,000	7,301,000	8,109,000	9,331,000	37,075,000
OPS	DI	9,327,791	8,918,307	8,600,258	8,213,910	7,424,532	42,484,798
OPS	DS	13,303,497	0	0	0	0	13,303,497
DSB	GMR	65,388,999	67,335,045	69,337,685	71,399,922	73,523,531	346,985,182
OPS	DDR	4,235,254	0	0	0	0	4,235,254
DSB	ACNH	123,173,000	217,622,000	4,298,000	0	0	345,093,000
OPS	DIS	108,360	0	0	0	0	108,360
OPS	GMR	2,352,889	0	0	0	0	2,352,889
OPS	D	979,546	1,018,728	1,059,477	1,101,856	1,145,930	5,305,537
CAP	SIWR	0	300,000	1,500,000	0	0	1,800,000
Total		225,058,589	302,204,603	92,412,596	89,148,511	91,756,768	800,581,067
<i>Prior Years Cost</i>		<i>626,951,286</i>	<i>Future Years Cost</i>		<i>2,774,195,128</i>	<i>Total Project Cost</i>	
						<i>4,201,727,481</i>	

Figure 2-2 Example Project Listing from the 2017-2021 Broward MPO

LOCAL GOVERNMENTS

Outside MPO jurisdiction, local government recommendations are typically consolidated and presented through the county. Florida law requires counties to approve Comprehensive Plans once every seven years (Chapter 163, Section 163.3191); these plans include a Transportation Element. As shown in **Figure 2-3**, MPOs and local governments are on different schedules to complete their LRTPs and Comprehensive Plans.

UPDATED LRTPS AND COMPREHENSIVE PLANS

Planning organizations maintain a “needs list” of desired projects. A local LRTP contains two elements:

1. The Cost Feasible Plan (CFP) is a list of projects that present a financially-feasible approach to build the local transportation network. This plan reflects federal and state commitments for funding [through FDOT’s Adopted Work Program and State Transportation Improvement Plan (STIP)] plus any grants, as well as local revenue projections and any local-project funding commitments from area governments. As with SIS Plans, local government Comprehensive Plans span an approximate 25-year planning horizon: five years of the current Work Program, the next five years afterward, and then the remaining years to the target year planning horizon (presently 2040).
2. The Needs Plan is a cost-unconstrained listing of desired projects. This plan features a long list of projects that would collectively contribute toward transportation system effectiveness.

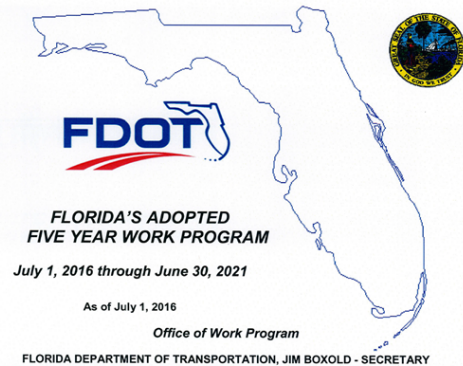
Needs Plan improvements considered on the CFP and which are specifically earmarked for the use of state/federal funds should be evaluated as qualifying projects in the Efficient Transportation Decision-Making (ETDM) Planning Screen.

BEST PRACTICE!

Ideally, the Efficient Transportation Decision Making (ETDM) Planning Screen is completed for qualifying projects as a precursor to LRTP and Comprehensive Plan updates.

FDOT ADOPTED FIVE-YEAR WORK PROGRAM

Annually, FDOT develops the comprehensive transportation program for the State of Florida in accordance with § 339.135 Florida Statutes (F.S.) known as the “Adopted” Five-Year Work Program. The document is reviewed and approved by the Governor and Legislature, and is then adopted by the Secretary of Transportation on or about July 1st each year. Concurrent with Work Program approval, Florida State Government also provides spending authority for the first year of the Work Program. This authorizes FDOT to actually commit funds to complete activities and projects. The remaining four years are “programmed” for funding, according to revenue projections, current program, or project estimates. The Work Program development involves extensive coordination with local governments, including MPOs and other city and county officials. Public hearings are held in each of the seven transportation districts, and a statewide public hearing is held by the Florida Transportation Commission. The Florida Transportation Commission performs an in-depth review of the Work Program, and presents results to the Executive Office of the Governor.



The Five-Year Work Program lists both programs and specific projects. Listings include information such as: project description, transportation purpose or mode, type of work [e.g.; Project Development and Environment (PD&E), Design, Right of Way (ROW)], and the estimated amount in a particular Fiscal Year (FY). The Work Program includes all modes of transportation, including highway, turnpike, bridge, aviation, seaport, rail, transit, bicycle, trail, and pedestrian projects. Typically, any new projects or programs tend to appear in the latter years of FDOT's Five-Year Work Program (i.e. most projects are added to the new fifth year of the work program). See **Figure 2-4** for a sample project listing from the 2017-2021 Five-Year Work Program.

Transportation System: INTRASTATE STATE HIGHWAY		District 07 - Pinellas County			
Description: US 19 (SR 55) FROM N OF SR 580 (MAIN ST) TO NORTHSIDE DR					
Type of Work: ADD LANES & RECONSTRUCT - Concrete		View Scheduled Activities			
Item Number: 256774-2		SIS			
Length: 1.028		View Map of Item			
Project Detail					
Fiscal Year:	2017	2018	2019	2020	2021
Highways/Preliminary Engineering					(On-Going)
Amount:	\$5,697				
Highways/Right of Way					
Amount:	\$3,477,100	\$1,194,970	\$9,919,130		
Highways/Railroad & Utilities					
Amount:				\$4,485,000	
Highways/Construction					
Amount:				\$60,351,819	\$123,210
Item Total:	\$3,482,797	\$1,194,970	\$9,919,130	\$64,836,819	\$123,210

Figure 2-4 2017-2021 Five-Year Work Program

FLORIDA DEPARTMENT OF TRANSPORTATION
OFFICE OF WORK PROGRAM
STIP REPORT

=====

TURNPIKE

=====

ITEM NUMBER:431166 8 PROJECT DESCRIPTION:TPK PROJECT PLANNING / COORDINATION - GENERAL CONSULTANT - STATEWIDE *SIS*
DISTRICT:00 COUNTY:DIST/ST-WIDE TYPE OF WORK:TRANSPORTATION PLANNING
PROJECT LENGTH: .000

FUND CODE	LESS THAN 2017	2017	2018	2019	2020	GREATER THAN 2020	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT							
PKYI	7,197	1,500	0	0	0	0	8,697
PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT							
PKYI	497	1,500	0	0	0	0	1,997
TOTAL <N/A>	7,694	3,000	0	0	0	0	10,694
TOTAL 431166 8	7,694	3,000	0	0	0	0	10,694

ITEM NUMBER:431166 9 PROJECT DESCRIPTION:TPK PROJECT PLANNING / COORDINATION - GENERAL CONSULTANT - TOLLS *SIS*
DISTRICT:00 COUNTY:DIST/ST-WIDE TYPE OF WORK:TRANSPORTATION PLANNING
PROJECT LENGTH: .000

FUND CODE	LESS THAN 2017	2017	2018	2019	2020	GREATER THAN 2020	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT							
PKYI	6,395,627	1,500	0	0	0	0	6,397,127
PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT							
PKYI	0	1,500	0	0	0	0	1,500
TOTAL <N/A>	6,395,627	3,000	0	0	0	0	6,398,627
TOTAL 431166 9	6,395,627	3,000	0	0	0	0	6,398,627
TOTAL Project:	6,403,321	6,000	0	0	0	0	6,409,321

Figure 2-5 FDOT Office of Work Program STIP Report

FDOT'S ANNUAL WORK PROGRAM DEVELOPMENT CYCLE

Each year, FDOT Districts and Central Office work with citizens, MPOs, and other stakeholders – to embark on the annual Work Program Development Cycle.

One could legitimately (and formally) argue that the Work Development Cycle begins on July 1st each year – just after the Secretary of Transportation adopts the Adopted Five-Year Work Program.

Practitioners might argue that the Work Program Development Cycle is a continuous process that merely contains annual, approval milestones at the local, state, and federal level – that there is no starting or stopping point. FDOT openly recognizes and advocates that program development involves a “bottom-up” identification of needed programs and projects – starting with citizens, industries, and other stakeholders. Identified wants and needs typically bubble-up through local government filters such as county governments and MPOs. Direct interaction with FDOT District staff is also common. Beyond listening to local governments and other stakeholders, Districts also develop their own ideas for project candidates, based on their knowledge of state and local transportation infrastructure. Thus, a project needs list may include safety projects, bridge replacements, and other needed network improvements. Yet, FDOT selection priorities must necessarily consider statewide and regional goals and needs that are affirmed by the FTP and the SIS.

Formally: The Work Program Development Cycle begins in July each year and ends the following July with adoption of the Five-Year Work Program. The cycle includes two major steps:

1. Tentative Work Program: This is the five-year plan encompassing the five years after the current work program. The development of this plan is a collaborative effort between FDOT Districts, Turnpike Enterprise, Central Office, citizens, MPOs, local governments, and other stakeholders.
2. Adopted Five-Year Work Program: on July 1 of each year, the tentative work program becomes the Adopted Five-Year Work Program.

Informally: Efforts by the entire transportation community reflect a continuous and cyclical progression of planning products and priorities.

To explain the Annual Work Program Development Cycle, this workbook chooses to “enter” the cycle at, as FDOT emphasizes, the point of entry for bottom-up ideas. Early calendar-year project requests from citizens, stakeholders, and local governments generate a large number of project or program candidates that are then considered - later in the year.

The following page layout (see **Figure 2-6**) paints a broad-brush picture of how the Annual Work Program Development Cycle functions. To aid understanding of how the Statewide Acceleration Transformation (SWAT) Process can enhance District planning and management activities, annual occurrences of the SWAT Planning Meeting and SWAT Strategy Meeting are embedded in the cycle (these meetings are explained in more detail in Module 3).

Following this graphic, each main component is described in detail.

Work Program Development Cycle

- continuous**
- Florida Transportation Plan (FTP) - 50 Years (policy - based)**
Strategic Highway Safety Plan (SHSP), Transportation Regional Incentive Program (TRIP), Small County Outreach Program (SCOP), Small County Road Assistance Program (SCRAP), Complete Streets, Freight Mobility and Trade Plan (FMTP), Environmental Stewardship, Multimodal, etc. Included components: 1) Strategic Intermodal System (SIS) - Statewide initiatives for multimodal projects (air, rail, ports, highways, etc.) 2) Long Range Transportation Plan: 25 Year Planning Horizon, based on a Cost Feasible Plan
 - MPO/TPO/TPA Long-Range Transportation Plans or Local Government Comprehensive Plans** – 25 Year horizon continuously developed and updated every 5 or 7 years, relatively. These plans accommodate FDOT's LRTP (including SIS), and reflect FDOT and locally-funded projects and revenue forecasts. Local LRTPs include a Project Needs List (unconstrained by cost), and a Cost Feasible Plan (CFP), ideally supported by ETDM Planning Screens.
 - FDOT Districts** continuously develop a District Work Program, via coordination with FDOT Central, MPO/TPO/TPAs, and Counties.

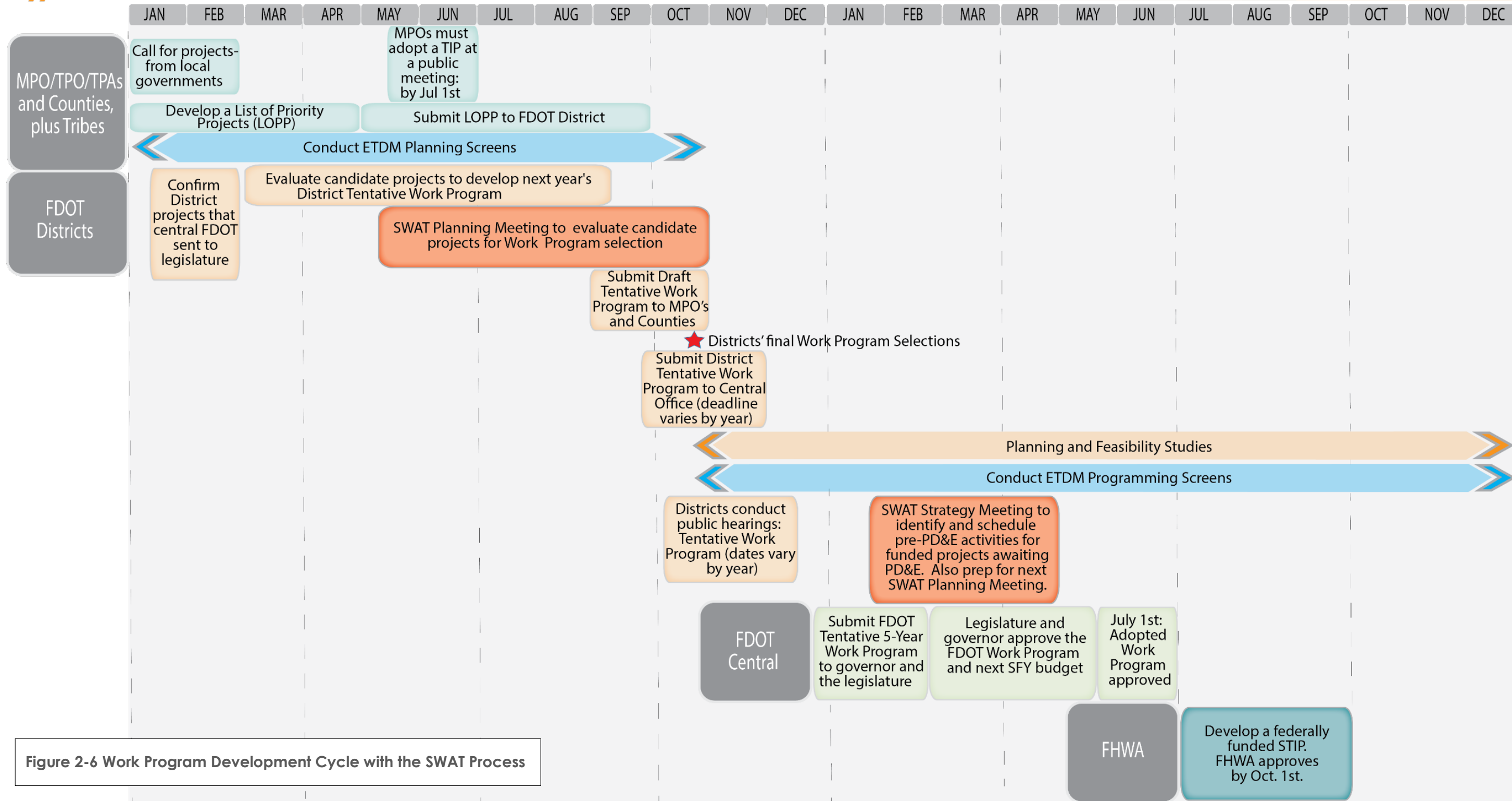


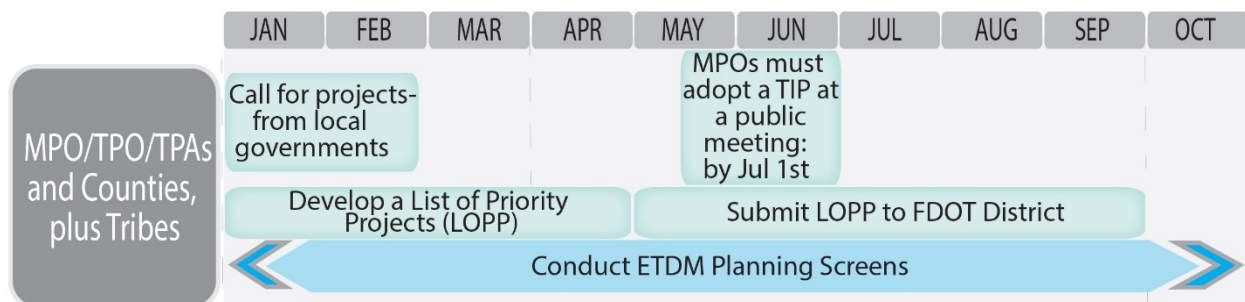
Figure 2-6 Work Program Development Cycle with the SWAT Process

MPOS, COUNTY GOVERNMENTS, AND TRIBES PREPARE FOR THE NEXT WORK PROGRAM DEVELOPMENT CYCLE

MPOs, counties, and tribes begin preparation for the annual Work Program Development Cycle during the first quarter of the calendar year. By the January/February timeframe, these government entities are aware of their respective FDOT District's project selection from the previous fall, and can also view the FDOT Tentative Work Program that FDOT Central Office has submitted.

Consulting their own Cost Feasible Plan and Needs Plan, MPOs and local governments then develop their own ideas for candidate program or projects. Using the priorities of the FTP and SIS as a compass, they may then develop a List of Priority Projects (LOPP) that reflects a balanced approach to meeting local needs, while also prioritizing state and regional vision.

Ideally, Needs Plan improvements that make it into Cost Feasible Plans and which are specifically earmarked for the use of state/federal funds - should be evaluated in the ETDM Planning Screen if they qualify for screening (see the FDOT **ETDM Manual**).



Excerpt from Figure 2-6 Work Program Development Cycle

These planning entities send out a “Call for Projects” for the upcoming Work Program Development. This “Call for Projects” is a generalized phrase that some planning entities use to help prioritize projects by requesting feedback from citizens, local governments, and other stakeholders. As project requests arrive, decisions must be made on project priorities. The process also includes consideration of various sources of information such as:

- ✓ L RTP and/or Comprehensive Plans
- ✓ Needs analysis
- ✓ Public input from District or MPO public announcements or meetings
- ✓ Revenue and inflation projections, plus FDOT instructions

MPOs and local governments might identify varying project phases, and prioritize projects/phases. Annual Transportation Improvement Programs are required to be approved by MPOs no later than July 1st, after public hearings have occurred. In this timeframe or soon thereafter, they submit an annual LOPP to respective FDOT Districts.

SUBMISSION OF LIST OF PRIORITY PROJECTS

In preparation for the annual Work Program Development Cycle (discussed next), MPOs and counties develop their own transportation needs lists. Candidate projects are drawn from the MPO's Cost Feasible Plan. These lists are provided to the FDOT District as a LOPP.

When compiling desired project lists, local government and MPOs consider FTP visions and SIS components.



FDOT DISTRICTS AND TURNPIKE

FDOT Districts conduct their annual Work Program Development Cycle each year, typically from July through the end of December. The effort is formally started as the Secretary of Transportation approves the Adopted Work Program on or about July 1st; however, in practice FDOT Districts are constantly communicating with planning organizations and other stakeholders – and may already have an idea about many candidate projects. As LOPPs are submitted by the MPOs and counties, FDOT District staff is suitably informed to adjust projects in years one through four and to start a project selection process for the Work Program's new fifth year. As soon as the Five-Year Work Program is approved in July of each year, FDOT Districts embark on a bottom-up process to develop the next Tentative Work Program.

Districts coordinate with stakeholders, and may consult:

- ✓ Last year's candidate projects
- ✓ LOPPs submitted by local governments and MPOs
- ✓ Revenue and inflation projections
- ✓ LRTPs and Comprehensive Plans
- ✓ District or FDOT's own list of candidate projects (safety projects, bridge replacements, etc.)
- ✓ Candidates for Advanced Production Potential (APP)
- ✓ The newly adopted FDOT Work Program (to acknowledge already-funded projects)
- ✓ Conduct a SWAT Planning Meeting to assess and rank projects

STEP 1

Confirm District Projects that Central FDOT sent to legislature

Expecting that the first year of the newly-adopted Five-Year Work Program will be committed, Districts must minimize changes, deletions, and adjustments to projects in the remaining four years; although project schedules and estimated costs might change as new information emerges. Efforts then focus on considering new, candidate projects to populate the fifth, or newest year, to appear in the Work Program.

STEP 2

Evaluate candidate projects to develop next year's District Tentative Work Program

Districts are certainly mindful of local capacity issues and maintenance needs, and will consult the FTP to consider regional and statewide priorities (e.g.; SIS CFP, TSM&O Strategic Plan, safety program, bridge replacements). In preparation for project selection, Districts request local governments (counties) and MPOs to submit their respective LOPP.

Districts consider candidate projects by reviewing previous work such as ETDM

Planning Screens, Planning studies, other plans, that provide information and helpful parameters by which District decision-makers can evaluate and make selections. Candidate projects have often waited for years for selection, thus some of these might have ETDM Programming Screens completed as well. Given the limited funds available, this extra level of analysis is helpful when making the difficult decisions to select project finalists.

STEP 3

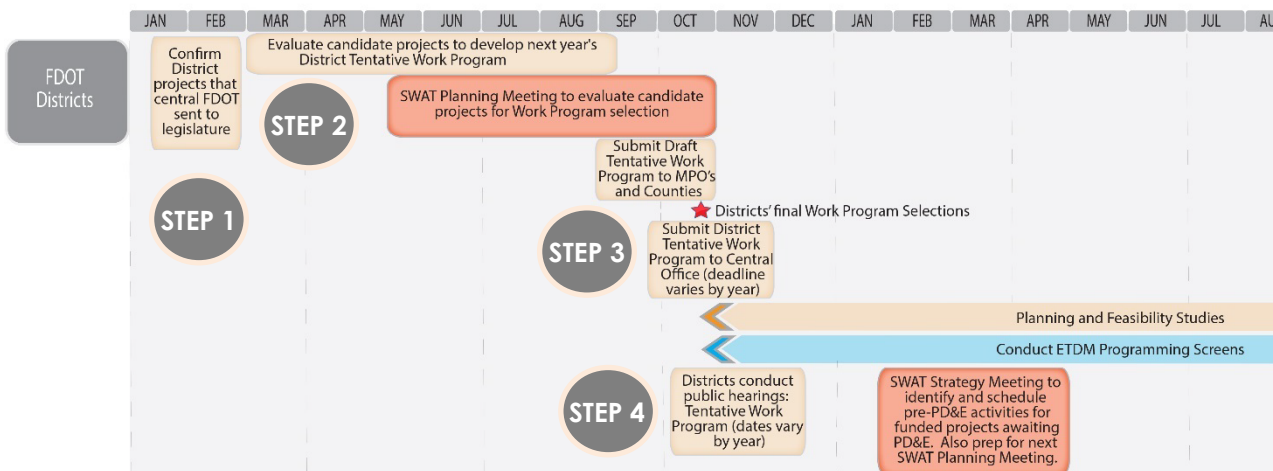
Submit Draft Tentative Work Program to MPOs and Counties

After vetting the Draft Tentative Work Program at the local agency level (i.e. MPOs), Districts submit their Draft Tentative Work Program to FDOT's Central Office in the November to December timeframe, depending on when the legislature meets.

STEP 4

Districts conduct Public Hearings (date varies by year)

Districts then conduct public hearings for the Draft Tentative Work Program. Typically, public meetings occur in late October through December timeframe.



Excerpt from Figure 2-6 Work Program Development Cycle

SWAT ACTIVITIES INFORMING THE WORK PROGRAM DEVELOPMENT CYCLE

The three SWAT activities that inform the Work Program Development Cycle are briefly noted here. These activities enhance the programming of Districts projects. Two SWAT activities in particular are shown in **Figure 2-6**, Work Program Development Cycle with the SWAT Process: 1) SWAT Planning Meeting; and, 2) SWAT Strategy Meeting.

SWAT PLANNING MEETING

Given that Districts tend to select projects for the Draft Tentative Work Program in the late-summer to early-fall timeframe, SWAT Planning Meetings are best held in the May-to-October timeframe – as an aid to District project selection. ETDM Planning Screens have likely been performed on projects that qualify for screening and appear to be strong candidates for this-year's Work Program selection – sufficient information should be available to evaluate candidate projects and then recommend a specific funding source, APP designation, and Environmental Document type. This information, in turn, can aid a District with project justifications, programming cost data, determination of an environmental document type and funding source, and other project selection parameters.

SWAT STRATEGY MEETING

As Districts select a limited number of projects for the Draft Tentative Work Program, a follow-up SWAT Strategy Meeting between February and April is used to focus on the new project selections - to look ahead for any tasks that should be completed prior to the start of PD&E. The District uses SWAT Strategy Meetings to produce a milestone schedule (also known as a SWAT Strategy Schedule) and assign a person who is responsible to track and manage progress. The project milestone schedules for existing projects in the Work Program queue can also be double checked for progress. This information should produce informed project schedules for the Work Program.

SWAT KICK-OFF MEETING

SWAT Kick-off Meetings are held to identify project scope and the initial PD&E schedule for the upcoming PD&E phase. The meetings will be held at different times in a year, depending upon the specific schedule of each project. For simplicity in process layout, these meetings are not indicated on graphics for the Work Program Development Cycle. Typically, SWAT Kick-off Meetings should occur at least one year prior to the start of PD&E Study; however specific scenarios may warrant longer lead-time as determined during the SWAT Strategy Meetings. Decisions made at the SWAT Kick-off Meeting can alter the scope and schedule of a particular project, resulting in a revised cost estimate and project delivery schedule. This updated information is vital to Work Program accuracy.

FDOT CENTRAL OFFICE

Central Office's first task is to gather Draft Tentative Work Programs from Districts between November and December, and consolidate these into a single, statewide program. Beyond these local and regional requests, FDOT central staff may consider additional project needs, justifications, and timeframes, such as:

- ✓ SIS
- ✓ TSM&O Strategic Plan
- ✓ Advanced Production Potential (APP)
- ✓ Strategic Highway Safety Plan
- ✓ Bridge Replacement and other Maintenance-Oriented projects
- ✓ Military and economic considerations

FDOT Central Office then develops a single, Preliminary FDOT Tentative Work Program, and submits to the Governor's office and Legislature at least 14 days prior to the impending legislative session. The Work Program is further reviewed and refined by FDOT's Secretary and executive staff, resulting in a "Final" Tentative Work Program which is submitted no later than 14 days after the Legislature convenes. The Florida Transportation Commission advertises the draft program and holds public hearing(s) on the Final Tentative Work Program.

In the January/February* timeframe, FDOT Central Office submits the Tentative Work Program to the legislature and to the Office of the Governor. Prior to July, the Governor's

Office and the Legislature work with FDOT to approve a final, Adopted Work Program. During this timeframe, the next year's State budget is approved (which is intended to fund FDOT and projects in the first year of the Five-Year Adopted Work Program). The remaining four years of the Adopted Work Program are considered programmed, but not yet budgeted by the State.

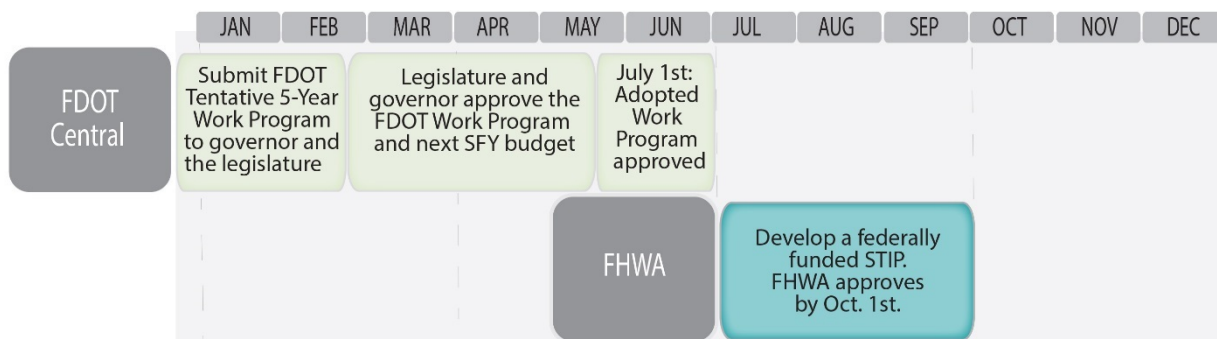
On or about July 1st, FDOT's Secretary "adopts" the Five-Year Work Program – hence the term: "Adopted Five-Year Work Program." This action formally completes all state-level approvals of Florida's transportation program. To obtain federal funds, FDOT then prepares a STIP which is reviewed and approved by FHWA.

For additional information on FDOT's Work Program Development Cycle, refer to the FDOT Work Program Instructions at:

http://www.fdot.gov/workprogram/Development/WP_instructions.shtml

DID YOU KNOW?

*The Florida legislative session convenes in January of odd years, and March of even years. This scheduling offset directly impacts the Work Program Development Cycle and its internal task completion or submittal



Excerpt from Figure 2-6 Work Program Development Cycle

THE STATE TRANSPORTATION IMPROVEMENT PROGRAM (STIP)

Florida's transportation program draws from a multitude of funding sources, with the two primary sources being state and federal funds. As the sanctioned agency under USDOT, FHWA is empowered to approve Florida's federally-funded program components.

Florida's STIP is a four-year listing of federally-funded projects - and their estimated schedules. The plan comprises of the first four years of the FDOT Five-Year Work Program. The State Transportation Improvement Program (STIP) is a document submitted by the State of Florida and approved by FHWA on or before October 1st each year. This document transforms project advocacy from citizens, local governments, and other pertinent stakeholders - into a statewide program. Projects are typically identified by local, regional, and transportation-modal partners. The candidate projects are vetted for consistency with laws, policies, and program objectives. Projects are then prioritized for funding selection, which results in a STIP that combines a spectrum of project purposes – from locally-endorsed projects to strategic, statewide initiatives.

Florida's State Transportation Improvement Program (STIP) considers statewide and regional system needs

- ✓ Statewide priorities such as: Strategic Highway corridors, timely bridge replacements, Strategic Highway Safety Plan (safety program and bridge replacements), and Intelligent Transportation Systems (ITS).
- ✓ Transportation system capacity improvements
- ✓ Local and regional system improvements
- ✓ Military and economic considerations
- ✓ Multimodal needs from freight operators, seaports, rail, aviation, public transit, spaceports, and waterways [Strategic Intermodal System (SIS) – explained later]

Federal Highway Administration and the STIP

FDOT manages a federally-funded transportation program. As such, FDOT coordinates on project justification, funding, and approvals with a number of federal agencies under USDOT, including:

- ✓ FHWA
- ✓ Federal Rail Administration (FRA)
- ✓ Federal Aviation Administration (FAA)
- ✓ Federal Transit Administration (FTA)
- ✓ Maritime Administration (MARAD)

For highway-related transportation projects, FDOT submits a draft STIP to FHWA for review. FHWA will approve the STIP no later than October 1st.

NOTE:

After FDOT's "Candidate" project selections are completed and the FDOT Work Program is adopted, attention turns to management of projects on an individual basis. Once the new fifth year projects are listed on the January/February submission of FDOT's Preliminary Tentative Work Program – and further vetted with the Complete Tentative Work Program (March timeframe), a high probability exists that projects listed in these documents will get funded. As well, the schedules of already funded projects may shift in the Work Program. Given these normally occurring changes, Districts consistently must generate new project schedules and revisit existing ones. This collective exercise is considered to be a SWAT Strategy Meeting, which lays out a strategic approach to each project. The activity establishes and revisits numerous project schedules, considers any advanced planning activities for individual projects that may be appropriate, assigns project managers, and then uses this information to determine when the SWAT Kick-off Meeting will occur for each project.

NOTES:

END OF MODULE 2

MODULE 3

OVERVIEW OF THE SWAT PROCESS

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SWAT Process Components

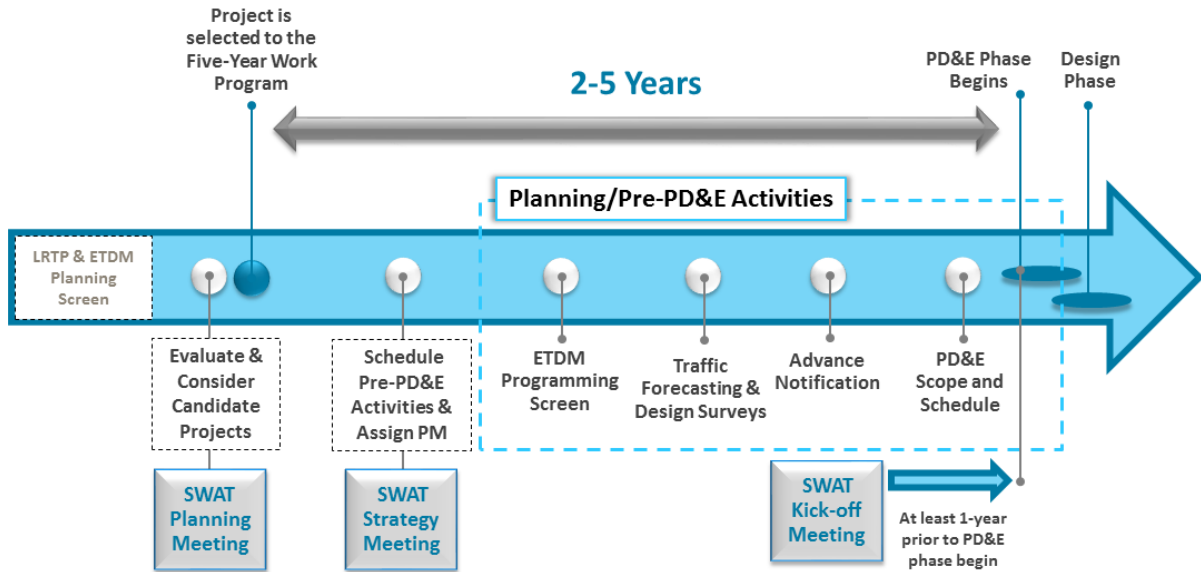


Figure 3-1 SWAT Process Components

INTRODUCTION

The Statewide Acceleration Transformation (SWAT) process provides a systematic approach to accelerate pre-construction phases of project delivery. SWAT activities begin in the Planning and pre-Project Development and Environment (PD&E) stages of a project, and address project activities all the way from evaluating “candidate projects” for FDOT’s Work Program, through to construction letting. Activities of the SWAT process are inter-meshed with Florida’s Department of Transportation (FDOT’s) annual Work Program Development Cycle to facilitate funding and project type identification, as well as anticipated critical issues and opportunities to conduct advance work.

Before discussing the SWAT process, however, it is vital to understand the planning aspects of the Florida Transportation Plan (FTP); how FDOT Districts, local governments, and Metropolitan Planning Organizations (MPOs) use this information; and how the annual FDOT Work Program Development Cycle operates – on a District and a statewide level. It is within this planning and programming context that SWAT process activities mesh with and complement planning efforts. Refer to **Module 2: FDOT’s Long Range Planning and Work Program Development Cycle** to view these aspects.

ACTIVITIES PRECEDING SWAT PROCESS

As explained in Module 2, certain SWAT process actions occur even as FDOT is developing its Strategic Intermodal System (SIS) Plan; MPOs are developing LRTPs; and counties develop Comprehensive Plans. These planning entities typically screen qualifying candidate projects using the Efficient Transportation Decision Making (ETDM) process for their long-range planning efforts and before generating a List of Priority Projects (LOPP). The SWAT approach can vary with commencement; however, SWAT may begin when a project is listed or considered for listing in the cost-feasible plan of an LRTP.

- **Long Range Planning:** This is the first major step in a project's life cycle. This may include listing in the FDOT SIS Plan, MPOs LRTP, and counties Comprehensive Plan. During this time, planning staff can perform initial assessments of the project's potential environmental impacts by initiating an ETDM planning screen on qualifying projects (see **ETDM Manual, Chapter 2**, for qualifying project types). When a project is placed in the Cost Feasible element of these plans, then it is nearing status as a "candidate project" for FDOT's Work Program Development Cycle. Not every locally-endorsed transportation project is included in FDOT's Work Program such as some local government or privately funded projects. Long Range Planning and the Work Program Development Cycle are further discussed in Module 2. **The SWAT parameters used during the evaluation of "candidate projects" in turn help to define certain project information that should be delivered by long range planning products.**
- **ETDM Planning Screening:** Ideally, planning screens are completed during development of the FDOT SIS CFP, LRTPs, and local governments via Comprehensive Plans. The planning screening links the transportation Planning phase to the PD&E phase by giving early consideration to the natural, physical, cultural, and social resources. Planning staff utilize the Geographic Information System (GIS)-based, Environmental Screening Tool (EST) to gather information, and analysis may include corridor evaluations. In turn, this Information helps MPOs and local governments to refine their annual LOPP that is submitted to FDOT's District. **Chapter 3** of FDOT's **ETDM Manual** specifically discusses the planning screen activities.
- **Preliminary Environmental Discussion:** A Preliminary Environmental Discussion (PED) is the District's initial understanding of a project's potential involvement with environmental issues/resources and the District's plans to address the issues as the project advances to the PD&E study. If a qualifying candidate project has emerged for consideration, yet has no ETDM Planning Screen, then District staff may develop a PED. For additional information, see FDOT's **PD&E Manual, Part 1, Chapter 3**.

The overall SWAT process for an individual project is presented graphically in **Figure 3-2** with an explanation of each major milestone afterward

Example of an Individual Project Progression using the SWAT approach

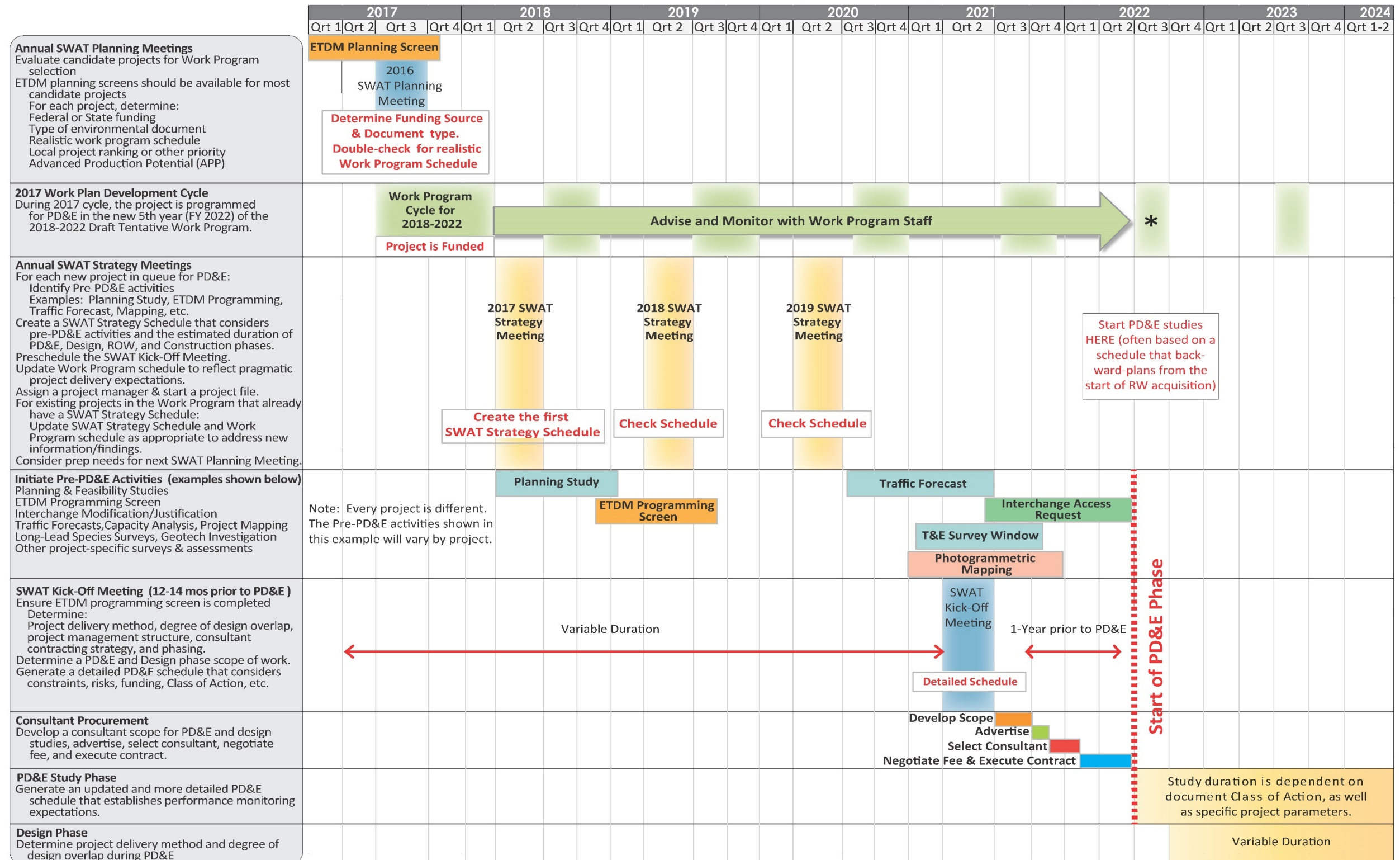


Figure 3-2 Example of an Individual Project Progression using the SWAT Approach Process

SWAT INTEGRATION INTO THE PROJECT PROGRAMMING AND DEVELOPMENT PROCESS

SWAT Planning Meeting (covered in Module 4)

The SWAT Planning Meeting begins the SWAT Process. This District-level meeting occurs each year between May and October, contributing to the annual Work Program Development Process by reviewing “candidate projects” seeking programming into the FDOT’s Work Program. During this meeting, a list of candidate projects is evaluated, specific project characteristics are considered, potential environmental issues are reviewed, preference of funding is recommended, and a preliminary determination is made on the expected environmental document. This meeting is also used to identify high-priority projects that are candidates for Advanced Production Potential (APP) funding. Ideally, ETDM planning screens should be available on each qualifying project. Districts will consider a number of factors such as: type of improvements, Purpose and Need, conceptual cost, preliminary Class of Action (COA) (type of Environmental Document), impacts to federal jurisdictions, early identification of risks, federal permitting, local prioritizations, and Work Program scheduling. A Work Program schedule might indicate estimated durations of various project phases, with an overall project duration – so that Right of Way (ROW) and Construction Let dates can be estimated. The District SWAT Leader will lead the SWAT Planning Meeting.

SWAT Strategy Meeting (covered in Module 5)

Held once a year between February and April, this meeting evaluates new projects that appear in the Tentative Five-Year Work Program (submitted in January/February by Central Office), and revisits existing projects in queue to begin PD&E Study, prior to their SWAT Strategy Meeting. The intent of the meeting is to identify pre-PD&E activities that will further define or advance the project—such as Planning Studies, Alternative Corridor Evaluation’s (ACE’s), ETDM Programming Screen, SWAT Kick-off Meeting, and PD&E advertisement. The meeting transfers responsibility from SWAT Lead to a responsible and accountable person – a Project Manager. A “SWAT Strategy Schedule” is developed for the meeting, which builds upon the “Work Program Schedule” from the SWAT Planning Meeting. The SWAT Strategy Schedule considers pre-PD&E activities and estimates future phase durations through the end of design - as well as Right of Way and Construction phases, if possible. A project file is also started. The meeting is also held at a time of year where it is advantageous to review newly-emerging, candidate projects associated with LRTP updates and SIS/Cost Feasible Plan (CFP) updates – in preparation for the upcoming SWAT Planning Meeting.

Planning Studies and Alternative Corridor Evaluations

During the SWAT Strategy Meeting, the SWAT Team will consider if a project needs to be further defined with a Planning Study or ACE. Planning Studies are recommended for developing/strengthening Purpose and Need and refining the description and limits of proposed improvements. ACE is recommended for projects that are proposing a new corridor or new rail transit facility. The Project Manager (PM) (if assigned) should lead the effort.

ETDM Programming Screen

Covered in Chapter 4 of FDOT's ETDM Manual, this screen should build upon the information produced during the Planning Screen. The ETDM Programming Screen may be used for project scoping for the PD&E phase and to distribute an Advance Notification (AN) package. Once a project has been programmed, it should be scheduled to undergo the ETDM Programming Screen. The programming screening results will be utilized to assist with discussion at the SWAT Kick-off Meeting – which initiates scope development for the PD&E phase. Recommended screening activities and information regarding prior screening should be coordinated with the District ETDM Coordinator. The PM (if assigned) or the ETDM Coordinator should lead the effort and delegate as appropriate.

SWAT Kick-off Meeting (covered in Module 6)

Scheduled at least 1-year (or more) prior to the scheduled start of the PD&E Study, this meeting can be held for one or more projects. The intent of the meeting is to discuss project parameters and then develop a PD&E scope of services for the project. The meeting should also be used to recommend the degree of PD&E phase overlap with the Design phase. The meeting also identifies and initiates any pre-PD&E activities that can jump-start or shorten the duration of the PD&E phase - such as survey, traffic data collection, and travel demand modeling. A draft PD&E schedule is developed before and refined after the meeting using the FDOT PD&E Schedule templates as a basis. The SWAT Kick-off Meeting is also utilized to decide on the procurement strategy and recommend a potential project delivery method. Active involvement of a PM (and other relevant FDOT units) is critical to prepare for the meeting.

Post-SWAT Kick-off Meeting Activities (Module 7)

Activities that may commence after the SWAT Kick-off Meeting and prior to the official advertisement of the PD&E study are: 1) development of a PD&E Scope of Service; 2) create/refine PD&E schedule; 3) fund and initiate certain pre-PD&E activities; and, 4) coordination with various entities – both internally at the District and externally with agencies and consultants. PD&E Scopes of Services are customized - based on review of early available information, consideration of identified project issues, and identification of areas requiring higher levels of consultation. Advanced work or critical path schedule management, and overlap of design activities should be considered to the maximum extent possible. FDOT's Scope of Services tools should be used. Pre-PD&E activities that may advance include tasks such as traffic data collection and analysis, existing conditions analysis, environmental surveys (i.e., species with limited or seasonal survey windows), preliminary geotechnical investigations, photogrammetry and design surveys, planning/feasibility studies, public outreach, and other efforts as determined appropriate to accelerate the pre-construction process. The PM leads the effort, monitors progress, and delegates as appropriate.

Procurement (Module 7)

Procurement includes scope of service finalization, advertisement, consultant selection, fee negotiation, and contract execution. The procurement strategy determined during the SWAT Kick-off Meeting may include: Procuring both the PD&E and Design phases concurrently; one contract for PD&E with optional Design; or, a standalone contract for PD&E.

PD&E Phase (with potential Design Phase overlap)

One of the consultant's first duties is to generate a PD&E project schedule that identifies the critical path. As a basis, the consultant should use the PD&E Schedule that was generated during the SWAT Kick-off Meeting. The schedule should be accurate and include various task links, as well as critical or near-critical activities/tasks. For example, the critical focus during the PD&E phase may be the environmental consultation in order to identify the recommended alternative. The Design phase can be overlapped to achieve 60% design by the end of PD&E for federal projects and 100% design for state projects. For additional information on overlapping phases, consider reviewing **PD&E Manual, Part 1, Chapter 4**.

Approval of Environmental Document (also known as Class of Action for Federal projects)

This decision document presents the "project story" of the project's description, justification, study of alternatives and their costs/impacts, and the recommended and preferred alternatives. The appropriate Environmental Document is preliminarily determined during the ETDM Programming screening and at progressive SWAT Meetings - but is always subject to change. The project schedule considers phases and elements necessary to assemble the appropriate document structure. Schedules consider underlying technical reports, agency review durations, time to develop draft documents, and subsequent iterative reviews to achieve final approval. Of significant note: most documents contain a section of commitments that are necessary to achieve project approval. These commitments must be considered and adhered-to by designers and others who follow the PD&E phase. Should changes become necessary, then consultation with the appropriate PD&E staff should ensue.

Completion of Design Phase

Approval of the Environmental Document essentially "sets" the project footprint and expected environmental impacts. Existing project designs are then completed and detailed to a level suitable for ROW acquisition and utility relocation (ROW mapping can begin at 60% design phase submittal). Design adjustments may (and frequently do) occur during ROW acquisition negotiations. While ROW acquisition occurs, designs are further developed to prepare for construction letting. Efforts include design refinements, specific notes, and construction details – in combination with specifications packages that include standard and special provisions, and specifications in preparation for construction letting. Prior to construction letting, additional designs (often called permit drawings) may be required in specific locations to support environmental permit applications. During this effort, designers are required to follow Commitments – or to initiate coordination should any commitment modifications prove necessary.

Right of Way Acquisition Activities

This phase includes appraisal, negotiations, relocation assistance, property management, and eminent domain. Sometimes it is appropriate to accelerate ROW activities by having the ROW Mapping completed during the design phase and after final design reaches 60%. Utility relocation activities frequently occur at the interface of the ROW phase and construction.

Construction Letting

The process ordinarily ends when the project is ready to be constructed. However, instances do occur when unforeseen events may require a modification to commitments. In these cases, consultation should occur with PD&E staff. For scheduling purposes, the SWAT process considers timelines through construction completion. However, the SWAT process itself - is completed by the design phase.



PROGRESSION OF PROJECT SCHEDULES

Project schedules are prepared to identify activities and illustrate the most effective progression of a project. The SWAT process embraces this approach by generating a series of progressively more-detailed project schedules. **Figure 3-3** provides an overview of the various types of schedules encountered at different points in the SWAT process. The expectation is that each of the schedules builds-upon its predecessor. Starting at the SWAT Strategy Meeting, schedules must incorporate the Project Schedule and Management (PSM) activity codes.

WORK PROGRAM SCHEDULE (SEE MODULE 4)

This initial project schedule is simply a high-level estimation of the duration and linkage of major project phases. Termed the “Work Program Schedule”, this product may be created after a SWAT Planning Meeting – or just as candidate projects are considered for addition to a District’s Draft Tentative Work Program. This schedule provides Districts with a first-cut opportunity to determine a realistic and deliverable project schedule that can inform the Work Program and STIP for specific phase start dates.

SWAT STRATEGY SCHEDULE (SEE MODULE 5)

Before the SWAT Strategy Meeting and when more project information is available, a “SWAT Strategy Schedule” is developed that considers pre-PD&E activities, duration of the anticipated PD&E Environmental Document, and based on the specific project: estimated durations up to the Design phase, and the ROW and Construction phases, if obtainable. The schedule identifies specific pre-PD&E activities, ETDM programming screen, and pre-schedules a SWAT Kick-off Meeting. These are activities that are linked to PSM codes so that they are tracked in FDOT’s scheduling system. The SWAT Strategy Schedule is created to accommodate meeting decisions, and is then updated annually to prepare for subsequent SWAT Strategy Meetings.

PD&E SCHEDULE (SEE MODULE 6)

The next major schedule development activity occurs at the SWAT Kick-off Meeting. At this point, the project is nearing the start of PD&E. Typically this schedule will show continued work on tasks already in progress – while also showing upcoming tasks. By this time, sufficient information is available to identify key task elements in the PD&E phase, and add those to the schedule. As well, the duration and overlap of the Design phase should be verified. The PD&E schedule is developed from a basic template that FDOT’s Office of Environmental Management (OEM) has created for the various types of state and federal Environmental Documents, and is then modified to fit the project and its specific issues. This detailed schedule is utilized for both updating the PSM activities within FDOT’s scheduling system, and for contract negotiation purposes with the Consultant. When a PD&E Consultant is selected, an initial task includes using this schedule as a basis to generate a more-detailed project schedule.

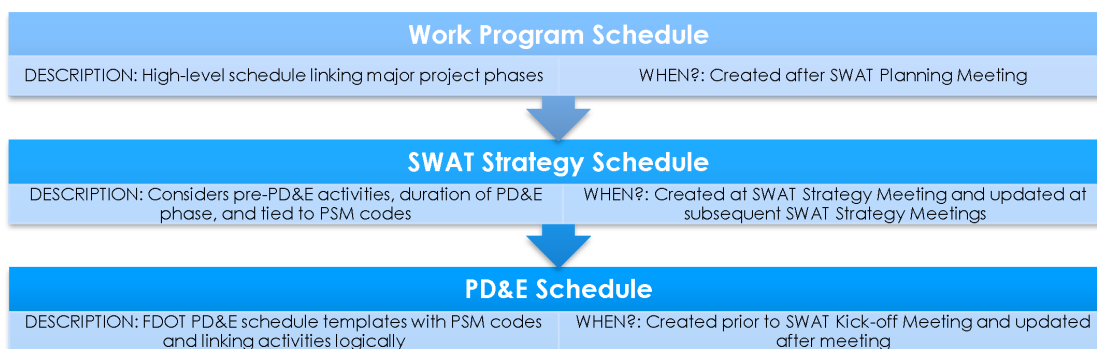


Figure 3-3 Progression of Scheduling Activities in the SWAT Process

SWAT TEAMS

Teams are established and stand ready to implement the SWAT process at the District and Central Office levels. The SWAT Teams are structured to help ensure that the SWAT process functions well and continually evolves to meet and potentially accelerate pre-construction challenges.

Figure 3-4 shows the general overview of SWAT Teams.

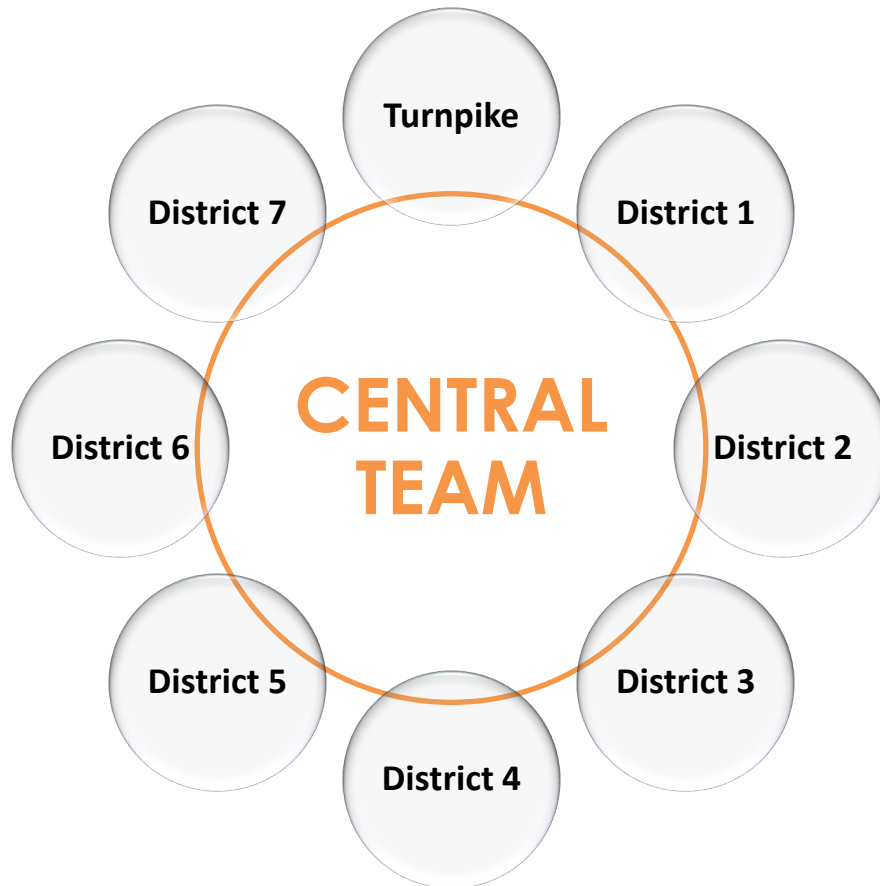


Figure 3-4 Statewide SWAT Team

CENTRAL OFFICE SWAT TEAM

The Central Office SWAT Team is comprised of staff representing OEM and the Work Program as well as the District SWAT Leads. The Central Office SWAT Team oversees overall implementation and development of the SWAT process. The Central Office SWAT Team collects any lessons learned from the Districts, develops SWAT guidance, and serves as a supporting resource to discuss project development issues. The Central Team also works with Districts to document best practices across the states and then facilitate subsequent training opportunities.

DISTRICT SWAT TEAM

Each District has an established SWAT Team that consists of cross-functional, multi-disciplinary staff experienced in project delivery. The Team is set at the discretion of the District Secretary with key members of the SWAT Team representing the Work Program, Planning, Environment, Design discipline managers, and Consultant Management. Key positions include:



Other functional disciplines such as SIS Coordinator, MPO Liaison, Transportation Systems Management & Operations (TSM&O) representative, ROW, and Construction staff can be invited as well. Since the SWAT process is focused on accelerating projects, schedulers should be invited to participate in the SWAT Team meetings to ensure project schedules accurately capture any activity recommendations. Members may be rotated in or out periodically to enlarge the knowledge pool and ensure the SWAT Team has an appropriate representation of cross-functional expertise. Inclusion of less experienced staff – simply to witness activities and achieve a broadened perspective - is encouraged. The District SWAT Team should either include or actively engage with the ETDM Coordinator to ensure timely screening of projects in the EST to facilitate the SWAT process. The SWAT Team should also work closely with the assigned PM(s). The SWAT Team coordinates discussion and decisions for appropriate delivery method, recommends activities to advance, and develops a framework for the PD&E Scope of Services which is subsequently developed by the PM.

The District SWAT Team holds an annual SWAT Planning Meeting, SWAT Strategy Meetings, and SWAT Kick-off Meetings. The District SWAT Team communicates with the Central Office Team and supports PMs. The District SWAT Team is also responsible for sharing lessons learned with the Central Office Team to improve on the process.

DISTRICT SWAT TEAM LEADER

Each District has an identified SWAT Team Leader to shepherd the process. The Team Leader can rotate as long as the Districts provide a transition plan to train new leaders. The District SWAT Team Leader should be familiar with their roles and responsibilities, as outlined in **Figure 3-5**. As SWAT is implemented on more projects, it is likely these parameters may change somewhat.

-  Primary point of contact for District SWAT activities
-  Coordinates regularly with other District personnel, to ensure timely and efficient operation of the SWAT process - EDTM Coordinator, Work Program, Schedulers, Cost Center Managers, Project Management, Planning and Environmental Offices
-  Maintains District SWAT team roster, and distributes communications to SWAT team
-  Assures SWAT Dashboard entries are made and updated by designated District editor
-  Monitors progress of projects on SWAT Dashboard schedules
-  Explores opportunities for mentorship and capacity building to develop SWAT team membership succession
-  Schedules and prepares for SWAT Planning meetings; ensures post-meeting follow-up
-  Schedules and prepares for SWAT Strategy meetings; ensures post-meeting follow-up
-  Monitors/improves the quality of SWAT Schedules and activity progress
-  Educates Project Managers on appropriate pre-PD&E activity management; advises on SWAT Kick-off Meeting preparation
-  Monitors overall “health” of District SWAT team
-  Assign/monitor consultant and staff assignments in developing Scoping forms and spreadsheets to support and facilitate Planning and Strategy meetings
-  Coordinate early assignment of Project Managers through appropriate coordination with District Cost Center Managers
-  Assure communication is on-going and completed with Work Program, Cost Center Managers, ETDM Coordinators, Schedulers as warranted
-  Vet SWAT Team Planning meeting recommendations and other pertinent communication with District Leadership
-  Participates in Central Office – District SWAT meetings
-  Recommends improvements to the SWAT process

Figure 3-5 District SWAT Lead Responsibilities

PROJECT TRACKING – PROJECT DASHBOARD

The purpose of the project dashboards within FDOT's Statewide Electronic Project Tracker (SWEPT) website are to give the Executive Committee and Central SWAT Team access to information on the progress of PD&E projects being conducted by Districts across the state. The PMs are responsible for on-going progress updates on the State Funding Only (SFO) Dashboard (see **Figure 3-6**).

Both State and Federal projects are created in the SWAT Dashboard from the PSM system with the project status and district name, the Financial Management (FM) Number, and the initial brief description/title of the project. Initial status of a new (but presently inactive) project is usually entered as "Pending;" however, if the project happens to be on-going or programmed into the present fiscal year, the project status is moved from "Pending" to "Current." Fields within the dashboard table show the traditional federal benchmark for project duration in months, depending on the type of project, and SWAT aspiration for a fast-tracked project, also in months. These durations represent the length of time from the start of PD&E procurement to the end of Final Design phase.

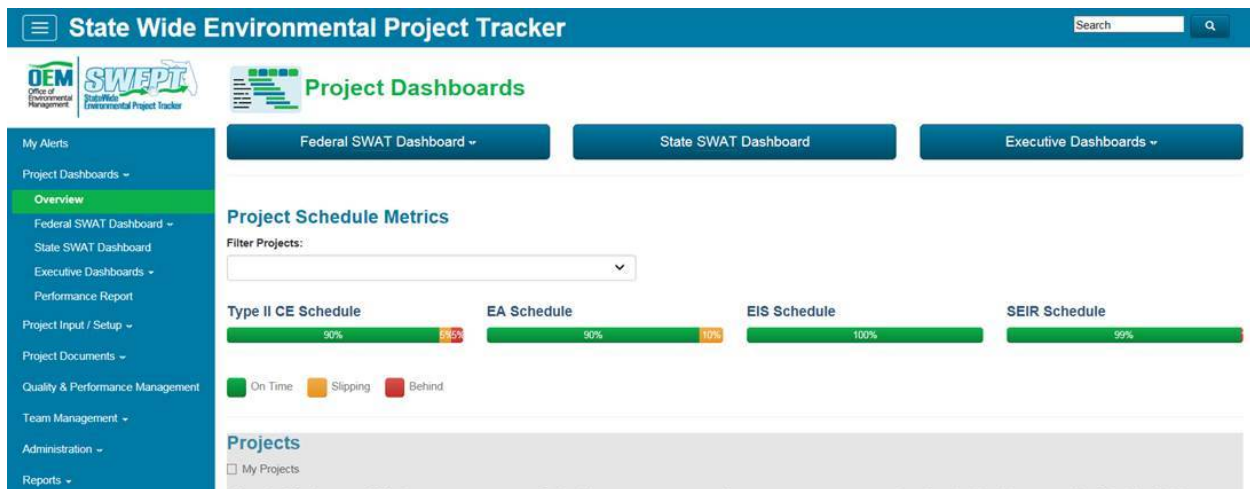


Figure 3-6 Sample Image from SWEPT Project Dashboard

NOTES:

END OF MODULE 3

MODULE 4

SWAT PLANNING MEETING

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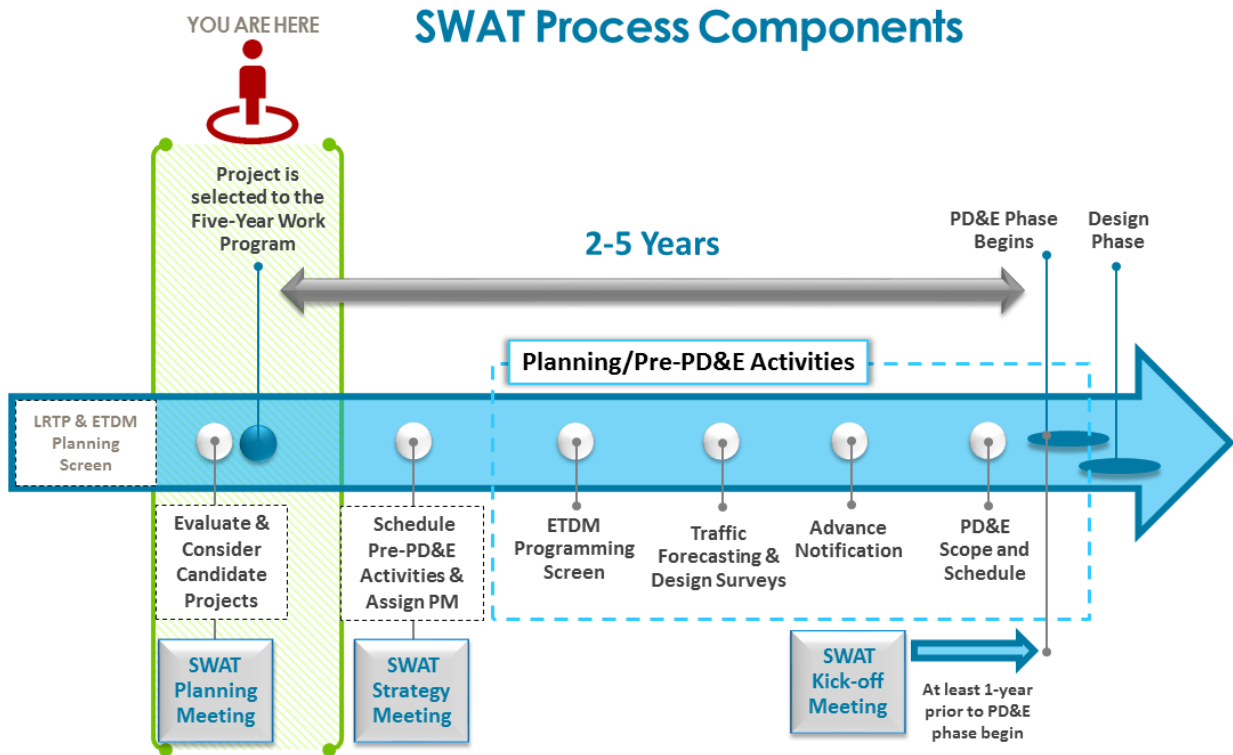


Figure 4-1 SWAT Process Components

INTRODUCTION

The primary purpose of the Statewide Acceleration Transformation (SWAT) Planning Meeting is to evaluate “candidate projects” for selection to the Florida Department of Transportation (FDOT) Tentative Five-Year Work Program and recommend the preference for funding, whether federal or state. Candidate projects are defined as any unfunded project that a stakeholder advocates for inclusion to the FDOT Five-Year Work Program.

FDOT uses approximately 75% of funds originating from state sources. While this scenario affords FDOT with considerable funding flexibility, the Department also has the need to select many state-funded projects. The SWAT Planning Meeting reviews the characteristics of candidate projects for potential project complexities, schedules, environmental impacts, preference of federal vs. state funding, and the type of Environmental Document. Districts can use this information to recommend projects as part of Work Program selection and to consider projects for Advanced Production Potential (APP).

TIMEFRAME AND FREQUENCY

This meeting is held annually between May and October – during the FDOT Work Program Development Cycle. The timeframe of a SWAT Planning Meeting within an individual project's progression with the SWAT process is shown in **Figure 4-1**.

PRODUCTS/RESULTS

- Identification of new, non-major [Non-Major State Action (NMSA) and Type 1 Categorical Exclusion (CE)], vs major projects [when Project Development and Environment (PD&E) Studies are required]
- Evaluation of projects to be programmed as state funded and federal funded
 - State Funding Only (SFO)
 - Federal funding
 - Recommended APP projects
- Anticipated Class of Action (COA) for Environmental Document type
- Develop Work Program schedules, as appropriate

MEETING ATTENDEES

The meeting attendees should include the District SWAT Team, ETDM Coordinator, Strategic Intermodal System (SIS) Coordinator, Planning and Environmental Management Office staff, Work Program staff, Transportation Systems Management & Operations (TSM&O) representative, and other staff, as appropriate. The Planning Meeting may also include project delivery staff experts from Planning and Environmental Management Office (PLEMO), Consultant Management, and Design & Construction offices at the request of the District. Overall, the potential roles and responsibilities of the meeting is presented in **Figure 4-2**.

MEETING PREPARATION AND COORDINATION

A SWAT Planning Meeting reviews many candidate projects at once. Therefore, to conduct an efficient meeting it is essential that information on each candidate project is prepared in detail, prior to the meeting. A preparatory meeting may be held to determine what information is available, what is needed, and what can readily be obtained prior to the SWAT Planning Meeting. Ideally, an ETDM Planning Screen Summary Report should be available for each candidate project on the List of Priority Projects (LOPP).



Figure 4-2 Roles and Responsibilities of Meeting Attendees

The District SWAT Team Leader should take the lead in coordinating the meeting, and delegate appropriately to other SWAT Team Members, District staff, Districtwide contract support and in-house consultants. Preparation for a SWAT Planning Meeting generally occurs in the order listed below:

1. **Gather a list of “candidate projects” being considered for the new Work Program:**
 - a. Review Local Governments' [counties, Metropolitan Planning Organization (MPO)/Transportation Planning Organizations (TPO)/Transportation Planning Agencies (TPA)] LOPP. As needed -further discuss local government system needs, project justifications and other issues
 - b. Consolidate the District's own thoughts on projects and justifications—considering numerous FDOT programs (i.e. SIS Plans, TSM&O) Strategic Plan, safety projects, bridge replacement, and maintenance projects)
 - c. Obtain the Adopted Five-Year Work Program, if available (approved each July)
 - d. Obtain fund allocations and program targets [for Fiscal Years (FYs) in the new Work Program]
2. **Collect basic project information** (described later in this module, based on fields in the SWAT Scoping Form and Planning Meeting Form)
3. **SWAT Scoping Form, Section A** (discussed later in this module) – This form is the primary data collection mechanism that is used to prepare initial recommendations **prior** to the SWAT Planning Meeting. A separate form is completed for **EACH** candidate project that the District feels should be considered at the SWAT Planning Meeting. The form is available in the PD&E Manual, Part 1, Chapter 4, Project Development.
4. **SWAT Planning Meeting Form** (discussed later in this module) – Consolidates projects into a single listing that is pre-populated with summarized information from the **SWAT Scoping Form, Section A**. The form provides initial staff recommendations for funding and document type. This form is used to present candidate project evaluations that support decision-making **during** the SWAT Planning Meeting.

COLLECT PROJECT INFORMATION

The following sources of information should be utilized when completing these forms:

- ETDM screening results / Preliminary Environmental Discussion (PED) / Environmental Screening Tool (EST) Area of Interest (AOI) feature
- FDOT Geographic Information Systems (GIS) Enterprise and/or Google Maps and similar applications

NOTE: The history of projects along the specific corridor and area may be obtained from this tool which is available to all Districts

- Planning studies / Feasibility studies / Master Plans
- FDOT SIS Plans (such as CFP), Long Range Transportation Plans (LRTP) and Comprehensive Growth Plans
- TSM&O Strategic Plan
- FDOT Roadway Characteristics Inventory (RCI) database, Roadway As-Built plans, and bridge inspection reports
- Work Program's Maddog reports to obtain information of projects along specific roadway Identification (ID) to help establish corridor and area history.
- Field visits as warranted and virtual field reviews.

THE SWAT SCOPING FORM

Project evaluation by the SWAT Team begins with the SWAT Scoping Form. The SWAT Scoping Form is used to consolidate individual project information. It is a tool that is instrumental in decision-making during SWAT meetings and development of the project prior to the PD&E phase. However, this form should not be the only tool used by the SWAT Team and assigned Project Manager (PM). It's recommended that the team utilize other methods to present during the SWAT meeting, such as projecting or displaying maps, schedules, and project documents. The SWAT Scoping Form is available in the **PD&E Manual, Part 1, Chapter 4**.

The SWAT Scoping Form includes a **Section A** and a **Section B**.

- **Section A** of the SWAT Scoping Form is to be completed at the SWAT Planning Meeting stage and updated at subsequent SWAT meetings as necessary.
- **Section B** is to be completed during the SWAT Strategy Meeting stage and updated at the SWAT Kick-off Meeting.

The **SWAT Scoping Form** is presented on the following pages as **Figure 4-3**.

FDOT SWAT TEAM SCOPING FORM

To be used for both Federal and State Funded Projects

SECTION A (Items 1-8 ideally completed prior to SWAT Planning Meeting)

1. PROJECT DESCRIPTION AND PURPOSE AND NEED

Project Information	
Project Name	
Project Limits	
Roadway Context Classification	
County	
ETDM Number	
Financial Management Number	
FDOT Project Manager	

Brief Description of Existing Conditions

Preliminary Project Description

Concise Purpose and Need

Figure 4-3 SWAT Scoping Form, Section A (blank form, page 1)

2. PD&E STUDY EVALUATION

Yes	Maybe	Not Likely	No	Question
				Is this a transportation project qualifying for ETDM EST screening? (See ETDM Manual, Section 2.3)
				Will the project cause adverse impacts to noise?
				Will the project cause adverse impacts to wetlands and require a federal permit?
				Will the project require a US Coast Guard permit?
				Will the project affect endangered or threatened species or their critical habitats and require a federal finding?
				Will the project require right of way acquisition and result in any residential or non-residential displacements?
				Is there any potential involvement with resources protected under Section 4(f) of U.S. DOT Act of 1966?
				Will the project affect any historic and archaeological resources protected under Section 106 of the National Historic Preservation Act of 1966 and/or Chapter 267, Florida Statutes?
				Does the action potentially impact contamination sites that result in more than a minimal impact to design, right of way, or construction activities, and can't be avoided or remediated?
				Is a public hearing required in accordance with 339.155(5)(b), F.S., as described in Part 1, Chapter 11 of the PD&E Manual?
				Will the project cause substantial controversy?

Limited project scope or low impacts may determine that an ETDM Screening is not necessary and a PD&E Study may not be required. Given the qualifying scope: If the answers to all questions in Item 2 are "no", then the anticipated COA for the project is either a NMSA (if state funded) or a Type 1 CE (if federally funded).

Check ONLY one	PD&E Study required?
	Yes
	No

Does this project fall below the scope and impacts threshold of a PD&E study? If the answer is YES, then it is still useful to complete SWAT Scoping Form through Item 5, to determine funding source, local priority, and estimated cost. Items 6 and 7 are not necessary.

3. FEDERAL NEXUS

The following evaluation steps should be considered in order to identify a federal nexus and whether projects are recommended for State Funding Only (SFO). Consultation with Work Program staff is often necessary, and OEM coordination is also a possibility. Refer to the Module 4 of the SWAT Training Workbook for specific guidance.

Figure 4-3 SWAT Scoping Form, Section A (blank form, page 2)

Complete the coordination process below to progressively determine whether the project is:

- a) Federal funding required,
- b) Federal funding recommended, or
- c) State Funding Only (SFO) recommended

FEDERAL FUNDING REQUIRED

Work Program staff is uniquely qualified to inform the SWAT Team and production staff about required federal funding parameters that pertain to the following eight (8) scenarios. (PD&E Manual: Part 1 Chapter 2, Section 2.2)

Scenarios 1-8

1) Interstate projects
2) Projects using or involving Interstate right of way (e.g., air rights, adjacent)
3) Projects within and impacting federal lands, such as National Parks or Forests;
4) Projects where a federally funded phase has occurred (funds expended)
5) Projects where current work is federally funded
6) Transportation Alternatives (TA) program projects
7) FHWA Safety Program projects
8) Off-System projects

FEDERAL OR STATE FUNDING RECOMMENDED

If federal funding is not required, the project can still be considered for either state or federal funding. In this case, the District or Turnpike will want to pursue the funding type (federal or state) that results in the most efficient project delivery approach. For example, if it is determined that there is informal or formal Section 7 [Endangered Species Act (ESA)] Consultation or required federal permits, FDOT may strategically consider a particular funding source. In these situations, it is advisable to talk with OEM - as this decision is a function of the type of permit and type of species issue involved in the project.

ENTER THE FUNDING RECOMMENDATION

From the coordination above, check "Federal Required" box just below if Work Program has determined that the project must receive federal funding. If federal funding is not required, then check the box which indicates the District or Turnpike's decision to pursue either Federal Recommended or SFO Recommended as a funding source.

Check ONLY one	Project Funding Decision
<input type="checkbox"/>	Federal Required
<input type="checkbox"/>	Federal Recommended
<input type="checkbox"/>	SFO Recommended

Enter the funding decision into Step 3 of the SWAT Planning Meeting Form.

Figure 4-3 SWAT Scoping Form, Section A (blank form, page 3)

4. LOCAL PRIORITY

	Describe source
Local Agency Project Champion, if applicable	
Priority # in Local List of Priority Project (LOPP)	
Local Long Range Transportation Plan (LRTP)	
FDOT Strategic Intermodal System Plan	

5. POTENTIAL COSTS

Category	Cost	Year of Estimate (i.e. Present day cost)	Source of Estimate (i.e. LRTP)
PE & PD&E			
Right of Way			
Construction			
Total			

6. POTENTIAL CLASS OF ACTION

What is the potential Class of Action or type of environmental document, and WHY?

7. INITIAL IDENTIFICATION OF RISK ASSUMPTIONS AND CONSTRAINTS

Develop an initial list of potential risks, constraints, or assumptions that may affect the project and set any contingency:

Figure 4-3 SWAT Scoping Form, Section A (blank form, page 4)

SECTION B

(Section B prepared for SWAT Strategy Mtg, Sections A & B revisited during SWAT Kick-off Mtg)

1. POTENTIAL PROJECT IMPACTS TO ENVIRONMENTAL RESOURCES

The following should be considered when determining potential impacts to environmental resources: Environmental resources that are marked as “No Involvement” must have an acknowledgement that it was considered but not present on the SWAT Scoping Form and therefore the scope of services should only require the consultant to verify and include a statement to that effect in the Environment Document. Resources that are marked as “No”, “Enhance”, or “Yes” on the form must be included in the scope of services for analysis during the PD&E Study.

Resource Categories	Potential Impacts?				Basis for Decision
	Yes	No	Enhance	*No Inv	
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.

Figure 4-3 SWAT Scoping Form, Section B (blank form, page 5)

2. ACTIVITIES TO BE ADVANCED PRIOR TO PD&E

List the data collection, technical reports, studies, or surveys that can be advanced ahead of the PD&E start.

3. LEVEL OF DESIGN EFFORTS

State whether design phase activities will be concurrent with PD&E. State the percent completion of design effort that might be anticipated during the PD&E phase.

4. SWAT STRATEGY SCHEDULE

Develop a schedule that lists, links, and estimates durations for pertinent pre-PD&E activities and the following phases: PD&E, Design, Right-of-Way, and Construction.

5. UPDATED PROJECT DELIVERY METHOD

State potential project delivery method

6. UPDATED RISK ASSUMPTIONS AND CONSTRAINTS

Develop initial list of potential risks, constraints, permit considerations, or assumptions that may affect the project and set any commitments or contingencies:

Figure 4-3 SWAT Scoping Form, Section B (blank form, page 6)

HOW TO COMPLETE THE SWAT SCOPING FORM, SECTION A

Prior to the SWAT Planning Meeting, the SWAT Scoping Form, Section A should be completed by the SWAT Team Leader for each candidate project - and then pertinent information should be summarized on the SWAT Planning Meeting Form (described later in this module). These responsibilities can be delegated to appropriate staff and districtwide contracts. The form is developed based on the District's knowledge of project requirements and potential project impacts. Section A of the form includes eight parts.

The SWAT Scoping Form, Section A should be updated during and after the SWAT Planning Meeting and other SWAT milestone meetings. The SWAT Scoping Form is included in **FDOT's PD&E Manual, Part 1, Chapter 4**. Detailed discussions of each item in the SWAT Scoping Form, Section A, are included in the next pages as follow:

ITEM 1 Project Description and Purpose and Need

Item 1 of Section A of the SWAT Scoping Form consists of general information pertaining to the project, including background information, brief description of the existing conditions, project description, and a concise Purpose and Need. This section should be filled out completely (with the exception of the Financial Management (FM) Number as this may not be selected prior to the meeting). Most of the information for the project description and Purpose and Need can be obtained from planning studies, FDOT SIS Plans (such as CFP), TSM&O Strategic Plan, LRTPs and the ETDM Planning screen reports.

The project description in this section should be general and concise. Additional guidance for developing the information in this section is included in the **PD&E Manual Part 2, Chapter 1**, as well as the **Federal Highway Administration (FHWA) Environmental Review toolkit**, the **American Association of State Highway and Transportation Officials (AASHTO) Practitioner's Handbook**, and other publications. Caution should be exercised to limit Purpose and Need elements to those truly applicable. A more detailed project description and Purpose and Need should be developed as the project progresses to the planning and PD&E phase.

ITEM 2 PD&E Study Evaluation

Next, the SWAT Scoping Form provides an evaluation that relies on a series of questions related to project involvement with environmental issues. Responses are based on available information which can be obtained from the ETDM screening reports, planning studies, or the District's understanding of the project. If this information is unavailable, a high-level GIS analysis is recommended to facilitate the evaluation - without needing to complete the official screen of the ETDM (i.e., EST Area of Interest (AOI) tool). The team may also review aerial photos of the study area and online mapping tools, to preliminarily identify potential resource issues or engineering constraints associated with the project.

Completion of the evaluation questions in Item 2 of the form can assist with determining if a project qualifies for ETDM Programming Screen and a PD&E Study may be required, which helps to anticipate the appropriate federal-equivalent Class of Action (COA) or level of Environmental Documentation. Conversely, limited project scope or low impacts may determine that an ETDM Screening is not necessary and a PD&E Study may not be required. If the answers to all questions in Item 2 are "no", then the anticipated COA for the project is either a NMSA (state funded) or a Type 1 CE (federally funded).

ITEM 3 Federal Nexus

A Federal Nexus is a term used when a project involves federal funding, a federal permit, Interstate Right of Way, federal lands, or a federal program. Item 3 helps with identifying a Federal Nexus and subsequently the funding path for a project. These Scenarios will help determine whether the project is:

- a. Federal funding required
- b. Federal funding recommended
- c. State Funding Only (SFO) recommended

FEDERAL FUNDING REQUIRED

Scenarios 1 through 8, listed below, focus on evaluating the federal jurisdictions and funding applications that automatically federalize the project as per FDOT's Work Program instructions.

Work Program staff is uniquely qualified to address funding scenarios and inform the SWAT Team and production staff. Given that numerous and potentially-complicated parameters may apply, Work Program should be consulted to determine when federal funding is required.

If any of these scenarios apply to a project, then the project is probably required to receive federal funding (see Federal actions listed in PD&E Manual, Part 1, Chapter 2). The SWAT Team may refer to FDOT's Work Program Instructions, Chapter 25 for additional guidance. These projects involve actions which are:

- **Scenario 1:** Interstate projects;
- **Scenario 2:** Projects using or involving Interstate right of way (e.g., air rights, adjacent);
- **Scenario 3:** Projects within and impacting federal lands, such as National Parks or Forests;
- **Scenario 4:** Projects where a federally funded phase has occurred (funds expended);

NOTE: If federal funds have been used on a prior phase of the current project, coordination with Central Office [OEM and Office of General Counsel (OGC)] should occur to determine whether the project falls under FHWA jurisdiction. Courses of action may be available. Multiple courses of action may be available, which are overly-complicated for explanation in this Workbook.

- **Scenario 5:** Projects where current work is federally funded;
- **Scenario 6:** Transportation Alternatives (TA) program projects;
- **Scenario 7:** FHWA Safety Program projects;
- **Scenario 8:** Off-System projects

If, after consultation with Work Program staff, it is determined that:

- A. The project should be "Federalized" for funding: Then the project is not eligible for SFO. The candidate project should be recommended for federal funding and progressed with FDOT as the lead agency. In this case, check the "**Federal Funding Required**" box as an answer to the Item 3 funding inquiry in the SWAT Scoping Form. Also enter "Federal Required" in Step 3 of the SWAT Planning Meeting Form.
- B. The project does not require federal funding: In this case, the project is still under consideration for either state or federal funding. Move to the next step to make that determination.

FEDERAL OR STATE FUNDING RECOMMENDED

When considering the type of funding source, project parameters may present a combination of scenarios whereby pursuing a document with state funding may present a more efficient project delivery approach over federal. Conversely, certain scenarios are better addressed under federal funding. For example, if it is determined that a project

presents informal or formal Section 7 [Endangered Species Act (ESA)] Consultation or require federal permits such as Section 404 or Coast Guard; then FDOT may strategically consider a particular funding source. In these situations, it is advisable to talk with OEM - as this decision is a function of the type of permit(s) and the type of species issue involved.

If, after coordination with OEM:

A. It is determined that Federal funding presents a more efficient approach: Then check the "Federal

Recommended" box as an answer to the Item 3 funding inquiry of the SWAT Scoping Form. Also enter "Federal Required" in Step 3 of the SWAT Planning Meeting Form.

B. It is determined that State funding presents a more efficient approach: Then check the "SFO Recommended" (State Funding Only) box as an answer to the Item 3 funding inquiry of the SWAT Scoping Form. Also enter "SFO Recommended" in Step 3 of the SWAT Planning Meeting Form.

ITEM 4 Local Priority

This area of the form is used to summarize the local government or MPO prioritization in the LRTP, and long range planning aspects of the project. The following should be used for guidance for each topic in the item:

- **Local Agency Project Champion** may be the local MPO/TPO/TPA, county government, municipality, agency, or the District.
- **Priority # in LOPP:** The local priority rank should be obtained from the local planning agency (i.e., MPO/TPO) LOPP. It's also recommended to coordinate with the MPO Liaison and FDOT's Work Program for this information prior to the SWAT Planning Meeting. For example, each project listed by Broward MPO will have only one #1, one #2, one #3, and so on. The same standard is applied to

other entities submitting a LOPP. Local rankings are useful during project selections, because decision-makers at the SWAT Planning Meeting must strike a careful balance between funding projects that are highly-prioritized by local partners, versus FDOT's own perceptions of priority funding. However, the priority ranking only applies to projects that have been prioritized by the local planning agency in the LOPP.

- **LRTP:** Reference the prioritization description within the local LRTP and the date of the LRTP.
 - **FDOT SIS Plan:** If applicable, describe the prioritization within the SIS Plan and the date of the SIS Plan. This will only apply to projects within the SIS network.
-

ITEM 5 Potential Costs

Estimated project cost information should be obtained from the latest FDOT SIS Plan, LRTP, Comprehensive Plans, or planning study. The estimated cost to completed PD&E and Preliminary Engineering (PE), Right of Way acquisition, and construction should be included. The source of the information and year of the estimate should also be included

and inflationary adjustments considered. It is possible that construction or ROW costs have yet to be developed.

ITEM 6 Potential Class of Action

Prior to the SWAT Planning Meeting, it is important to render a preliminary judgement as to what type of Environmental Document will be pursued and WHY. This is accomplished via close coordination with the District Environmental Manager. Using the federal COA as a yardstick, staff can determine the level of Environmental Documentation that is expected for the project to advance to the PD&E stage. At any time, the potential COA judgement may be updated. Consideration should also be given to advanced studies, development of PEDs, ETDM Screening, or other pertinent information. The identification should be

based on guidance from the **PD&E Manual Part 1, Chapter 2.**

The preliminary COA may be identified as one of the following:

- Environmental Impact Statement (EIS)
- Environmental Assessments (EAs)
- Type 2 Categorical Exclusion (CE)
- State Environmental Impact Report (SEIR)
- Non-Major Project Types:
 - Type 1 CE (Federal)
 - NMSA (State)

ITEM 7 Initial Identification of Risk Assumptions and Constraints

Item 7 of the form provides a preliminary assessment of the identified risks and constraints. Risk management is most effective when performed earlier in the life of a project, with continuous assessment throughout the project life.

At the SWAT Planning Meeting, it is often possible to identify more visible parameters such as the following:

- Impacts to railroads or other transportation modes
- Utility impacts
- Bridges over navigable waters

- Canals and other water features
- Major planned developments
- Permitting expectations
- Protected resources such as Section 106
- Constraints to ROW needs

The answers provided should form an initial risks list for the project that can be built upon as the project develops throughout the SWAT process and into the PD&E and Design phases.

THE SWAT PLANNING MEETING FORM

The **SWAT Planning Meeting Form** consolidates projects into a single listing that is populated with information from the **SWAT Scoping Form, Section A**. This form is the primary tool used to evaluate candidate projects during the SWAT Planning Meeting. The SWAT Team should complete the **SWAT Planning Meeting Form**, in tandem with the **SWAT Scoping Form, Section A**. These responsibilities can be delegated to appropriate staff and other districtwide resources.

The SWAT Planning Meeting Form is presented in **Figure 4-4**. The form is divided into 10 steps. **Step 1** through **Step 8** comprise Section A, which should be completed and reviewed prior to the SWAT Planning Meeting. **Steps 9** and **10** (Section B) should be left blank – as these cells present decisions made by the SWAT Team during the SWAT Planning Meeting.

The following should be considered when completing each part within Section A of the **SWAT Planning Meeting Form**

Step 1 General Project Information

Utilize the information from Item 1 of the **SWAT Scoping Form, Section A**. This should be concise to fit the cells.

Step 2 Is a formal PD&E Phase Required?

This step is determined based on the results from Item 2 of the **SWAT Scoping Form, Section A**.

Step 3 Federal Nexus

Using Item 3 of the SWAT Scoping Form, Section A, enter one of the three options: 1) Federal required; 2) Federal Recommended; or, 3) SFO Recommended.

Step 4 Local Priority Ranking within each LOPP

Utilize the information from Item 4 of the **SWAT Scoping Form, Section A**.

Step 5 Potential Costs

Extract the cost information from Item 5 of the **SWAT Scoping Form, Section A**. This information, particularly the magnitude of the cost, will assist the SWAT Planning Meeting attendees to determine if the project warrants use of federal funds. Cost

magnitude also helps the team to recognize a potential need for phased delivery.

Step 6 Potential Federal COA

Based on the type of improvements and the potential impacts, the preparer should coordinate with the District Environmental Manager to determine the anticipated federal-equivalent COA – which is the hypothetically-determined COA should the SFO eligible project switch to federal funding. The **PD&E Manual, Part 1, Chapter 2 – FHWA Class of Action Determination**, should be used to support this step. The results from this step utilized for making determinations for Step 8.

Step 7 Eligible for SFO

This entry is based on the results from **Step 3**. If the results from this step indicate “Federal required”, then the project is not eligible for SFO and a “N/A” should be entered in this field. If the results from Step 3 indicate “Federal recommended”, then is not advisable for SFO funding, however is still eligible for SFO at the discretion of the District. In this case, it is recommended that the District coordinate with OEM. If Step 3 shows “SFO recommended”, enter a “yes” in this entry.

SWAT PLANNING MEETING



Date Held:
District:
Work Program Cycle:

SECTION A: Information and Analysis Reporting - Prior to the SWAT Planning Meeting	SECTION B: Decisions & Recommendations from the Meeting
--	---

STEP 1 General Project Information					STEP 2 Is a formal PD&E Phase Required?	STEP 3 Federal Nexus?	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8	STEP 9 Preliminary Decisions		STEP 10 Recommendations for Funding Source and Document Type	
Financial Management Number	ETDM # (if available)	Project Name / Facility Name (include limits)	Proposed Improvements (i.e. capacity improvement, safety, bridge replacement, widening)	County	Is PD&E Required? (SWAT Scoping Form, Section A, Part 2) If Project is either Type 1 CE or NMSA, then designate below and stop (SWAT analysis is done)	Federal Nexus questions determine whether FDOT will proceed with federal or state funding. Enter one of three answers, according to the SWAT Scoping Form: Federal required, or Federal recommended, or SFO recommended	Local Priority Rank within each MPO/TPO/TPA or county LOPP. ("1" is highest)	Potential Costs (\$ millions)	Potential Federal Class of Action (if project is federally-funded)	Eligible for State Funding Only (SFO)? (Based on Step 3)	Estimated Time Savings for Projects Eligible for State Funded Projects (months) (use guidance from SWAT Training Workbook)	District Rating of Recommended SFO Projects (Hi, Med, Lo)	Advanced Production Potential (APP) Identifier or N/A	Funding Source Enter either "Federal" or "SFO" (State Funds Only)	Class of Action (SEIR, Type 2 CE, EA, EIS, or decision from Step 2). Update SWAT Scoping Form

SWAT Planning Meeting Form

The **SWAT Planning Meeting Form** is utilized to consolidate information on many projects. Information is gleaned from the **SWAT Scoping Form, Section A**, and provides an overview of key information categories for each project. This form is utilized during the SWAT Planning Meeting for decision-making on funding source, document type, and APP designation. The SWAT Team should complete and review the SWAT Planning Meeting Form in advance of the SWAT Planning Meeting - in close coordination with other units and the relevant Cost Center Manager.

Section A (Steps 1-8) of the SWAT Planning Meeting Form should be completed prior to the meeting so the information is available for consideration during the SWAT Planning Meeting. Section B (Steps 9 and 10) are used to record decisions made during the SWAT Planning Meeting.

Figure 4-4 SWAT Planning Meeting Form

Step 8 Estimated Time Savings for Projects Eligible for SFO

Projects eligible for SFO may benefit from potential time savings by progressing through a state rather than federal process. The following step is used to estimate the potential time savings between the state and federal. This field helps to show which

projects would benefit the most from a time-savings perspective, which in turn helps to rank the most beneficial eligible SFO projects. **Table 4-1** provides guidance on the average time savings in months for PD&E Studies by COA using a state process (SEIR) instead of federal. Each individual District may utilize their own estimations on time savings. Note that depending on the complexity of the proposed design, time may slightly change.

Class of Action (COA)	State SEIR Federal Equivalent	Federal Document	Potential Savings with a SEIR Process
Type 2 CE	13	34	21
EA	23	62	39
EIS	36	101	65

Decisions made during SWAT Planning Meeting

Section B of the SWAT Planning Meeting Form includes Steps 9 and 10. This section should be completed to record decisions made at the SWAT Planning Meeting.

Step 9 Preliminary Decisions

District Rating of Recommended SFO Projects: The SWAT Planning Meeting decision-makers should provide a subjective rating decision (in terms of urgency for selection) on each SFO eligible project using a simplified High (Hi), Medium (Med), and Low (Lo) entry. The following parameters might be considered when making this decision:

- Step 3 – Does SFO provide a strategic rationale for document progression?
- Step 4 – Is the project a local high priority project?
- Step 5 – Are the ROW and construction costs reasonable for SFO expenditure?
- Step 8 – Does the project offer a high estimated time savings with SFO?

APP Identifier: Proposed candidate projects with a high priority should consider Advanced Production Potential funding. This decision should be coordinated with FDOT's Work Program Office and follow the guidance provided within the Work Program Instructions, Part V, Production

Management. The potential APP candidate projects should be discussed during the SWAT Planning Meeting. In addition, projects identified as high-priority - and which presently show minimal impacts to environmental resources, low design complexity, and minimal ROW impacts, should be considered for inclusion in the APP report.

Step 10 Recommendations for Funding Source and Document Type

Funding Source: The SWAT Team should make their determination on whether the subject project will be "Federal" or "State Funds Only (SFO)." Before an SFO identifier is assigned, the recommendation should be coordinated with the District Work Program Office to confirm availability of state funds to complete ALL phases of the project.

COA: Depending on whether the recommendation for funding source is state or federal, the following COA will be utilized:

- SEIR, EIS, EA, Type 2 CE, Type 1 CE, or NMSA

CONDUCTING THE MEETING

The key to a successful meeting is advanced preparation. The SWAT process advocates that project staff gather pertinent information, prepare the appropriate forms and presentation mapping, make preliminary recommendations, and then brief the collaborating SWAT Team Decision-makers. The SWAT Team should arrive at the meeting to find project information that is clearly presented on the SWAT Planning Meeting Form and with all SWAT Scoping Forms available. Staff should either project or display project maps and other relevant materials to further enhance understanding of the project and its information shown on the forms. This approach quickly briefs decision-makers and promotes responsive and rational decision-making.

A typical SWAT Planning Meeting should discuss the items that are listed below. The SWAT Team should use the SWAT Planning Meeting Form to record decision-making and make notes for additional consideration as necessary. Any deferred decisions should be clearly identified. All recommendations should be coordinated with the relevant Cost Centers Manager and documented in the District's network.

Review candidate projects

Review Section A of the SWAT Planning Meeting Form, using additional graphical presentation material deemed necessary for understanding and project comparison.

NMSA and Type 1 CE projects identified in SWAT Planning Meeting Form

These projects are no longer considered in the subsequent SWAT process meetings detailed in Modules 5 and 6.

Make and record decisions for PD&E projects - SWAT Planning Meeting Form, Section B

Step 9 – Decisions during SWAT Planning Meeting

- District rating of Recommended SFO projects
- APP funding

Step 10 – Recommendations for funding source and document type

- Funding source
- Class of Action

Consider any Work Program target dates to consider the reasonable delivery of programmed project phases

- PD&E, Design, ROW, and Construction phases
- Consider generating a Work Program schedule or milestone tables for high-ranking candidates, at a detail suitable to conduct programming discussions about cash flow needs for various phases.

POST-MEETING ACTION ITEMS

The SWAT Planning Meeting is intended to assist with decisions for candidate projects in the FDOT Work Program Development Cycle. The Post-Meeting Action Items may include the following:

- Updates to SWAT Scoping Form, Section A, based on decisions during the SWAT Planning meeting**
- Develop Work Program Schedules for projects that lie in good standing for the District’s Draft Tentative Work Program. The idea is simple: District staff can perform a quick scheduling exercise to ensure that any newly-programmed projects are reasonably scheduled with regard to delivery expectations for future project phases.**
- Funding and scheduling of identified planning activities**
- Make preparations for upcoming SWAT Strategy Meeting preparations**

WHAT IS A “WORK PROGRAM SCHEDULE”?

After a SWAT Planning Meeting, District staff will have an idea for the stronger project candidates. Certainly, as District selections are completed, the projects moving into the Draft Tentative Work Program will be known. These projects will then need to be “programmed” into FDOT’s Five-Year Work Program – which implies locking - in the FY start dates of project phases (PD&E, Design, ROW, and Construction), that is connected to specific cash flow expenditures for each FY.

As a proactive management measure, District staff can perform a quick, high-level scheduling exercise to ensure that the project is reasonably scheduled with regard to delivery expectations. To assist with the correct programming of a project, the SWAT Team can work with other District Subject Matter Experts (SME) to develop a basic “Work Program Schedule.” This simple schedule establishes reasonable project delivery expectations by setting appropriate phase durations, which in turn, ensures reasonable start dates for each successive phase.

An example of a “Work Program Schedule” is shown below.

Project Phase	Funding Schedule by Fiscal Year (in Millions)											
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Pre-PD&E Activities	0.6											0.6
PD&E Phase		1.6										1.6
Design Phase + Permit Activity			1.0					.2				1.2
ROW Phase							32.6					32.6
Utility Relocation								8				8
Mitigation								4				4
Construction Phase									66			66
TOTAL COST												114 Million

Note: At early stages, some projects may not present suitable information to estimate the cost, duration, and begin dates of various phases. In this case, simply attempt to deliver the most accurate depiction possible.

Figure 4-5 Example of Work Program Schedule

Depending on the project, PD&E phases can often encounter unforeseen difficulties such as: new discoveries, project opposition, and coordination issues with cooperating agencies. These issues, in turn, can require additional design work and studies that delay to the PD&E phase. Thus, and as a general rule, it is often wise to start the PD&E phase sooner rather than later to provide a small degree of float. The information on PD&E documents does have a shelf-life, however. Care should be exercised to avoid completing Environmental Documents too far in advance of the ROW or Construction Phase.

As a project progresses and delays may occur, revisiting Work Program Schedules during any phase is a valuable exercise to ensure that published dates for subsequent phases are still achievable. If schedule changes become necessary to adjust these phase timelines, then Districts recognize the need to coordinate these changes with other partners – internal and external. For example, there is need to maintain consistency between FDOT production schedules and those published in the FDOT Work Program, in the STIP, and the FDOT SIS Plan. As well, local government partners should be notified so they can adjust delivery dates for LRTPs, TIPs, Comprehensive Plans, and other planning documents. Project managers should closely coordinate with Work Program and scheduling staff, as necessary. Notwithstanding the recommendations of a feasible Work Program schedule, the Work Program office will ultimately schedule phases depending on funds availability and balancing needs with other priorities.

BUILDING OR EVALUATING A WORK PROGRAM SCHEDULE

For a subject project, consider building a high-level, overall project schedule through the end of the Construction phase. This major-phase-only schedule is considered when programming funds for the project (in the Work Program Office MADDOG system) and is needed to establish a realistic PD&E phase start date (and then a SWAT Kick-off Meeting date) in the Work Program and STIP.

Are ROW start dates or Construction Let dates shown in MADDOG, the SIS Ten-Year Plan, or other scheduling means as a delivery expectation? If not, then this schedule exercise provides a first-run opportunity to inform Work Program staff and then create a reasonable schedule from the start. If ROW and Construction phase dates are shown, then this exercise will provide an opportunity to verify the reasonableness of meeting those dates - and it might help to identify whether the start date for e PD&E phase is correctly established.

A QUICK RUN-THROUGH

Revisit the type of Environmental Document that was identified at the SWAT Planning Meeting to ensure it is still appropriate given any new information. Set an initial duration for the PD&E phase according to the table below and apply judgment: Are there any project-specific issues that might cause the PD&E phase to extend beyond these averages? Example: Acquiring US Forest Service lands may require additional studies to satisfy their regulations, as well as mitigation planning and commitments that could extend the PD&E phase.

Environmental Document Type	Average Duration of PD&E Phase (Months)
State-funded State Environmental Impact Report (SEIR) to replace a federal Categorical Exclusion (CE)	13
SEIR to replace a federal Environmental Assessment (EA)/Finding of No Significant Impact (FONSI)	23
SEIR to replace a federal Draft Environmental Impact Statement (DEIS)/Final Environmental Impact Statement (FEIS)/Record of Decision (ROD)	36

Environmental Document Type	Average Duration of PD&E Phase (Months)
Federal Type 2 CE	34
Federal EA/FONSI	62
Federal EIS/DEIS/ROD	101

Note: These are averages only based on the SWEPT SWAT Dashboard reports. Note that expectations will vary depending on the individual project and its issues

- Consult with Roadway and Structures Design staff. Establish an appropriate Design phase duration while also recognizing the potential for Design phase overlap into the PD&E phase. The Design phase typically falls between the end of the PD&E phase and overlaps with ROW phase.
- If significant utility relocation is anticipated, consider meeting with those experts as well.
- Consult with ROW staff. Obtain an estimate for how long the ROW phase will take given specific project information on potential number of affected parcels, relocations, and whether any special land acquisition needs are evident [such as federal lands, Section 6(f) properties, Federal Emergency Management Agency (FEMA) hazardous grant (flood-buy-out) parcels]. The ROW phase frequently overlaps with Design phase; however, opportunities may exist to optimize schedule by initiating right of way actions earlier.
- Consult with Construction staff. Based on an overall project build-out “expectation”, try to determine an estimated duration for the Construction phase. For example, Construction phase durations are often extended for long bridges and projects with multi-phased traffic-control challenges.

If the start date of the PD&E phase is NOT pre-established:

- Develop a high-level “Programming Schedule” or list of milestones that portrays the major phases (as follows) until the completion of the Construction phase:
 - Pre-PD&E activities
 - PD&E
 - Design
 - ROW
 - Construction
 - Possibly consider Utility Relocation and/or Mitigation, if significant
- Assign costs to each project phase using updated cost estimates.

If the start date of the PD&E phase is pre-established:

- Check the delivery of the ROW phase. Then, add the durations of the PD&E and Design phases after the start date of the PD&E phase. Does the schedule meet the anticipated start of the ROW phase? If not, then consider starting the PD&E phase sooner or, conversely, start the ROW phase later. Consider additional “float time” for unexpected delays in the PD&E phase – based on risk analysis performed.
- Check the delivery of the Construction phase. Add the durations of the PD&E, Design, and ROW phases to the start of the PD&E phase. Does the schedule meet the anticipated Construction Let date, and expected Construction phase end date? If not, then reschedule the PD&E phase or other phases to start sooner, overlap more, or, conversely, delay the ROW and/or Construction phases. Consider additional “float time” for unexpected delays.

NOTES:

END OF MODULE 4

MODULE 5

SWAT STRATEGY MEETING

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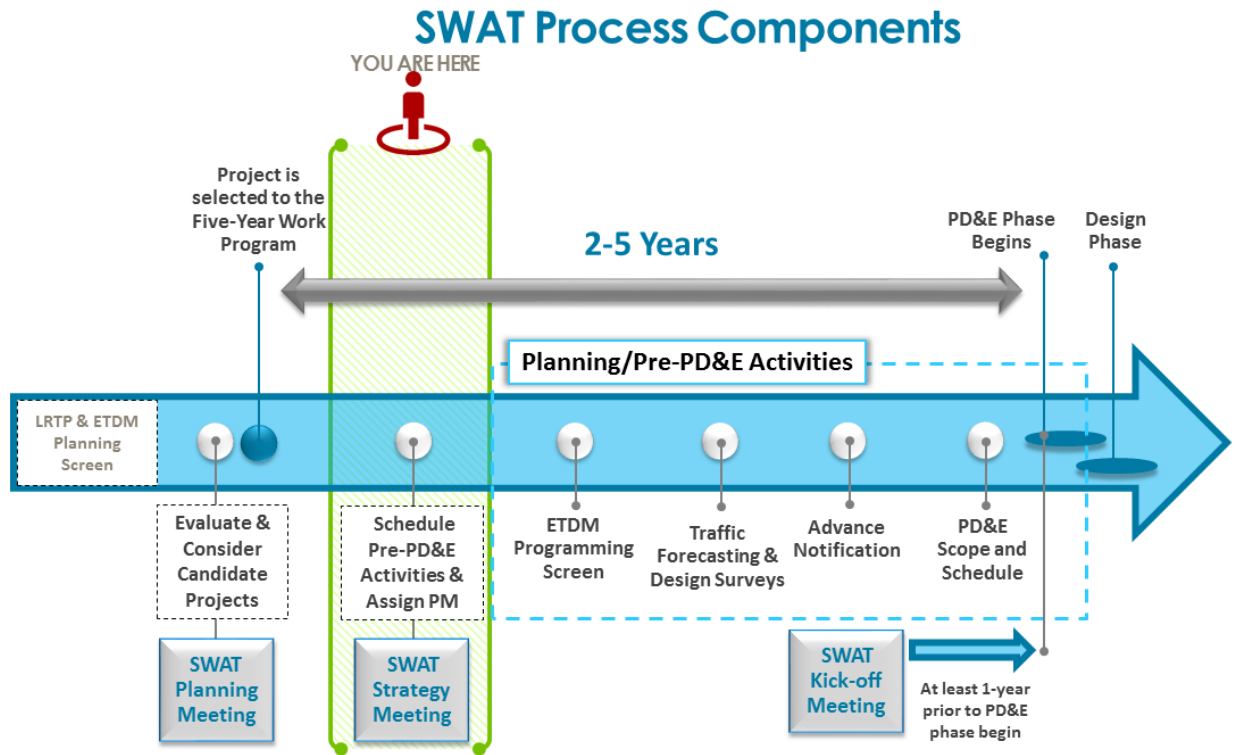


Figure 5-1 SWAT Process Components

INTRODUCTION

The purpose of an annual Statewide Acceleration Transformation (SWAT) Strategy Meeting is to evaluate newly-selected projects to the FDOT Tentative Year Work Program, as well as existing projects in the Five-Year Work Program – which will present sufficient scope and/or anticipated impacts that will require a Project Development and Environment (PD&E) Study, and which await scoping and advertisement for the PD&E Phase.

FIRST PRIORITY:

1. Identify activities that can be advanced prior to the start of the PD&E phase. Then, create an initial project delivery schedule (termed a SWAT Strategy Schedule) that appropriately addresses project needs.
2. Transfer individual project responsibility from the SWAT Lead to an assigned Project Manager (PM).

SECONDARY PRIORITY (AS A PROACTIVE MEASURE):

1. Identify new candidate projects and consider necessary preparations - in advance of the next Work Program Development Cycle.

At a SWAT Strategy Meeting, the following items should be covered or established:

- Look at **NEW** PD&E projects that were recently selected for the Tentative Work Program. For each project, consider relevant Pre-PD&E activities that should be accomplished. For each project, prepare a "SWAT Strategy Schedule" prior to the SWAT Strategy Meeting - and then modify the schedule based on meeting decisions. Determine the correct time to initiate an Efficient Transportation Decision Making (ETDM) Programming Screen and then schedule a SWAT Kick-off Meeting at least a year in advance of the anticipated PD&E start date.
- Look at **EXISTING** projects already in the Work Program that await a SWAT Kick-off Meeting. Identify any schedule changes or other project-specific issues which may prompt reconsideration of earlier SWAT scheduling decisions. Create a SWAT Strategy Schedule for those projects that do not have one or otherwise adjust the existing schedules. Revisit relevant Work Program dates and Programming Schedules (see SWAT Planning Meeting) to verify that the overall project schedule aligns with Work Program delivery expectations. As necessary, adjust the start date of the PD&E phase if funding is identified to avoid delays to the Right of Way (ROW) and/or Construction phases. Then moving backward in time from the start date of the PD&E phase, double-check that the SWAT Kick-off Meeting is scheduled far enough in advance (at least 12 months) to complete identified tasks (Alert: some projects may need a lead-time greater than 12 months.)
- Ensure that a Project Manager or team is assigned to each project to attend the meeting and then prompt timely action to fund and initiate designated Pre-PD&E tasks, and then monitor progress. Project responsibility shifts to this person at the SWAT Strategy Meeting, with the additional expectation that a project file is started at this time.
- Identify any upcoming SWAT Kick-off Meetings and consider preparation [considering any ETDM Screening(s)].
- Develop a list of upcoming ETDM Programming Screens or Planning Screens, if needed.
- Review any recent updates to Long Range Transportation Plans (LRTP), Comprehensive Plan, the Strategic Intermodal System (SIS) Plan, and the Transportation System Management and Operations (TSM&O) Strategic Plan. Identify any existing or new project candidates that look favorable for consideration at the upcoming Work Program Development Cycle in the summer/fall. Consider prescheduling ETDM Planning Screens as preparation.

TIMEFRAME AND FREQUENCY

The SWAT Strategy Meeting is a District-level meeting held annually between February and April after Central Office submits FDOT's Tentative Work Program. Naturally, the Tentative Work Program incorporates new projects selected by each District. In addition, the projects listed in the Tentative Work Program are not likely to change; therefore, any staff effort expended on these projects is productive.

PRODUCTS/RESULTS

- A responsible and accountable Project Manager (PM) assumes responsibility for each new project in the Work Program
- New SWAT Strategy Schedules are developed for projects recently selected for the Work Program
- Verify or revise SWAT Strategy Schedules for existing projects in the Work Program
- Resulting changes to Work Program Schedules, as applicable, may change the start date of the PD&E phase if funding is identified
- A list of upcoming SWAT Kick-off Meetings and other pre-PD&E activities
- Initiation of a project file for new projects
- Funding requests, as appropriate, to support execution of pre-PD&E activities, start of the PD&E phase, and subsequent phases
 - List of favorable, new-candidate projects that arose from review of LRTPs, Comprehensive Plans, SIS Plan, TSM&O Strategic Plan, and other plans
- List of upcoming ETDM screenings and their scheduled timeframes

MEETING ATTENDEES

The SWAT Team and staff from other District functional disciplines are invited and encouraged to participate in the SWAT Strategy Meeting. A SWAT Strategy Meeting involves considering each individual project's attributes, determining a reasonable delivery schedule, and then identifying key Pre-PD&E activities to pursue.

Aspects from multiple disciplines effect the decisions made; therefore, the meeting may include representatives from the SWAT Team as well as discipline experts and the Project Managers to whom responsibility is awarded.

Considerations for meeting attendees might include:

PD&E STAFF

- District PD&E Engineer
- PD&E Scoping staff

PLANNING STAFF

- Planning Manager(s)
- SIS Coordinator
- MPO Liaison

TSM&O REPRESENTATIVE

ENVIRONMENTAL STAFF

- Environmental Management Office staff
- ETDM Coordinator
- Permit Coordinator

SPECIFIC ENVIRONMENTAL AND ENGINEERING SUBJECT MATTER EXPERTS

- Social, Cultural, Biological, Contamination, and/or noise/air expert(s)
- Roadway Design
- Structure Design
- Drainage Design
- Utility Design (and relocation)

POST-DESIGN PHASE MANAGERS

- Right-of-Way representative
- Construction representative
- Permitting representative

SCHEDULING STAFF

- Production Schedulers

WORK PROGRAM

- Work Program representative

PROJECT MANAGERS – AS ASSIGNED TO EACH PROJECT UNDER EVALUATION

WHAT IS A “SWAT STRATEGY SCHEDULE”?

A “SWAT Strategy Schedule” estimates a project's major tasks and time durations from the first SWAT Strategy Meeting until completion of the Construction phase. At the very minimum, a SWAT Strategy Schedule should indicate the start, finish, durations, and appropriate critical-path links for:

- Recommended pre-PD&E activities such as: Planning Studies, Feasibility Studies, ETDM Programming Screens, Alternative Corridor Evaluations (ACE), or many other possibilities. A listing is provided later in this Module. (Consultation with Production Scheduling is desirable, to minimally establish any FDOT Project Schedule and Management (PSM) codes which might apply to pre-PD&E activities.)
- SWAT Kick-off Meeting
- Scope Development, Advertisement, Consultant Selection, Fee Negotiation, and Contract Execution timeframes prior to the PD&E phase
- PD&E start date and phase duration
- Design phase duration (and potential overlap with PD&E phase)
- ROW phase duration (and potential overlap with Design phase)
- Construction phase duration

Districts with more proactive approaches are scheduling selected tasks from the PD&E phase to begin earlier; thus, the PD&E phase is shortened.

As discussed later and as a general rule of thumb: A SWAT Kick-off Meeting is typically scheduled at least 12 months ahead of the PD&E phase to provide adequate time for Consultant Acquisition and Contracting. However, the Kick-off Meeting should be scheduled with a longer lead time if pertinent, project-specific issues and considerations provide cause.

Microsoft Project or Primavera software are sufficient for adequate SWAT Strategy Schedules

An example of a SWAT Strategy Schedule is shown in **Figure 5-2** for a federal EA, followed by a Finding of No Significant Impact (FONSI). Note that four pre-PD&E activities are shown which precede the SWAT Kick-off meeting, followed by a Consultant Procurement and Contracting activity.

The desired SWAT Strategy Schedule is quite simple and requires few tasks; however, task links and start/finish dates are important. Thus, these commonly-used software types provide sufficient information and are simple to use for these micro-schedules.

NOTE: Project scheduling templates were developed by the Office of Environmental Management (OEM) in 2017 and can be used for SWAT Strategy Schedules. The templates utilize MS Project or Primavera software and are available through FDOT's Public website for each federal Class of Action (COA) [Categorical Exclusion (CE), Environmental Assessment (EA), Environmental Impact Statement (EIS)] and for State Environmental Impact Report (SEIR) projects. More information is provided in Module 6. Depending on the project, sufficient information may not be available to pursue these more detailed schedules at the SWAT Strategy Meeting timeframe. Therefore, the SWAT approach does not advocate using these templates until the SWAT Kick-off Meeting.

These schedule templates identify activities necessary to deliver a project through the end of the Design phase. The templates also provide FDOT Project Schedule and Management (PSM) codes for tasks and milestones and assist with the development of PD&E and pre-PD&E schedules by pre-linking an initial “shopping list” of common project tasks. Recognizing that each project is different, templates are merely a tool to assist with schedule development. Ultimately, the District staff must impart judgment to add and remove items as relevant to the project.

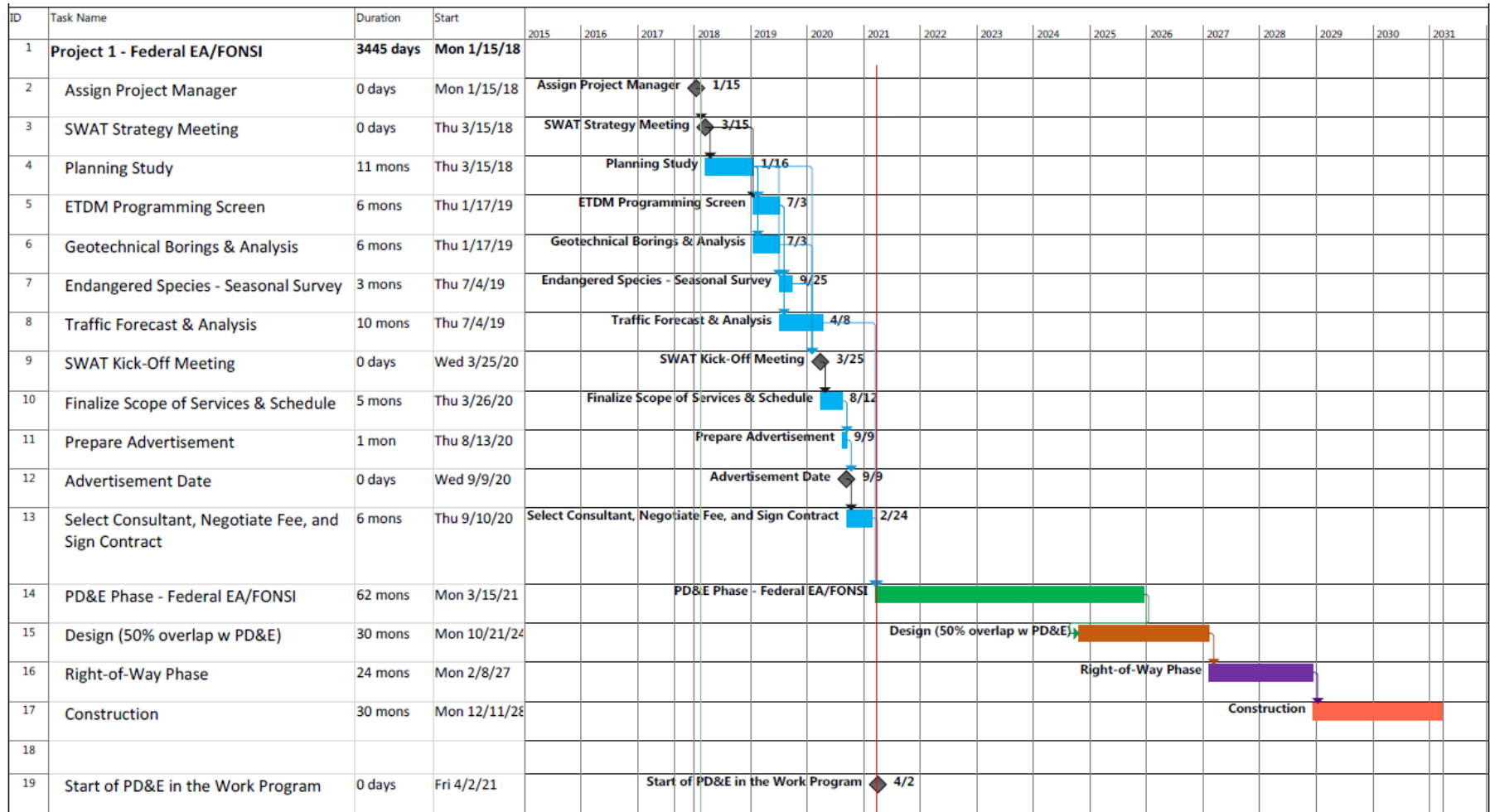


Figure 5-2 Example SWAT Strategy Schedule

MEETING PREPARATION AND INTERNAL COORDINATION

The key to a successful SWAT Strategy Meeting is simple:

- Advanced preparation/coordination that sets-up efficient decision-making;
- Attendance by appropriate, multi-disciplinary staff;
- Active participation and decision-making during the meeting; and
- Post-meeting follow-up.

Since the primary purpose of the meeting is to establish a schedule for key activities for each project prior to the PD&E consultant selection, then the SWAT Team should coordinate internally with various offices. Typical coordination involves gathering project information and developing a reasonable production schedule (SWAT Strategy Schedule). However, other discussions would include appropriate PM assignments, establishing funds for early studies, coordination with Work Program staff, or other needs.

The SWAT Lead should schedule and coordinate preparation for the annual SWAT Strategy Meeting. Various preparation tasks should then be delegated to other SWAT Team members and District staff, as well as Districtwide contract support and in-house consultants. Preparation for a SWAT Strategy Meeting generally occurs in the order listed below.

STEP 1: Identify Projects to Evaluate

- First Priority: Identify projects to evaluate for pre-PD&E activities and then create or update SWAT Strategy Schedules.
 - Compile a list of new PD&E projects appearing on the Tentative Five-Year Work Program (from the District's Work Program Office).
 - Compile a list of existing, upcoming PD&E projects that await a scheduled SWAT Kick-off Meeting.
 - **NOTE:** These projects should have been reviewed during a previous SWAT Strategy Meeting, so it is time for an annual status/schedule review.
- Secondary Priority: Identify any favorable "candidate projects" for the next SWAT Planning Meeting.
 - Coordinate with:
 - Planning staff, SIS Coordinator, MPO Liaison, TSM&O, ETDM Coordinator
 - The SIS Coordinator should identify the next major update of SIS Plan. MPO Liaison should identify next major updates of MPO LRTP. ETDM Coordinator should provide projects' status for ETDM Planning and Programming Screens.
 - Work Program Office to verify any new PD&E projects that were discussed at the previous summer/fall SWAT Planning Meeting.

STEP 2: Review NEW PD&E Projects appearing in the Tentative Work Program

Complete SWAT Scoping Form, Section B (discussed later in this module) for each new PD&E project. The form is available in the **PD&E Manual, Part 1, Chapter 4, Project Development Process**.

NOTE: Section A of the SWAT Scoping Form should have been completed at the SWAT Planning Meeting. If not, then complete both sections.

- Coordinate with:
 - Planning Staff, MPO Liaison, SIS Coordinator, and TSM&O representative to determine the historical context of a project's origin. Identify the often-multiple origins of each project (i.e.: LRTP, SIS Plan, District congestion or safety hot spots, TSM&O Strategic Plan). Identify any previous or ongoing studies. Determine project-specific parameters such as:
 - Project Description with proposed improvement characteristics
 - Project Purpose and Need and Urgency
 - How the project contributes as a component toward a larger transportation system
 - LRTP or Comprehensive Plan consistency
 - Logical termini of mainline and intersecting road improvements
 - Structures and hydraulic crossings
 - Estimated project study area
 - Previous cost estimates with supporting parameters
 - Other pertinent issues
 - Production Scheduling staff, to minimally establish any FDOT Project Schedule and Management (PSM) codes which might apply to pre-PD&E activities.
 - Work Program staff or relevant others to identify existing expectations for the Work Program schedule (after the SWAT Planning Meeting, a Work Program Schedule may have been developed for projects selected for the District's Tentative Work Program list).
 - Environmental Management Office to determine:
 - Special study requirements (such as endangered species surveys)
 - Anticipated permits and their requirements (in some Districts this is the Environmental Permit Coordinator)
 - Mitigation considerations
 - Anticipated state or federal lands acquisition with accompanying considerations for extending the PD&E phase duration

-
- Discipline experts from Roadway, Structures, Drainage, and Utilities Design, plus veteran ROW and Construction representatives who can help determine:
 - Consultant scope for PD&E and Design phases
 - Estimated phase durations based on the project description
 - Potential to overlap various project phases, such as: PD&E, Design, ROW and Utility Relocation, and Construction
 - Project Delivery Methods
 - Gather information on each project from:
 - Corridor Studies
 - Planning Studies
 - Feasibility Studies
 - Scoping Reports
 - Previous PD&E Studies or adjacent project studies that compliment or might otherwise include environmental information for areas of the subject project
 - Traffic forecasts and capacity analyses
 - Utilities and easements near the project, particularly Florida Gas Transmission (FGT)
 - Previous cost estimates and assumptions
 - Road and bridge inspection/condition reports, FDOT Geographic Information System (GIS) Enterprise, or other GIS platforms
 - Information gleaned from MADDOG or Project Suite data
 - ETDM Environmental Screening Tool (EST) / Area of Interest (AOI) tool if no ETDM Summary Report is available
 - Create a new, draft SWAT Strategy Schedule prior to the SWAT Strategy Meeting (discussed later in this module).
 - Revisit the Work Program Schedule (discussed in Module 4 and later in this module) with Work Program staff to ensure that the Five-Year Work Program reflects a true and reasonable schedule, given specific project parameters.
 - Create a project file and populate with project information, SWAT Strategy Schedule, and other project decisions.

STEP 3: Update existing PD&E Projects in the Work Program that await Scheduled SWAT Kick-off Meetings

- Revisit each upcoming PD&E project in the Work Program that still awaits a SWAT Kick-off-Meeting
 - **NOTE:** Existing projects were already reviewed at prior-year SWAT Strategy Meetings
- Coordinate with appropriate persons to obtain updates to the information gathered in Step 2, above
- Update the SWAT Scoping Form
- Review and update each project's existing SWAT Strategy Schedule to reflect any new findings
- Coordinate with Work Program staff to ensure that a reasonable project delivery schedule appears in the Five-Year Work Program and the State Transportation Improvement Program (STIP)

STEP 4: Prepare for this year's upcoming SWAT Planning Meeting

Consider new, “candidate projects” from MPO/TPO/TPA LRTP Updates

Identify new “candidate projects” from updates of local MPO/TPO/TPA LRTP(s), County Comprehensive Plan(s) [Comprehensive Transportation Plans (CTP)], SIS Plan, and TSM&O Strategic Plan. Determine if an ETDM Planning Screen is needed. The purpose is to identify projects eligible for ETDM Screening ahead of the SWAT Planning Meeting so that relevant programming information is available for use during the project selection process for the next Work Program Development Cycle.

Coordination with the MPO Liaison and Planning staff is recommended to review updates to the local MPO/TPO/TPA LRTP(s) or County Comprehensive Plan(s). The District and Central Office SIS Coordinator is also an available resource for the SIS Plan.

Note: For a project to be screened through the ETDM process, the project should meet the requirements for screening within the **ETDM Manual, Chapter 3**. However, non-qualifying projects may be screened to support issue identification. The SWAT Team should work with the ETDM Coordinator to develop a project screening release schedule.

COMPLETION OF THE SWAT SCOPING FORM, SECTION B

Module 4 contains the complete SWAT Scoping Form. **Section B** of the form includes six parts that should all be populated prior to the SWAT Strategy Meeting for all new PD&E projects. It is important to provide preliminary recommendations based on the latest available information from planning studies and ETDM Summary Reports. For existing projects that already have a SWAT Scoping Form populated from a previous SWAT Strategy Meeting, the form should be updated based on results from pre-PD&E activities and changes in funding. The SWAT Scoping Form should be updated again after decisions are made during the SWAT Strategy Meeting. The **SWAT Scoping Form, Section B** is included in **FDOT's PD&E Manual, Part 1, Chapter 4, Project Development Process**.

The following instructions should be considered when completing each part within Section B of the SWAT Scoping Form.

ITEM 1 Potential Project Impacts to Environmental Resources

Item 1 of **Section B** identifies various environmental resources which may be impacted by a proposed transportation action. Within the SWAT Scoping Form, a determination is made whether the potential impacts of a project are substantial by responding with one of the following: No Involvement, Enhanced (i.e., improved over present condition), No, or Yes. This section should be answered in consultation with Subject Matter Experts (SME), and a very brief explanation can be included for the basis of the opinion rendered. Strategic project decisions will be made, judged on: the type or resource and severity of impact, studies being recommended, and potential permits. The following sources of information should be used when completing this item:

- ETDM Programming Screen Summary Report
 - Field review or "virtual" field review
 - Consultation with SMEs from the respective District Planning and Environment Management Office
 - Previous planning activities
 - FDOT GIS Enterprise and/or virtual field review with Google Maps or similar applications
- NOTE:** Project history along the corridor may be obtained from this tool.
- Local government plan

ITEM 2 Activities to be Advanced Prior to PD&E

The goal of this preparatory step is to determine which tasks can expedite the project by helping to jumpstart beginning the PD&E phase or otherwise reduce phase duration. Key, critical issues may need to be vetted in order to expedite the project. Prior to the SWAT Strategy Meeting, the person completing the SWAT Scoping Form should

1.) list potential pre-PD&E activities based on a review of previous planning efforts and ETDM screening results, and 2.) then determine which critical activities might be advanced prior to the PD&E phase. A "shopping list" of activities that may be considered for advancement are presented in **Table 5-1**. The Scoping Form's initial list of

activities can be reviewed and updated during the SWAT Strategy Meeting, considering schedule and funding constraints. The Planning and Environmental

Management Office should be consulted to determine the appropriateness of activities and the use of District staff or consultants.

Table 5-1 Potential pre-PD&E Activities to Consider (list not all-inclusive)	
ACTIVITY	REASONS TO CONSIDER PRIOR TO PD&E PHASE
Public Involvement	
Public Involvement Plan (PIP) and Outreach	<ul style="list-style-type: none"> • Well defined build alternative(s) • Projects with low potential for controversy and social impacts • Planning phase had significant public involvement activities and has support from the community
Alternatives Workshop	<ul style="list-style-type: none"> • Only recommended for projects with alternatives that are well defined with engineering, cost, and environmental data and analysis • Not recommended for complex design projects or projects with substantial environmental impacts • Projects with low potential for controversy and social impacts
Engineering	
Planning/Feasibility Study/Master Plan	<ul style="list-style-type: none"> • Project purpose and need and/or alternatives need to be defined
Alternatives Corridor Evaluation (ACE)	<ul style="list-style-type: none"> • Typically for major bypasses and projects with new alignments, major realignments • Class of Action (COA) is typically an Environmental Impact Statement (EIS) or potentially an Environmental Assessment (EA)
Interchange Access Requests	<ul style="list-style-type: none"> • Alternatives are well defined and can be analyzed from a traffic analysis perspective • Depending on the impacts to the interstate facility, these requests could take years and delay decisions for the recommended alternative
Traffic (Data Collection, Modeling, Forecasting, and Analysis)	<ul style="list-style-type: none"> • Build alternatives and corridors are well defined and traffic is a critical task • Traffic Study methodology is defined • Existing traffic data to calibrate the travel demand modal • Can be completed as part of a planning study, feasibility analysis, masterplan, and Alternatives Corridor Evaluation
Safety (Data Collection and Analysis)	<ul style="list-style-type: none"> • Consider advancing this if one of the project's primary purpose and needs is based on safety, depending on the timing of the data
Photogrammetry Products & Design Surveys	<ul style="list-style-type: none"> • District is comfortable to proceed with alternative design (which would not be pre-decisional or limit the range of reasonable alternatives) • Low design complexity; potentially one build alternative • Projects with a minimal number of alternatives • Consider widening within existing ROW or with minimal ROW impact
Preliminary Geotechnical Investigation	<ul style="list-style-type: none"> • Low design complexity; potentially one build alternative • Projects with a minimal number of alternatives • Consider widening within existing ROW or with minimal ROW impacts

Table 5-1 Potential pre-PD&E Activities to Consider (list not all-inclusive)	
ACTIVITY	REASONS TO CONSIDER PRIOR TO PD&E PHASE
Environment (need to understand timing and season of surveys)	
Efficient Transportation Decision Making (ETDM) Screening Events	<ul style="list-style-type: none"> • ETDM Planning Screen • ETDM Programming Screen
Wetlands, Species Surveys, Cultural Resources, and Contamination Issues	<ul style="list-style-type: none"> • Consider timing and the seasonal availability for surveys • Perform jurisdictional wetland determinations • Complete listed species surveys, especially for long-lead (preparation and duration) species surveys • Development of Methodology for the Cultural Resources Assessment Survey (CRAS) • Development of Contamination Assessment
Permits	<ul style="list-style-type: none"> • Identified permits in ETDM Planning of Programming Screen which can initiate development
On-Site Mitigation Planning	<ul style="list-style-type: none"> • Early impact analysis shows a need for mitigation, and the project location offers site potential
Advanced Coordination/Studies with Federal Land Owners or Tribes	<ul style="list-style-type: none"> • Acquiring federal lands or potentially affecting tribal resources can often require substantial analysis that includes additional surveys and studies to meet the managing agency's requirements • Coordination often results in documentation/reports containing habitat and resource impact analysis, with subsequent coordination and mitigation negotiation
Other Issues	<ul style="list-style-type: none"> • Need early analysis of critical issues to assist with advancing schedule.

ITEM 3 Level of Design Efforts

One SWAT goal is to reduce the overall pre-construction duration and costs by overlapping the PD&E and Design phases. The SWAT Team should determine whether any portion of the Design phase can run concurrent with the PD&E phase, as well as the % level of design effort anticipated. Once a level of design effort is decided, then coordination with Work Program staff should follow to ensure that funding is available for subsequent phases.

At a minimum, engineering design activities for a PD&E Study are performed to a level of detail that is suitable to develop viable alternatives and then analyze and compare the effects of each alternative on the social, natural, cultural, and physical environment. Certain projects can, however, advance design beyond this purpose to move forward with more detailed, final design activities. The level of design detail required for a PD&E

Study is project-specific. Depending on the context and schedule of the project being studied under the **National Environmental Policy Act (NEPA)** process, the PD&E phase and preliminary Design phase can begin concurrently, provided that the preliminary Design phase activities comply with **23 Code of Federal Regulations (CFR) Part 771** and **40 CFR §§ 1500-1508**. Essentially, preliminary Design phase activities must not limit the choice of reasonable alternatives [**40 CFR §1506.1(a) and (b)**]. State-funded projects offer more flexibility to advance a higher level of Design phase activities during the PD&E phase.

Project Managers have a choice when developing consultant procurement services for PD&E and/or Design phases. Services can be contracted to complete the two phases concurrently, or the manager may consider overlapping the Design phase with part of

the PD&E phase. This expedited schedule decision is one objective of the SWAT process. Resultantly, the SWAT Team should be familiar with and consider the risks associated with overlapping preliminary Design phase activities with the PD&E phase. To mitigate risk, it is recommended that a PM should be assigned to work closely with the SWAT Team before deciding to overlap the Design phase with the PD&E phase. This decision may wait until the second or third-year SWAT Strategy Meeting for a particular project - to ensure the consultant procurement process is vetted for issues that may prevent the project from moving forward. For more information about the overlapping of phases, review the **PD&E Manual Part 1, Chapter 4, Project Development Process**.

Several factors to consider when considering whether to overlap the PD&E and Design phases include:

- Federal projects cannot advance beyond 60% design without further coordination with the Lead Federal Agency, or Location and Design Concept Acceptance (LDCA).
- State projects can typically overlap 100% of the Design with the PD&E Phase.
- In general, all PD&E phase and Design phase activities and accomplishments are considered "at risk" until approved Environmental Documents establish a selected alternative. Even then, risk remains until permits are obtained and pertinent legal actions are resolved.
- The Design phase should not begin until the project team is confident that a reasonable alternative is (or can be) identified and is not likely to change substantially in its location or concept.
- For PD&E projects with one build alternative, it is plausible to consider completing a Design phase concurrent with the PD&E Study. (Example: certain bridge replacement projects.)
- For PD&E projects with multiple build alternatives, the District must consider its comfort level with a build alternative that appears favorable in terms of justification, public support, and low environmental impacts. The District might then consider advancing design activities "at risk." It should be noted that multiple alternatives are not legally required to be studied for SFO projects, unless specific state or federal laws and/or regulations require avoidance considerations, and/or federal permits require alternatives analysis, or other needs for avoidance measures become apparent.
- For federal projects: preliminary design activities may be prohibited if it is determined that such activity will materially affect the objective consideration of alternatives or cause a controversial or adverse environmental impact.

ITEM 4 SWAT Strategy Schedules

Create or update SWAT Strategy Schedules prior to the SWAT Strategy Meeting:

- The SWAT Team should create a new SWAT Strategy Schedule for each new project appearing in the Tentative Five-Year Work Program.
- For projects with previous SWAT Strategy Meetings, the assigned PMs should provide updated SWAT Strategy Schedules that reflect the status of ongoing studies and which adjust phase durations, links, and overlaps that sufficiently address all-discovered project issues.
- Proposed SWAT Strategy Schedules should then be cross-checked against any existing Work Program Schedules, expectations, or constraints – to determine consistency.

Schedules should reflect the currently-anticipated funding source and type of Environmental Document, remaining pre-PD&E activities which are proposed, anticipated durations for Consultant Acquisition and Contracting, proposed project delivery method, and degree of Design phase overlap.

To the extent possible, the SWAT Strategy Schedule should also anticipate any major task expectations for the PD&E phase due to specific project issues/parameters (For example: Acquiring federal lands often requires additional studies and alternatives analysis which can extend a PD&E phase

duration). The schedule should indicate the Design phase duration and overlap with the PD&E phase. Similarly, the ROW phase may or may not overlap slightly with the Design phase. If significant utility relocation is anticipated, this task should be considered – typically overlapping both the ROW and Construction phases. Finally, construction staff can be consulted to help estimate the duration of the Construction phase. As an additional consideration, any projects with Advanced Production Potential (APP) funding might consider how to shorten the critical path and start the PD&E phase at an earlier time.

Consider the following when creating or updating a SWAT Strategy Schedule:

- SWAT Kick-off Meeting
- Advance Notification
- Certain pre-PD&E activities which will either help to define scope for PD&E services or save time in the PD&E phase by pre-emptively completing the task. Each project will have its own specific issues.
- SWAT Strategy Schedules are not detailed, and are not intended to foresee all potential activities in each major project phase (as shown in **Figure 5-1**). Therefore, preliminary funding efforts should focus on designated pre-PD&E activities until such time as a more detailed, PD&E Schedule is developed at the SWAT Kick-off Meeting (see Module 6).
- Consider scheduling pre-PD&E activities such as those listed in **Table 5-2**. Commonly-selected pre-PD&E activities are those which ensure that the PD&E Phase is “Ready to Go,” and can quickly move into alternatives development and analysis. These might include:
 - Appropriate mapping and aerial photography products
 - Studies and Concepts which provide a solid Purpose and Need and specific project termini. Traffic models, forecasts, and analysis are one such example.
 - Credible studies and information that provide advanced work toward alternative development, analysis, and elimination. Caution must be exercised to ensure these efforts meet federal and state Planning and Environmental Linkage (PEL) requirements. Examples include:
 - ETDM screenings
 - Geotechnical borings and analysis (often for bridges)
 - Certain agency, tribe, and public coordination
- Pre-schedule reasonable time to procure consultant services for the PD&E Study and possibly the Design phase.

- Refinement of project scope, termini, and limits. This includes consideration of the proposed project's interaction with intersecting or adjacent transportation modes – and any resulting scope increase.
 - Preparation of PD&E and Design Scope of Services
 - Advertisement to Consultants for PD&E (and Design) Contract
 - Consultant Selection
 - Fee Negotiation and Contract Execution
 - Start of PD&E Study
- For various phases, work with District Subject Matter Experts (SME) to:
 - Estimate duration of the PD&E phase, recognizing the anticipated Environmental Document type and any laws, permits, or special land acquisitions that will affect phase duration.
 - Estimate duration of the Design phase, and degree of overlap with the PD&E phase.
 - Estimate duration of the ROW phase and its degree of overlap with the Design phase.
 - If utility relocation or mitigation will play large roles in the project, an attempt to estimate their place in the project schedule is helpful.
 - Estimate duration of the Construction phase while considering overall project attributes such as: length, type of facility, intersections and interchanges, special needs for traffic control phasing, number and length and type of structures, work on railroads or other transportation modes, and a host of other issues.

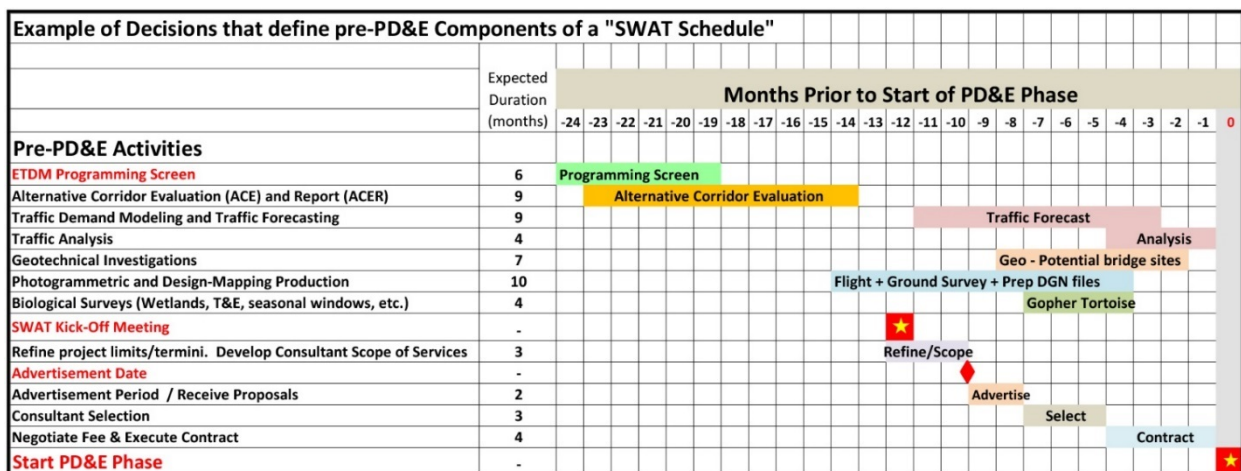


Figure 5-3 Component examples to build a SWAT Strategy Schedule

Several scheduling “rules of thumb” are:

- The SWAT Strategy Schedule should extend from the Strategy Meeting until estimated construction completion. **NOTE:** In early stages - even veteran practitioners may struggle to accurately estimate ROW and construction durations. However, project-level staff are best-suited to make this early determination, in consultation with ROW and construction staff. Work Program staff rely on the professional judgement of those closer to the project, so that schedules shown in the Five-Year Work Program and STIP reflect accurate and deliverable milestone dates.
- Use various SMEs to help establish schedules. Their experience will help to generate a more realistic schedule that easily justifies the additional coordination time.
- Assign a Project Manager PSM activity at least 3 months prior to a SWAT Strategy Meeting, so that the PM is alerted and actively-engaged with preparation.
- SWAT Kick-off Meetings should be prescheduled at least 12 months prior to the start of the PD&E phase. **NOTE:** Each project is different, so specific project tasks may dictate a longer lead time.

Double-Check the Five-Year Work Program Schedule

As the SWAT Team develops a reasonable project delivery schedule, the next logical step is to ensure that the Five-Year Work Program schedule is consistent with the practical expectations established by experienced professionals.

- For new projects appearing in the Five-Year Work Program, the first SWAT Strategy Meeting should produce a SWAT Strategy Schedule that, in the best case, becomes the basis of a Work Program schedule, and the basis for funding and scheduling future project phases. As always, changing priorities and/or availability of funding may cause funding inconsistencies downline.
- For existing projects in the Five-Year Work Program (which likely have existing SWAT Strategy Schedules), it is probable that a Work Program schedule already exists. Therefore, it is a pertinent pre-meeting step to compare the updated SWAT Strategy Schedule to the existing Work Program schedule, and then point out any concerns or inconsistencies to decision-makers at the SWAT Strategy Meeting. Based on decisions rendered, a post-meeting activity may include coordination with Work Program staff to adjust schedules and funding.

Questions to consider about the Work Program schedule:

- Do the ROW or Construction Let delivery dates shown in MADDOG (or other listings) match the SWAT Strategy Schedule? Note any differences for discussion.
- Does the start of the PD&E phase match? Should the PD&E phase start sooner - in order to deliver on established ROW or Construction phase start dates? Conversely, is the PD&E phase starting too soon for a delayed ROW phase or Construction phase such that the Environmental Documentation will age and then require a Re-evaluation?
- Do funding projections in the Work Program closely match the current project cost estimate? Are utility and mitigation costs considered?

A Typical Work Program Schedule												
Project Phase	Funding Schedule by Fiscal Year (in Millions)											Total
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Pre-PD&E Activities	0.6											0.6
PD&E Phase		1.6										1.6
Design Phase + Permit Activity			1.0					0.2				1.2
ROW Phase						32.6						32.6
Utility Relocation							8					8
Mitigation								4				4
Construction Phase									66			66
TOTAL COST											114 Million	

Figure 5-4 A Typical Work Program Schedule

ITEM 5 Updated Project Delivery Method

In this step, the preparer should re-evaluate project delivery decisions from any previous SWAT Strategy Meeting and determine if any changes have occurred. There are several project delivery methods that can be utilized, such as the traditional Design-Bid-Build method, Design-Build, and Public-Private Partnership (P3) Concession Agreements. The choice of the delivery method depends on a variety of factors, such as context and urgency of the project, status of the project, project schedule, risk factors, funding availability, level of complexity, and other project-specific factors.

During the SWAT Strategy Meeting, the SWAT Team should consider the appropriate project delivery method that best matches the specific project. Often this decision can be deferred to the second or third-year SWAT Strategy Meeting for a particular project, when more information is available.

Several factors should be considered when recommending a project delivery method other than the conventional Design-Bid-Build process. These include:

- Is this a high priority project with low design complexity and minimal impacts (potential for APP funding)?
- Is there a need to accelerate the ROW phase or the Construction phase?
- Is funding available for future phases?
- Are environmental permits in hand or readily obtainable? Do any anticipated permits present risk concerns that could substantially change the design?

Additional guidance is provided in the **FDOT PD&E Manual, Part 1, Chapter 4, Project Development Process**.

ITEM 6 Updated Risk Assumptions and Constraints

Finally, the SWAT Scoping Form provides a preliminary assessment of identified risks and constraints. This assessment builds upon the risks and constraints that were identified and listed on the SWAT Scoping Form from additional studies and previous SWAT Strategy Meetings. The PM should update

the list based on what has been learned about the project to date, and present this at the SWAT Strategy Meeting. The final list may prompt decisions that impact the SWAT Strategy Schedule.

Risk management is most effective when performed earlier in a project, with

continuous assessment throughout the project life. Risk management is the systematic process of identifying, analyzing, planning for, responding to, and monitoring project risk. It involves processes, tools, and techniques that help to minimize the probability and consequences of adverse events by developing and following a risk management plan. At the Strategy Meeting stage of the project, it may only be feasible to preliminarily identify potential risks due to environmental resources, funding, ROW impacts, and public involvement.

Risk assumptions and constraints identified during the SWAT Strategy Meeting may be utilized as a starting point for a formal risk analysis during the PD&E Study. This is typically completed for projects that are greater than \$50 million in cost. Additional information about risk management is provided in **Part 1, Chapter 19 of FDOT's Project Management Handbook**. Some considerations for identifying potential risks are presented in **Table 5-2**.

Table 5-2 Consideration for Identifying Potential Risks		
ISSUE	POTENTIAL RISK	POTENTIAL MITIGATION STRATEGY
Potential for public controversy or environmental justice issues may require early and substantial public involvement efforts	Substantial controversy could impact the Class of Action (COA) on federal projects and cause schedule delays to accommodate additional studies and meetings, etc.	Start outreach efforts during pre-Project Development and Environment (PD&E). Establish advisory groups or regular coordination with project stakeholders
Potential for permitting agency resource impacts such as canal, bridge over navigable waters (USCG), and wetland impacts (USACE) and State agencies (FDEP) and Water Management Districts (WMDs).	<ul style="list-style-type: none"> Section 404 and Section 408 process is lengthy Issues requiring special permit involvement such as a Section 14 of the Rivers and Harbors Act of 1899 and codified in 33 USC 408 (Commonly referred to as "Section 408") to grant permission for alteration or occupation or use of a USACE Civil Works Project if determination is considered a significant Impact. Modifications constructed with Federal Funds which fall under Section 408 Determination as Significant can require two-year process and approval to move forward. 	Start permitting process as part of pre-PD&E or PD&E Study dependent on schedule constraints. The determination is typically commenced through the Water Management Districts (WMDs) so early involvement is key.

Table 5-2 Consideration for Identifying Potential Risks

ISSUE	POTENTIAL RISK	POTENTIAL MITIGATION STRATEGY
<p>Issues requiring consultation [Section 7 of Endangered Species Act (ESA), Section 106 of the National Historical Preservation Act (NHPA), Section 4(f) of the U.S. Department of Transportation (USDOT Act), and Magnuson-Stevens Act]</p>	<p>Consultation (and subsequent mitigation development and negotiation) can extend project durations by up to 2 years. The expiration of surveys should also be considered.</p>	<ul style="list-style-type: none"> • Consider advancing methodology as a pre- PD&E effort (e.g., Research Design for Cultural issues). • Take the ETDM screening one step further. During Pre-PD&E, conduct analysis to review substantial issues in more detail and review options that can be considered during the PD&E (are there ways to avoid resources or minimize impacts?)
<p>Substantial potential for impacts to major utilities such as natural gas and high voltage transmission lines which require their own National Environmental Policy Act (NEPA) Process.</p>	<ul style="list-style-type: none"> • Relocation of major utilities can substantially increase project costs (if compensable interests apply) and can delay the schedule. • Relocation of Florida Gas Transmission (FGT) facilities requires a higher level of analysis during PD&E. If a line must be relocated there is a potential need to obtain replacement right of way for the facility, and substantially increase project costs and lengthen delivery timeframes. Additionally, these types of facilities require their own NEPA process through the Federal Energy Regulatory Commission (FERC). Additionally, current agreement with Florida's Department of Transportation (FDOT) requires the development of 90% plans in the vicinity of their facilities to obtain final confirmation of potential impacts on existing facilities. 	<ul style="list-style-type: none"> • During pre-PD&E, conduct analysis to review substantial issues in more detail and review options that can be considered during the PD&E (are there ways to avoid or minimize impacts?). • Work with Central Office in obtaining upfront agreement with utilities for pre-planning reimbursement costs and schedule of needed determinations.
<p>Substantial potential for impacts to railroad facilities</p>	<ul style="list-style-type: none"> • Schedule delays 	<p>Start coordination prior to pre-PD&E to appropriately scope the work</p>

Table 5-2 Consideration for Identifying Potential Risks

ISSUE	POTENTIAL RISK	POTENTIAL MITIGATION STRATEGY
<p>Procurements of projects which run concurrently with the NEPA process (i.e. P3 or other alternative delivery methods): There is a risk of scope changes, schedule delays, and other procurement uncertainties. Specifically, until the NEPA process is completed, the full scope of work and final RFP issuance dates are not known.</p>	<p>Until completion of the NEPA process and final scope definition, it may be difficult to determine the level of public funding needed to create a financially viable project – which would have its own impact on procurement and competition.</p>	<p>Early Screening of projects using a Cost Risk Approach identifying pre-PD&E Study that can be conducted to reduce potential risks and define scopes with reasonable expectancy of NEPA outcome.</p>
<p>Substantial potential for Right of Way (ROW) acquisitions and relocations</p>	<p>This could be tied into public controversy.</p>	<p>Start outreach efforts during pre-PD&E.</p>
<p>Substantial traffic generating developments</p>	<p>New developments are approved during PD&E Study and could affect traffic projections requiring re-work or project delays</p>	<p>Coordinate with county/city/MPO early. Establish optional services to evaluate traffic under a separate scenario during PD&E. FDOT could help local agencies facilitate their analysis of planned land use changes and its impact to FDOT facilities.</p>
<p>Introduction of unique concepts and project configurations such as unconventional intersections and/or interchange designs [i.e. Diverging Diamond Interchanges(DDI)].</p>	<p>Substantial controversy could impact the COA on federal projects. Uncertainty by local permitting agencies may cause potential delays or refusals to move forward with concepts.</p>	<p>Start outreach efforts during pre-PD&E. Establish contact with local government. Consider advisory groups or regular coordination with project stakeholders and develop educational plan to garner acceptance. Evaluate the potential to obtain Memorandum of Understandings (MOU)'s that support concepts - to avoid a potential need to change in latter phases.</p>

CONDUCTING THE MEETING

A SWAT Strategy Meeting is most efficient and effective when staff has prepared relevant information and coherently presents the project to decision-makers. Staff should present the project description and purpose and need, describe anticipated issues, and then offer a proposed SWAT Strategy Schedule that contains designated pre-PD&E activities. Then discussion can ensue. This approach saves time by quickly briefing all meeting participants on relevant project information, stimulating dynamic conversation, and hopefully prompting on-the-spot decisions.

NOTE: Many subject matter experts attending the meeting will already have been engaged during preparation; thus, the meeting should likely not be their first glimpse of a project. SWAT Scoping Forms logically present the most-relevant project information, as well as staff recommendations on pre-PD&E activities, Design phase parameters, project delivery method, and SWAT Strategy Schedule. These recommendations further drive any re-visitation of Work Program schedules - for projects new and old.

To enhance meetings, Districts might consider a combination of screen projections and hardcopy handouts. For example, a staff person assigned to a particular project may set up a combined presentation that incorporates:

- PowerPoint slides that show:
 - Project location map and aerial depictions
 - Environmental features
 - Proposed SWAT Strategy Schedule
 - Any existing Work Program schedule, expectations, or constraints
 - Other relevant information
- Hardcopy handouts that include:
 - SWAT Scoping Form, Sections A and B
 - SWAT Strategy Schedule
 - Work Program schedule
- PowerPoint or hardcopy descriptions or depictions of new "candidate projects" for the Work Program which recently appeared in an updated SIS Plan, TSM&O Strategic Plan, LRTP, TIP, County Comprehensive Plan, or a specific District project needs list – which look favorable in terms of potential project selection.
 - Staff may present any recommendations to study certain projects in advance of the next SWAT Planning Meeting. An ETDM Planning Screen is a common choice.

The District SWAT Team and other attendees should discuss each upcoming project to confirm schedule activities, recommend additional studies, and resolve scheduling issues with the Work Program. The outcome from the SWAT Strategy meeting is the following:

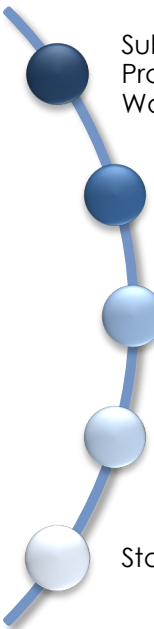
- A PM assumes responsibility for each new project in the Work Program

-
- New SWAT Strategy Schedules - for projects recently selected for the Work Program
 - Revised or verified SWAT Strategy Schedules – for existing projects in the Work Program
 - Resulting changes to Work Program Schedules, as applicable – which may change the start date of the PD&E phase if funding is identified
 - A list of pre-PD&E activities for each project
 - Funding requests, as appropriate to support execution of scheduled pre-PD&E tasks
 - Upcoming SWAT Kick-off Meetings are scheduled
 - Initiation of a project file for new projects
 - List of favorable, “candidate projects” that arose from review of LRTPs, Comprehensive Plans, SIS Plan, TSM&O Strategic Plan, and other plans
 - List of upcoming ETDM Screenings and their scheduled timeframes

AGENDA CONSIDERATIONS

- Identify NEW PROJECTS in the Tentative Work Plan. Verify that the Work Program Schedule reflects an appropriate start date for the PD&E phase. Review staff recommendations for pre-PD&E activities and the draft SWAT Strategy Schedule. – All Attendees
- Review EXISTING projects in the Tentative Work Plan. Verify that the Work Program Schedule reflects an appropriate start date for the PD&E phase. Review staff recommendations for pre-PD&E activities and any recommended changes to the SWAT Strategy Schedule. Agree on a new SWAT Strategy Schedule if none exists. – All Attendees
- Summarize major updates to MPO/TPO/TPA LRTPs and TIPs, County Comprehensive Plans, the SIS Plan, and the TSM&O Strategic Plan. Identify any new projects that look favorable for potential selection at the upcoming Work Program Development Cycle. – All Attendees
- Identify and pre-schedule any upcoming SWAT Kick-off Meetings, and consider preparation (usually this means ETDM screenings).
- Review the list of upcoming ETDM Programming Screens or Planning Screens.
- Review the list of Project Management Teams for each upcoming project.

POST-MEETING ACTION ITEMS

- 
- Submit a list of newly-created or revised SWAT Strategy Schedules to the District Production Project Scheduler, who should likely attend the meeting. Coordinate with Work Program staff.
 - Pre-schedule and monitor upcoming SWAT Kick-off Meetings and pre-schedule/fund the start of pertinent pre-PD&E activities. Coordinate as appropriate with SWAT Team, Work Program Office, and others.
 - Conduct proposed ETDM Planning Screens for projects identified by the review of updated MPO/TPO LRTPs and/or SIS Plan.
 - Arrange funding and initiation for upcoming pre-PD&E activities.
 - Start a project file for new projects.

NOTES:

END OF MODULE 5

MODULE 6

SWAT KICK-OFF MEETING

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SWAT Process Components

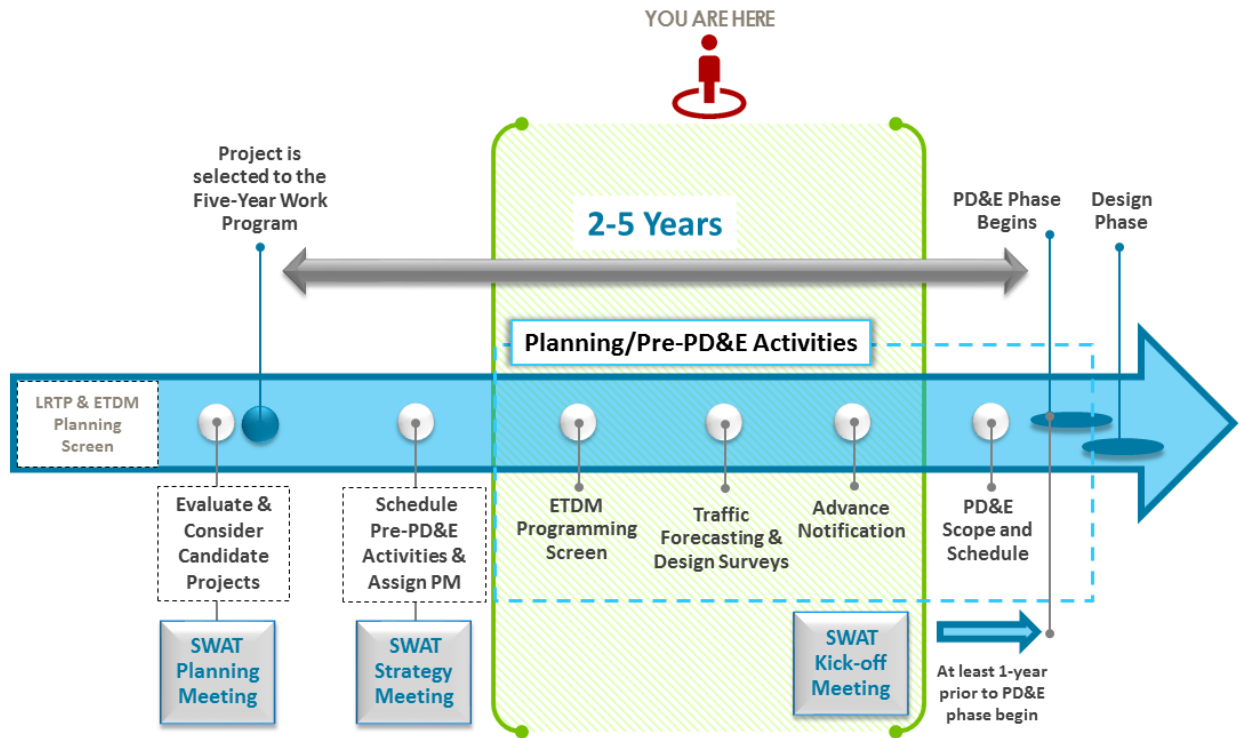


Figure 6-1 SWAT Process Components

INTRODUCTION

The Statewide Acceleration Transformation (SWAT) Kick-off Meeting reviews project information to support scope development for the upcoming Project Development and Environment (PD&E) phase. The SWAT Kick-off Meeting typically concentrates on one individual project; however, multiple projects can be reviewed in one meeting, if desired. By this milestone of the SWAT Process, the Efficient Transportation Decision Making (ETDM) Programming Screen should be completed, as well as any planning studies that were identified during the SWAT Strategy Meeting.

The main goals of the SWAT Kick-off Meeting are to review planning phase products, identify remaining pre-PD&E activities, establish the framework to develop the PD&E Scope of Services, develop a detailed Pre-PD&E schedule, and determine/update the project delivery method and risk assumptions.

TIMEFRAME AND FREQUENCY

The SWAT Kick-off Meeting should be held a minimum of one year before the PD&E start date in the Work Program. In some cases, the meeting should be held earlier to accommodate any project-specific tasks that might otherwise delay the start of PD&E phase.

PRODUCTS/RESULTS

1. Establish a framework to develop PD&E Scope of Services.
2. Determine remaining pre-PD&E activities to advanced prior to the PD&E phase.

NOTE: Focus on activities that will shorten the project duration of the PD&E phase or otherwise jumpstart the PD&E Study.

3. Develop a draft PD&E Schedule which is tailored to the project, and which extends to the start of Right-of-Way Phase. Consider any possibilities for overlapping phases.
4. Decide on the appropriate level of design to complete during the PD&E phase.
5. Decide on a procurement strategy (preferably PD&E and Design combined) for advertisement. Establish the appropriate project management structure.
6. Recommend a potential project delivery method [traditional Design-Bid-Build, Design-Build (DB), Public-Private Partnership (P3)].

MEETING ATTENDEES

Attendees should include the assigned Project Manager(s) (PM), District's SWAT Team, District Production Project Scheduler, as well as staff representatives for other functional areas (i.e., Planning, Environment, Design (Roadway, Drainage, Structures, Utilities), ROW, Construction, or others) based on the project under discussion.

NOTE: A comprehensive list of potential meeting participants is shown in Module 5.

The assigned Project Manager prepares a meeting presentation and handouts, briefs participants, and then actively collaborates with meeting attendees to make good decisions.

MEETING PREPARATION AND COORDINATION

The Project Manager should initiate coordination and use available resources to actively prepare for the meeting. Typical resources are other District staff as well as Districtwide contract support and in-house consultants. Meeting preparation typically involves collecting new data, reviewing the latest version of the SWAT Scoping Form, populating the SWAT Kick-off PD&E Scope of Services Tool, developing a draft PD&E schedule, and preparing a project brief.

Preparation for the SWAT Kick-off Meeting may include the following steps:

- 1. Gather and review project documents completed to date**
 - Project related documents may include any of the following:
 - Latest SWAT Scoping Form
 - ETDM Programming Screen

-
- Planning products completed to date – consider information that may be adopted into the PD&E phase.
 - SWAT Strategy Schedule
 - Aerial and GIS graphics
2. **Review the latest version of the SWAT Scoping Form**, recognizing that new information may be available (discussed later in this module)
 3. **Populate the SWAT Kick-off PD&E Scope of Services Tool** (discussed later in this module)
 - List the planning products completed (or ongoing) to date
 - Identify the needed PD&E Scope of Services Activities
 - Consider the % level of design effort (and degree of overlap) during the PD&E phase) using the SWAT Scoping Form, Section B
 - Identify potential PD&E activities to advance prior to PD&E

NOTE: These are activities which will expedite the project by shortening the duration of the PD&E phase or otherwise helping to jumpstart PD&E studies by providing needed information.
 4. **Produce a draft PD&E Schedule** which considers activities in the PD&E and Design Phases (with PSM codes)
 - Utilize FDOT's Environmental Document Schedule Templates which are presently located on the SWEPT website. Estimate when Right-of-Way and Construction Phases might occur. Make best effort to optimize schedule.
 5. **Consider procurement options and project management**
 - Procurement strategy and contractual methods with overlapping phases
 - Project Management Structure
 6. **Prepare a SWAT Kick-off Meeting Agenda and Presentation**
 - Refer to "Conducting the Meeting" section within this module

REVIEW THE SWAT SCOPING FORM

The PM should review the **SWAT Scoping Form** prior to populating the SWAT Kick-off PD&E Scope of Service Tool. Due to the availability of more up-to-date information, the following should be considered when reviewing the **SWAT Scoping Form**.

Section A of the SWAT Scoping Form

The ETDM Programming Screen and planning products may provide new and different information for this section of the form including the project description, Purpose and Need, proposed improvements, project termini, anticipated study area, funding source, and potential Class of Action (COA).

Section B of the SWAT Scoping Form

Section B of the **SWAT Scoping Form** provides information to support decisions on the SWAT Kick-off PD&E Scope of Services Tool, as well as discussion during the SWAT Kick-off Meeting. As with Section A, more up-to-date information may be available. The following items should be considered, corresponding to the actual item numbers of the **SWAT Scoping Form, Section B**:

1. Potential Project Impacts to Environmental Resources

- ETDM Programming screen will provide the latest information for this topic
- Check whether an Advance Notification package was distributed

2. Activities to be Advanced Prior to PD&E Phase

- What is the status of these activities? If they are completed or ongoing, these should be listed in the SWAT Kick-off PD&E Scope of Services Tool.
- Activities that have not been initiated, should be considered as a potential pre-PD&E activity on the SWAT Kick-off PD&E Scope of Services Tool. If the PM judges that initiating a specific activity prior to the start of PD&E can either reduce the duration of the PD&E Phase, or otherwise help to “jumpstart” the phase with immediate actions, then the PM should consider designating the activity for pre-PD&E and present the idea for discussion at the SWAT Kick-off Meeting.

3. Level of design effort during the PD&E Phase

- Information in this section should be used to introduce design activities within the SWAT Kick-off PD&E Scope of Services Tool and then considered when creating the draft PD&E Schedule.

4. SWAT Strategy Schedule

- Review the latest version to assist with PD&E Schedule development

5. Updated Project Delivery Method

- Consider the best delivery method given project circumstances
- The overall goal of making this decision during the SWAT Kick-off Meeting is to prompt quality conversations with Work Program staff to establish informed funding timeframes. However, it is acknowledged that the project may not be sufficiently developed to make this determination.

6. Updated Risk Assumptions and Constraints

- Are there new risk assumptions and constraints?
- Any new permits, applicable environmental laws, or agency coordination needs that were identified from the ETDM Programming Screen?
- Consider risk aspects when determining a project approach, PD&E Scope of Services, and PD&E schedule

POPULATE THE SWAT KICK-OFF PD&E SCOPE OF SERVICES TOOL

Recognizing the multiple purposes of a SWAT Kick-off Meeting, a tool was developed which catalogs the planning products completed or ongoing to date, identifies the anticipated tasks needed for the PD&E phase, and then designates remaining pre-PD&E activities to advance. The tool builds upon the information from the SWAT Scoping Form and assists decision-making during the SWAT Kick-off meeting. The tool also provides a basis to develop the detailed PD&E schedule.

The SWAT Kick-off PD&E Scope of Services Tool is organized as follows:

1. **General Project information:** Located in the header of the document.
2. **Planning Products Completed or Ongoing to date:** This section lists the planning products for the project, effectively serving to catalog all planning phase activities. These products may have been recommended during the SWAT Strategy Meeting and may have been prepared by FDOT, another agency, local government, or another entity. It also serves to catalog basic project background information such as roadway as-builts and bridge inspection reports. The information from these documents should be used to develop the next step of this tool. When considering the viable adoption of planning products' decisions into the PD&E phase, it's recommended to consult the **PD&E Manual, Part 1, Chapter 4**, as well as District Subject Matter Experts as well as OEM. Specific Planning to Environment Linkage (PEL) requirements must be satisfied.
3. **PD&E Scope of Services Activities:**
 - The tool provides a list of potential activities needed during the PD&E phase. These activities are based on the Standard Scope of Services for PD&E Studies (March 2017). To develop an applicable PD&E activities list within this section, consider reviewing the ETDM programming screen, previous planning products, SWAT scoping form, aerial and GIS information, and consult with Subject Matter Experts – both at District and the Office of Environmental Management.
 - Design Services during PD&E phase: Review the **SWAT Scoping Form, Section B, Item 3, Level of Design Overlap**. Consider any new information. This information should be used to develop the PD&E Schedule.
 - Identify remaining pre-PD&E Tasks to advance prior to PD&E phase:
 - Consider activities that can shorten the PD&E phase or otherwise jumpstart the PD&E Study.
 - Use recommendations from the SWAT Strategy Meeting within the **SWAT Scoping Form, Section B, Item 2, Activities to be Advanced Prior to PD&E phase**
 - Refer to the list of Pre-PD&E activities included in Module 5, Table 5-1
 - Coordinate with Subject Matter Experts and District staff
 - Finalize decisions during the SWAT Kick-off meeting.
4. **Recommendations:** This part of the tool provides a summary of staff recommendations to decision-makers, and then **records** the actual decisions made during the SWAT Kick-off Meeting.

The **SWAT Kick-off PD&E Scope of Services Tool** is presented on the following pages as **Figure 6-2**.

SWAT Kick-off PD&E Scope of Services Tool

FM No.:

Project Name:

**Statewide Acceleration Transformation (SWAT) Process
SWAT Kick-off PD&E Scope of Services Tool**

The purpose of this tool is assist decision making during the SWAT Kick-off Meeting. The information in this list will help with post-SWAT Kick-off Meeting prior to PD&E advertisement including the development of the PD&E Scope of Services identification of potential pre-PD&E activities, and development of PD&E schedule.

Planning Products Completed or Ongoing to Date

This section documents the previously-completed or ongoing planning products to date, serving as a reference library for the PM while also ensuring that vital information is shared as PMs change. These products should be referenced during development of the Preliminary PD&E Scope items in the next section. It should be noted that any planning products which evaluate and eliminate alternatives, and which are intended to be adopted or incorporated by reference into the PD&E process - must meet certain Planning-to-Environmental (PEL) requirements, in accordance with the PD&E Manual, Part 1, Chapter 4.

Planning Product / Project Background Information	Type of Document (i.e. general environment, traffic forecasting, alternatives development)	Date Completed or to be Completed
ETDM Programming Screen	General Environment	
Advance Notification package		
Alternatives Corridor Evaluation	Corridor development	
Corridor / Sub-Area / Planning / Feasibility Studies		
Traffic Engineering Studies (existing conditions analysis, future traffic forecasting, and future traffic analysis)		
Concept Development and Alternatives Screening (transit)	Transit study	
Legislative Mandate		
PD&E Scoping Report	Scoping the PD&E activities	
Roadway As-builts or Inventories		
Bridge Inspection Reports		
Other studies / or adjacent project studies		
SWAT Scoping Form		
SWAT Strategy Schedule		

PD&E Scope of Services and Potential Pre-PD&E Activities

The purpose of this table is to serve as a list of needed PD&E activities. Based on the studies listed above, the PM should place a checkmark ✓ in the “Needed for PD&E” column - for activities with a likelihood of inclusion during the PD&E project study. As well, a “✓” should be placed in the “Pre-PD&E Task” column if a certain activity, performed prior to the PD&E Study, can shorten the PD&E Phase duration or otherwise help to jumpstart the PD&E study. These activities were extracted from the PD&E Standard Scope of Services.

PD&E Task	Needed for PD&E?	Pre-PD&E Task?	Notes
Additional Services			
Scoping Meeting (EIS Only)			
Notice of Intent (EIS Only)			
Transit Coordination Plan			

Date:

Page 1 of 4

Figure 6-2 SWAT Kick-off PD&E Scope of Services Tool (page 1)

SWAT Kick-off PD&E Scope of Services Tool

FM No.:

Project Name:

PD&E Task	Needed for PD&E?	Pre-PD&E Task?	Notes
Optional Services			
Name of optional service			
Public Involvement			
Public Involvement Plan			
Project Kick-off Meeting			
Presentation to Local MPOs and Associated Technical and Citizen Committees			
Coordination Meetings with Key Agencies			
Corridor Workshop or Public Informational Meetings			
Alternatives Public Meeting			
Additional Coordination and Consensus Building Meetings			
Community / Stakeholder Forums			
Environmental Forums			
Public Hearing			
Engineering Analysis and Considerations			
Review of Previous Studies			
Existing Conditions Analysis			
Survey			
Design Survey			
Photogrammetry			
Geotechnical Investigation			
Traffic Analysis			
Traffic Analysis Methodology			
Traffic Data Collection (Turning Movement Counts, vehicle classification counts, pedestrian and bicycle counts, and other forms of multimodal data)			
Existing Traffic Operational Analysis			
Future Demand Forecasting			
No-Build Analysis			
Development and Screening of Alternatives			
Operational Evaluation of Build Alternatives			
Project Traffic Analysis Report			
Interchange Access Request			
Signalization Analysis			
Signage			
Tolling Concepts			
Safety Analysis Documentation			
Utilities and Railroad			
Roadway Analysis			
Identify Construction Segments			
TSM&O			

Date:

Page 2 of 4

Figure 6-2 SWAT Kick-off PD&E Scope of Services Tool (page 2)

SWAT Kick-off PD&E Scope of Services Tool

FM No.:

Project Name:

PD&E Task	Needed for PD&E?	Pre-PD&E Task?	Notes
Structures			
Drainage			
Drainage Analysis			
Floodplain Compensation Analysis			
Stormwater Management Analysis			
Drainage Design			
Location Hydraulic Report			
Bridge Hydraulic Report			
Landscaping Analysis			
Construction and Right of Way Cost Estimates			
Alternatives Evaluation			
Value Engineering Study			
Concept Plan			
Transportation Management Plan			
Risk Management			
Engineering Analysis Documentation			
Transit Systems, Service, and Design			
Environmental Analysis and Reports			
Sociocultural Effects Evaluation Report			
Conceptual Stage Relocation Plan			
Cultural Resources			
Research Design			
Cultural Resources Assessment Survey			
Determination of Eligibility as required			
Section 106 Case Study Report			
Section 4(f) Evaluation for Historic Resources			
Memorandum of Agreement (MOA)			
Recreational Section 4(f) Evaluation			
Natural Resources Evaluation (NRE) Report			
Water Quality Impact Evaluation			
Special Designations Involvement			
Farmlands Evaluation Form			
Noise Study Report			
Air Quality Report			
Contamination Screening Evaluation Report			
Environmental Document Type			
Categorical Exclusion Type 2			
Environmental Assessment			
Environmental Impact Statement			
State Environmental Impact Report			
Design Services			

Date:

Page 3 of 4

Figure 6-2 SWAT Kick-off PD&E Scope of Services Tool (page 3)

SWAT Kick-off PD&E Scope of Services Tool

FM No.:

Project Name:

PD&E Task	Needed for PD&E?	Pre-PD&E Task?	Notes
Overlapping design phase with PD&E			
Additional Foreseen Activities that are not listed above			

RECOMMENDATIONS:

(This section is left blank until decisions are made at the SWAT Kick-off Meeting)

Date: _____

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Figure 6-2 SWAT Kick-off PD&E Scope of Services Tool (page 4)

DEVELOP A DRAFT PD&E SCHEDULE

Prior to the SWAT Kick-off Meeting, the Project Manager should review the latest version of the SWAT Strategy Schedule (see Module 5). Utilizing the SWAT Strategy Schedule and the list of activities identified in the SWAT Kick-off PD&E Scope of Services Tool, the PM is then equipped to develop a draft PD&E schedule to present during the SWAT Kick-off meeting.

The schedule should include the “normal” tasks, but to the extent possible, also incorporate any special studies or other major task expectations for the PD&E phase.

The PD&E schedule must estimate a duration for Design phase (that also considers overlap with the PD&E phase). As well, any decisions to move forward with Advanced Production Potential (APP) work program identifier would heighten the importance of recognizing, optimizing, and perhaps shortening a project's overall duration of a critical path activities. Together with the Scope of Services Tool, this draft PD&E Schedule provides a basis for discussion at the SWAT Kick-off Meeting.

The following preparations are recommended to develop the draft PD&E schedule.

1. Review the latest SWAT Strategy Schedule.
2. Go to **FDOT PSM Codes and Schedule Templates** website and extract the most relevant template based on the probable Class of Action / Environmental Document. <http://www.fdot.gov/environment/PSMCodes.shtm>
3. Using the SWAT Kick-off PD&E Scope of Services Tool, adjust the schedule template based on project specifics and identified activities. Also, consider the design phase overlap.
4. Present at the SWAT Kick-off meeting.

After the SWAT Kick-off Meeting when a detailed Scope of Services is being developed, the draft PD&E Schedule should be updated to reflect decisions made during the SWAT Kick-off meeting. Schedule recommendations should be transmitted to the Districts Production Scheduler.

About the FDOT PSM Codes and Schedule Templates

Project scheduling templates have been developed by FDOT which use Microsoft Project and Primavera software. These templates are available for each federal Class of Action and for SEIR projects. The templates provide a pre-listing of common project tasks and milestones needed to successfully deliver a project through the end of Design phase. The templates also provide FDOT Project Schedule and Management (PSM) codes for tasks and milestones, and

assist with the development of PD&E and pre-PD&E Schedules by pre-linking an initial list of common project tasks. Recognizing that each project is different, these templates are merely a starting tool to assist with schedule development. Ultimately, the Project Manager and District staff must impart judgment to add, remove, determine durations, and then appropriately link project tasks.

Developing a PD&E Schedule provides numerous key purposes:

1. The mere exercise of predicting very specific tasks and their linkages will prompt a project team to think ahead at a deeper, more introspective level. This effort results in a higher-quality schedule that also improves recognition of necessary project tasks, their estimated durations, and task links/chronology.

-
2. Credible project schedules better-inform Work Program staff, so that phase delivery dates scheduled in the Five-Year Work Program and STIP are achievable. This helps FDOT to consistently deliver projects on time.
 3. A higher-quality schedule that reflects improved thoughts on scope will naturally result in a better advertisement package for PD&E (and possibly Design) services – both in terms of scope clarity and realistic delivery timeline expectations for performance monitoring.
 4. An existing PD&E Schedule provides a great jump-start to the selected Consultant as the firm then prepares an even more-detailed project schedule that already conforms to FDOT protocol.

An example PD&E Schedule of a SEIR is presented in **Figure 6-3** (the typical project schedule often contains many more tasks/rows than are shown in the limited space). The PSM codes from this schedule have been extracted to **Table 6-1**.

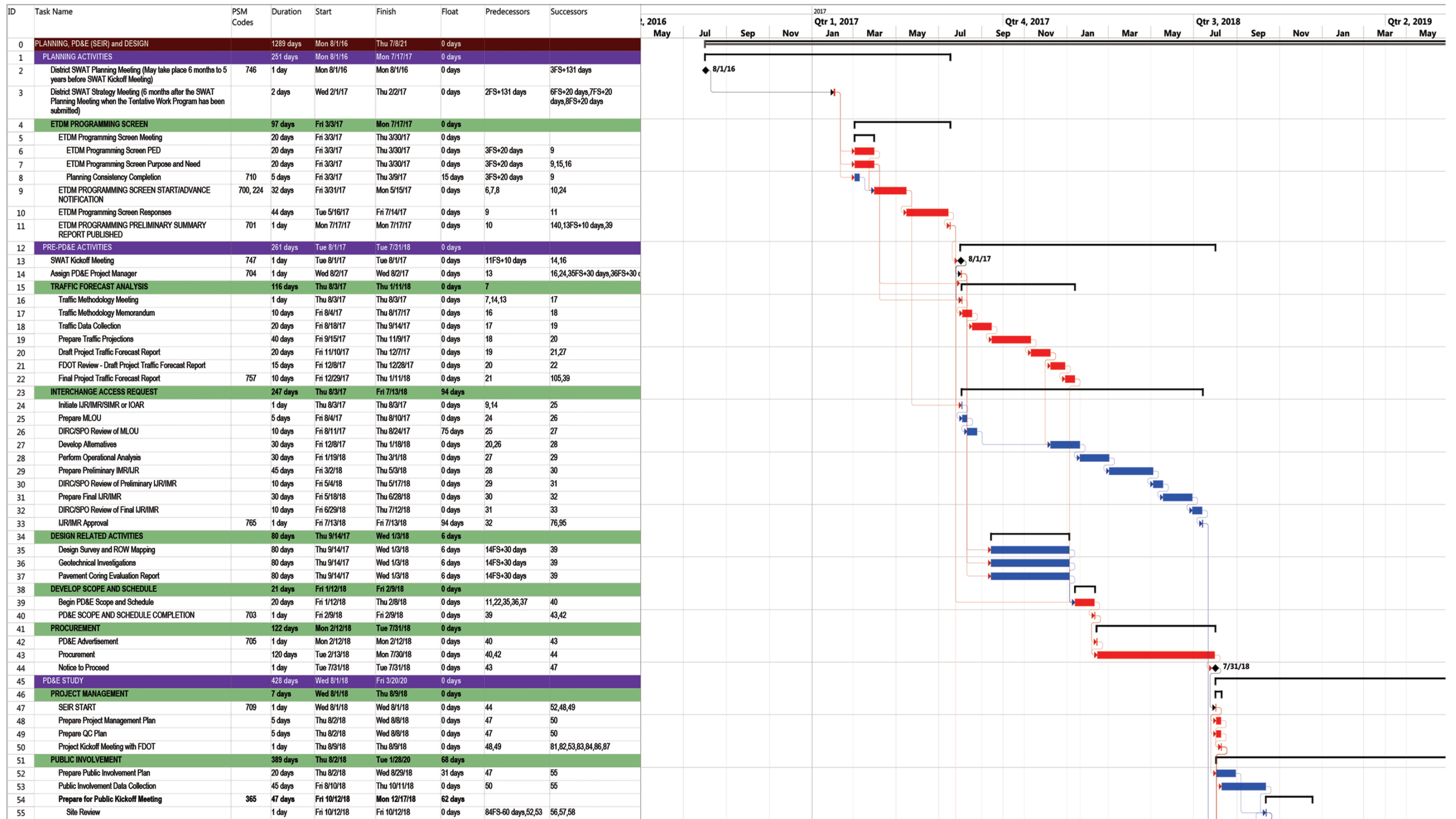


Figure 6-3 Enlarged Portion of a SEIR PD&E Schedule—to show subtasks

Table 6-1 List of PSM Codes Extracted from SEIR PD&E Schedule		
PSM Code	DESCRIPTION	PRE-SET DURATIONS
746	District SWAT Strategy Meeting	1 day
710	Planning Consistency Completion	5 days
700	ETDM Programming Screen	32 days
224	Advance Notification	32 days
701	ETDM Programming Preliminary Summary Report Published	1 day
747	SWAT Kick-off Meeting	1 day
704	Assign PD&E Project Manager	1 day
757	Final Project Traffic Forecast Report	10 days
765	Interchange Justification Report / Interchange Modification Report	1 day
703	PD&E Scope and Schedule Completion	1 day
705	PD&E Advertisement	1 day
709	SEIR START	1 day
365	Prepare for Public Kickoff Meeting	47 days
365	Prepare for Public Information Meeting	76 days
292	Public Information Meeting	1 day
366	Prepare for Public Hearing	101 days
262	Public Hearing	1 day
757	Final Project Traffic Analysis Report	10 days
759	Typical Section Selection	20 days
333	Finalize Cultural Resources Assessment Survey	10 days
761	Finalize Natural Resource Evaluation Report	10 days
762	SHPO Consultation Complete	1 day
752	Informal USFWS Consultation Complete	10 days
763	Informal NMFS Consultation Complete	10 days
713	FDOT Review DRAFT SEIR	20 days
756	Finalize Engineering & Environmental Reports	10 days
751	Finalize Section 4(f) Evaluation	5 days
335	Finalize Noise Study Report	5 days
760	Finalize Preliminary Engineering Report	5 days
722	District Secretary Approval of SEIR	0 days

PROCUREMENT STRATEGY AND PROJECT MANAGEMENT

Procurement Strategy

Selecting an appropriate strategy to procure consultant services is a key discussion during a SWAT Kick-off Meeting. The dual procurement approach (i.e., procure both PD&E and Design services) is a commonly-favored approach that accelerates the pre-construction process because it avoids at least one period where the project may not advance due to delays in procuring design services. Traditionally, a procurement stage would start for the PD&E services and then once the PD&E services were approved, the procurement stage for Design services would begin. This linear approach extended project schedules. These two procurement methods are presented in **Figure 6-4**. At the very least, the consultant procurement for design phase should be performed prior to the completion of the PD&E phase.

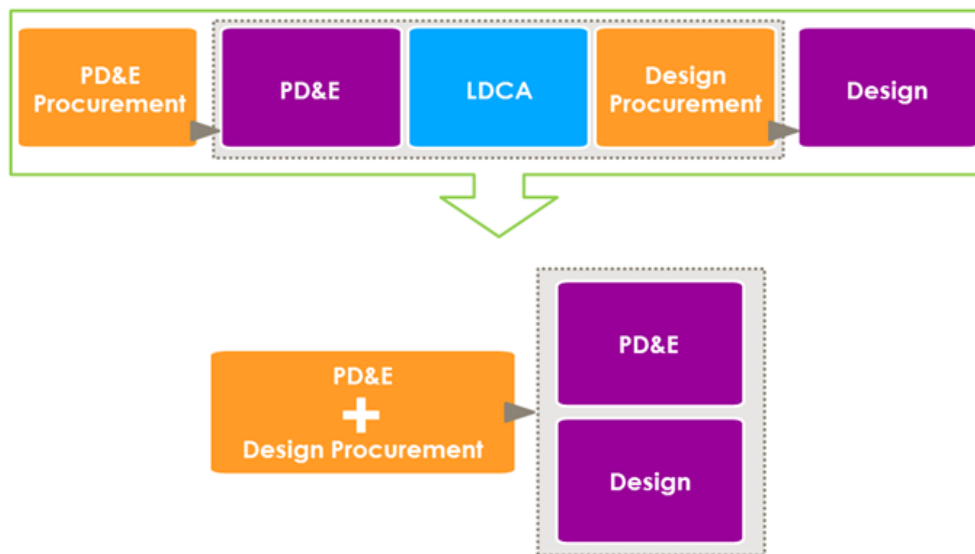


Figure 6-4 Procurement Strategy Flow Chart

Contractual Method

Depending on the procurement strategy and District preference, consider using one of the four contractual options presented in **Table 6-2**.

Table 6-2 Contractual Methods		
OPTION	NUMBER OF CONTRACTS	STRATEGY WITH CONSULTANTS
1	1 contract	PD&E and Design concurrent/overlapping with one contract
2	2 contracts	PD&E and Design concurrent/overlapping with separate contracts
3	1 contract	PD&E contract with option for Design
4	2 contracts	Separate PD&E and Design contracts

Other procurement strategies to consider include the following:

Segmentation (state projects): If the project can be divided into multiple segments and involves significant issues in a limited number of segments, consider segmenting the project. This approach may be utilized to advance the segments with minimal environmental complexity and design ambiguity. However, project segmentation cannot occur for federal projects which should be analyzed based on established logical termini. Caution should be exercised when "segmenting" to ensure that decisions will not create undue pre-decisional constraints on future alternatives segmentation nor preclude a reasonable range of alternatives – key NEPA or SEIR considerations. This aspect is particularly challenging with new alignments and major realignments. Any thoughts on segmenting should be discussed during the SWAT Kick-off Meeting as this decision fundamentally affects the advertised scope and the project delivery schedule.

Technical Panel (if recommended during SWAT Kick-off Meeting): The intent of a Technical Panel is to obtain industry feedback from consultants on the projects aggressive expectations. The information from this panel can be used to refine the project approach such as the overlap between the PD&E and Design phases. This may be a useful tool for large and complex projects and can occur prior to advertisement as an optional activity. The agenda should include the following items:

- Procurement/Contractual services information such as the procurement steps and technical review committee members
- Discuss project description including potential alternatives and available information
- Proposed project delivery method

Project Management Structure

Prior to a SWAT Kick-off Meeting, the project management structure may not be determined even though a PM should have already been assigned. The project may benefit from assigning one PM to oversee both the PD&E and Design activities or dual management responsibilities that entail one PM for PD&E activities and one for Design activities, the latter of which is the more common approach. A major consideration is the individual PM's core competence areas, experience, and projected workload. This decision may also depend on the actual project schedule and degree of phase overlap – as indicated in **Figure 6-5**. These important project set-up decisions will be subject to District management review and may be dependent upon District organizational structure and staffing capacity.

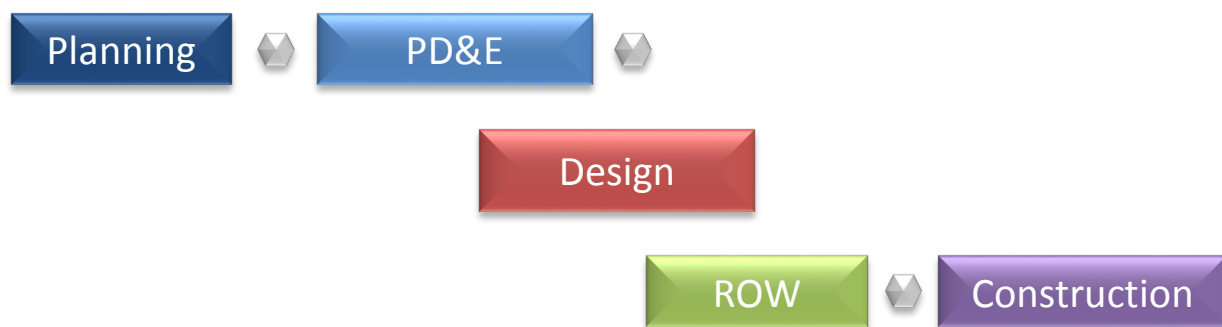


Figure 6-5 Project Schedule showing Phase Overlaps

CONDUCTING THE MEETING

The most substantial outcome from the SWAT Kick-off Meeting is sufficiently understanding the project parameters in order to develop a comprehensive scope of services and quality PD&E Schedule. This, in turn, improves the quality of the advertised Scope of Services, ease of staff hour estimates, and timely start of the PD&E and Design phases.

Prior to conducting the meeting, the SWAT Scoping Form should be reviewed for any updated information. Using that information as a basis, the SWAT Kick-off PD&E Scope of Services Tool is completed, and a draft PD&E Schedule is developed. As with many meetings, success of the SWAT Kick-off meeting depends on the degree of preparation and staff coordination that occurs before the meeting.

Meeting invitations can greatly depend on the project and its specific needs. The SWAT Team is naturally invited, but other managers and SMEs should be considered, as appropriate. Module 5 provides a list of potential staff to consider inviting.

The meeting participants may benefit from including aerials of the project or a short PowerPoint presentation that depicts the topics below. Handouts are encouraged to provide specific information and for note-taking. The following topics should be discussed during the SWAT Kick-off Meeting:

- 1. Introduce Project:** Attendees may not be familiar with the project so it is recommended to provide some basic project information such as what is contained in the SWAT Scoping Form, Section A, Item 1, as well as an aerial of the project location.
- 2. Discuss any NEW information and its relevance to decision-making:**
 - SWAT Scoping Form
 - ETDM Programming Screen
 - Class of Action / Environmental Document
 - Was an Advance Notification package distributed?
- 3. Discuss the identified Risks and Constraints:** Such as utilities, railroads, right of way, permits, developments, environment, and public involvement. Consider newly-identified risks or constraints from previous SWAT Strategy Meeting. Use **SWAT Scoping Form, Section B, Item 6**. Discuss if any other potential risks should be monitored based on environmental impacts or engineering information.
- 4. Present the SWAT Kick-off PD&E Scoping Tool (consider providing as a handout)**
 - Completed planning products to-date
 - Anticipated PD&E Activities
 - Identify and decide on PD&E tasks to advance prior to PD&E start: these should be activities that will shorten the PD&E phase duration or otherwise help to jumpstart the PD&E Study. Use the SWAT Kick-off PD&E Scope of Services Tool
- 5. Review draft PD&E Schedule:** Consider pre-PD&E activities, PD&E duration, and design phase overlap. What may be the earliest point that the Design phase can begin? Discuss with Work Program staff available resources for overlapping the PD&E and Design phases. Annotate decisions made during the meeting that may impact schedule.
- 6. Recommend degree of design phase overlap:** Discuss overlap between the PD&E and Design phases. Adjust schedule accordingly.

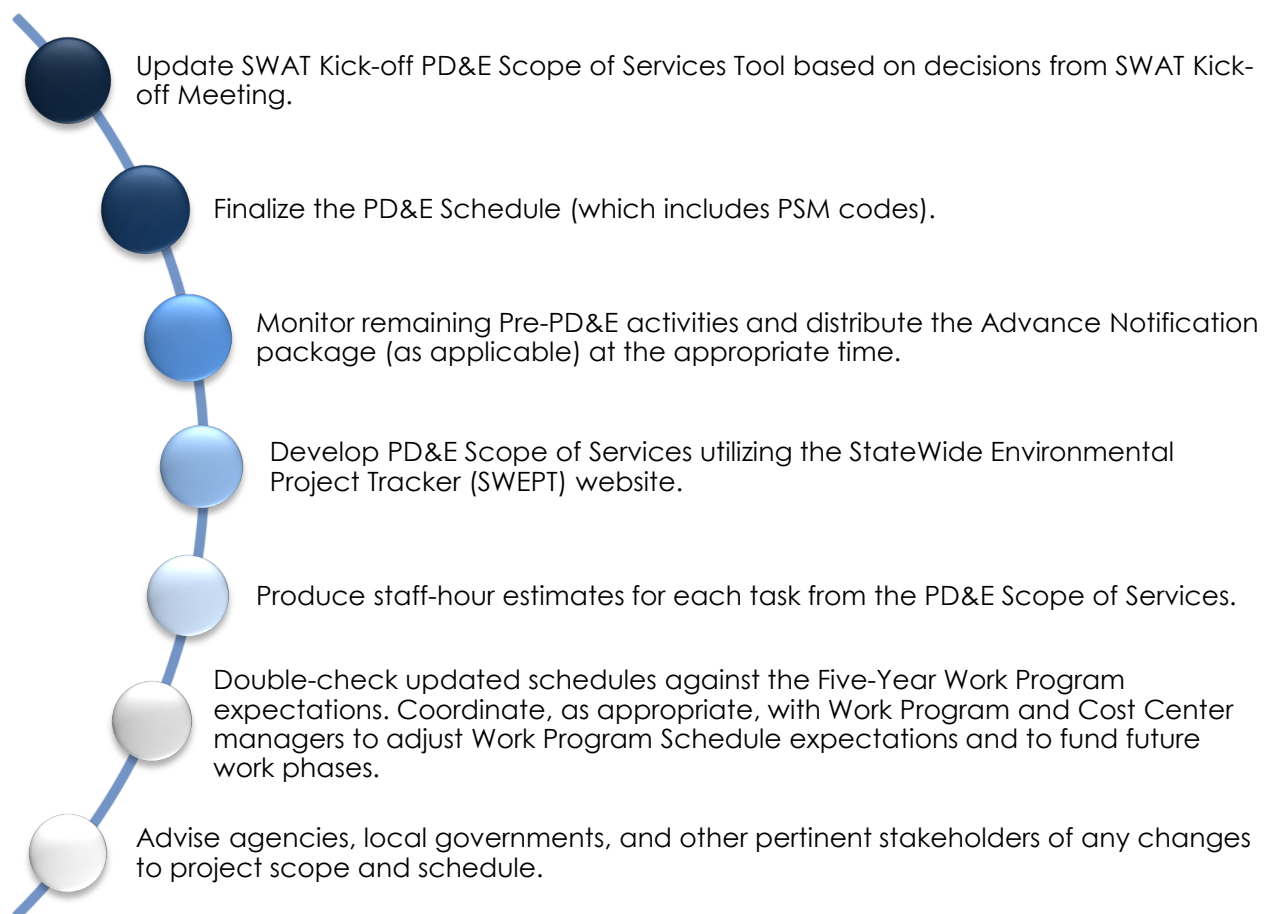
7. Procurement Strategy and Project Management:

- Decide on the procurement strategy and contractual method. Should project consider industry feedback through the use of a technical panel needed? Determine applicability of project segmentation (with caution).
- Project Management Structure includes one PM for both PD&E and Design phases or a shared approach.

8. **Consider potential Project Delivery Method:** Review previous proposed project delivery method and if this approach is valid

POST-MEETING ACTION ITEMS

After the SWAT Kick-off meeting, the following activities are recommended to be completed by the PM. Module 7 includes more details on Post-Kick-off Meeting Activities.



NOTES:

END OF MODULE 6

MODULE 7

POST-SWAT KICK-OFF MEETING: PD&E SCHEDULE AND SCOPE OF SERVICES

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SWAT Process Components

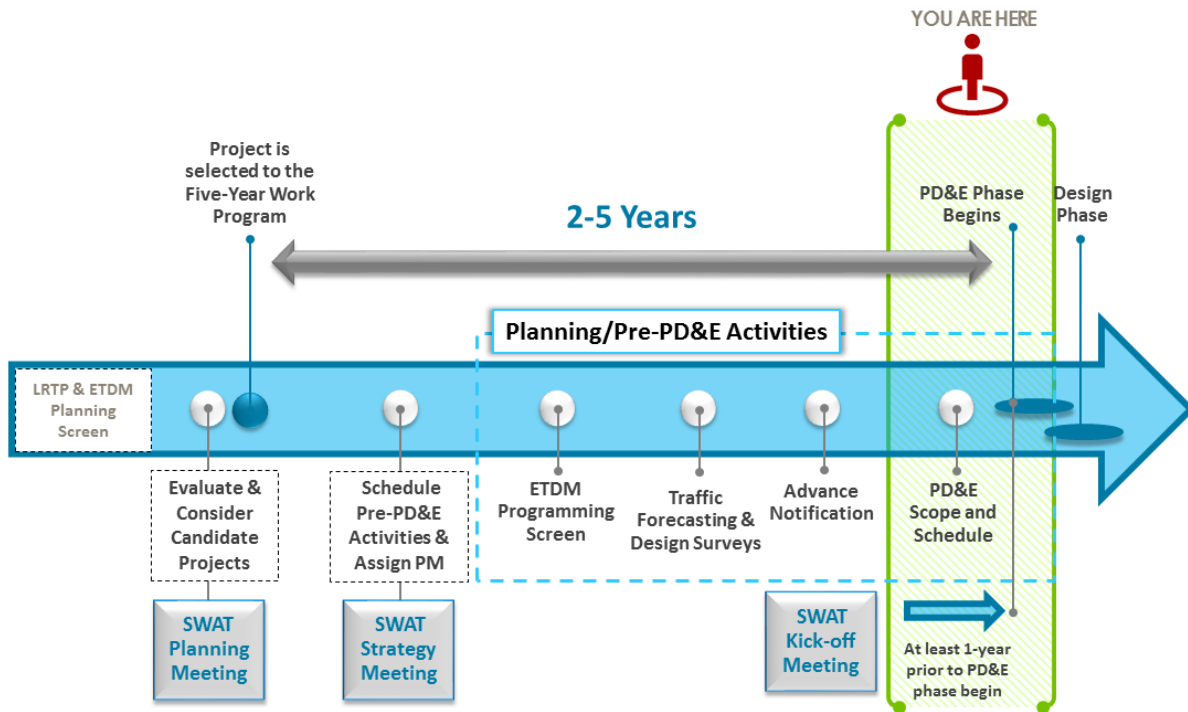


Figure 7-1 SWAT Process Components

AFTER THE SWAT KICK-OFF MEETING

After the Statewide Acceleration Transformation (SWAT) Kick-off Meeting, the Project Manager's (PM's) main goal is timely progression toward the start of Project Development and Environment (PD&E) phase. During this 12+ month period, certain activities will need to occur:

- Develop the PD&E Scope of Services that was discussed at the SWAT Kick-off Meeting (most likely includes design scope) using the StateWide Environmental Project Tracker (SWEPT) website.
- Refine the draft PD&E schedule that was discussed during the SWAT Kick-off Meeting.
- Estimate the Staff-hours.
- Complete remaining pre-PD&E activities (previously identified and funded).
- Distribute the Advance Notification package (if not already done).
- Begin the Consultant Acquisition process (advertise, select, negotiate, and execute contract).
- Coordinate activities with:
 - Appropriate FDOT office that is performing each pre-PD&E activity.
 - Work Program and SWAT Team - to inform them of results from pre-PD&E activities that may impact schedule and scope of project, and to arrange funding for future project phases.
 - Technical Review Committee (TRC) and Professional Services Unit (PSU) - to understand the rules of engagement during procurement process, including any allowable communication with Consultants.

-
- Consultants interested in the project who proactively reach out in order to meet and learn about the project. This may be an opportunity to work with the TRC if that has been established.
 - PSU one-month prior to advertisement to provide the initial scope of services.
 - Subject Matter Experts (SMEs) and PSU after consultant selection to help with any final adjustment of scope, schedule, and then negotiation of staff-hours.
 - Project Review Team, for various specialized tasks such as historic resources, natural resources, drainage, structures design, and traffic.

Decisions on advanced studies, procurement method, and other pertinent project parameters should be known by this time. While additional post-meeting coordination is envisioned; suitable information should be available to finalize the scope of professional services, and move toward Consultant Acquisition.

The District will advertise the project/contract and then select a consultant team. Concurrently, the PM can refine the detailed PD&E schedule that was initially discussed at the SWAT Kick-off Meeting.

REFINE THE PD&E SCHEDULE

The Office of Environmental Management (OEM) has developed project schedule templates for numerous state and federal document types (PD&E Studies). These schedule templates identify common project tasks and milestones necessary to successfully deliver a PD&E project. Environmental FDOT Project Schedule and Management (PSM) codes are incorporated.

The templates are available through the FDOT Public Website link provided below and are intended for use as an initial guide - with the expectation that District staff and their consultants will modify the templates to fit specific project tasks, applying sound judgment when modifying task durations and links. Prior to the SWAT Kick-off Meeting, the PM works with the District Production Project Scheduler to create a draft PD&E schedule based on the proposed Scope of Services. After the meeting, the PM is expected to

adjust the schedule according to decisions made, plus any discoveries from post-meeting coordination. The project schedule must identify the full array of necessary project tasks and milestones, with corresponding PSM codes. The schedule should portray realistic task durations, appropriately link activities, and then identify a critical path. The PD&E schedule should include time required for iterative documents reviews by the District, Central Office, cooperating and participating agencies, and federal/state resource agencies, as appropriate [after National Environmental Policy Act (NEPA) Assignment was approved, FDOT will act as the Lead Federal Agency for most projects]. A sample PD&E schedule is provided in **Figure 6-3**. This sample schedule shows a State Environmental Impact Report (SEIR) with design overlap and a few elements to expedite the project delivery, such as advancing design survey activities and impacts to historic resources.

The Environmental Document Schedule Templates and a list of Environmental PSM Codes can be found at:

<http://www.fdot.gov/environment/PSMCodes.shtm>

REVISIT THE WORK PROGRAM SCHEDULE

The SWAT process recommends periodic updates to the project schedule that are also used to inform the Work Program Schedule. However, with a more defined project after the SWAT Kick-off Meeting, it is appropriate and recommended to take one more look at the Work Program Schedule to double-check the delivery timeframes of major phases.

Opportunities to adjust the timing of future project phases may exist, when warranted by timing of completion of prior phases, priority, and funding availability. A quick check may be in order, using the Work Program Schedule protocol outlined in Module 4: SWAT Planning Meeting. This minor coordination effort with Work Program also affords an opportunity to ensure funding is established for future project work phases.

DEVELOP THE PD&E SCOPE OF SERVICES

Based on results from the SWAT Kick-off Meeting and any post-meeting coordination, the PM should develop a PD&E Scope of Services and complete it at least one month prior to the scheduled PD&E advertisement that follows the Consultant Acquisition Plan. The basic steps to develop the PD&E Scope of Services includes the following:

1. Review the notes from the SWAT Kick-off meeting, as well as the SWAT Kick-off PD&E Scope of Services Tool (described in Module 6)
2. Consider additional information or discoveries from current or past pre-PD&E activities
3. Review the FDOT Instructions to Prepare Scope of Services on the FDOT public website: <http://www.fdot.gov/designsupport/scope/>
4. Develop the PD&E Scope of Services using the StateWide Environmental Project Tracker (SWEPT) site: <https://www.fla-etat.org/est/swept/>
 - SWEPT is an interactive scope developing tool that provides flexibility to add and modify tasks, and then impart individual judgement that reflects specific project issues, activities completed ahead of PD&E, and overlapping of phases.

NOTE: Access must be requested to use this website.

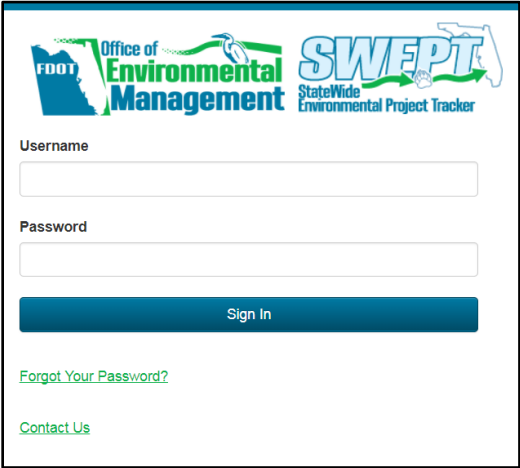


Figure 7-2 Image of SWEPT Website Login

5. Consult with District resources and Subject Matter Experts, where necessary

- District staff, Districtwide contracts, in-house consultants, and other agencies

Use of the FDOT Instructions to Prepare Scope of Services is mandatory for FDOT and Consultant PMs when scoping and negotiating all consultant contracts for PD&E and Design services, according to **Procedure 375-030-020**. The scope and staff hour estimation guidelines provide FDOT and Consultant PMs with a detailed description of the work efforts (activities and tasks) for uniform and consistent project scoping, and a basis or range of staff hours required to complete project tasks.

DEVELOP STAFF HOUR ESTIMATES

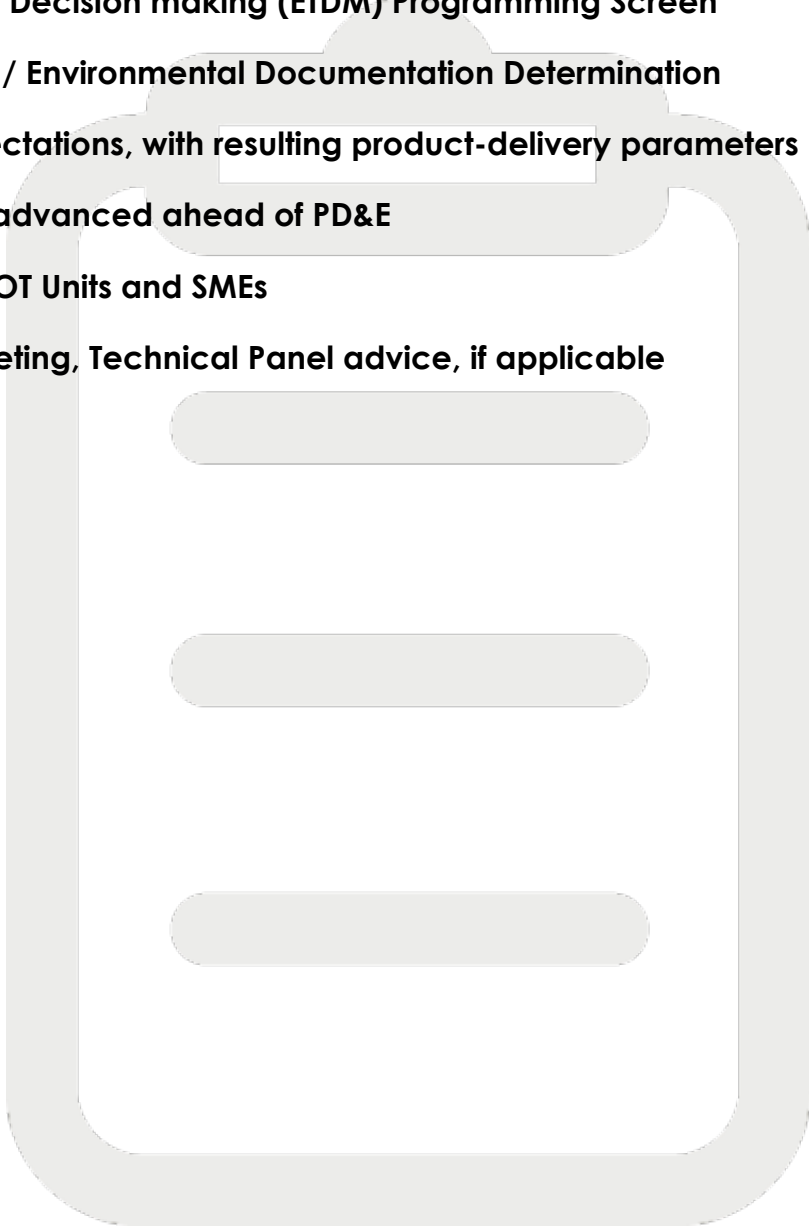
Once the Scope of Service has been developed, the PM can estimate the staff hours for each task of the project. The estimate of hours needed for individual tasks is based on the anticipated effort to complete each task, its context, and the intensity of impacts. Staff-hour estimates are necessary to conduct negotiations and provide a basis to consider any modifications to work program funding for the PD&E phase. The following steps should be considered when developing the staff-hour estimates:

1. Review PD&E Scope of Service and related project documents
2. Review the FDOT **Instructions to Prepare Scope of Services** on the FDOT public website
 - <http://www.fdot.gov/designsupport/scope/>
3. Utilize the **PD&E Staff Hour Estimation Guidelines**: this document provides detailed information, breaking down the tasks and activities that can appear in a scope of a document along with recommended staff-hour ranges to do work
 - <http://www.fdot.gov/designsupport/scope/>
4. Document the staff-hours estimations using the **PD&E Staff Hour Estimations Forms**
 - <http://www.fdot.gov/designsupport/scope/>
5. When design phase or design activities are advanced concurrently with PD&E phase, Design Staff Hours Estimation Guidelines should be used to estimate such activities
6. Consult with District resources and Subject Matter Experts, as necessary
 - District staff, Districtwide contracts, in-house consultants, or other resources

RESOURCES TO CONSIDER

The Scope of Services should be developed based on the outcomes from the SWAT Kick-off Meeting and any pre-PD&E activity results; however additional considerations frequently arise. Accordingly, the PM(s) can seek input from other District functional areas to complete the scope of service. Several of the resources and considerations when developing a scope of services include the following:

- **SWAT Kick-off PD&E Scope of Services Tool**
- **SWAT Scoping Form**
- **Outcome and notes from SWAT Kick-off Meeting**
- **Efficient Transportation Decision making (ETDM) Programming Screen**
- **Class of Action (COA) / Environmental Documentation Determination**
- **Project schedule expectations, with resulting product-delivery parameters**
- **Results from activities advanced ahead of PD&E**
- **Input from differing FDOT Units and SMEs**
- **Post SWAT Kick-off Meeting, Technical Panel advice, if applicable**



CONSULTANT ACQUISITION PROCESS

Consultant Acquisition typically occurs in the following order:

1. Advertisement (planned and current)
2. Consultant Selection
3. Scope of Service finalization and Fee Negotiation
4. Contract Execution

Within a District, the Professional Services Unit (PSU) generally establishes a schedule for consultant acquisition. This duration should be reflected in the PD&E schedule (and should be considered when setting dates for the SWAT Kick-off Meeting). Not all acquisition durations will be the same. Small or simpler project selections tend to be shorter duration, while large and/or complex projects may introduce a two-phased selection process – such as short-listing for a small number of consultants prior to making a final selection. The average duration from advertisement [Request for Proposal (RFP)] to execution of a Consultant contract is typically viewed as six (6) months; however, a two-phased selection may extend this duration considerably – up to 8 months.

STAFF HOUR ESTIMATION AND FEE NEGOTIATION

First-iteration estimates for FDOT should be based on staff hour estimation guidelines. However, it should be recognized that estimating guidelines are necessarily generic and thus cannot include provisions for the many project specificities. FDOT PMs and District staff are encouraged to consider appropriate modifications to the standard scope as an ordinary occurrence of scope refinement to “fit” each project. Such decisions should reflect project-specific requirements for analysis, coordination, product delivery, and timing.

For example, a short project in an urban, historic district may require substantially more hours for the cultural resources tasks than a study involving 20 miles of rural roadway. As with scope of services development, staff-hours estimates can rely upon consultation with SME.

It is normal that changes to the scope will occur after a consultant is selected and greater attention is paid to the work at hand. Once a scope is agreed-upon, both FDOT and its consulting partners will need to agree

on a reasonable number of staff hours. The fee estimate will then result, based upon negotiated rates and consultant administrative and operational costs that are covered by overhead.

CONTRACT EXECUTION AND NOTICE TO PROCEED

Contract execution is soon followed by a Notice to Proceed (NTP). This important milestone designates when the consultant is legally-authorized to begin work in earnest, and to invoice for progress. One of the first tasks following NTP involves the development of a detailed project schedule, Quality Control (QC) Plan, and a Project Management Plan (PMP), for major projects only.

The standard definition for NTP of the actual PD&E Study is based on the relevant PSM activity code. For Environmental Impact Statements (EIS's), this is defined as the PSM activity for Notice of Intent (NOI). For the remaining types of Environmental Documents, the PM identifies the PSM code that designates the beginning of the PD&E Study.

NOTES:

END OF MODULE 7

MODULE 8

SWAT AS A PROJECT MANAGEMENT PROCESS

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The SWAT Process

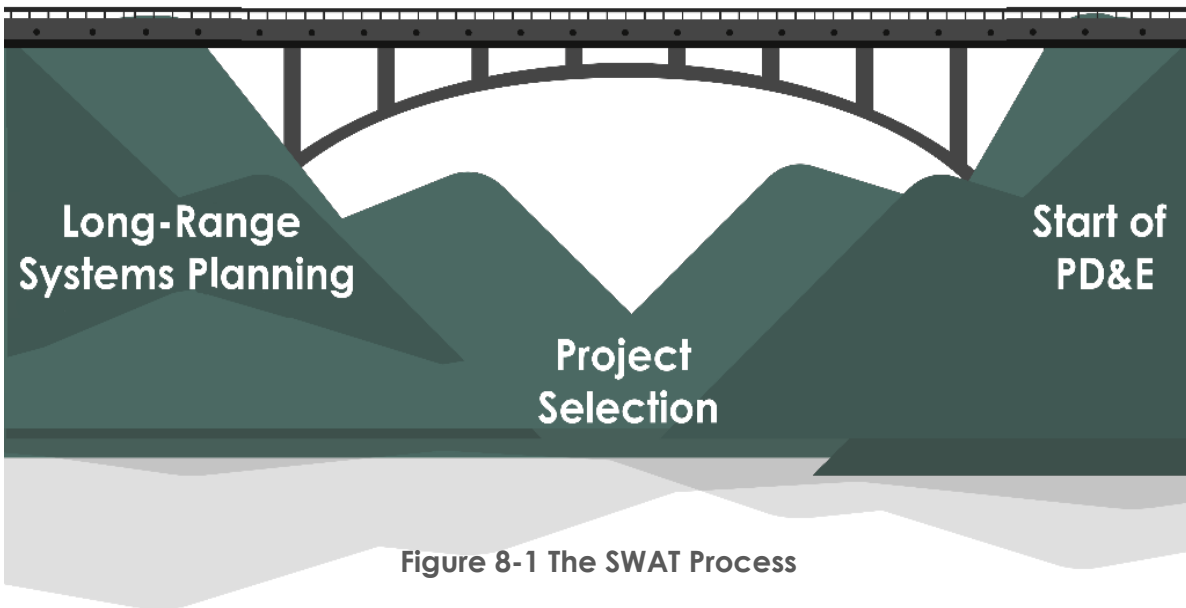


Figure 8-1 The SWAT Process

INTRODUCTION

The StateWide Acceleration Transformation (SWAT) process provides a streamlined and proven template for Florida Department of Transportation (FDOT) to expedite project delivery. Much of the anticipated success of SWAT is due to early assessment and decision-making.

SWAT is simply a proactive project management approach.

SWAT AS A PROJECT MANAGEMENT PROCESS

SWAT is a **project start-up process** that bridges the “multi-year gap” between long-range systems’ planning and the implementation of individual project studies (see **Figure 8-1**). SWAT uses early information to formulate a strategic approach to all project phases through the end of construction. Thus, SWAT activities largely occur prior to the PD&E phase, yet early decisions affect the entire preconstruction duration.

As with any project delivery system, FDOT success ultimately relies on organized, proactive, and continuous project management.

Success of the SWAT process depends on management by the District SWAT Lead and smooth transition to individual project management by the actual Project Managers. Critical to both their success are the supporting activities of key phase managers, office managers, and subject matter experts.

From a management perspective, the SWAT process:

- Establishes clear responsibilities and performance expectations at various project milestones – including an earlier engagement of Project Managers.

-
- Advocates early collection and determination of basic project information and scope, then fosters critical thinking and decision-making to classify the project type, identify project management structure, and initiate certain pre-PD&E activities that will shorten overall project delivery or otherwise help to jumpstart the PD&E phase.
 - Provides guidance on information collection and internal coordination considerations – while preserving the flexibility of District and Turnpike practitioners to exercise independent judgement.
 - Promotes the consideration of numerous & expedited project delivery strategies during the entire preconstruction process. (Example: standard overlap of PD&E and Design phases, possibly ROW and Design phases.)
 - Provides enhanced information for Work Program milestone delivery dates
 - Provides simple and progressive templates which record project information and track project-level decisions.

The SWAT process highlights three distinctive milestones prior to the start of the Project Development and Environment (PD&E) phase, which progressively collects information, classifies project issues, and then optimizes a project approach. These are the:

- SWAT Planning Meeting,
- SWAT Strategy Meeting, and
- SWAT Kick-off Meeting.

MANAGING THE SWAT PROCESS

“Projects are the means by which FDOT delivers its core services to the traveling public. Successful management of projects is important to the success of the FDOT.” *FDOT Project Management Handbook*

FDOT has redefined its overall project management approach. Project management now begins with the SWAT process, which involves organizing project information, formulating a strategic project approach, and then executing or directing others in the performance of tasks. Decisions made through application of the SWAT process may affect the entire preconstruction schedule.

At a District level, the SWAT Lead is responsible for the execution and completion of the overall SWAT process. In this way, the SWAT Lead functions in more of a program management role, ensuring that FDOT projects undergo the SWAT process until FDOT's Project Manager (PM) is assigned. As each project moves through the SWAT process, the SWAT Lead delegates assignments to SWAT Team Members, and pertinent others, then relies on each professional to practice effective project management. The responsibilities and tasks for project success first begin with the SWAT Lead, but responsibilities progressively transition to individual project managers as each project nears the start of PD&E phase (see **Figure 8-2**). Ultimately, the SWAT Team transfers full project management responsibility to the appropriate Cost Center Manager or PM at the first SWAT Strategy meeting, yet the SWAT Team will continue to assist with strategic decision-making through the SWAT Kick-off Meeting.

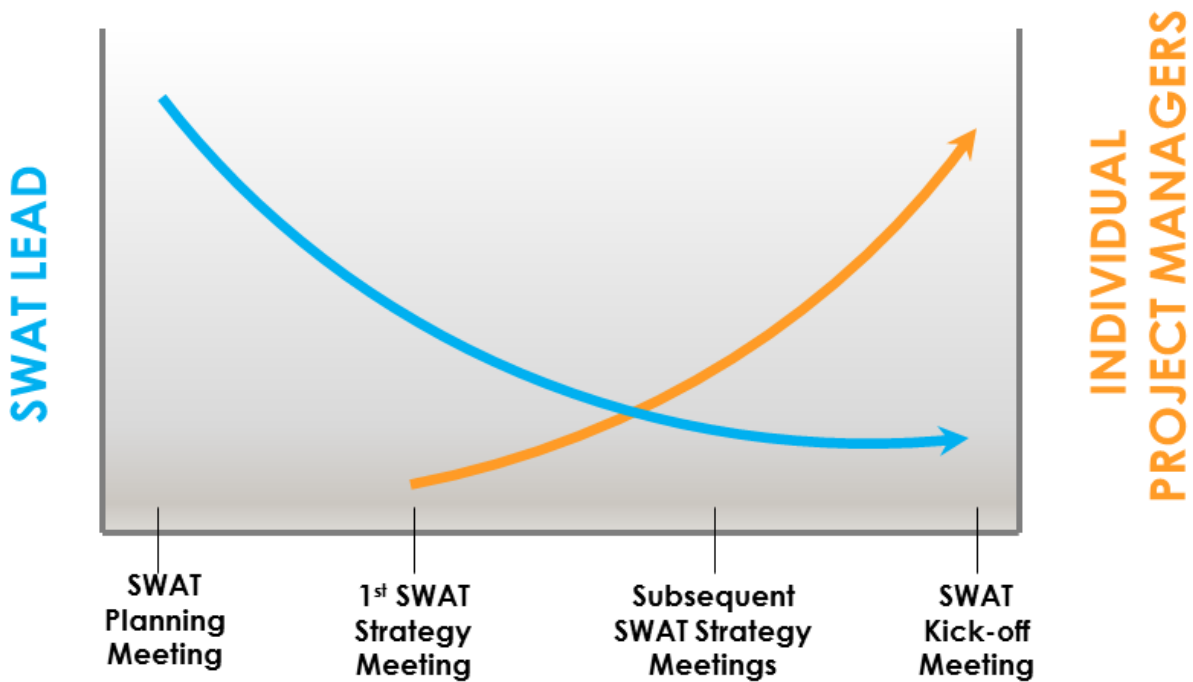


Figure 8-2 Progressive Transfer of SWAT Responsibilities

Once the progression from SWAT lead to Project Manager begins at the first SWAT Strategy Meeting, the PM accepts full responsibility and accountability to the beginning of, and through PD&E phase. The PM not only schedules and monitors task initiation and completion, but must also arrange funding and determine who will perform the necessary work. The PM will present project status at annual (and subsequent) SWAT Strategy Meetings to check-in with the SWAT Team, until the SWAT Kick-off Meeting occurs – which is recommended approximately 12 months ahead of the Start of PD&E phase. Each project's scope of services is determined at the SWAT Kick-off meeting, which entails the last strategic contribution of the SWAT Team. From that point through to consultant acquisition and the start of PD&E, the PM operates independently of the SWAT Team, but may consult with managers or subject matter experts, as appropriate.

SCHEDULES

Three scheduling products result at various times during the SWAT process. These are: Work Program schedule, SWAT Strategy Schedule, and the PD&E Schedule. Coordination with the District's Production Scheduler is necessary to assure entry of appropriate project activity codes into FDOT's Project Schedule and Management (PSM) System, at the suitable times. Work Program staff should also receive updates. If schedule changes become necessary with any phase, the District should recognize the need to coordinate these changes with other partners – internal and external. For example, there is a need to maintain consistency between FDOT production schedules and local government entities such as MPOs and counties that publish Long Range Transportation Plans (LRTPs), Comprehensive Plans, and Transportation Improvement Programs (TIPs).

Work Program Schedule

Once a project is selected for the Draft Tentative Work Program, the project will need to be programmed into FDOT's Five-Year Work Program. This implies locking-in the fiscal year start dates and cost of project phases for PD&E, and consider subsequent phases such as Design, Right of Way (ROW), and Construction. Discussed in Module 4, this simple schedule establishes specific project

expectations by setting appropriate phase durations, which in turn establish reasonable start dates for each successive phase. SWAT Leads, SWAT Team Members, and PMs (once assigned) should coordinate with Production Scheduling and Work Program staff, as necessary, to evaluate recommendations for shifting the schedule of any project phase that was previously scheduled.

SWAT Strategy Schedule

Discussed in Module 5, the SWAT Strategy Schedule covers a project's time duration from the first SWAT Strategy Meeting until completion of the Construction phase. The schedule identifies specific pre-PD&E activities, ETDM planning and/or programming screen, and pre-schedules a SWAT Kick-off Meeting. At a minimum, a SWAT schedule should indicate the start, finish, duration, and appropriate critical path links for the following activities:

- Recommended pre-PD&E activities

- Efficient Transportation Decision Making (ETDM) Programming Screen
- SWAT Kick-off Meeting
- PD&E Scope of Services and schedule completion
- Consultant Advertisement
- PD&E start date
- Durations and overlaps of Design, ROW, and Construction phases.

PD&E Schedule

Soon before the SWAT Kick-off Meeting, the Project Manager develops a draft PD&E Schedule that shows tasks in the PD&E phase, any remaining pre-PD&E activities, and the transition or overlap of PD&E phase with the Design phase. During this effort, the PM will coordinate with a variety of managers and Subject Matter Experts within the District production team. Presented and discussed at the SWAT Kick-off Meeting, the draft PD&E Schedule should be updated immediately after the meeting.

Microsoft Project and Primavera software scheduling templates are available on the FDOT Statewide Environmental Project Tracker (SWEPT) website for each federal and state Environmental Document type. These schedule templates identify project milestones and activities to successfully

deliver the project – through the end of the Design phase. The templates provide FDOT Project Schedule and Management (PSM) codes for tasks and milestones, and assist with the development of PD&E and pre-PD&E schedules by pre-linking common project tasks. Environmental Document schedule templates are available online at FDOT's website at:

<http://www.fdot.gov/environment/PSMCodes.shtm>

Specific PSM codes are identified in each schedule template. Each project is different and templates are merely a starting tool to assist with schedule development. Ultimately, District staff must impart judgment to add and/or remove schedule items, as relevant to the project.

A list of typical PD&E phase PSM codes can be obtained from FDOT's website at:

<http://www.fdot.gov/environment/pubs/APPROVED-EMO-PSM-ACTIVITY-CODES-2016-1117.pdf>

PROJECT MANAGER TRANSITIONS

(from SWAT Process to an Individual Project/Study)

As each project moves through the SWAT Process, the SWAT Lead will transfer projects to the appropriate Cost Center Manager or PM at the first SWAT Strategy meeting. At this point the PM will lead and take ownership and accountability for the project. A PM's primary objective is to clearly understand the history of a project and to ensure a smooth transition among phases. The PM will need to meet certain roles and responsibilities throughout the SWAT process. **Figure 8-3** provides a list of commonly-anticipated tasks.

SWAT Strategy Meeting – The PM participates in the first SWAT Strategy meeting and afterwards prepares the project for subsequent SWAT Strategy Meetings. After the first SWAT Strategy Meeting, the PM should start a project file and prepare to implement the identified pre-PD&E activities. The PM should lead the coordination for funding efforts, and schedule the ETDM programming screen. The PM should start coordination efforts with District functional areas and SWAT Team members, in addition to updating the SWAT Strategy Schedule. The PM will also present project status at annual (and subsequent) SWAT Strategy Meetings, to “check-in” with the SWAT Team.

About 12 months or more from the scheduled start of PD&E, the PM leads a SWAT Kick-off meeting, which segues into the consultant acquisition process that leads to the PD&E phase.

SWAT Kick-off Meeting – The PM reviews the SWAT scoping form and SWAT Strategy Schedule, reviews any new project information developed during the pre-PD&E phase, and then produces a targeted Scope of Services and draft PD&E Schedule. Discussed in Module 6, a “SWAT Kick-off PD&E Scope of Services Toll” is available to guide this preparation. Post meeting, the PM reviews Work program schedules and coordinates with the District and key agencies as appropriate. An Advance

Notification packet might also be necessary at this time.

Consultant Acquisition – The PM coordinates with the Technical Review Team on the methodology of consultant acquisition, ensures timely consultant selection, and then works with the selected consultant to discuss project parameters and scope of services, negotiate fee, sign the contract, and produce a PD&E Schedule.

A typical FDOT project can take many years to move through Planning, PD&E, Design, ROW, and Construction phases. Throughout a project's life, there will be several PMs (both FDOT and Consultant) will likely be involved in different phases of the project. During each phase, numerous decisions will be reached, commitments made, and technical details coordinated. Hand-off meetings between PMs is therefore a natural occurrence – as a result of workload balancing, staff turnover, or even as the project transitions to a different phase. Proper transitions preserve the documentation, status, and value of the work performed in earlier phases, and help to maintain pace toward project delivery.

Good project management includes appropriate record keeping. Project documentation should capture information gathered, assessments made, decisions made by the PM and the project team, coordination held with agencies and stakeholders (external and internal), lessons learned and best practices. PMs should not wait until a transition to begin this documentation. At this point, it is too late to effectively capture the project information and decisions. Project documentation should be maintained in a manner that will make it easy for a successor to take over if needed, at any point in the process. Fewer project interruptions occur when the PM has been diligent about developing a solid Project Work Plan and keeping it current, documenting all important activities and decisions, and ensuring that the project files are current, complete, and accurate.

The key steps when transitioning a project to a new PM are:

✓ **Share the Project's Documentation**

The project history, key factors in the project, political concerns, schedule, and other important aspects of the particular project

✓ **Project Status**

- What stage is the project currently in?
- What tasks have been completed, and what is the current "to do" list?
- What is the project schedule, and what future tasks are envisioned?
- Are any delays anticipated?
- What is the project scope of work?
- Have there been changes to the scope of work or are there anticipated changes?

✓ **Existing Documentation**

- Where is the documentation being stored?
- What resources are available?

✓ **Project Support**

Identify the project team before and during the transition, including Subject Matter Experts (SMEs), key agencies, and stakeholders.

✓ **Financials**

- What is the available funding?
- Is it adequate?

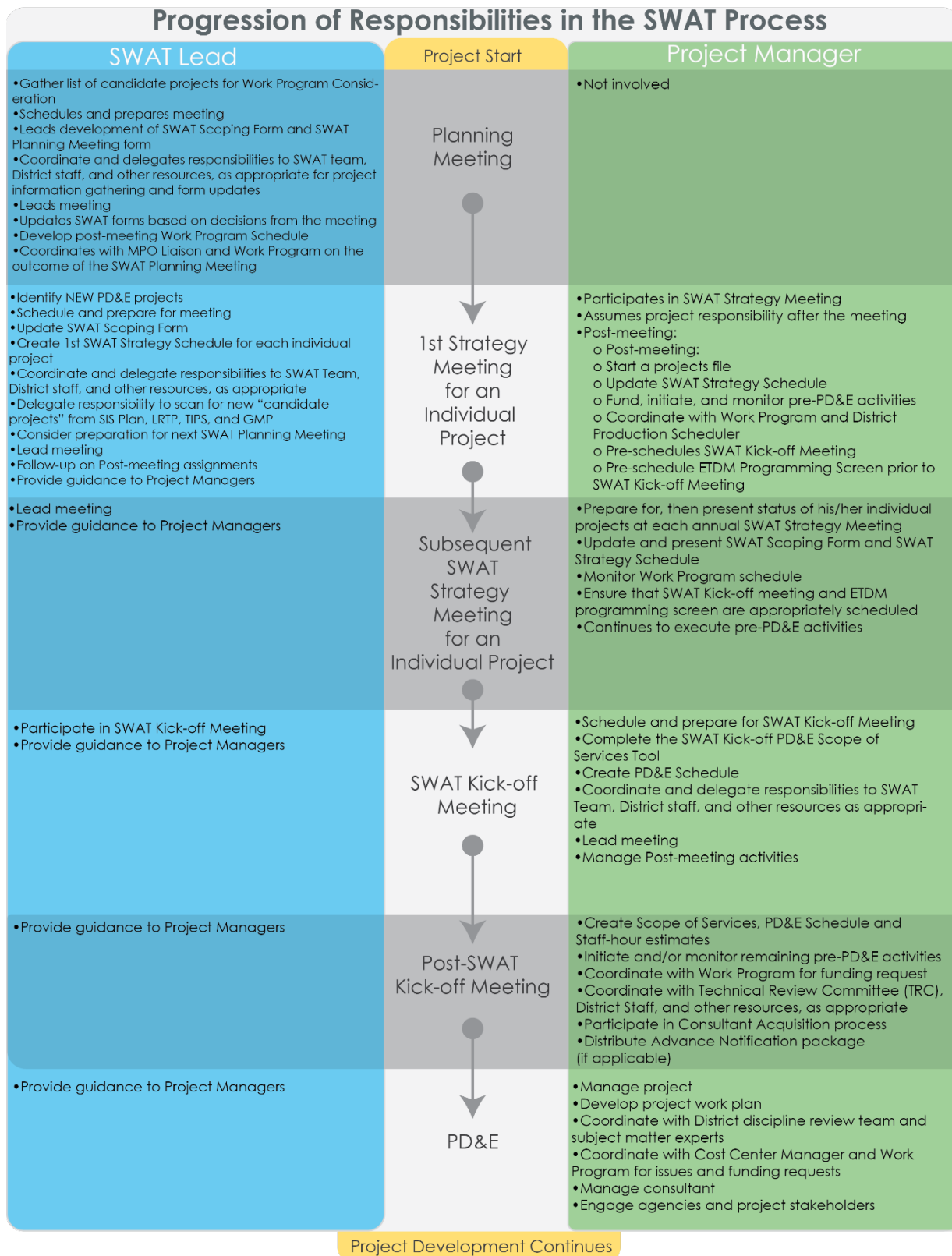
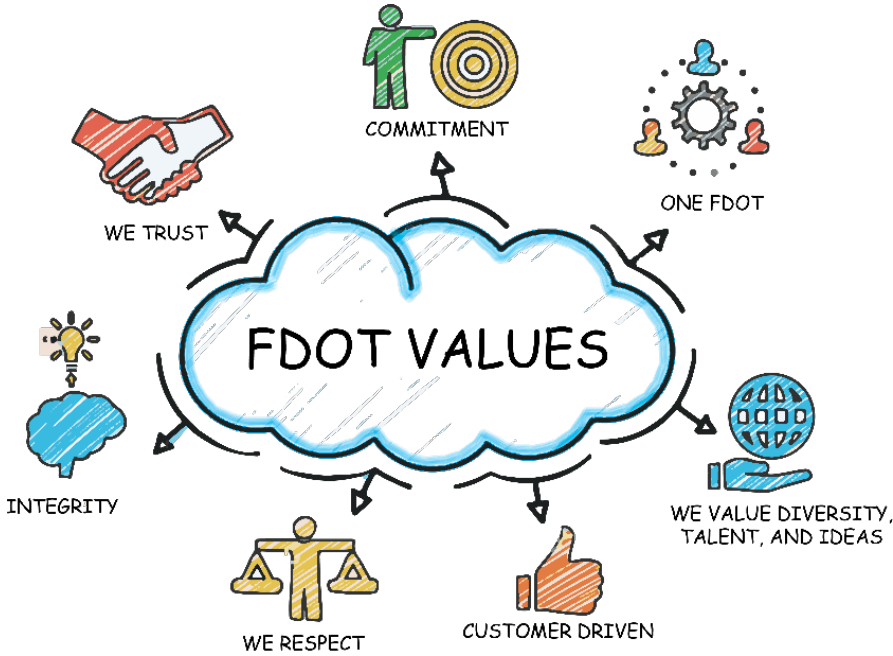


Figure 8-3 Progression of Responsibilities in the SWAT Process

BEST PRACTICES



ROLES AND RESPONSIBILITIES OF PROJECT MANAGERS

This Workbook presents an overall SWAT management approach. However, overall success relies upon classic project management techniques.

To accomplish the objectives of a successful project, PMs must have a clear understanding of their roles and responsibilities. Listed below are relevant excerpts from FDOT's Project Manager Handbook, which most apply to the SWAT process.

WHAT IS A SUCCESSFUL PROJECT?

THE FOLLOWING CRITERIA DEFINE A SUCCESSFUL PROJECT:

- The project objectives are fulfilled
- Budget is not exceeded
- Schedule is met
- Quality meets or exceeds the standards of FDOT and the profession
- Customer is satisfied
- FDOT values are maintained

Scope of Services: The scope defines the project objectives. The PM works with other FDOT staff and the consultant to establish the project's scope and schedule, and then monitors completion of tasks. At times, scope adjustments are necessary to address new project findings or needs. Project and consultant work beyond that detailed in the initial scope of services is known as "scope creep". Scope creep needs to be carefully managed and folded-into the contract. At times scope creep is necessary to address newly-identified project needs or extended project limits or expenses. Additional funds to consultants can at time be unnecessary; however, it is the larger cost of scope creep that truly challenges project funding and overall Work Program viability.

Contract: The PM must responsibly manage contracts to ensure that consultants are paid in a fair and timely manner for work effort expended and established deliverables are produced according to scope and schedule. A payout curve is established at the beginning of each project to estimate payout throughout the project's duration. Consultant PMs should be conducting earned value analysis to ensure the invoices represent work effort expended and earned, and not based simply an estimated lump sum percent billing which does not accurately represent the work conducted to date. A payout curve can also inform the PM about the project's schedule. Consultant invoicing which is much less than the amount projected in the pay out curve may indicate that the consultant is behind schedule.

Cost: Maintaining a reasonable project delivery cost is a primary responsibility of the PM. Unnecessary project scope creep can present issues here. Project delivery costs for ROW, construction, utility relocation, and mitigation – should be periodically updated and communicated to Work Program staff. FDOT uses project suite to update the scope and manage daily project management tasks. Long Range Estimates (LRE) are conducted for conceptual estimates used in establishing funding levels for future years.

Time: Monitoring progress, maintaining project schedules, and recognizing the key, critical-path tasks are important aspects of completing the work — on or ahead of schedule. At times, alternative strategies may be necessary to "crash the path" and reduce the total project duration. A PM may use multiple project teams or resources to accelerate the schedule or complete additional tasks not originally scoped. Other times it may be appropriate to form a Project Management Steering Committee for complex projects that require high-level decision making to keep the project moving forward. Steering committees that are established with defined roles and responsibilities can be an effective way to shepherd a complex project through the process, while ensuring are the needed decision makers are involved in the critical aspects of the project.

A Drive to Succeed. A Sense of Urgency: Two common characteristics of a successful PM is an uncompromising drive to succeed, accompanied by a sense of urgency. The PM communicates frequently with the Consultant PM and is cognizant of the critical path of the schedule. The PM seeks to understand needed tasks to make projects successful, and works tirelessly to that end. A seasoned PM also accepts personal ownership of project delivery. Veteran PMs accept valid criticism and suggestions and realize that academic discussions or even disagreements can be healthy for the project. The PM stays focused on the goals of the project, engages team members, and avoids being sidetracked by less important issues.

Quality: Product delivery should meet or exceed the standards of FDOT and the profession. Quality standards are established by a Quality Management Plan (QMP). This plan is developed at the onset of the project typically uses standard requirements to describe Quality Control (QC) procedures to be utilized to verify, independently check, and review all project studies, design drawings, specifications, and other contract documents. The QMP will establish a Quality Assurance (QA) program to confirm that the Quality Control procedures are followed. The objective of QA is to continue improvement of the total delivery process to enhance quality, productivity, and user satisfaction.

Respective Roles of Project Managers

SCOPE	<ul style="list-style-type: none"> • Develop the scope of services. Coordinate input from support services and the project team. • Know and understand the scope. • Be accountable to management for the success of the project. • Approve modification to the scope and update the document.
CONTRACT	<ul style="list-style-type: none"> • Thoroughly know and understand the contract and fulfill all contractual obligations. • Understand fiduciary responsibilities to ensure proper expenditure of public funds and to ensure that contracted services are delivered. • Review deliverables, progress reports and other project monitoring tools to identify problems early. • Take decisive action if monitoring indicates a problem: work products are deficient, the consultant is not responsive or the project is significantly behind schedule.
COST	<ul style="list-style-type: none"> • Stay within the budget; be concerned about total costs, including design, right of way, construction, and inspection services. • Process appropriate changes in the contract amount.
TIME	<ul style="list-style-type: none"> • Approve any change in project schedule. • Be concerned with schedule linkages to other projects in the work program. • Identify actions required by FDOT management and ensure timely completion. • Ensure that Department review commitments, as defined in the contract, are met.
HUMAN RESOURCES	<ul style="list-style-type: none"> • Ensure that staff is available to perform the project and to review the project team.

Figure 8-4: Respective Roles of Project Managers

Consult with Subject Matter Experts: The transportation industry presents a vast spectrum of disciplines and special sets of knowledge. Within this context, it is impractical to expect any one person to possess the right set of knowledge, skills, and abilities to operate with total independence. Seasoned Project Managers recognize and readily share what they know – and what they do not know.

When specific or even general knowledge gaps emerge, the Project Manager should seek the appropriate Subject Matter Experts for guidance. Technical reports are an obvious use of SMEs; however, the value of consults is particularly heightened when considering project approach and schedule development – as SME's innately understand the duration of certain tasks, and how these tasks may link with other pertinent information to affect the project flow.

Monitoring and Managing: A primary responsibility of a PM is monitoring and managing the project.

- ✓ Are project objectives being met?
- ✓ Are the costs of the project under control?
- ✓ Is the estimated ROW and construction cost within the programmed amount?
- ✓ Are the correct decision makers involved?
- ✓ Has public input been considered?
- ✓ Are schedule milestones being met?
- ✓ Are critical path activities anticipated and managed?
- ✓ If the project gets off schedule, has a recovery plan been proposed?
- ✓ Is the Quality Assurance/Quality Control (QA/QC) plan being followed?

Communication: The PM must communicate effectively to be successful. All communications skills are important: writing, speaking, conducting meetings, interpersonal exchanges, and listening. When a project involves both an FDOT and a Consultant PM, these positions are equally responsible for the success of the project; however, it is important that each professional's responsibility and role be clearly defined (see **Figure 8-4**). The FDOT PM is accountable to Department management for the success of the project. Therefore, the FDOT PM should take ownership of the project, demonstrate a drive to succeed, and manage from a "big picture" view of the project. The FDOT PM should also understand and respect that FDOT's delivery system relies on consultants for their expertise and resources available to do the job. The PM must actively communicate with his/her counterparts, with project team

members, and with pertinent organizations and individuals external to the project team. Communication processes include person-to-person and telephone conversations, meetings, e-mail, letters, and reports.

Risk: Risk management is an important and often-overlooked role of the PM. Project risk is a probabilistic event or condition that, should it occur, will affect project progression, scope, cost, and ultimately: success. **Figure 8-5** lists various examples of risk types that may affect a project. Both the FDOT and Consultant PM should try to identify and reduce, eliminate, or mitigate risk to the project.

TECHNICAL RISKS	<ul style="list-style-type: none"> • Preceding phase project deliverables are incomplete • Preceding phase reports/plans are in error • Right of way studies are not accurate • Unexpected geological issues • Inaccurate design assumptions in PD&E Report • Surveys are late or are in error • Geotechnical reports in error • Hazardous waste analysis incomplete or in error • Need for design variations or exceptions • Context sensitive solutions create design delays 	ORGANIZATIONAL RISKS	<ul style="list-style-type: none"> • Inexperience staff assigned • Lack of staff assigned to the project • Loss of critical staff at critical point in project • Insufficient time to plan project • Unanticipated Project Manager workload • Delays getting approvals and decisions • Support units unavailable or overloaded • Changed priorities • Project under funded • Inconsistent project goals (objectives, schedule, budget and quality)
EXTERNAL RISKS	<ul style="list-style-type: none"> • Right of way delays as a result of court actions • Changed priorities • Local communities or groups pose objections • Funding changes • Political factors change • Stakeholders request late changes • New stakeholders emerge with new demands • Influential interest raise objections • Lawsuits to halt or change the project • Pressure to choose time over costs or quality • Delay in agreements with local agencies, railroads, etc. • Utility relocation delays • Permit issues 	PROJECT MANAGEMENT RISKS	<ul style="list-style-type: none"> • Project need and purpose poorly defined • Project scope is poorly consultant or subconsultants • Selection of a poor contractor • Project Manager does not have control over staff priorities • Too many projects • Estimating and/or scheduling errors • Poor communication within the team • Unrealistic schedule • Changed schedule • Lack of coordination among support units • Lack of management support • Changes in key staff members
ENVIRONMENTAL RISKS	<ul style="list-style-type: none"> • Delays in permit approval • Changed requirements for permits • Changes in environmental regulations • Reviewing agencies require higher-level review than expected • Lack of specialized staff to perform environmental analysis • Unidentified special-interest sites discovered (historical, endangered species, etc.) • Environmental class of action changes • Public controversy arises over environmental issues • Change in alignment requires new environmental analysis • Section 4(f) lands become involved • Pressure to compress the schedule for Environmental analysis 	PROJECT MANAGEMENT RISKS	<p>Many of the above issues will apply to consultants as well, however consultant Project Managers must also address risk as it applies to profitability. Some unique risks for a consultant Project Manager may include:</p> <ul style="list-style-type: none"> • Incomplete or inaccurate scope of services • Scope creep • Unrealistic schedule • Inappropriate, unnecessary or conflicting comments on FDOT reviews • Late comments on submittals • Unexpected rise in firm overhead • Unresponsive subconsultant(s) • Assessment of errors and omissions claims

Figure 8-5 Types of Risk

WORK PLAN

A key to successful project delivery is the development of a Project Work Plan. The purpose of the Project Work Plan is to promote the efficient, organized, and timely completion of the work product according to schedule, budget, and contract requirements. The Project Work Plan details the job scope, defines the work product, identifies key players, and establishes task sequencing, budget, resource allocation, and the schedule.

The FDOT PM should develop a Project Work Plan when a project is first assigned—ideally when the project is first scoped. This plan will be very helpful when preparing the scope of services for the contract. **Figure 8-6** represents an example Project Work Plan. For more information on the work plan definitions refer to Chapter 3 of the *Project Management Handbook*. In addition, a Risk Management Plan should become part of the Project Work Plan.

1. Project Definition <ul style="list-style-type: none">a. Title and Identificationb. Project Descriptionc. Project Limitsd. Objectivese. Scope of Servicesf. Commitmentsg. Constraints and Assumptionsh. Expectationsi. Deliverables	5. Project Administration <ul style="list-style-type: none">a. Responsible Officeb. Administrative Staffc. Project Filesd. Special Needse. Communication Planf. Meeting Scheduleg. Internal Reportingh. Progress Reportsi. Project Closeout Requirements
2. Organization/Human Resources <ul style="list-style-type: none">a. Organization Chartb. Key Personnelc. Subconsultantsd. Staffinge. Delegation Plan	6. Quality Control (QC) <ul style="list-style-type: none">a. QC Planb. Responsibilitiesc. Required Submittals
3. Schedule <ul style="list-style-type: none">a. Scheduleb. Critical Path Elementsc. Major Milestones	7. Risk Assessment <ul style="list-style-type: none">a. High-Risk Elementsb. Contingency Plan
4. Financial Issues <ul style="list-style-type: none">a. Contract Valuesb. Method of Compensationc. Invoicingd. Optional Servicese. Contingenciesf. Budget	

Figure 8-6 Project Work Plan Outline

CONCLUSION

The SWAT Process presents a redefined project management approach that expedites overall project delivery and can affect the entire preconstruction approach. Even though most SWAT activities occur in a pre-PD&E timeframe, staff evaluations classify the project type, limits, its specific issues, and then are equipped to make recommendations regarding project approach, management structure, funding, and schedule. The SWAT Team provides program management oversight, working with Project Managers, functional area managers, and pertinent discipline experts to establish a reasonable approach to each upcoming project's scope, schedule, and programming. As individual projects are evaluated and then released to move forward, Project Managers then assume responsibility and accountability to manage actions – with periodic SWAT Team interaction. Finally, strategic recommendations are made to launch a management structure appropriate to the project – and which are intended to positively affect the entire preconstruction timeframe.

Ultimately, the success of project delivery relies upon on an organized approach, personal ownership, and continuous management throughout the life of each project.

NOTES:

END OF MODULE 8