

# Expediting Project Delivery (C19) Case Studies Series

## Florida Department of Transportation (FDOT) District IV

*Expediting Project Delivery (C19) is a product developed under the Second Strategic Highway Research Program (SHRP2) to help transportation agencies deliver projects with greater efficiency and speed by encouraging the use of innovative approaches and early coordination with resource agencies, stakeholders, and the public. The product identifies 16 common constraints to efficient project delivery and recommends 24 strategies, organized into six themes, to expedite project delivery.*

This case study illustrates how the Florida Department of Transportation (FDOT) District IV applied eight *Expediting Project Delivery* strategies to improve its project delivery process.

### Summary

FDOT District IV used **\$158,000** in SHRP2 Implementation Assistance Program (IAP) Lead Adopter funding from FHWA in January 2014 to evaluate its project delivery process using eight [strategies under the SHRP2 C19 Product](#), *Expediting Project Delivery*. FDOT held two *Expediting Project Delivery* Assessment workshops (facilitated by FHWA) to **identify potential streamlining opportunities** and **develop implementation action plans**. FDOT District IV successfully implemented its action plan with SHRP2 IAP technical assistance support within two years, with additional process improvements planned.

Implementation challenges included communicating project delivery schedule changes and task timing and coordination with project funding schedules. Benefits included reduced Categorical Exclusion (CE) processing time, greater continuity and reduction of re-work, clearer scope of services, and efficient project programming. FDOT's next steps are to institutionalize the results from this effort by continuing to modify the project schedule template and improve the tracking of pre-work in their project tracking system.

### Background

FDOT District IV has been nationally recognized for its project delivery efforts, including their Project Development and Environment (PD&E) Manual documenting the National Environmental Policy Act (NEPA) process and the Efficient Transportation Decision Making (ETDM) program. However, despite these accolades, FDOT District IV still continues to face constraints that impact the timely delivery of transportation projects.

FDOT District IV completed a Value Engineering (VE) review of the PD&E process in August 2013. District IV's primary challenge was a long PD&E phase resulting from undefined protocols and timeframes that led to confusion in roles and responsibilities. **The PD&E process normally took between 34 to 49 months, and the entire project delivery process, including design, lasted between 76 and 103 months.**

#### ***Expediting Project Delivery***

The *Expediting Project Delivery* Strategies are organized into the following six themes. The main themes covered in this case study are in bold.

1. Improve public involvement and support.
2. **Improve resource agency involvement and collaboration.**
3. Demonstrate real commitment to the project.
4. **Improve internal communication and coordination.**
5. **Streamline decision making.**
6. Integrate across all phases of project delivery.

This product saves time by reducing project delays while also providing innovative approaches to improve transportation planning and decision making. This product allows agencies to anticipate where delays are expected to occur and to apply tested strategies to avoid or reduce delays during all phases of project development and delivery.

The review provided 16 recommendations to accelerate the project delivery process. Many of the recommendations were in line with the *Expediting Project Delivery* strategies. FDOT District IV applied for IAP funding to implement the recommendations from the VE review and further aid the streamlining of projects.

## Product Implementation

In September 2013, the Director of Transportation Development for FDOT District IV issued a **District-wide memorandum to implement each recommendation developed from the VE study**. The recommendations were broken down into four main categories, each with a different FDOT staff champion, to implement to reduce project delivery times:

<i>Project Scheduling Template</i>	<i>Project Management</i>
<i>Central Office Coordination</i>	<i>Right-of-Way</i>

In order to successfully implement the streamlining strategies identified in the VE study and laid out in the implementation memo, District IV applied for and received SHRP2 IAP Lead Adopter funding from FHWA in January 2014.

## Assessment Workshops

As part of the technical assistance provided by the IAP, **FHWA and FDOT held two *Expediting Project Delivery Assessment Workshops* to further discuss potential streamlining opportunities and to develop implementation action plans**. The first workshop, held in May 2014, was attended by FDOT Districts 4, 5, and 6, FDOT’s Central Environmental Management Office, the FHWA Florida Division Office, the FHWA Resource Center, and the Volpe Center. The *Expediting Project Delivery* product and Assessment Tool were introduced and an action plan was collectively formed. While FDOT found that several elements of the *Expediting Project Delivery* Assessment Tool were not applicable to FDOT, the best practices from the tool were useful. The first assessment workshop created the framework for FDOT’s action plan to implement the recommendations from the VE study.

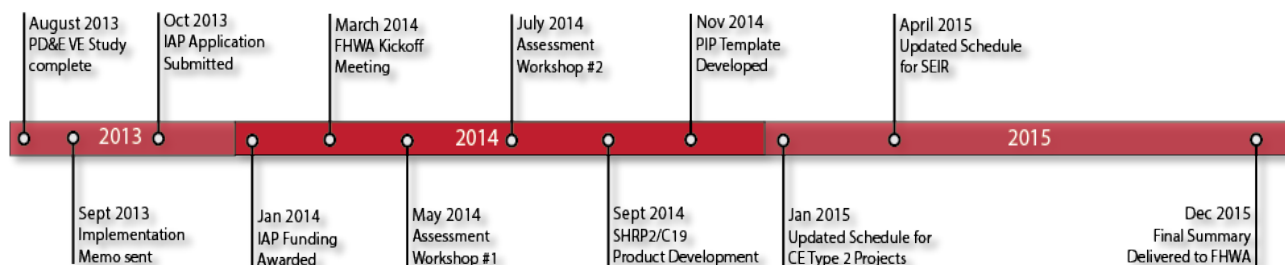
The second assessment workshop was held in July 2014 as a follow-up to the first workshop, and also as a way to include external resource and regulatory agencies involved in FDOT’s project screening process. Participating agencies included the Florida State Historic Preservation Office (SHPO), National Marine Fisheries Service (NMFS), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), and U.S. Environmental Protection Agency (EPA). This group represents 55.5% participation from agencies involved in project screening. **This workshop focused on leveraging interagency coordination as a means to streamline project review**. Strategies were identified to improve collaboration and prevent future project delays. At the end of the second Assessment Workshop, FDOT validated that its relationship with resource and regulatory agencies is largely effective, but may be improved through the implementation of recommendations from its VE study and the Assessment Workshops.

**FDOT District IV**

Responsibilities:  
Planning, developing, and maintaining a safe and reliable multimodal transportation system for five counties north of Miami-Dade along Florida’s eastern coast.

Demographics  
The region consisting of Broward, Indian River, Martin, Palm Beach, and St. Lucie Counties serves more than 3.6 million residents.

Figure 1. Timeline of FDOT District IV Expediting Project Delivery Implementation Project



## Implementation

Using the recommendations generated from the VE study and the two assessment workshops, along with technical assistance provided as part of the SHRP2 IAP, FDOT District IV has successfully implemented strategies to streamline its project delivery. Support and coordination from upper management at FDOT (at both the District and Central Office levels) were key to the successful implementation of the various strategies across the District. Implementation has taken place since the endorsement of the VE study by the FDOT’s District Director of Transportation Development in September 2013. Several of the most successful strategies are detailed in the table below.

Table 1: Selected Streamlining Strategies Implemented by FDOT District IV

Strategy	Summary
<b>Internal Trainings</b>	Trainings are regularly held for project managers, staff, and consultants in order to further the use and adoption of streamlined schedules district-wide and to explain their advantages.
<b>Use of Pre-work</b>	District IV now starts some work (including some traffic data collection, environmental review, and stakeholder outreach) prior to the beginning of the project.
<b>Updated Project Schedules</b>	FDOT District IV has one of the most progressive project schedule and tracking systems in the nation. They have updated this schedule to advance certain activities, such as environmental and traffic data collection, design surveys, and advanced purchase of mitigation sites.
<b>Document Review Checklist</b>	FDOT District IV developed a PD&E Document Checklist for quality assurance and quality control purposes. The checklist includes every engineering, environmental, and public involvement supporting document in the State Environmental Impact Report, Categorical Exclusion (CE) Type 2, Environmental Assessment, and Environmental Impact Statement.
<b>Increased Scrutiny for PD&amp;E</b>	FDOT District IV now places the same scrutiny and oversight on the PD&E phase that was previously reserved for the Design phase of projects. Production meetings are held regularly to carefully monitor the progress of projects. Additionally, a FDOT Central Office Dashboard has been created that includes all PD&E projects. Resource agency involvement has also increased from quarterly meetings to continuous communication.
<b>Single Project Manager</b>	FDOT District IV now ensures that all projects to have a single Project Manager in charge of both the PD&E and Design phases of projects in order to provide more continuity in decision-making.
<b>Formal Project Liaisons</b>	Recognizing the importance of project and decision making continuity, FDOT District IV formally assigns liaisons to specific projects that provide technical expertise in various areas.
<b>Public Involvement Plan</b>	FDOT District IV created a Public Involvement Plan (PIP) to guide Project Managers through the public outreach process.

## Challenges to Implementation

With buy-in from the District IV Director of Transportation Development and the District Secretary, implementation challenges were relatively minimal. However, while implementing the streamlining strategies FDOT District IV faced, and continues to face, several challenges.

1. Challenge: Communicating Project Delivery Schedule Changes. One of the biggest, and most difficult challenge to overcome has been changing the traditional project delivery schedule, both within and outside District IV. It has taken time to share the reasoning and importance of the changes to District IV staff and their partners. Consultants and project managers working on District IV projects have been using the same PD&E schedule for years and changing an entrenched practice can be difficult. Moreover, many project managers and consultants feared that work they had traditionally done during the PD&E and Design phases was being eliminated as the project delivery schedule was shortened. In fact, most of the work is simply being done in advance.

Solution: Training, Engraining, and Focusing On Project Delivery Schedule during Consultant Selection. To overcome these reservations, District IV staff had to articulate the reality and benefits of the new streamlined project schedules. Internally, FDOT District IV presented the new schedules at project manager meetings and has incorporated a presentation on PD&E Scope Development Guidelines into their training program so that new project managers are trained on the procedures. District IV also has a project scheduling unit dedicated to creating and maintaining schedules for all active projects. This team enforces the use of the new schedule templates for new projects and has assisted in retrofitting existing project schedules to the greatest extent possible, engraining the new procedures. Additionally, FDOT District IV now asks for details related to expedited project delivery during the consultant selection process. A list of sample questions targeting project acceleration was distributed to the project managers for use in consultant oral interviews and selection. This ensures that consultants are demonstrating their commitment to accelerating project delivery prior to the start of the project. The project manager training, effective work by the project scheduling unit, and requesting the project delivery schedule while choosing a consultant ensures that the entire project delivery team, within and outside of FDOT, is committed to a streamlined project schedule.

2. Challenge: Task Timing and Coordination with Funding Schedule. Another major challenge to implementing the streamlining strategies was perfecting the new timing of tasks and coordinating this with the funding schedule. FDOT District IV staff needed to answer the following timing questions:
  - When is the right time to begin the design phase?
  - When can the ROW process begin?
  - How do you now anticipate and secure funding for projects?

Solution: Process Reviews and Updated Schedule Templates. To answer these questions, FDOT District IV conducted other process reviews, including a ROW Process Review, and is now sharing the lessons learned with other Divisions throughout FDOT. One outcome of the PD&E and ROW process reviews was a shift of the ROW acquisition process to begin and end earlier, overlapping with PD&E. FDOT has also implemented a multidiscipline review meeting for ROW requirements prior to initiating mapping, drastically reducing the number of parcel changes during design and acquisition. This ensures that project managers are able to more effectively go through the project delivery process.

While FDOT District IV faced challenges while implementing *Expediting Project Delivery* strategies, they were few and easily overcome thanks to the buy-in and support from upper management at the District and FDOT Central Office levels.

In fact, FDOT District IV received endorsement on their implementation activities from the Assessment Workshops from the District Secretary.

In addition to the support from upper management, FDOT District IV's past work developing project schedule templates and tracking projects was key in limiting further implementation challenges. Prior to this project, FDOT District IV had a mature and advanced project tracking system and project schedule templates were already being used by project managers and consultants. Making changes to this template was easy, and project managers and consultants were already familiar with using the template. Other agencies may find this task much more difficult without a culture of thorough project tracking system and a pre-existing template in use.

## Benefits

Since FDOT District IV deployed this effort in June 2013, the District is already experiencing the benefits from implementing *Expediting Project Delivery* strategies.

- Reduced CE processing time. The expedited project schedule template has led to a reduction of up to one year for CE projects (**from 30-36 months to 24 months**). In fact, one current project even has a schedule of 20 months, which is half of the time needed under the traditional project schedule.
- Greater continuity and a reduction of re-work. By allowing as much as a year overlap between the PD&E and Design phases, decisions can be made jointly, resulting in fewer revisions later on in the project. The **Design and PD&E Teams are now normally led by the same project manager**, allowing the teams to work hand-in-hand through problems. Rather than constantly revisiting the decisions made during the PD&E phase, the Design Team's input is considered early on, reducing the likelihood of lengthy project redesigns that occurred under the previous schedule.
- Clearer scope of services. Another tangible benefit is a clearer scope of services as a result of completing pre-work. **The scope of the PD&E process is now much more defined from the beginning due to the preliminary environmental and cultural assessments** and public outreach initiated prior to the start of the project. The PD&E Team is aware at the outset of a project if they will have to account for additional staff hours or perhaps hire consultants. The team is also aware of any of the public's concerns and the additional steps necessary to address them.
- Efficient project programing and funding. With the PD&E and Design phases overlapping, **projects can be prioritized for funding more quickly** and FDOT District IV can have more candidate projects ready whenever funding becomes available.

### ***From Potential Disaster to Success Story: Expedited Project Delivery in Action***

While no project has been fully completed under the new project schedule, many projects are already seeing significant time savings. One project benefiting from the newly implemented strategies is an interchange project located on I-95 in District IV.

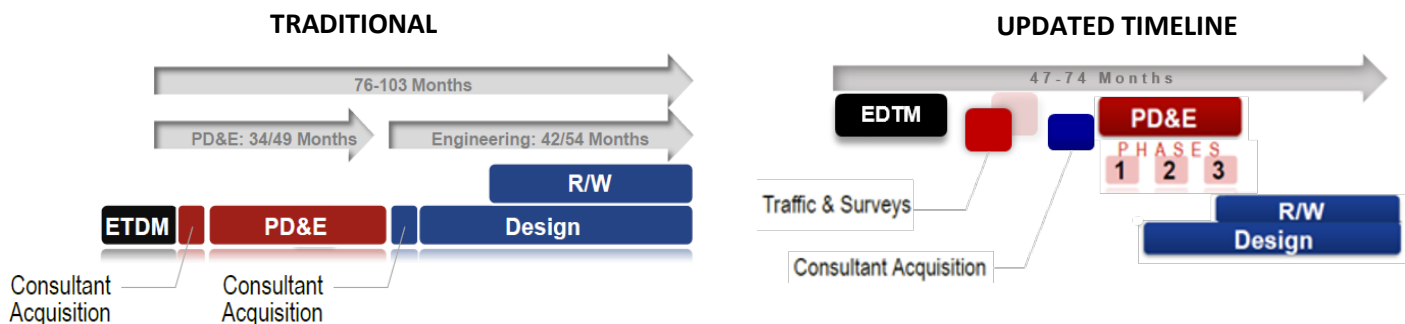
As part of its reliance on pre-work, FDOT District IV conducted a full cultural resources assessment that identified numerous historic resources, including a cemetery, before the project began. With this information, they also conducted an extensive public outreach effort prior to the beginning of the PD&E process. By the time the PD&E study began, FDOT had already conducted analysis on the site and received valuable public feedback that could be incorporated immediately into the PD&E and design phases.

Under a traditional PD&E schedule, the identification of a culturally sensitive resource could have caused massive delays. Instead, thanks to the strategies recommended in the *Expediting Project Delivery* product, the project has moved ahead on-schedule.

All of these benefits facilitate significant time savings and improved project delivery in FDOT District IV. These benefits were made possible with the assistance of the SHRP2 *Expediting Project Delivery* IAP funding. These additional funds gave

FDOT District IV the resources and technical support necessary to “bridge the gap” between the recommendations of the VE Study and actually implementing and institutionalizing them.

Figure 2. Traditional and Updated Project Delivery Timelines. Source: FDOT



## Next Steps

Looking forward, FDOT District IV will continue **to modify the project schedule template in order to further streamline project delivery** and will also work to improve the tracking of pre-work in their project tracking system. Over the next year, FDOT District IV intends to collect data about project schedule timelines to compare them to historical averages. As they continue to institutionalize the *Expediting Project Delivery* strategies, FDOT District IV is also working with FDOT’s Central Office to implement some of the strategies, especially the use of pre-work, across all seven districts in the state of Florida. Having already gone through the process, **District IV can provide valuable guidance to institutionalize the *Expediting Project Delivery* strategies at a statewide level.**

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