## Introduction

It is important for all Project Managers to understand the scope of each project. The scope of the project and the type of pavement will determine the course of action to be taken. For pavement design, certain field conditions, and required data collection varies between resurfacing, widening, and new construction projects.

Pavement type is to be selected through the Pavement Type Selection (PTS) Report on new construction projects and reconstruction projects greater than one mile in length where work includes a modification to the base materials. This PTS report is to be approved by the District Design Engineer and sent to the State Pavement Design Engineer at least six months prior to construction funds being adopted in the Work Program.

Pavement designs are typically completed during the Initial Engineering Design Process (see FDM), and are then verified during quality control checks during the Final Engineering Design Process (see FDM).

## Coordination

The PM (FDOT) should be aware of the several offices that the Consultant PM and Engineer of Record (EOR) will consult to obtain project-specific data:

**District Maintenance Office:** The first office to consult when considering a pavement design should be the District Maintenance Office. Since this Office maintains the roadways through the years, its staff can provide project-specific insight into potential problem areas within the project limits. They can provide information on where failures have occurred, the frequency of failures, and which methods were used to repair them. This information is critical to the pavement design so that any known issues can be addressed through the design project.

**District Materials Office (DMO):** The DMO provides project-specific information including:

- Pavement Condition Data (e.g., frictional characteristics, structural adequacy)
- Resilient Modulus Data ($M_R$)
- DMO Field Test considerations:
    - Each district has a “Pre-Design Coordinator” that communicates specific field testing needs for every project. Thus, any request to the DMO must be made through the appropriate District Pre-Design Coordinator.
    - Field Testing may not be feasible in all locations due to a variety of factors including testing confidence limits and logistical issues in the field (e.g., setting up Temporary Traffic Control).
    - Please see the FDOT Flexible Pavement Design Manual, Section 7.4 for additional information on Field Testing parameters.

The DMO can provide several parameters required for pavement design:

- Existing pavement and soils conditions
- Estimated Seasonal High Groundwater
- Recommendations on stabilization, milling depth, overbuild, and cross slope correction.

**District Design Office:** The District Design Office can provide input related to the geometric design of the roadway. Some of these items include the proposed design speed, lane widths, shoulder configuration, and the project limits.

**District Construction Office:** The District Construction Office should be involved to determine if there is any specific information that needs to be included in the plans, such as special construction details, or issues that need to be addressed regarding constructability and construction time. Some of these items may include base type, stabilization, temporary traffic control plans, construction time, etc.

**District Planning Office:** This office provides the current and future traffic data, including the projected Equivalent Single Axle Loads (ESALs). This office should also be aware of any planned developments that may be coming during the design life of the facility.

## Pavement Design

The pavement design process is covered in both the ***FDOT Flexible Pavement Design Manual*** and the ***FDOT Rigid Pavement Design Manual***. Please refer to these manuals for information regarding the specific pavement design process.

### Pavement Design Package

The minimum requirements for Pavement Design Packages can be found in **Section B.4** of **Appendix B** in the ***FDOT Flexible Pavement Design Manual*** and the ***FDOT Rigid Pavement Design Manual***. Documentation requirements can be found within FDM 111.7