



Florida Department of Transportation

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TRAFFIC ENGINEERING AND OPERATIONS BULLETIN 21-04
STATE SAFETY OFFICE BULLETIN 21-01
ROADWAY DESIGN BULLETIN 21-09
OFFICE OF ENVIRONMENTAL MANAGEMENT BULLETIN 21-03

DATE: August 20, 2021

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Safety Administrators, District Traffic Operations Engineers, District Safety Engineers, District Design Engineers, District Consultant Project Management Engineers, District Roadway Design Engineers, District Structures Design Engineers, District Project Development Engineers, District Program Management Engineers/Administrators, District Construction Engineers, District Maintenance Engineers, and District Materials Engineers

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SUBJECT: **Safety Needs Lists Dashboard**

This bulletin implements changes to the *FDOT Design Manual (FDM)*, the *Project Development and Environment Manual (PD&E Manual)*, *FDOT Highway Safety Improvement Program Guidelines*, and announces the development of the Safety Needs Lists Dashboard as a collaborative platform to:

- Compile the lists of safety needs identified by the Districts and Central Office;
- Ensure statewide consistency in the approach to identifying and addressing safety goals, tailored to the specific needs of each District;
- Align collective safety resources and the upcoming work program to enable strategic implementation of improvements.

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REQUIREMENTS

District staff will collaborate with Central Office to utilize the Safety Needs Lists Dashboard to evaluate opportunities to leverage collective resources and advance safety projects within their respective safety programs and Work Program, consistent with statewide approaches and goals, while tailored to the specific safety needs of the District. The Central Office and each District shall keep the Dashboard updated with the Central Office and District priority lists or safety initiatives on at least a biannual basis. Training on the dashboard will be provided by the State Traffic Engineering and Operations Office and State Safety Office by September 30, 2021.

The following FDOT Manuals are revised as follows:

1. Delete the second paragraph of *FDM 110.3* and replace with the following:

The project objectives and scope are best confirmed and completed by:

- (1) Reviewing the PD&E study recommendations, conclusions and commitments including any safety needs.
- (2) **Review, select, and prioritize any of the overlapping safety needs or projects identified in the Department's Safety Needs List Dashboard with coordination and approval of the appropriate manager determined by the District (i.e. the District Traffic Operations Engineer, the District Safety Administrator, or other appropriate position according to the Districts' processes).**
- (3) Performing a field review of the project with the project manager and personnel from appropriate FDOT offices, such as Roadway Design, Traffic Operations, Safety, Right of Way, Utilities, Landscape, Survey, Maintenance and Construction.
- (4) Requesting a review of the draft scope of services activities by FDOT offices, such as Maintenance, Construction, Design, Traffic Operations, Access Management, Public Transportation, Pedestrian and Bicycle, and Environmental Management.
- (5) Developing the scope of services sufficient to advertise for professional services. After the scope of services is completed and approved, the schedule and budget may be confirmed and updated by the engineer/project manager and approved by the appropriate district manager. The scope of services should anticipate and include:
 - (a) The most cost-effective methods that may be used in Subsurface Utility Engineering (SUE) for locating subsurface anomalies, structures, **buried fiber optic cable** and utilities.
 - (b) Opportunities to accommodate existing trees, proposed trees, and other long-lived plants.

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2. Delete the second paragraph of the *PD&E Manual, Part 2, Section 3.2.5.3* and replace with the following:

Safety analysis for build conditions should occur after evaluation of crash data to determine any existing safety deficiencies and appropriate corrective measures. Evaluation of existing safety can also include a Road Safety Audit (RSA), which is an examination of safety conditions of a road by an independent audit team. Safety analysis for build conditions should analyze potential hazardous elements on the proposed project conditions and draw inferences based on interactions of these elements and users. Development of Build Alternatives must correct existing safety deficiencies. **For existing and prescreened safety needs, review, select, and prioritize any of the overlapping safety needs or projects identified in the Department’s Safety Needs List Dashboard with coordination and approval of the appropriate manager determined by the District (i.e. the District Traffic Operations Engineer, the District Safety Administrator, or other appropriate position according to the Districts’ processes).**

3. Delete the first paragraph of the *FDOT Highway Safety Improvement Program Guidelines 4.4.1* and replace with the following:

An initial BCR ranking may need to be adjusted to account for other factors. The following criteria are examples of considerations when adjusting prioritized projects and selecting projects for the STIP:

- Other planned projects at the location: Projects could be given a higher priority when other projects are planned at the location (for safety improvement or otherwise) when the projects could, for example, save on mobilization and materials costs if constructed together. Projects may be given a lower priority if other projects are planned at the location and the proposed safety improvement is redundant or the other project should be evaluated before further improvements are made. **To assist with the identification of overlapping safety needs at the same location on the State Highway System and enable alignment with other planned projects, the Department’s Safety Needs List Dashboard displays safety needs identified by Central Office and the Districts and as well as other projects programmed in the Work Program.**
- Funding equity: It is neither practical nor a good investment strategy to use all HSIP funds in one region of Florida—all regions experience traffic fatalities and serious injuries. The Department will adjust priorities as necessary to distribute available funding among Districts.
- Right-of-way needs and acquisition: Projects requiring right-of-way acquisition could be given slightly lower priority than similar projects with no right-of-way needs.
- Environmental impacts and mitigation: Projects with substantial environmental impacts could be given slightly lower priority than similar projects with no environmental impacts.
- Project readiness: Projects could be scheduled sooner if they are “shovel-ready” while other projects are in development and design stages.
- Familiarity with the countermeasure’s design, construction, and safety effects: Unfamiliarity may trigger a slightly lower priority compared to countermeasures that engineers and contractors are more comfortable with. Alternatively, unfamiliar countermeasures could be given a higher priority to pilot their implementation and begin wider use of the countermeasures.

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- Public requests for improvement projects: Public requests or expectation for a project could trigger a higher priority compared to other projects; however, a data-driven approach to project prioritization is typically more reliable.

COMMENTARY

Florida's 2021 Transportation Plan and Strategic Highway Safety Plan (SHSP) have been released and serve as a framework of activities that will improve safety and efficiency on our roadways with an ultimate goal of zero fatalities and serious injuries. The FHWA and Florida's Transportation Commission monitor FDOT's progress toward this goal with safety performance metrics. The department's Vital Few Safety Team is focusing statewide multidisciplinary efforts to improve safety in the SHSP emphasis areas of lane departure, pedestrian/bicycle, and intersections.

The State Safety Office, the State Traffic Engineering and Operations Office, and the Districts worked together to compile the safety needs lists. From this, the Safety Needs Lists Dashboard was created as a GIS-based repository of this safety project information and includes corridors and intersections identified for safety prioritization through various District and Central Office efforts. Safety needs in the Safety Needs Dashboard are those that are identified by the following means:

- Statewide and District Network Screening for Locations with Potential for Safety Improvement
- Systemic Safety Analysis for Countermeasure Deployment
- Local Road Safety Plans, Local Agency Requests, Citizen Requests, and Community Traffic Safety Teams
- Investigations into Fatality Locations
- Safety Studies to Supplement Other Planned Projects
- Other Safety-Related Studies

The Safety Needs Dashboard displays these identified needs lists in a single platform, including the Statewide Intersection Lighting Initiatives, *MUTCD* Curve Compliance, Wrong Way Driving, Railroad Dynamic Envelope, SAFE STRIDES 2 Zero, and the Pedestrian and Bicycle Network Screening. The Safety Needs Dashboard also includes District priority lists and additional lists may be added as needed. The Dashboard includes the live FDOT work program to identify overlapping projects with prioritized corridors and intersections. The Dashboard is for FDOT internal use and is located on the FDOT Esri Azure Enterprise Portal at the following link:

<https://devgis.fdot.gov/arcgisportal/apps/opsdashboard/index.html#/e718d4d539034abbbfed1cd470a508fb>

For tracking and safety performance evaluation purposes, a coding schema has been developed for Districts to use when implementing Safety Needs List projects. Coding instructions and Item Group identifiers will be added to the Work Program Instructions for FY 2022 – 2026 through the standard document revision process.

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IMPLEMENTATION

The State Traffic Engineering and Operations Office will provide Safety Needs List Dashboard training for the Districts' and their Consultant teams' use. This one-hour training will be conducted and scheduled through Microsoft Teams Meeting by September 30, 2021.

The Safety Needs Lists Dashboard is available to be implemented immediately per the guidance in the PD&E Manual, FDOT Design Manual, and HSIP Guidelines, and shall be implemented into the District's Program Management processes by December 31, 2021.

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