

Guidance for Preparing and Submitting FTE Design Exception and Variation



Do not submit guidance sheets along with the FTE Checklist

A strong case can be made if it can be shown that (see **FDM 122.3**):

1. The required criteria are not applicable to the site-specific conditions.
2. The project can be as safe by not following the criteria.
3. The environmental or community needs prohibit meeting criteria.

A case should not be made based solely on the basis that:

1. The Department can save money.
2. The Department can save time.
3. The proposed design is similar to other designs.

Design guidance for preparing and submitting Design Exceptions & Variations

1. Ensure Design Exceptions & Variations are succinct, well organized, and easy to follow. The expectation is that someone unfamiliar with the project could review the document and ascertain its validity without having to sift through appendices or other project documents.
2. Anticipate at least three (3) rounds of ERC reviews (Draft, Pre-Final and Final) for all Design Exceptions & Variations prior to submitting to the Turnpike District Design Engineer for approval. Additional rounds of comments may be generated on a case-by-case depending on the quality of report.
3. All Design Exceptions & Variations are required to document and summarize the FDOT and AASHTO design criteria for any given design element.
4. Include R/W impacts in the discussion for all Design Variation & Exception request. Identify the acreage and cost of the R/W that would be required to correct a deficiency as well as documenting the R/W impacts of allowing a deficiency to remain. If there are no R/W impacts associated with the design element then it will need to be explicitly stated as such in the report.
5. A review of the 5-Year Crash History, including the long-forms within areas of the deficiency, are required to be reviewed summarized in the discussion of the reports.
6. Include what the Highway Safety Manual (HSM) and the Highway Capacity Manual (HCM) has to say about a given design element.
7. Include a rough cost estimate and summarize the associated cost for:
 - a. Correcting the deficiency
 - b. All alternatives evaluated
8. Document potential mitigating strategies for all Design Variation & Exceptions and explicitly document which of the mitigating strategies are being implemented on the project. If any mitigating strategies are not being implemented then explain in the report why they are not being implemented.
9. Benefit/Cost Analysis (see **B/C Analysis Spreadsheet**) are required whenever a crash can be attributed to a deficient design element.
 - a. Crash History Exists: If there are no correctable crashes then a B/C analysis is not required, however, designers need to explain in the report why a B/C analysis is not being prepared.
 - b. No Crash History Exists: Conduct HSM predictive method and a B/C analysis is required. Reference HSM Chapter 18, Chapter 19 and ISATe.
 - c. Provide a copy of the selected Crash Modification Factor(s) from whichever source utilized. When using the FHWA CMF Clearinghouse, the following should be followed:
 - i. Select a 3 to 5 star rated CMF. A no star to 2 star rated CMF requires justification and concurrence from Turnpike Safety Engineer.
 - ii. The selected CMF needs to apply to the location and the situation. The following need to be verified to make certain that the selected CRF/CFM is applicable by clicking on the CRF:
 1. Crash Type, Crash Severity, Area Type
 2. Roadway Division, Number of Lanes, Traffic Volume, Intersection Type, Traffic Control

10. Coordinate with the FTE Project Manager to determine if there are planned or future projects that would correct the deficient design elements and include the results in the reports. Explicitly state whether there are or are not any planned or future projects.
11. All items listed on FTE Design Exception and Variation Documentation Checklist and the FDOT Florida Design Manual (FDM) Chapter 122, must be addressed in all Design Variations and Exceptions. If something is excluded because it is not applicable or no impacts, a brief explanation as to why it is not applicable/no impacts is necessary for the completeness of the report. Items not addressed in the report are assumed to have been missed during the evaluation and will receive comments regarding its absence.
12. Submit three PDF files each time the Exception/Variation is submitted to FTE:
 - a. Request for FTE Design Exceptions + Variations Checklist
 - b. Submittal/Approval Letter
 - c. Design Exception/Variation Report
13. The Design Exception/Variation Report PDF file must include bookmarks for each major section of the report as well as each Appendix. Be sure to set the bookmarks tab to open when the file is opened so others viewing the PDF file can easily navigate between sections. In Adobe: File → Properties → Initial View → set Navigation tab dropdown to **Bookmarks Panel and Page** → OK.