U.S. Department of Transportation
Federal Highway Administration

Memorandum

Subject: **INFORMATION:** A Policy on Geometric Design Highways and Streets, 2018 (Green Book)

Date: May 10, 2019

From: /s/ Brian J. Fouch
Director, Office of Preconstruction, Construction, and Pavements

In Reply
Refer To: HICP-10

To: Resource Center Directors
Division Administrators
Federal Lands Highway Division Directors

In September 2018, the American Association of State Highway and Transportation Officials (AASHTO) published the 7th edition of "A Policy on Geometric Design of Highways and Streets," (also known as the '2018 Green Book'). Many State departments of transportation (SDOT) have expressed interest in adopting this new edition for use on National Highway System (NHS) projects.

As specified in part 625 of title 23, Code of Federal Regulations, the 2011 Green Book (6th edition) is currently the incorporated reference establishing the criteria for acceptable standards, policies, and standard specifications, approved by the Secretary of Transportation in cooperation with the SDOTs, for construction and reconstruction projects on the NHS. The 2018 Green Book was developed through the typical AASHTO consensus process and is an incremental evolution of the 2011 Green Book.

Until 23 CFR part 625 is updated through rulemaking procedure, the 2018 Green Book should be considered guidance only and the 2011 Green Book is still the adopted standard for construction and reconstruction projects on the NHS. However, FHWA has reviewed the 2018 Green Book and finds that the updates meet or improve upon the criteria of the 2011 Green Book. As a result, a SDOT may adopt the 2018 Green Book for use *on* NHS projects without requesting a formal design exception. As always, SDOTs maintain the discretion to adopt any standard they choose for use with projects on their State roads *off* the NHS.

Refer to Appendix A for additional information on the 2018 Green Book. Any questions regarding this topic should be directed to Robert Mooney (Robert.mooney@dot.gov) or Elizabeth Hilton (Elizabeth.hilton@dot.gov).

Appendix A

Information on the AASHTO 2018 Green Book

The 2018 Green Book introduces new definitions of project types—new construction, reconstruction, and projects on existing roads—and explains how design flexibility is provided for each project type as part of the project development process. The project type of "projects on existing roads," with the additional caveat in the policy "that do not change the basic roadway type," has traditionally been referred to as a resurfacing, restoration or rehabilitation (RRR) project. The American Association of State Highway and Transportation Officials does not define the phrase "projects on existing roads that do not change the basic roadway type," leaving room for FHWA to interpret this phrase in a manner consistent with Federal regulations.

The FHWA generally considers projects that change the general geometric character of a highway, such as widening to provide additional through motor vehicle lanes, widening to add a raised or depressed median where none currently exists, and projects that substantially modify horizontal or vertical alignments to be among those that result in a "change in the basic roadway type". Road changes that are accomplished with no, or only minimal widening, such as lane reconfigurations (road diets), adding turn lanes, adding channelizing islands, or adding median curbs for access management are *not* considered a "change in the basic roadway type".

In addition, the 2018 Green Book states that full-depth pavement replacement projects that retain existing geometrics are not considered a "change in the basic roadway type". The FHWA finds this interpretation acceptable for the purposes of determining geometric design criteria when applying the 2018 Green Book, but not for other purposes, such as pavement design.

The FHWA publication *Mitigation Strategies for Design Exceptions*, 2007 [FHWA-SA-07-011] is now considered obsolete and has been archived on the FHWA website. While the guidance regarding mitigation for design exceptions is still useful, much of the policy information in this publication is outdated.