



Professional
development program

Student Supplement (for Web seminar only)

The student supplement is a 10-25 page document which includes additional information that might not have been covered in detail during the presentation. This document should be of professional quality and consistently formatted, as it will be used for future reference by your participants. The document must follow along with the material organized in the presentation.

Examples of what would be included in the supplement are: case studies, excerpts from manuals/books, diagrams, formulas, charts and graphs, useful checklist or take home exercise. All borrowed information *must* include a reference.

Requirements for the student supplement include:

1. 10 page min. and 25page max.
2. At least one case study
3. Reference page

Student Supplement Example: Below are a few abbreviated examples of the type of material included in the student supplement.

Additional references:

Websites relevant to this seminar. The following websites were mentioned in this seminar:

http://mutcd.fhwa.dot.gov/resources/interim_approval/pdf/ia-10_flashyellarrow.pdf for the Interim Approval of the FYA on the FHWA's MUTCD website

http://mutcd.fhwa.dot.gov/resources/interim_approval/ialistreq.htm for a list of agencies that have been granted an interim approval to use the FYA (IA-10) in their jurisdiction

<http://www.regulations.gov> is the website for submitting comments to the docket during the public comment period associated with the NPA, and is also the website that can be used to view all of the comment letters that have been received for the NPA docket (the docket number is FHWA-2007-28977)

Additional Background Information:

Purpose: The purpose of this memorandum is to issue an Interim Approval for the optional use of a flashing yellow arrow (FYA) signal indication as the signal display for left-turn movements during permissive turn intervals at signalized locations. Interim Approval allows interim use, pending official rulemaking, of a new traffic control device, a revision to the application or manner of use of an existing traffic control device, or a provision not specifically described in the MUTCD.

Background: For many years, some engineers have had concerns that drivers turning left on a permissive circular green signal indication might inadvertently mistake that indication as implying the left turn has the right of way over opposing traffic, especially under some geometric conditions. A variety of different indications and signal face arrangements for permissive left turns have been tried over the years by road authorities, but no comprehensive research had been conducted to evaluate all the potential displays.

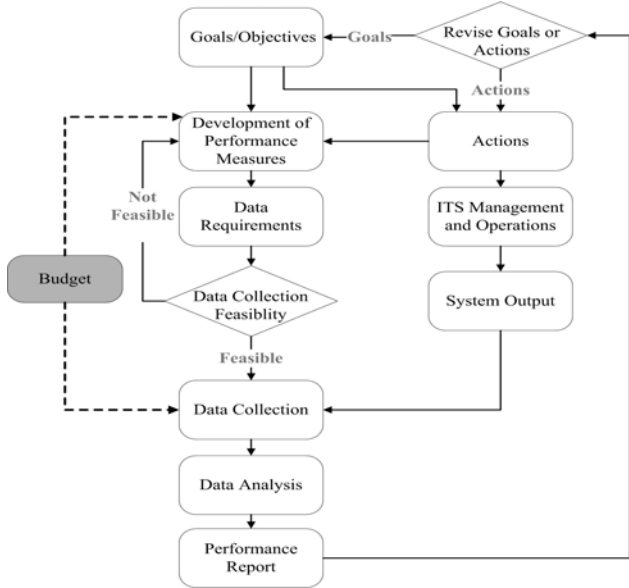
Research on the Flashing Yellow Arrow: National Cooperative Highway Research Program (NCHRP) Project 3-54, Evaluation of Traffic Signal Displays for Protected/Permissive Left-Turn Control, was initiated in the mid-1990s for the purpose of conducting the necessary definitive research to evaluate the wide variety of potential displays for permissive left-turn movements. The full report may be accessed via the Interim Approvals page of the MUTCD website at <http://mutcd.fhwa.dot.gov>.

Tables:

Table 1. Summary of operational performance measures for NTOC

Measure	Sample Units of Measurement
Customer Satisfaction	Very satisfied Somewhat satisfied Neutral Somewhat dissatisfied Very dissatisfied Don't know/Not applicable
Extent of Congestion-Spatial	Lane miles of congested conditions or Percent of congested roadways
Extent of Congestion-Temporal	Hours of congestion
Incident Duration	Median minutes per incident

Diagrams:



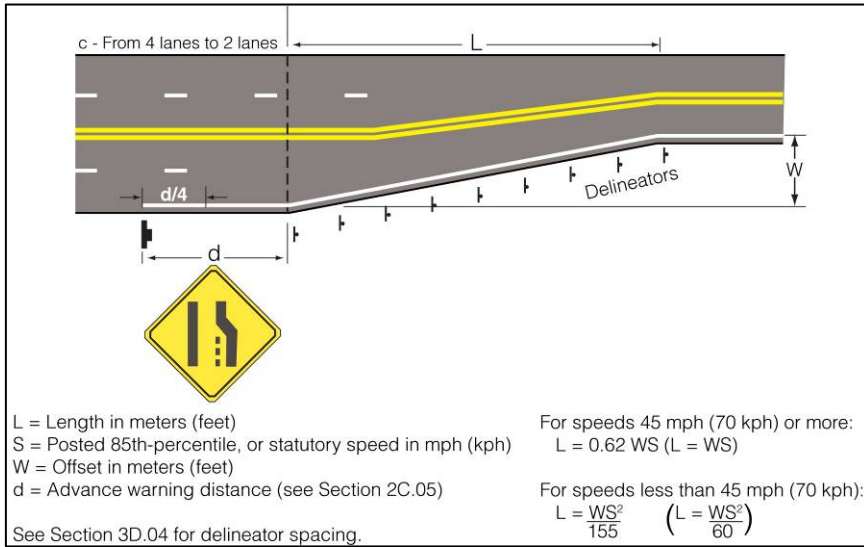
Photos:



Reference photos from the Web or author as stated below:

Photo: pedbikeimages.com

Photo: First and Last Name and/or Organization Name



Reference photos from within a text as stated below:

Graphic Reference: MUTCD, Federal Highway Administration, 2003.