Safety
2023 CFL Annual A/E Meeting

Agenda

- CFL Safety Team Introductions
- New and Upcoming in Safety
- Safe System Approach

CFL Safety Team

- Christine Black
- Kelly Terrell Prose

New MUTCD

Draft edition of the updated MUTCD was published for public comment in December 2020.

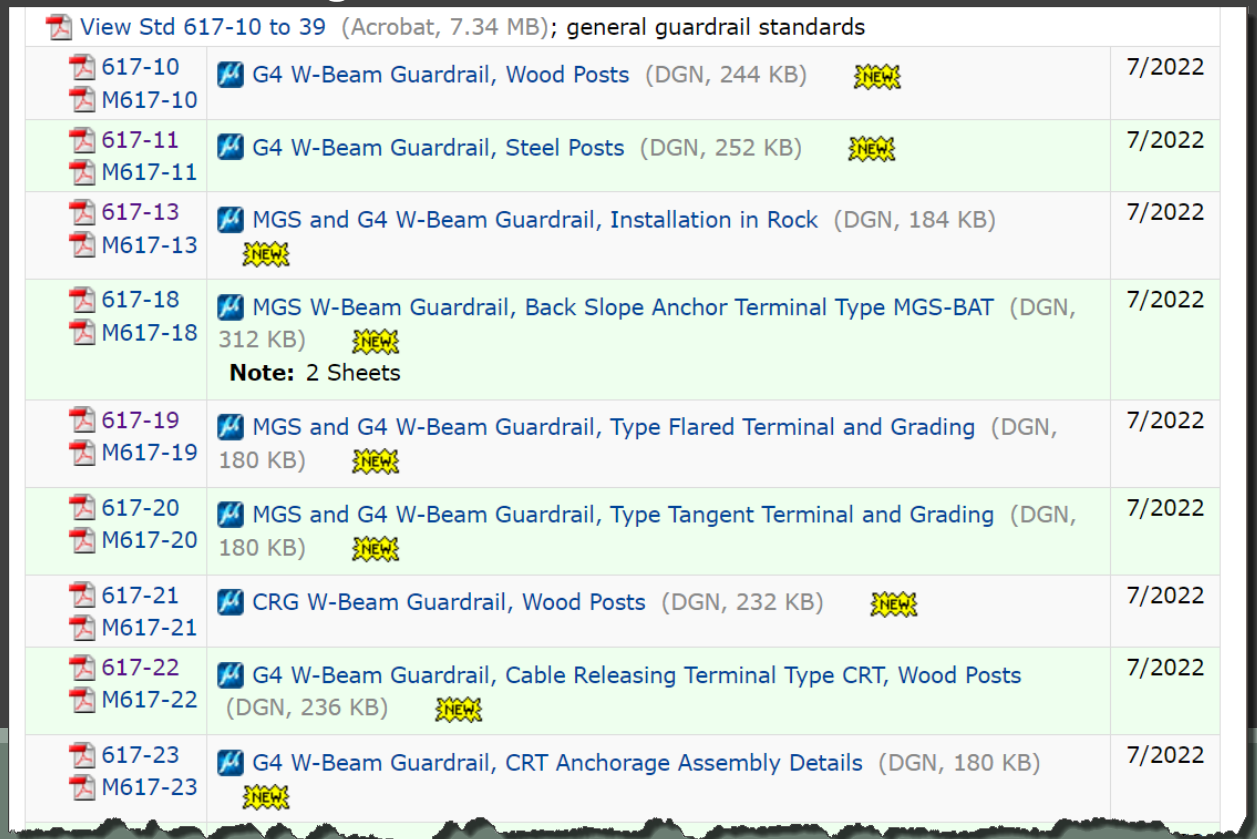
As part of the Infrastructure Investments and Jobs Act, FHWA is required to update the MUTCD by May 2023.

In the future, updates will occur at least every 4 years.

Guardrail Standard Drawings

Approved FLH Standard drawings posted to FLH > Standard Drawings (dot.gov)

CFL Details for guardrail have been removed

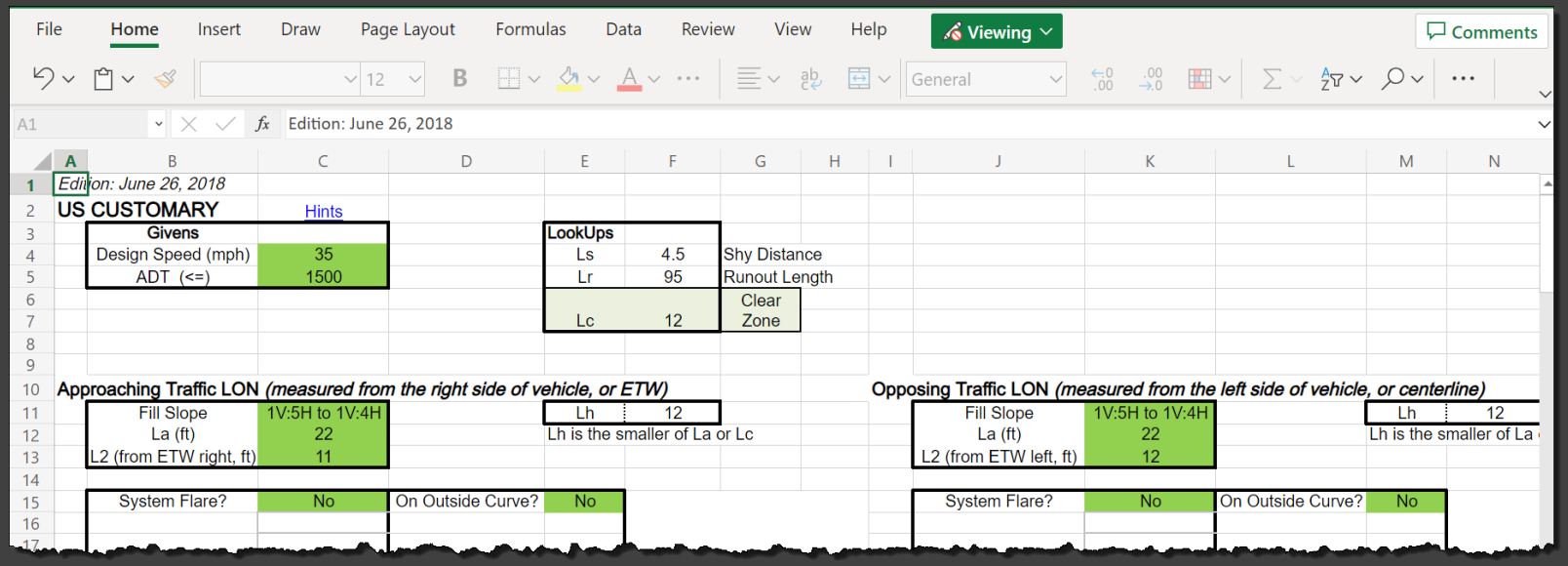


View Std 617-10 to 39 (Acrobat, 7.34 MB); general guardrail standards

617-10 M617-10	G4 W-Beam Guardrail, Wood Posts (DGN, 244 KB) NEW	7/2022
617-11 M617-11	G4 W-Beam Guardrail, Steel Posts (DGN, 252 KB) NEW	7/2022
617-13 M617-13	MGS and G4 W-Beam Guardrail, Installation in Rock (DGN, 184 KB) NEW	7/2022
617-18 M617-18	MGS W-Beam Guardrail, Back Slope Anchor Terminal Type MGS-BAT (DGN, 312 KB) NEW **Note:** 2 Sheets	7/2022
617-19 M617-19	MGS and G4 W-Beam Guardrail, Type Flared Terminal and Grading (DGN, 180 KB) NEW	7/2022
617-20 M617-20	MGS and G4 W-Beam Guardrail, Type Tangent Terminal and Grading (DGN, 180 KB) NEW	7/2022
617-21 M617-21	CRG W-Beam Guardrail, Wood Posts (DGN, 232 KB) NEW	7/2022
617-22 M617-22	G4 W-Beam Guardrail, Cable Releasing Terminal Type CRT, Wood Posts (DGN, 236 KB) NEW	7/2022
617-23 M617-23	G4 W-Beam Guardrail, CRT Anchorage Assembly Details (DGN, 180 KB) NEW	7/2022

Barrier Length of Need Spreadsheet

Current spreadsheet available on FLH website [Barrier Length of Need | FHWA (dot.gov)]



Working on an updated version of the spreadsheet used to calculate the length of need for guardrail installation

Midwest Guardrail System FAQ

Not posted yet to FLH website – currently undergoing updates

Contact CFL if you would like an advance copy

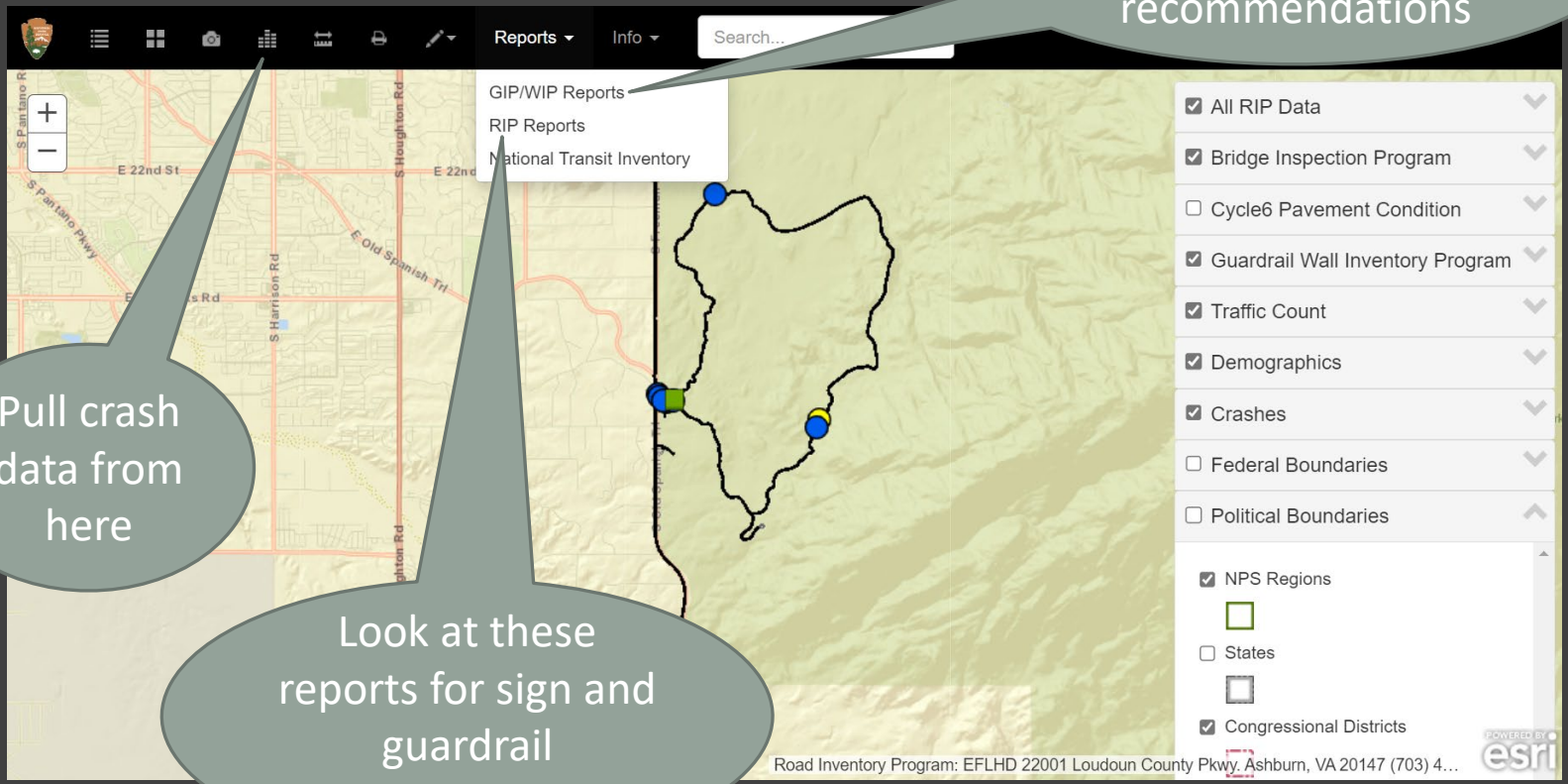
Low Speed W-Beam Terminal

FLH has been working with Texas Transportation Institute to develop a new design for a low-speed w-beam terminal

Final report anticipated end of February

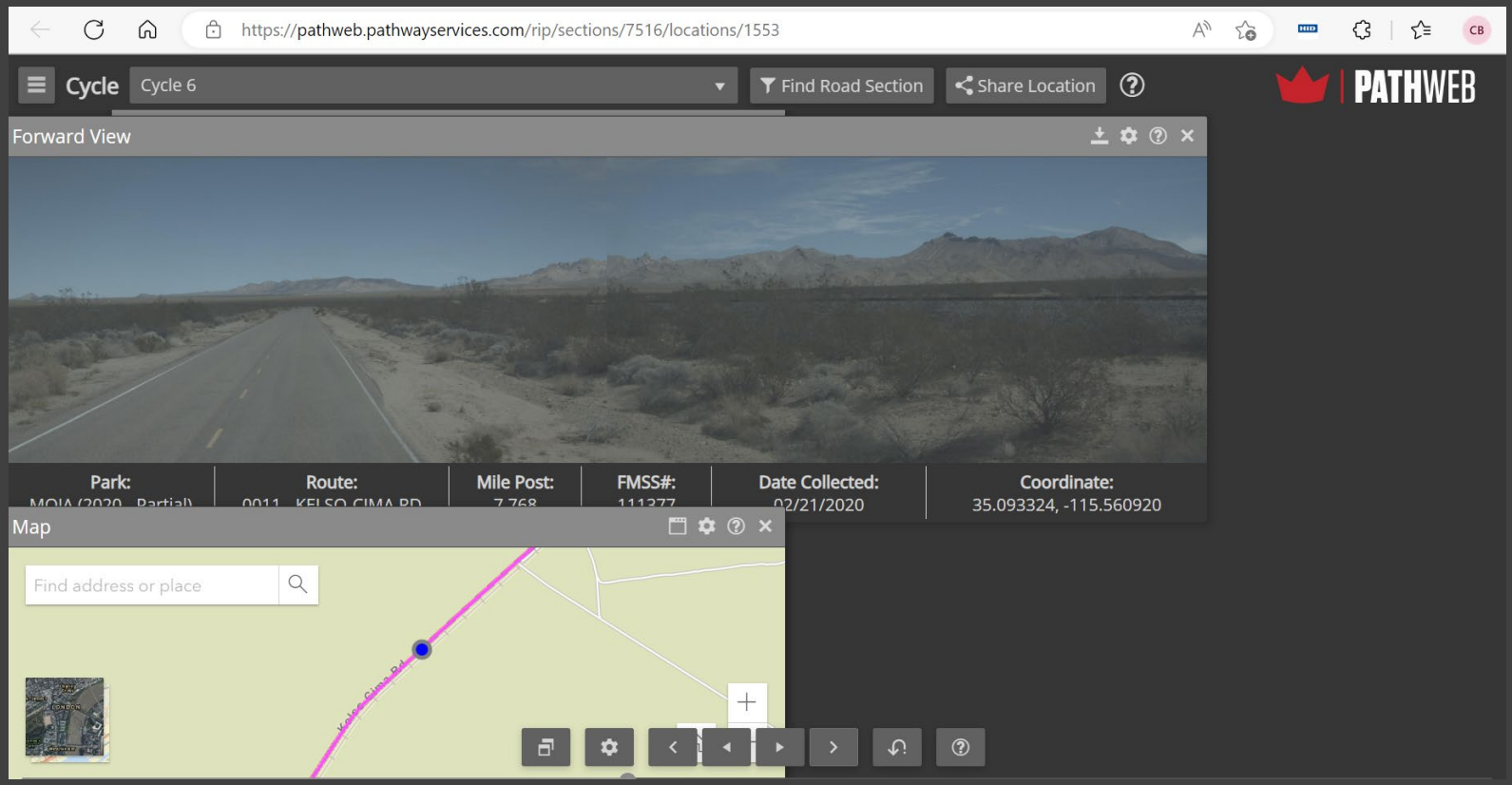
Sources of NPS Data

NPS Navigator [NPS Navigator 2.2202]



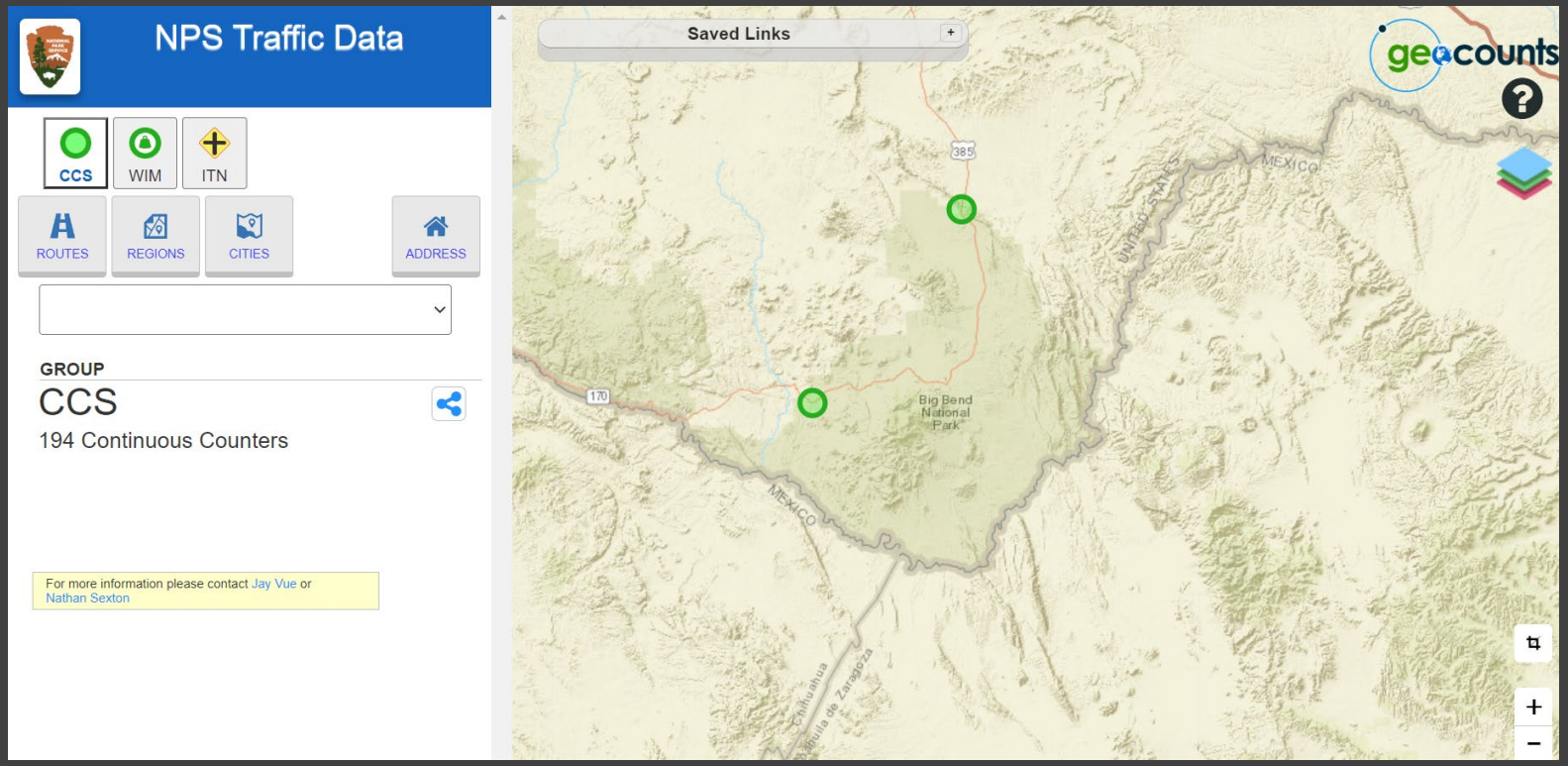
Sources of NPS Data

https://pathweb.pathwayservices.com/rip/



Sources of NPS Data

Traffic data https://geocounts.com/traffic/us/nps



Sources of Crash Data

National Highway Traffic Safety Administration Fatality and Injury Reporting System Tool (FIRST) https://cdan.nhtsa.gov/query

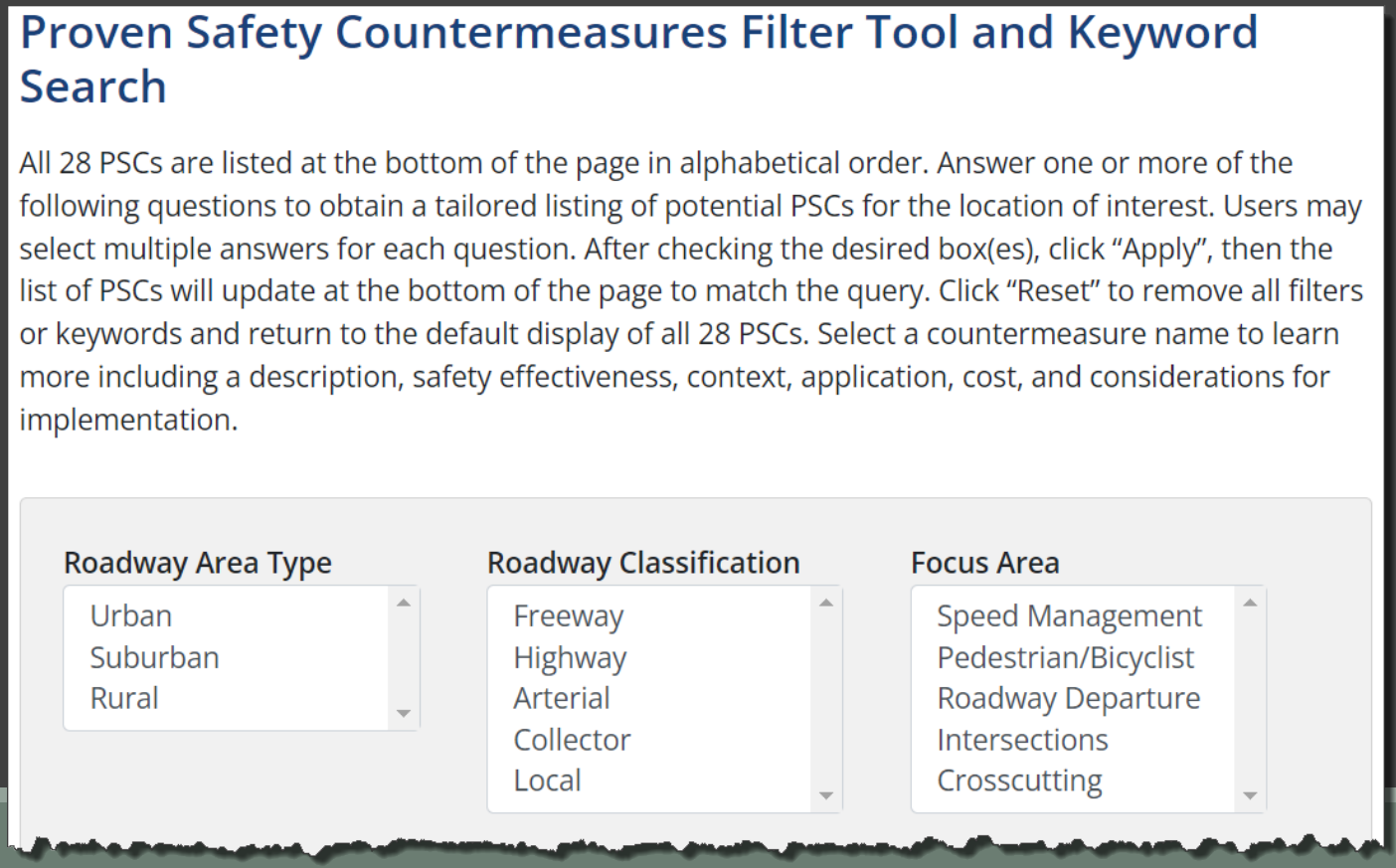
State DOT websites - example is CA TIMS - Transportation Injury Mapping System (berkeley.edu)

Find state contact info on Tribal Safety website https://www.tribalsafety.org/state-contacts

Ask partner agencies about their perspectives, ideally law enforcement

Proven Safety Countermeasures

New Search Tool https://highways.dot.gov/safety/proven-safety-countermeasures/search



Roadway Departure Safety

Countermeasures

Keep Vehicles on Roadway

- Pavement Friction
- Rumble Strips
- Horizontal Curve Safety
- Nighttime Visibility

Provide for Safe Recovery

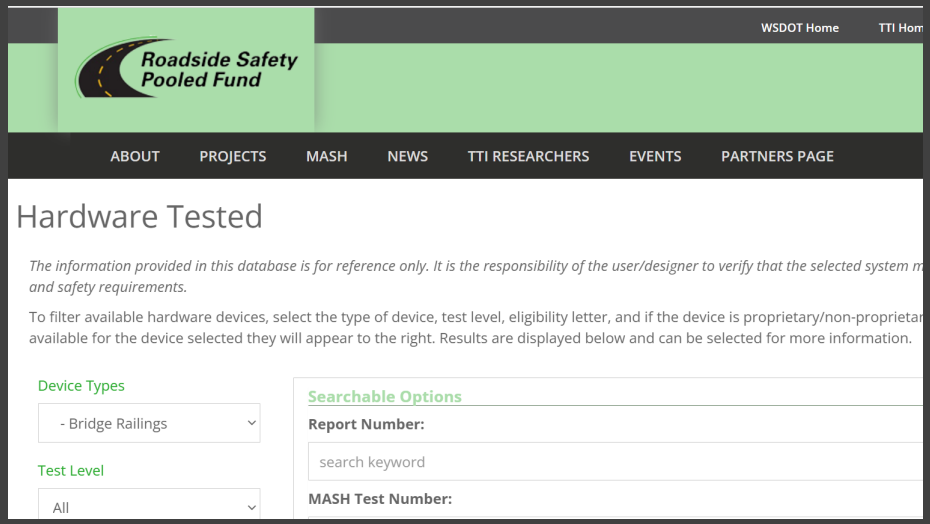
- SafetyEdge[SM]
- Clear Zones

Reduce Crash Severity

- Hardware Eligibility Letters
- Guidance & Policies
- Resources

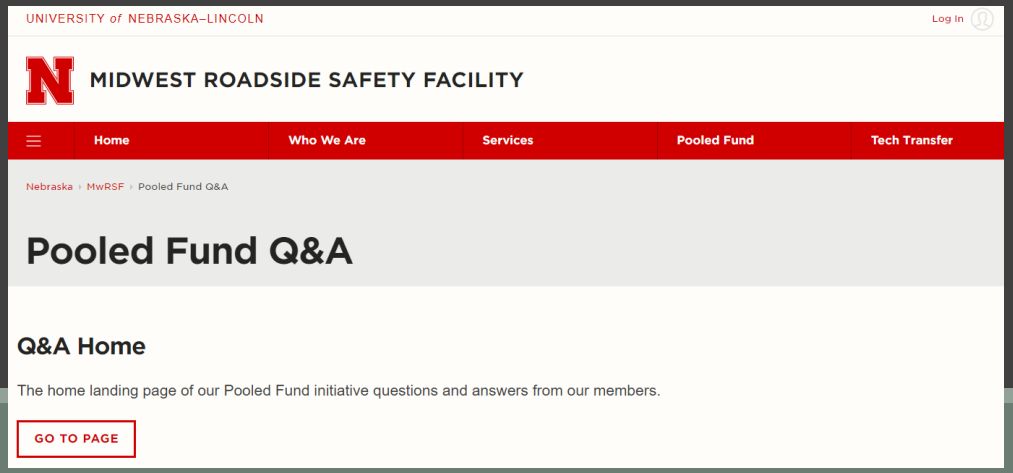
https://highways.dot.gov/safety/RwD

Roadway Departure Safety



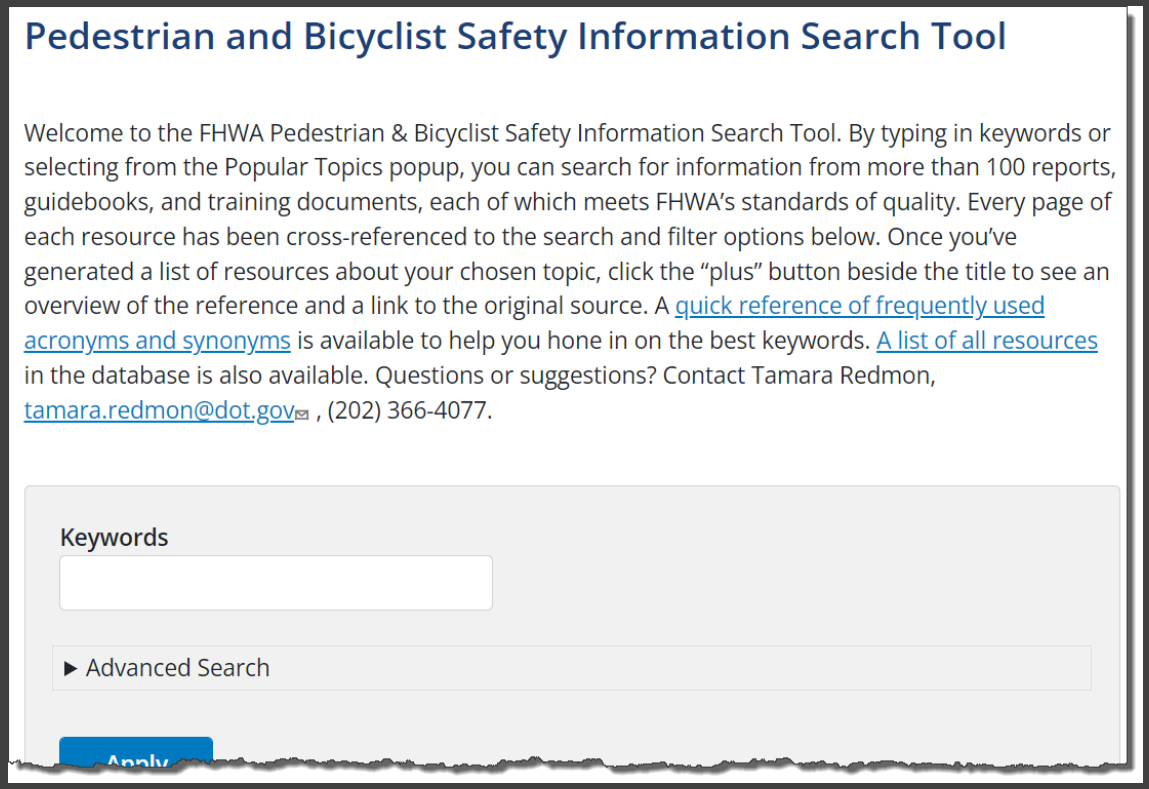
https://www.roadsidepooledfund.org/mash-implementation/search/

https://mwrsf.unl.edu/pooledfundq&ahome.php



Pedestrian & Bicyclist Safety

https://highways.dot.gov/safety/pedestrian-bicyclist/safety_info_search



Pedestrian and Bicyclist Safety Information Search Tool

Welcome to the FHWA Pedestrian & Bicyclist Safety Information Search Tool. By typing in keywords or selecting from the Popular Topics popup, you can search for information from more than 100 reports, guidebooks, and training documents, each of which meets FHWA's standards of quality. Every page of each resource has been cross-referenced to the search and filter options below. Once you've generated a list of resources about your chosen topic, click the "plus" button beside the title to see an overview of the reference and a link to the original source. A quick reference of frequently used acronyms and synonyms is available to help you hone in on the best keywords. A list of all resources in the database is also available. Questions or suggestions? Contact Tamara Redmon, tamara.redmon@dot.gov , (202) 366-4077.

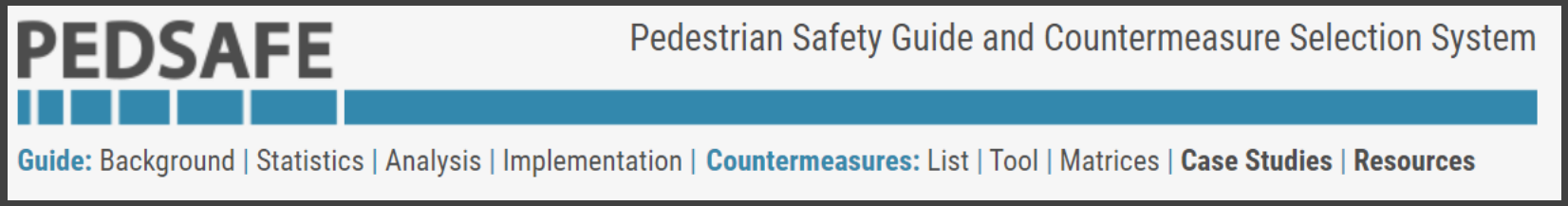
Keywords

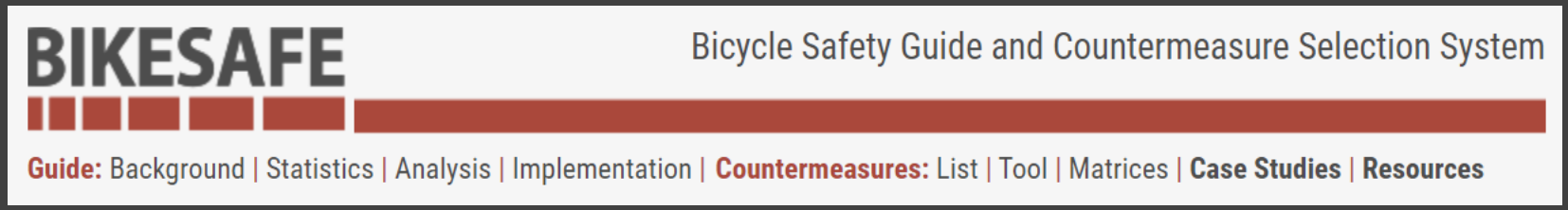
▶ Advanced Search

Apply

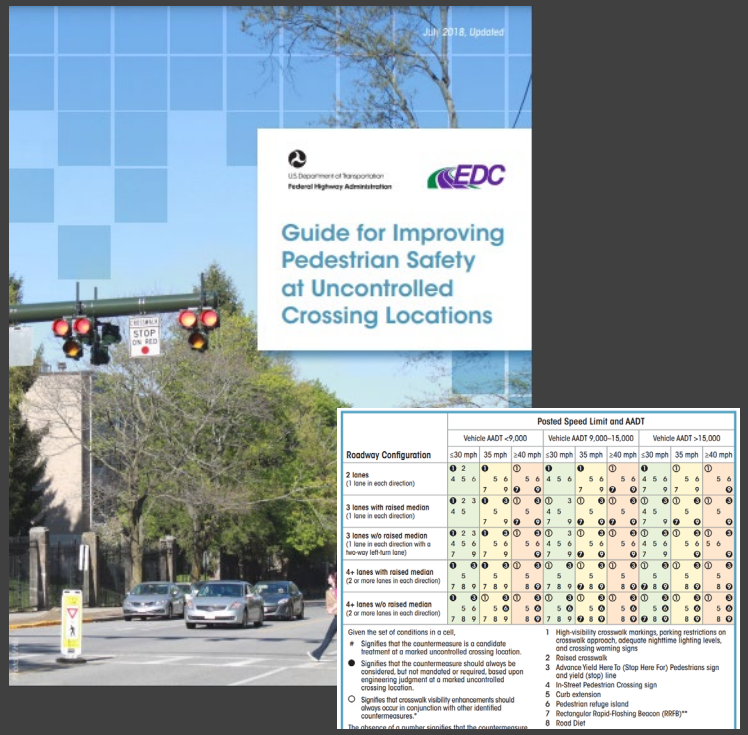
Pedestrian & Bicyclist Safety

http://www.pedbikesafe.org/

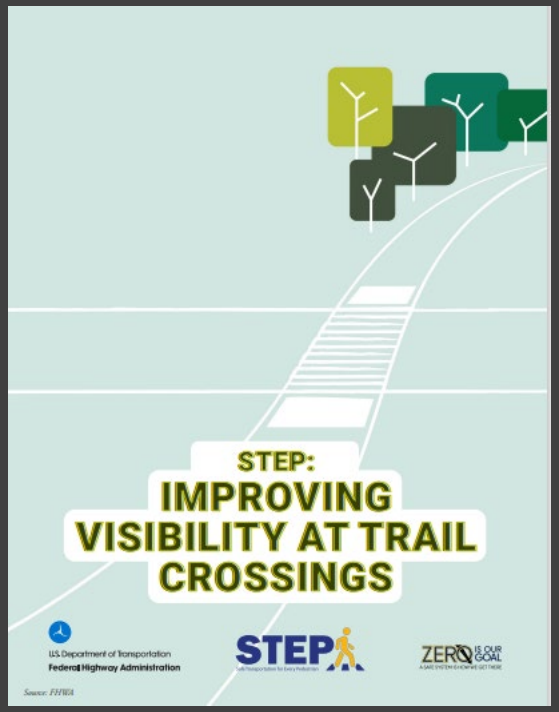




Pedestrian & Bicyclist Safety



https://www.fhwa.dot.gov/innovation/everydaycounts/edc_5/docs/STEP-guide-improving-ped-safety.pdf



https://safety.fhwa.dot.gov/ped_bike/step/resources/docs/step_improving_visibilty_at_trail_crossings.pdf

Speed Management

USLIMITS2

A Web-Based Tool for Setting Appropriate Speed Limits

NEW FEATURES AND ENHANCEMENTS

- **New Look** – Pages have been updated to provide a simple, clean look.
- **Help** – A help link on each page points back to the User Guide, documentation on the decision rules, and other useful information.
- **Local Storage** – Users now have full control over where projects are saved.
- **No Account or Log-In Needed** – Project files can now easily be shared with co-workers and decisionmakers without having to reveal user names and passwords.
- **Crash Data** – USLIMITS2 can work with total crashes or only injury crashes.
- **Additional Choice for Route Type** – Users can select "one way" streets as an option for road sections in fully developed areas.
- **Updated Reports** – Reports now include start and end locations for speed zones and other project information.

Background

Speeding is a major factor in motor vehicle crashes on local roads, arterials, and freeways. Exceeding the posted speed limit or driving too fast for conditions contributes to more than 30 percent of all highway fatalities in the United States annually. Setting appropriate speed limits is an essential element of highway safety. A rationally determined speed limit is one that is safe, considered appropriate by most drivers, and enforceable. USLIMITS2 provides a fact-based set of decision rules to determine an appropriate speed limit for a specific roadway segment.

USLIMITS2 is a user-friendly and logical web-based tool designed to help practitioners set credible, consistent, and enforceable speed limits. USLIMITS2 is applicable to all types of roads ranging from local roads and residential streets to freeways. The tool's accessibility and broad applicability make it an important resource in any transportation practitioner's toolbox.

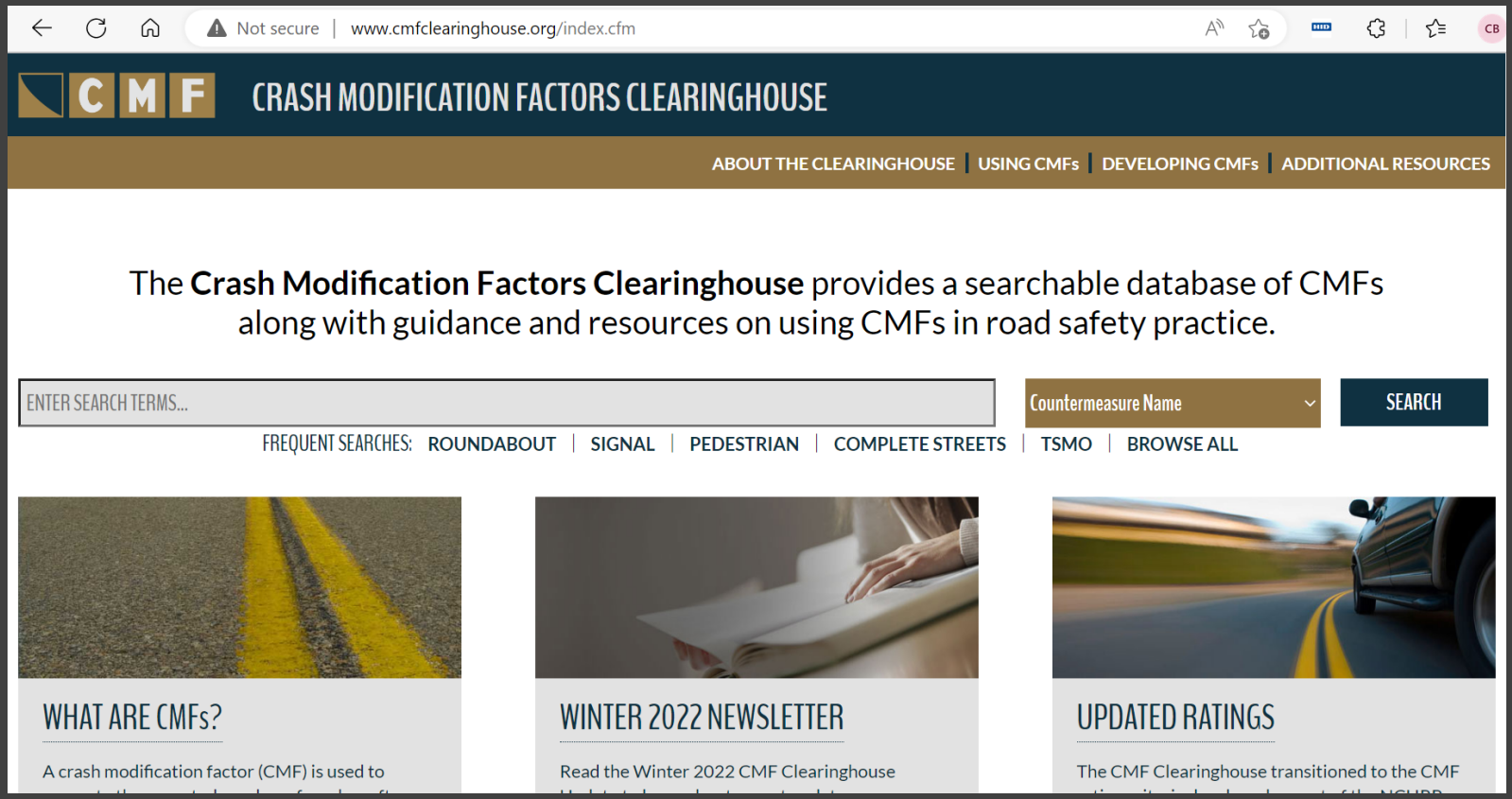
How Does USLIMITS2 Work?

Using the basic information entered by the user, USLIMITS2 runs proven algorithms to develop a recommended speed limit. Inputs include:

- Type of surrounding development (e.g., rural, fully developed);
- Access points (e.g., the number of driveways, intersections, and traffic signals);
- Road function/area type;
- Road characteristics (e.g., divided or undivided, number of lanes, annual average daily traffic (AADT), roadside hazards, and section length);
- Freeway characteristics (e.g., number of interchanges, section length, and AADT);
- Existing vehicle operating speeds (50th and 85th percentile);
- Pedestrian activity;
- Crash history; and
- Special conditions (e.g., adverse alignment, transition zones, and parking).

Speed Management | FHWA (dot.gov)

Crash Modification Factors



Safe System Approach

Adopted by the US DOT in 2022 as part of the National Roadway Safety Strategy

[What Is a Safe System Approach? | US Department of Transportation]

Questions?