Pedestrian and Bicyclist Safety

Source: FHWA

Source: FHWA

Source: FHWA

Federal Highway Administration (FHWA) Major Strategies

- Problem Identification
- Countermeasures
- Outreach/Technical Assistance

Problem Identification

- Key Product

  FHWA Pedestrian and Bicyclist Safety Strategic Plan.

- Key Message

  FHWA proactively works to decrease pedestrian and bicyclist fatalities.

- Outcome

  FHWA will develop a 5-year plan for increasing pedestrian/bicyclist safety.

Countermeasures

- Key Product/Resource

  Pedestrian Countermeasures Crash Modification Factor (CMF) Study

- Key Messages
  - Use Focused Approach and Every Day Counts (EDC5).
  - Use Safe Transportation for Every Pedestrian (STEP) to promote pedestrian/bike safety improvements.

- Outcomes
  - Use safety initiatives (Focused Approach, EDC5) to help stakeholders address pedestrian/bicyclist safety.
  - Develop CMF on Leading Pedestrian Intervals (LPI).
  - Develop Pedestrian-Intersection CMF.
  - Develop CMF for different types of Separated Bike Lanes (SBLs).

Outreach/Technical Assistance

- Safe Transportation for Every Pedestrian (STEP) Training and Workshops.
- Road Safety Audits/Assessments.
- Scan Tours.
- Peer Exchange.
- Conference Presentations.
- STEP Action Plans.
- Policy and Guidance.

Becky Crowe
FHWA Office of Safety
(202) 507-3699
Rebecca.Crowe@dot.gov

Arkansas – Tennessee Scan Tour
Source: FHWA

Administrator Nason's Pedestrian Safety Initiative to Reduce Pedestrian Fatalities and Serious Injuries

WHY

HOW

Showcase Tour

- Emphasize noteworthy practices.
- Highlight locations with pedestrian safety improvements.

Summit on Pedestrian Safety

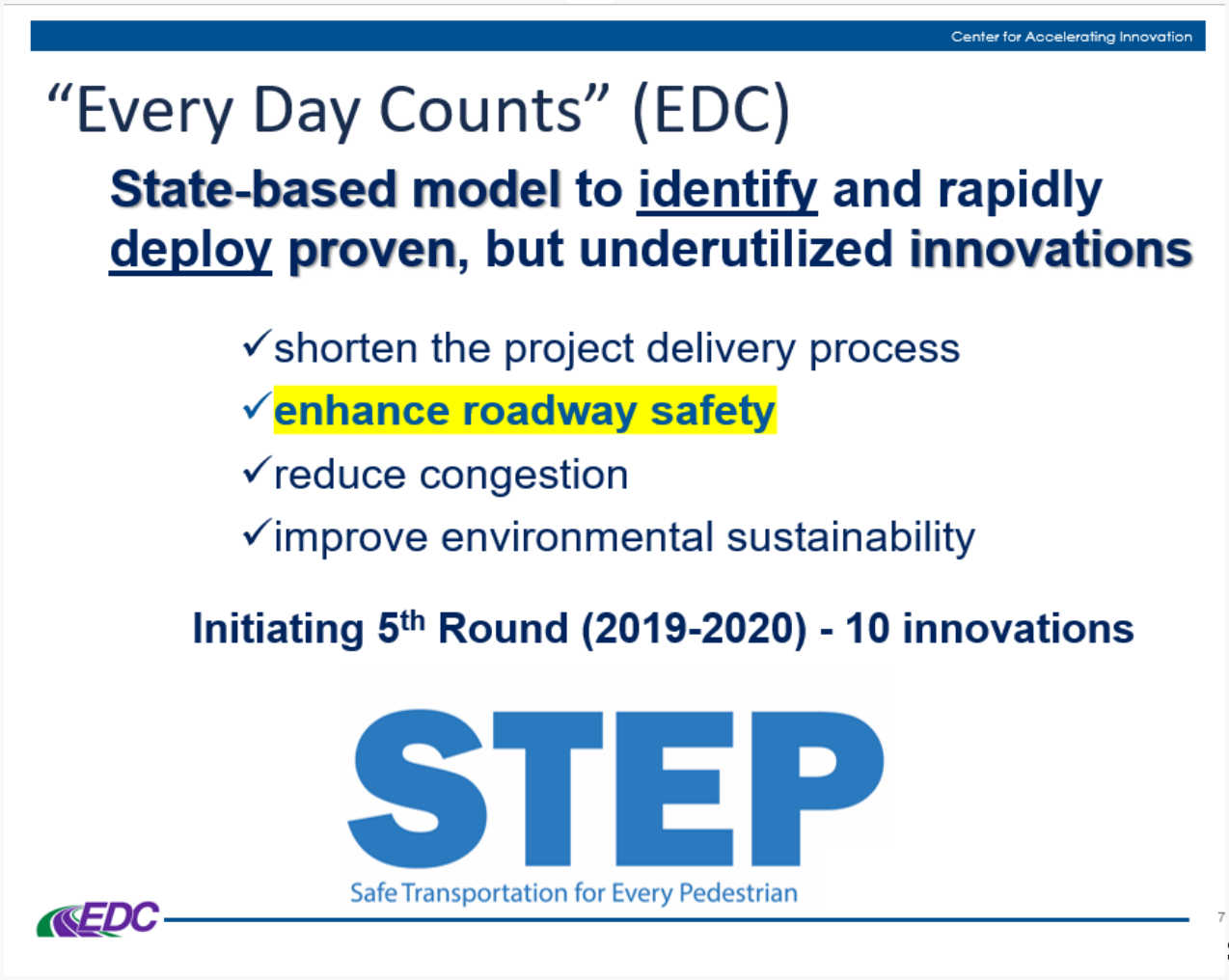
- Identify problems.
- Highlight partnerships.
- Identify priorities.

GOAL

Zero Deaths

Source: FHWA

Safe Transportation for Every Pedestrian (STEP)



Source: FHWA

STEP

Benefits:

- Improve safety.
- Address nationwide pedestrian safety problem.
- Enhance quality of life.

Source: FHWA

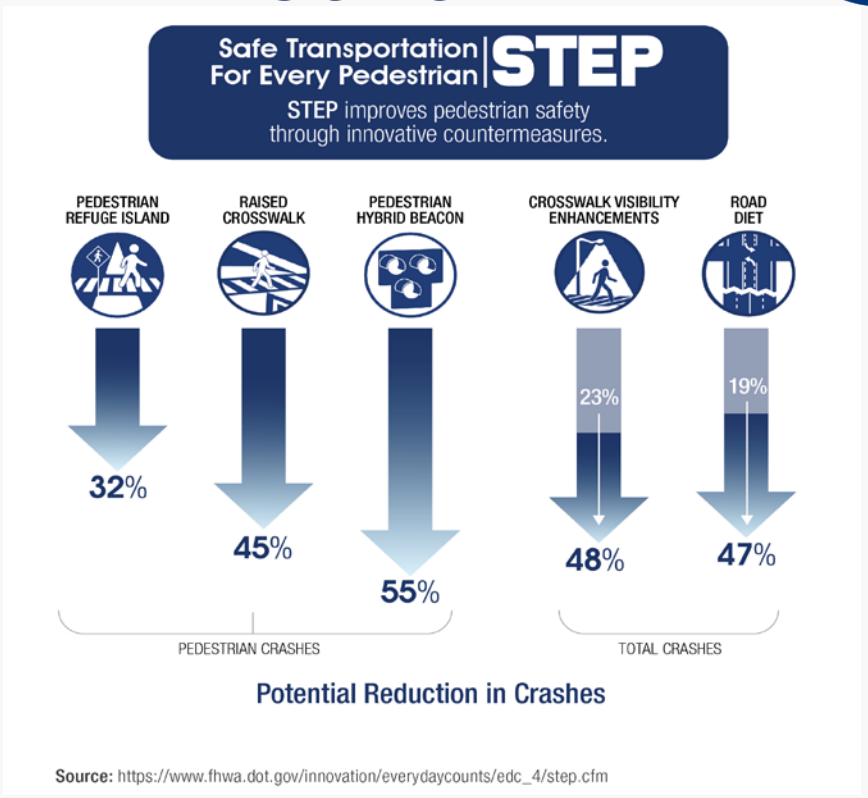
STEP

The Spectacular Seven









Source: FHWA

Recent Accomplishments: Office of Safety

- *Bikeway Selection Guide*

  Completed six workshops.

- *Guide for Scalable Risk Assessment Methods for Pedestrians and Bicyclists (ScRAM)*

  Completed six workshops and provide technical assistance.

- STEP

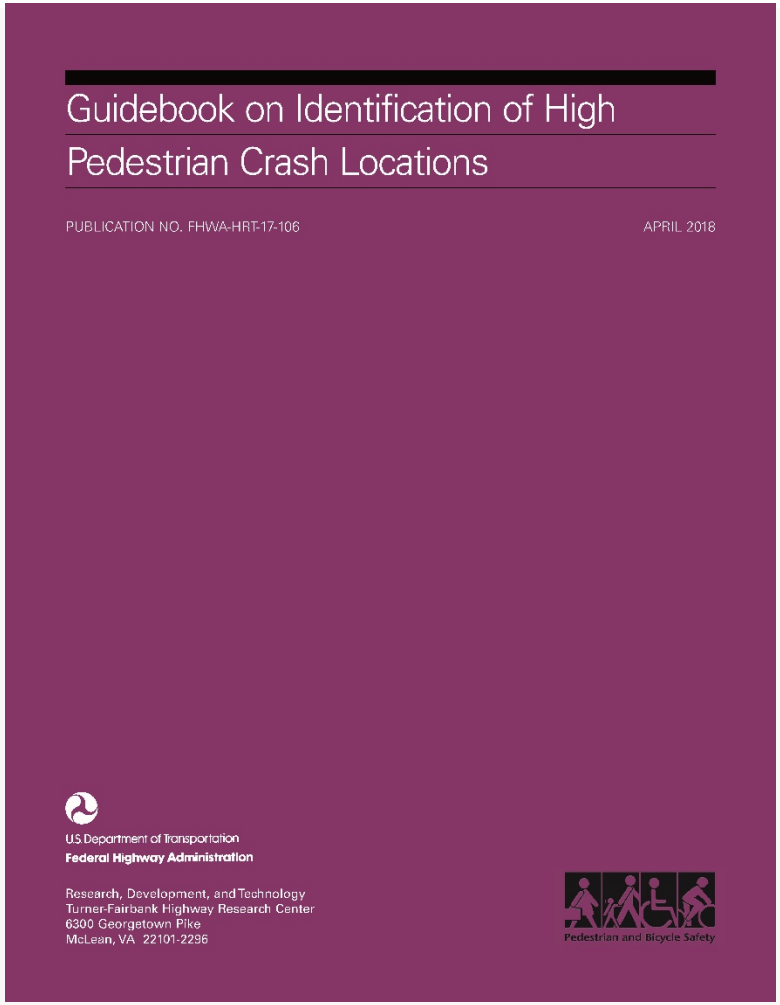
  Forty-seven States received technical assistance.

- Focus States
  - Twenty technical assistance workshops and four webinars completed in the past year.
  - Bikeway Selection Guide training will be available.

Recent Accomplishments: Office Safety Research and Development (R&D)

- Identification and Prioritization of High Pedestrian Crash Locations/Area.
- Pedestrian CMFs:
  - Leading Pedestrian Intervals (LPI).
  - Protected Left-Turn Phasing.
- Smart Cross Traffic Signal Interface on Smartphone.

Identification and Prioritization of High Pedestrian Crash Locations/Areas



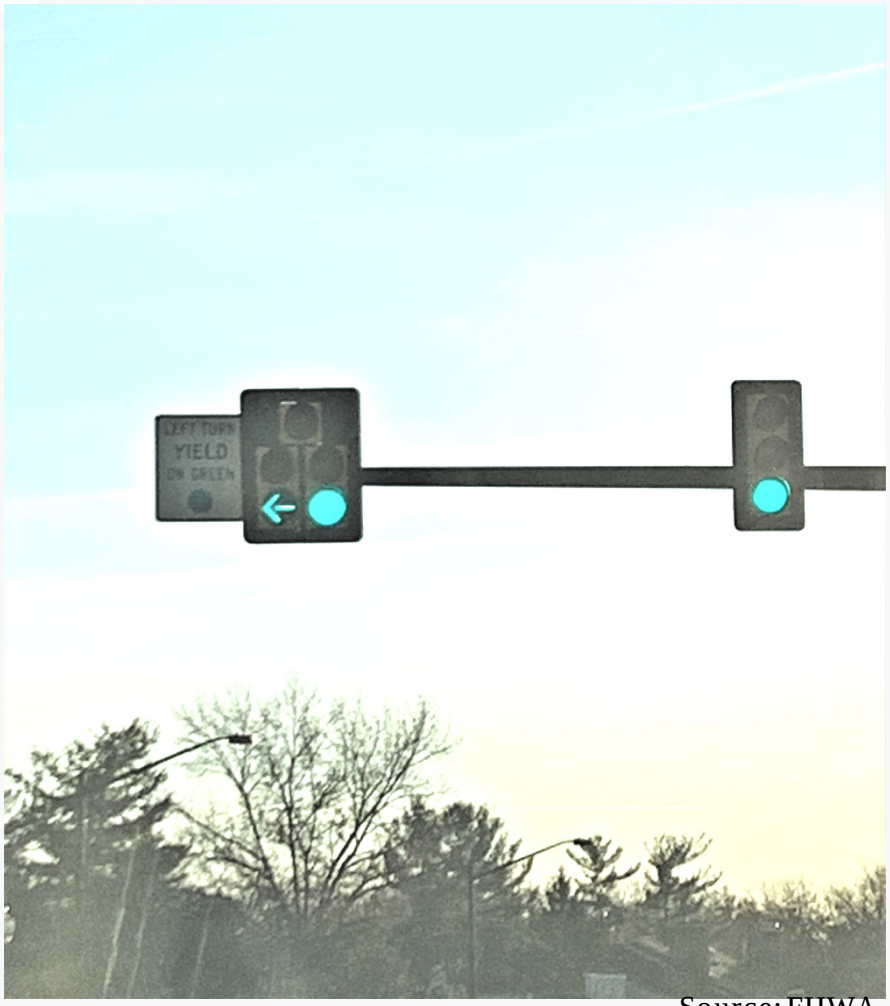
Source: FHWA

Source: FHWA

CMF for Leading Pedestrian Intervals

Source: FHWA

CMF for Protected Left-Turn Phasing



Source: FHWA

Smart Cross Application

The Smart Cross Application was developed through an award from the Small Business Innovation Research (SBIR) program.

Safety R&D Current Research Studies

- Development of CMFs for:
  - Different types of SBLs.
  - Right-turn radius for pedestrians at intersections.

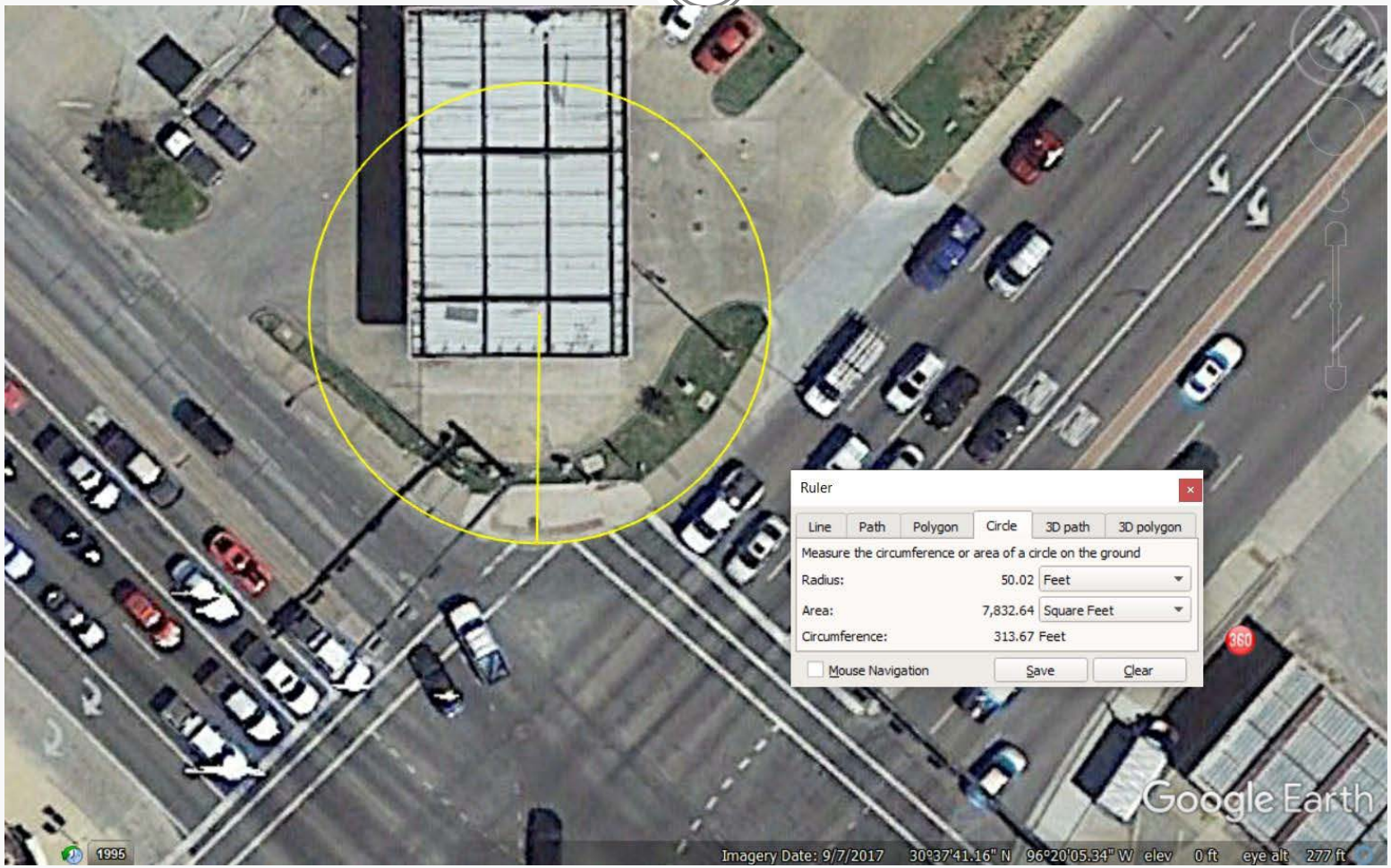
SBL in New York

SBL in New York City

SBL in New York City

Bicyclist Signal

CMF for Right-Turn Radius Measurement



Original Photo: 2019 © Google®. Map modifications: Source: FHWA.

Office of Human Environment Planning

Current Research Projects:

- Fostering Innovation in Pedestrian and Bicycle Transportation Pooled Fund Study.
- NHI Bicycle Facility Design Course.
- Multimodal Network Planning Pilot Communities.
- Planning Multimodal Networks in a Connected and Automated Vehicle Future.

Fiscal Year 2020 Proposed Focus Areas and Projects

- Continue to prioritize Focus States and Cities.
- Champion FHWA Administrator's Pedestrian Safety Initiative.
- Update *Pedestrian and Bicycle Road Safety Audit* materials.
- Update *Pedestrian and Bicycle Crash Analysis Tool.*
- Implement STEP.
- Examine vehicle-to-pedestrian safety technologies.
- Promote/provide technical assistance for:
  - *Pedestrians and Bicyclists ScRAM.*
  - *Bikeway Selection Guide.*

Pedestrian Crossing Warning Sign with Light-Emitting Diodes (LEDs)

- Project seeks to evaluate safety performance and develop a CMF for the W11-2 sign.
- Pedestrian Crossing Warning Sign with LEDs could be an alternative to Rectangular Rapid Flashing Beacons.

Figure 3: Example of pedestrian crossing warning sign with embedded LEDs and solar unit.

Source: FHWA

THANK YOU

BRIAN.CRONIN@DOT.GOV

ANN.DO@DOT.GOV