What is Every Day Counts (EDC)?

A state-based model that identifies and deploys proven, yet underutilized innovations — saving time, money, and resources that can be used to deliver more projects.

Learn more about Every Day Counts >>

- Find Proven Innovations
- Learn from Others
- Fund Innovation Deployment
Why should you care?

• Proven innovations & technologies
  – Save lives
  – You don’t have to re-invent the wheel
• Support available
  – Case studies & success stories
  – Experts: FHWA & Peer

https://www.fhwa.dot.gov/innovation/everydaycounts/

Limited funding available

• STIC (State Transportation Innovation Council) Incentive - $100K each year
  – To standardize an innovation in a state
  – Use must be approved by the STIC
• AID Demonstration – competitive & up to $1 million each year
  – To accelerate the implementation & adoption of an innovation
  – Coordinate through ALDOT & STIC
  – https://www.fhwa.dot.gov/innovation/grants/
EDC Safety Initiative Highlights

- EDC-1: 2011-2012
  - Sloped Pavement Edge (Safety Edge)

- EDC-2: 2013-2014
  - High Friction Surface Treatments (HFST)
  - Intersection & Interchange Geometrics

- EDC-3: 2015-2016
  - Smarter Work Zones

- EDC-4: 2017-2018
  - Safe Transportation for Every Pedestrian (STEP)

- EDC-5: 2019-2020
  - REDUCING RURAL ROADWAY DEPARTURES

- EDC-6: 2021-2022
  - Crowd Sourcing for Advanced Operations

Sloped Pavement Edge (Safety Edge)

- Saves lives - mitigates edge drop offs
- Improves pavement edge durability
- Little to no increase to project cost
Tire Scrubbing

This is a typical diagram for a crash caused by tire scrubbing. The vehicle at left scrubbed the edge of the pavement, and when it returned, the driver overcorrected, lost control, crossed into the adjacent lane, and struck an oncoming vehicle.

Graphic Source: AAA Foundation for Highway Safety

Configurations for asphalt pavements & overlays

For single lift overlay

For H ≤ 5 in.

For H > 5 in.

Note: “Shoulder (recommend) Slope to be minimum lateral 1:1.75:1.0. Pan depth at time to expected 20” in 407.

Exhibit B: Safety Edge™ configurations for asphalt pavements and asphalt overlays.
Sloped Pavement Edge/Safety Edge

1.5 inch overlay

High Friction Surface Treatments (HFST)

• Horizontal Curves: 5 % ~ 25% of fatalities
• HFST
  – Typically small quantities
  – High-quality, durable aggregate
  – Polymer binder
Intersection & Interchange Geometrics

- ~50% of severe crashes occur at intersections
- Opportunities:
  - Displaced Left-Turns (DLT) or Variations on U-Turns
  - Roundabouts and Mini-Roundabouts
  - Diverging Diamond Interchange (DDI)

Smarter Work Zones

- Coordinate construction projects
- Reduce WZ impacts with technology applications
  - Queue detection
  - Speed management
Safe Transportation for Every Pedestrian (STEP)

- Rectangular rapid flashing beacons (RRFBs)
- Leading pedestrian intervals (LPIs)
- Crosswalk visibility enhancements: crosswalk lighting & enhanced signage
- Raised crosswalks
- Pedestrian crossing/refuge islands
- Pedestrian hybrid beacons (PHBs)
- Road Diets

West South Boulevard Before

Credit: Google Maps
West South Boulevard After

Credit: STACC & The Six Fifty Co

Safe Transportation for Every Pedestrian (STEP)

• West South Boulevard before video:

   https://www.youtube.com/watch?v=Fm5jPeCB3tM

• West South Boulevard after video coming soon to the Auburn University ATAP YouTube channel
REDUCING RURAL ROADWAY DEPARTURES

• Nearly 60% of fatalities are on AL rural roads
• Systemic Safety
  – Proactive & uses a system-wide analysis
    • Example: rural lane departure crashes
      – Severe crashes spread over a wide area, typically no cluster
      – Not identified through traditional data analysis
      – Use roadway characteristics to analyze network
      – Use results to create a prioritized list
      – Apply proven safety countermeasures systemically
• Local Road Safety Plans

REDUCING RURAL ROADWAY DEPARTURES

• Proven Safety Countermeasures
  – https://safety.fhwa.dot.gov/provencountermeasures/
Crowd Sourcing for Advanced Operations

- Faster response to incidents
- Reduce secondary crashes
- Improve operations
- Common sources: social media, third-party data providers, mobile apps
  - passive or active transmission
  - quantitative or qualitative
  - speed, travel time, incident type, travel behavior, public sentiment, vehicular operation, and more

Questions?

https://www.fhwa.dot.gov/innovation/everydaycounts/

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