EVALUATIONS OF LOW COST SAFETY IMPROVEMENTS POOLED FUND STUDY
OBJECTIVE

- Develop reliable estimates of lower cost safety improvements
  - Focus on strategies identified in NCHRP 500 Guidebooks
  - Rigorous before-and-after evaluations
  - Leverage large sample sizes through participating states

- 38 States Participating

Alabama, Washington, Nevada and Rhode Island are participating but not identified on map
$4.4 million (total) contributed

Original Scope was to conduct
- 20 strategies
- 5 years
- 4 stages

Current Scope is
- X strategies
- 10 years
- 8 stages
PHASE 1 - RETROSPECTIVE EVALUATION

- Increased retroreflectivity of STOP signs.
- Flashing beacons at STOP-controlled intersections.
- STOP AHEAD pavement markings.
- Installing center two-way left-turn lanes on two-lane roads.
Lane and shoulder width combinations on rural, two-lane, undivided roads.
- Improved curve delineation.
- Offset improvements for left-turn lanes.
- Advance street name signs.
Surface friction treatment on curves.
Surface friction treatment on ramps.
In-lane pavement markings for curve warning.
Larger chevrons.
Edgeline rumble strips on curves.
Red light indicator lights.

PHASE 3 – PROSPECTIVE EVALUATION
PHASE 4 – RETROSPECTIVE EVALUATION

- Rural two-lane undivided roads: nighttime delineation for curves (three strategies).
- Rural traffic calming for small towns (three strategies).
PHASE 5 – PROSPECTIVE EVALUATION

- Combination of centerline and edgeline rumble strips.
- Combination of median barrier and rumble strips.
- Signalized intersection multicountermeasures.
- STOP-controlled intersection multicountermeasures.
PHASE 6 – RETROSPECTIVE EVALUATION

- **Asphalt Pavement**
  - Thin hot-mix asphalt overlay.
  - Chip seal, microsurfacing.
  - Ultra-thin bonded wearing course.
  - Open-graded friction course.
  - Slurry seal.

- **Concrete Pavement**
  - Diamond grinding.
  - Ultra-thin bonded wearing course.
  - Microsurfacing and grooving.
Pedestrian signals, signs, markings, etc.
Driver feedback signs.
Active intersection conflict warning systems/dynamic signing.
Pavement marking types and characteristics.
PHASE 8 – RETROSPECTIVE EVALUATION

- Restricted crossing U-turn (RCUT).
- Flashing yellow arrows.
- Access management.
- Realignment of horizontal curvature.
- Profiled thermoplastic pavement markings.
FUTURE OF ELCSI PFS

- Technical Advisory Panel/Annual Meeting June 4-5
- Open evaluation projects
- Budget update
- Future direction
  - Mucho Mas
  - Terminar
  - Yo no se
- Great Value from DOT perspective
PREGUNTA?

Brad Estochen
MnDOT State Traffic Safety Engineer
Bradley.estochen@state.mn.us


Reports, presentations, schedule, details