High Friction Surface Treatment
HFST
National Perspective

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All Highway Fatalities in US

Annual

5-Year Avg
Indiana Highway Fatalities

Yearly vs 5-Year Ave.


Fatalities: 400, 500, 600, 700, 800, 900, 1000, 1100
Focused Approach to Safety

- Three (consistent) Focus Areas
  - Roadway Departure -------------- States
  - Intersection ----------------- States
  - Pedestrian and Bicycle -------- Cities and associated States
United States Fatalities by FHWA Focus Area  
Average 2015-2017

- Roadway Departure Only Crashes: 47%
- Intersection Only Crashes: 13%
- Pedestrian/Bicycle Only Crashes: 18%
- Multiple Focus Areas: 12%
- Intersections and Pedestrians/Bicycles: 11%
- Intersections and Roadway Departures: 5.5%
- Roadway Departures and Pedestrian/Bicycles: 4.2%
- All Focus Areas: 0.2%
- Crashes not involving a Focus Area: 1.4%

NOTE: The totals in the pie charts do not exactly add up to 100% and 11% respectively due to rounding.
Snapshot of Roadway Departure Fatalities

----- 50+% of all US Fatalities

43% of these are on curves
HFST

COUNTERMEASURES

Keep Vehicles on Roadway
Provide for Safe Recovery
Reduce Crash Severity
HFST

• HFST – a Proven Safety Countermeasure
• Effectiveness
• National Implementation
FHWA Proven Safety Countermeasures

- Enhanced Delineation and Friction for Horizontal Curves
- USLIMITS2
- New
- Roadside Design Improvement at Curves
- Reduced Left-Turn Conflict Intersections
- Systemic Application of Multiple Low Cost Countermeasures at Stop-Controlled Intersections
- Leading Pedestrian Interval
- Local Road Safety Plan
- Median Barrier
- Safety Edges
- Backplates with Retroreflective Borders
- Corridor Access Management
- Dedicated Left- and Right-Turn Lanes at Intersections
- Roundabouts
- Yellow Change Intervals
- Medians and Pedestrian Crossing Islands in Urban and Suburban Areas
- Pedestrian Hybrid Beacon
- Road Diet
- Walkways
- Road Safety Audit
Enhanced Delineation and Friction for Horizontal Curves

Enhanced Delineation

• Pavement Markings
• Post-mounted delineators
• Brighter/larger signs
• Dynamic curve warning signs

Increased Pavement Friction

• Sharp Curves
• Wet Conditions
• Polished Surfaces
• Excessive Speeds
State DOT HFST Status
★ Active implementation as of 12/1/2017

- No curves
- One curve
- 2 – 10 curves
- 10 – 50 curves
- 50 – 100 curves
- Over 100 curves
- Over 2 million S.Y.
DO NOT BE AFRAID
OF WORK
THAT HAS NO END

— AVOT DE RABBI NATAN