



SOLUTIONS FOR SAVING LIVES ON TEXAS ROADS

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Texas Traffic Safety Task Force was created in August 2015 with the goal of finding solutions to save lives on Texas roads.



Solutions for Saving Lives on Texas Roads June 2016

- provides a cost-benefit analysis on proven traffic safety improvements.
- recognizes that installing more highway safety engineering improvements and conducting driver behavior and enforcement campaigns will save more lives.



SOLUTIONS FOR SAVING LIVES ON TEXAS ROADS

TEXAS TRAFFIC SAFETY TASK FORCE REPORT

Commissioner Jeff Moseley, Texas Transportation Commission



Texas Traffic Safety Task Force Report

Data Presented in Report

- Potential Inventory
- Recommended Portion
- Investment
- Potential Lives Saved
- Potential Serious Injuries Prevented
- Potential Crashes Prevented
- Estimated Cumulative Benefit
- Potential Return per \$1 Spent



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Data Needed for Calculations

- Average Construction Cost
- Quantity
- Crash Data by Crash Severity (KABCO)
- Crash Modification Factors by Crash Severity
- Confidence Intervals
- Crash Costs by Crash Severity (NSC)



RUMBLE STRIPS

- Up to 20,000 miles
- \$360 million over 5 years
- Potential Lives Saved 850–900 lives
- Estimated Cumulative Benefit \$4.3 billion

Potential \$12 Return for Every \$1 Spent



URBAN INTERSECTION IMPROVEMENTS

- Up to 6,250 intersections
- \$313 million over 5 years
- Potential Lives Saved 50–100 lives
- Estimated Cumulative Benefit \$1.3 billion

Potential \$4 Return for Every \$1 Spent



HIGH-FRICTION SURFACE TREATMENT

- Up to 1,000 curves
- \$100 million over 5 years
- Potential Lives Saved 25–50 lives
- Estimated Cumulative Benefit \$205 million



Potential \$2 Return for Every \$1 Spent

CONCRETE AND CABLE MEDIAN BARRIERS

- Up to 1,150 miles
- \$590 million over 5 years
- Potential Lives Saved 400–700 lives
- Estimated Cumulative Benefit \$2.3 billion



Potential \$4 Return for Every \$1 Spent

MODERNIZE RAIL AND APPROACH GUARDRAIL

- Up to 350 bridges
- \$70 million over 5 years
- Potential Lives Saved 10–50 lives
- Estimated Cumulative Benefit \$154 million

Potential \$2 Return for Every \$1 Spent



WIDEN NARROW HIGHWAYS AND BRIDGES

- Up to 2,000 miles
- \$636 million over 5 years
- Potential Lives Saved 200–300 lives
- Estimated Cumulative Benefit \$1.3 billion

Potential \$2 Return for Every \$1 Spent



TRAFFIC MANAGEMENT SYSTEM IMPROVEMENTS

- Up to Statewide
- \$300 million over 5 years
- Potential Lives Saved 500–900 lives
- Estimated Cumulative Benefit \$17.1 billion

Potential \$57 Return for Every \$1 Spent



SAFETY BELT CAMPAIGN AND ENFORCEMENT

- Up to \$156 million over 5 years
- Potential Lives Saved 175–650 lives
- Estimated Cumulative Benefit \$2.1 billion



Potential \$13 Return for Every \$1 Spent

IMPAIRED DRIVING CAMPAIGN AND ENFORCEMENT

- Up to \$49 million over 5 years
- Potential Lives Saved 300–450 lives
- Estimated Cumulative Benefit \$1.7 billion

Potential \$35 Return for Every \$1 Spent



NEW TRAFFIC SAFETY CAMPAIGN AND ENFORCEMENT

- Up to \$116 million over 5 years
- Potential Lives Saved 100–275 lives
- Estimated Cumulative Benefit \$1 billion

Potential \$9 Return for Every \$1 Spent



EXPANDED MOTORCYCLE SAFETY CAMPAIGN AND ENFORCEMENT

- Up to \$38 million over 5 years
- Potential Lives Saved 75–125 lives
- Estimated Cumulative Benefit \$421 million

Potential \$11 Return for Every \$1 Spent



TEXAS HIGH SCHOOL TRAFFIC SAFETY CAMPAIGN

- Up to \$15 million over 5 years
- Potential Lives Saved 50–125 lives
- Estimated Cumulative Benefit \$555 million

Potential \$37 Return for Every \$1 Spent



A Plan for Saving Lives on Texas Roads

5-Year Safety Improvement Plan

- Investment **\$2.7 B**
- Potential Lives Saved **2,735**
- Cumulative Benefit **\$32.4 B**

5-Year Safety Improvement Plan	Potential Lives Saved Over Service Life	Investment	Potential Cumulative Benefit	Potential Return per \$1 spent
HIGHWAY SAFETY ENGINEERING				
Rumble Strips	850-900	\$360 M	\$4.3 B	\$12
Urban Intersections	50-100	\$313 M	\$1.3 B	\$4
High-friction Surface Treatments	25-50	\$100 M	\$205 M	\$2
Median Barriers	400-700	\$590 M	\$2.3 B	\$4
Modernize Bridge Rail	10-50	\$70 M	\$154 M	\$2
Widening Highways and Bridges	200-300	\$636 M	\$1.3 B	\$2
Traffic Management Systems	500-900	\$300 M	\$17.1 B	\$57
DRIVER BEHAVIOR AND ENFORCEMENT				
Safety Belt Campaign	175-650	\$156 M	\$2.1 B	\$13
Impaired Driving Safety Campaign	300-450	\$49 M	\$1.7 B	\$35
New Traffic Safety Campaign	100-275	\$116 M	\$1.0 B	\$9
Motorcycle Safety Campaign	75-125	\$38 M	\$421 M	\$11
High School Education Campaign	50-125	\$15 M	\$555 M	\$37
TOTAL	2,735-4,625	\$2.7 B	\$32.4 B	\$12

- More than 540 lives could be saved and thousands of crashes prevented every year at an average annual investment of \$540 million.
- Texas could achieve a \$12 benefit for every \$1 spent on these safety strategies.



Solutions for Saving Lives on Texas Roads



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<http://ftp.dot.state.tx.us/pub/txdot-info/trf/trafficsafety/saving-lives.pdf>