

“The return on investment generated by Advocates’ safety successes is extraordinary and growing appreciably.”

495
state safety laws passed

215,000
lives saved

\$2 trillion
avoided in medical costs, work loss, and property damage

\$1,250 ROI
in cost savings per dollar invested by auto insurers

THE ECONOMIC AND PUBLIC HEALTH BENEFITS OF 32 YEARS OF
ADVOCACY FOR SAFE CARS, SAFE DRIVING, AND SAFE ROADWAYS
BY ADVOCATES FOR HIGHWAY AND AUTO SAFETY

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January 2024



Highlights

- Laws and regulations enacted with the support of Advocates for Highway and Auto Safety (Advocates) saved an estimated 215,000 lives from September 1989 to December 2021.
- Total cost savings exceeded \$2 trillion, excluding the value of lost quality of life:
 - More than \$930 billion in reduced losses resulting in significant cost savings to auto insurers and benefiting consumers.
 - An additional savings of \$150 billion to other insurers.
- Just a portion of Advocates' efforts contributed to passage of 495 state laws and averted repeal of at least 74 more:
 - Laws passed included 153 occupant protection laws, 131 impaired driving laws, 62 graduated driver license laws, 83 laws governing cell-phone use while driving, and 66 laws authorizing automated enforcement.
 - Federal laws and regulations included dozens of other safety provisions resulting in lifesaving and cost-saving technologies as standard equipment on motor vehicles, including airbags, rollover prevention systems, electronic stability control, tire pressure monitoring, upgraded roof strength, improved side impact protection, rear view cameras and more. Automatic emergency braking with pedestrian detection is expected to be required in 2028. Congressionally mandated rulemaking to detect and intervene with impaired drivers is underway. This technology may also have the capability of preventing distracted and drowsy driving.
 - Increased funding for grant programs for states to improve roadway safety infrastructure, traffic safety programs and for federal safety agencies.
- If Advocates was responsible for as little as 10% of what was achieved, auto insurers helped generate at least \$1,250 in cost savings for every dollar invested in support of Advocates' safety efforts.
 - That return is very conservative. It equates to just \$100,000 in fatal and injury claims payments averted per fatality prevented. By comparison, jury awards for vehicular liability averaged \$664,097 in 2019 and \$2,673,427 in 2020.¹

¹ Thomson Reuters, Current Award Trends in Personal Injury, 60th and 61st Editions.

Introduction

Advocates for Highway and Auto Safety (Advocates), founded in 1989, is a national alliance of consumer, safety, law enforcement, medical and public health groups, and insurance companies and agents working to advance laws proven to prevent crashes, deaths and injuries on our roads and contain related costs. Advocates lobbies for the adoption of federal and state roadway and auto safety laws, policies, and programs. Its goal is to reduce deaths, injuries, and financial burdens from crashes on U.S. roadways. In addition to its legislative efforts, Advocates provides input from its constituency into federal rulemakings that affect the safety of the Nation's roadways and vehicles and the behavior of its drivers. It typically coordinates with others to maximize their allied effects and avoid duplication. This report analyzes Advocates' impact over the past 34 years, with emphasis on its contribution to the reduction of roadway deaths and injuries and mitigation of crash costs through 2021².

Because its policy campaigns throughout the past 34 years have been unusually extensive and large in number, it is impossible to review and evaluate Advocates' successes in their entirety. Advocates' influence and accomplishments on advancing safety policy and legislation, including preventing passage of laws and regulations that would diminish traffic safety, is extensive and often nuanced in ways that are not always amenable to ready quantification. As a result, it is impossible to evaluate every safety initiative and effort Advocates has undertaken in this review. This report captures a comparable range of achievements as similar reports issued about Advocates' impacts in its first 20, 25, and 30 years. Nevertheless, it includes just a sampling of Advocates' legislative and regulatory efforts to illustrate and highlight the nature of those achievements and their lifesaving and cost benefits to individual sectors and society at large.

Advocates' success has exceeded all expectations. In 34 years, just a portion of Advocates' efforts contributed to the passage of 495 state laws and averted repeal of at least 74 more.

(See Table 1.) The laws passed included 153 adult and child occupant protection laws, 131 impaired driving laws, 83 laws governing cell phone use while driving, 62 graduated driver licensing laws (GDL), and 66 laws authorizing automated enforcement for speeding and red light running. Advocates in some instances acts at the federal level to advance state laws. It developed a strategy that integrated federal sanctions with financial incentives to

² The most recent crash fatality data available when this report was written were from 2021.

prompt state legislative action; ushering the necessary legislation through Congress; then to ensure fully effective results, focusing on implementation of federal regulations and urging state legislative action before federal deadlines arrived.

Table 1: State Laws Attributable in Part to Efforts by Advocates. 1990 - 2023

Type of Law	# of Laws	% Reduction in Related Fatalities
State Laws Passed	495	
- Occupant Protection	153	
Secondary Safety Belt	18	15%*
Primary Safety Belt	30	8%
Booster Seat	65	20%, occupants ages 4-8*
Other Child Occupant Protection	36	N/A
Motorcycle Helmet	4	15%*
- Impaired Driving	131	
Maximum BAC	41	7%
Zero Tolerance for Youth	22	4%
Administrative License Revocation	7	6.5%
Ignition Interlock Authorization/Mandate	36	15%
Other	25	N/A
- Graduated Driver Licensing	62	11%, youth drivers age 16-17
- Cell Phone Usage	83	
Teen Cell Phone Restriction	25	N/A
All-age Texting While Driving	46	4.5%
Hand-Held Cell Usage While Driving	12	4.5%
- Automated Enforcement Authorization	66	N/A
State Law Repeals Averted or Delayed	74 **	
- Motorcycle Helmet	20	15%*
- Automated Enforcement	19	N/A
- Speed Limit Increase	15	N/A
- Other	20	N/A

*Estimates are based on a 40-percentage point increase in usage following passage of a law, as recommended by Miller TR, Hendrie D. Economic evaluation of public health laws and their enforcement. In A Wagenaar, S Burrell (ed.), *Public Health Law Research: Theory and Methods*, San Francisco: Jossey-Bass, 347-378, 2013.

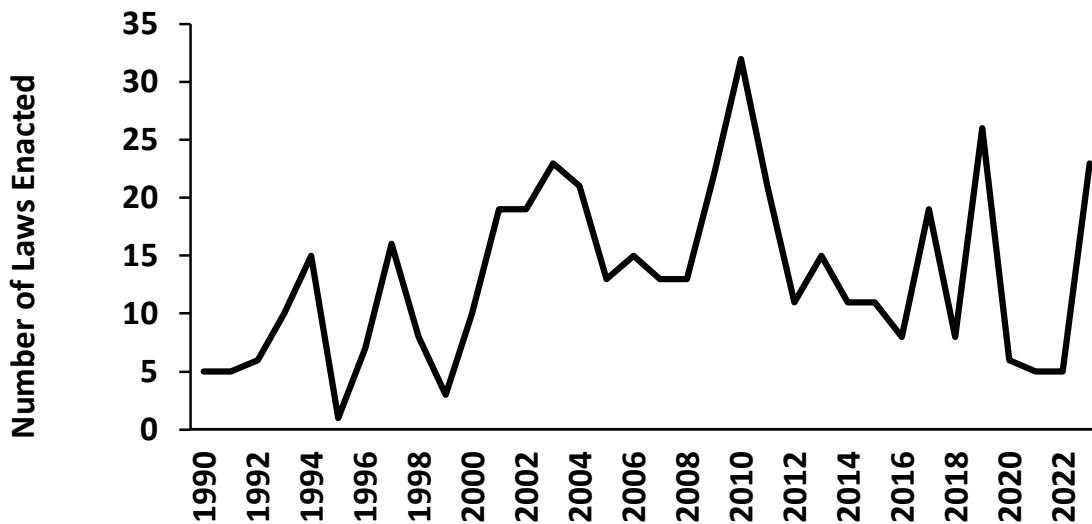
** This count is the number of laws protected. Some of these laws have been protected repeatedly; repeals could not be prevented in Pennsylvania in 2003, Michigan in 2012, Missouri in 2020, and Nebraska in 2023.

N/A = Savings not available.

The last column in Table 1 shows federal or Insurance Institute for Highway Safety (IIHS) estimates of the percentage reduction in related fatalities that resulted from the enactment of state laws. Advocates’ operating premise, that enactment of state laws coupled with effective public information and enforcement, improves safety by increasing compliance and, as a result, decreases crashes, deaths, and injuries, has been validated by the organization’s experience. Occupant protection laws include those increasing use of safety belts, child safety seats, booster seats, and motorcycle helmets. Before these laws took effect, some motorists were using occupant protection devices; after the laws took effect, some motorists still did not comply with their usage mandates. Therefore, the estimates shown only measure the percentage of occupants whose use of occupant protection resulted from enactment of the law.

As Figure 1 shows, Advocates and its partners have developed and deployed strategies leading to enactment of a steady stream of state road safety laws. Its successes accelerated starting in 2000.

**Figure 1: Advocates and its Partners Helped to Enact
A Steady Stream of State Road Safety Laws from 1990 to 2023**



(Note: Excludes authorizing legislation passed before 2014 for automated enforcement.)

Lobbying by Advocates also helped convince Congress to pass dozens of other safety provisions, as well as funding for safety programs. Tables 2 and 3 offer highlights. Arguably the most important provisions mandated front airbags in passenger cars and light

trucks. Other mandates hastened adoption of stronger head impact padding, side airbags, electronic stability control, tire pressure monitoring, rearview cameras, improved consumer information, crash testing of child safety seats and crashworthiness standards for passenger-carrying motorcoaches. Major legislative, regulatory and litigation successes also kept double and triple trailer trucks off the roads in many states, prevented truck size and weight increases, limited the scope of truck driver exemptions from federal vision and other safety standards, required the use of electronic logging devices (ELDs) to accurately track driving hours, and convinced the federal government to reform truck driver hours-of-service (HOS) rules. In the next few years, automatic emergency braking and automatic detection of and intervention with impaired drivers will join that list. When fully implemented, the IIHS projects they will save 10,000 lives annually.

Table 2. Crash Fatality Reductions Resulting from Selected Laws and Vehicle Safety Regulations That Advocates and its Partners Helped to Put in Place, Shape, or Keep in Force, September 1989-December 2021

Type of Law	Fatalities Prevented	% Reduction in Related Fatalities *
Safety Belts	40,285	5%
Airbags	61,431	7% **
Booster Seats	1,096	18% **
Motorcycle Helmets	6,548	5%
Impaired Driving	65,651	14%
Graduated Licensing	2,792	4%
Total Saved by Laws	177,802	17%
Total Saved by Laws in 2021	10,743	37%
Total Saved by Regulations	37,543	3%
GRAND TOTAL	215,345	17%

* Computed as fatalities averted/observed fatalities

** The first airbags were delivered in 1994 and the first booster seat law became effective in 2000, so percentage reductions are computed from those dates.

As with federal laws requiring state action and new vehicle safety standards, Advocates plays a critical role in the regulatory process. In 1990-2023, staff filed 1,036 comments on federal agency rulemakings, many implementing bipartisan congressional directives often passed because of Advocates' involvement. Advocates rapidly became a credible consumer voice in debates historically dominated by industries with vested interests in minimizing safety regulation. It also was involved in filing agency petitions and initiating legal actions,

when necessary, to force greater safety regulation. These efforts resulted in extensive and far-ranging improvements of federal policies, programs and standards affecting roadway and auto safety.

Fatality Reductions

Advocates’ annual legislative and regulatory agendas are based on the best data available from government and private research estimates of the lifesaving potential of various laws and policy initiatives. To estimate the impact of Advocates and its partners on crash deaths, we used and updated the National Highway Traffic Safety Administration’s (NHTSA) estimates of lives saved by airbags. We applied the fatality reduction percentages for state laws from Table 1 to fatality counts by state and year. That lets us estimate the associated fatality reductions.

Table 3. Lives Saved and Injuries Prevented by Major Vehicle Safety Regulations Published from 1990-2021 that Advocates and its Partners Helped to Put in Place, Shape, or Keep in Force

Regulation	Docket #	Lives Saved Per Year at Full Implementation	Lives Saved Thru 2021	Injuries Prevented Thru 2021
Heavy Trailer Conspicuity	1992-58406, 1999-15587*	270	6,175	92,625
Child Restraint Anchorage Systems	1998-3390	43	847	40,971
Power-Operated Window Switch	2004-19032	1	16	16
Tire Pressure Monitoring Systems	2005-20586	120	1,788	126,210
Side Impact Protection	2007-29134	311	2,851	3,309
Electronic Stability Control (ESC), Light Vehicles	2007-27662	2,040	21,737	600,895
Upgrade Roof Crush Resistance	2009-0093	135	1,046	8,252
Rear Visibility Cameras	2010-0162	14	58	5,090
Electronic Hours-of-Service Logging	2010-0167	26	104	2,248
Ejection Mitigation	2011-0004	373	2,704	3,451
Motorcoach Safety Belts	2013-0121	5	18	2,008
ESC, Heavy Vehicles	2015-0056	45	197	2,557
TOTAL		3,383	37,541	887,631

* Savings from Kahane CJ. Lives Saved by the Federal Motor Vehicle Safety Standards and Other Vehicle Safety Technologies, 1960-2002 - Passenger Cars and Light Trucks - With a Review of 19 FMVSS and their Effectiveness in Reducing Fatalities, Injuries and Crashes. Report DOT HS 809 833, Washington DC: NHTSA, 2004. All other savings are projections from regulatory analyses accompanying the rulemakings.

** Regulation has been in effect for less than two years.

The state laws that Advocates and its partners aggressively pushed to pass or keep in force have significantly increased the safety of our roadways. The laws and regulations included in this report saved an estimated 215,345 lives. Enactment of laws saved 177,802 of those lives. Most of the federal safety regulations we evaluated only went into effect after 2010, but they already have saved another 37,541 lives. Crash fatality reductions averaged 17% over the past 30 years. Figure 2 shows that the life-saving benefits accelerated as the number of laws and regulations in force grew. By 2021, these laws and regulations resulted in 37% fewer crash fatalities. We estimated the fatality reductions for laws each year from the number of fatalities in that year, not from the trend in fatalities over time.³ Therefore, we project less lives are saved in years when economic conditions reduce driving and consequently the number of road deaths.

Figure 2. By Year, Motor Vehicle Fatalities and the Lives Saved by Selected Laws and Regulations that Advocates Influenced and Helped to Create or Retain, 1990 -2021

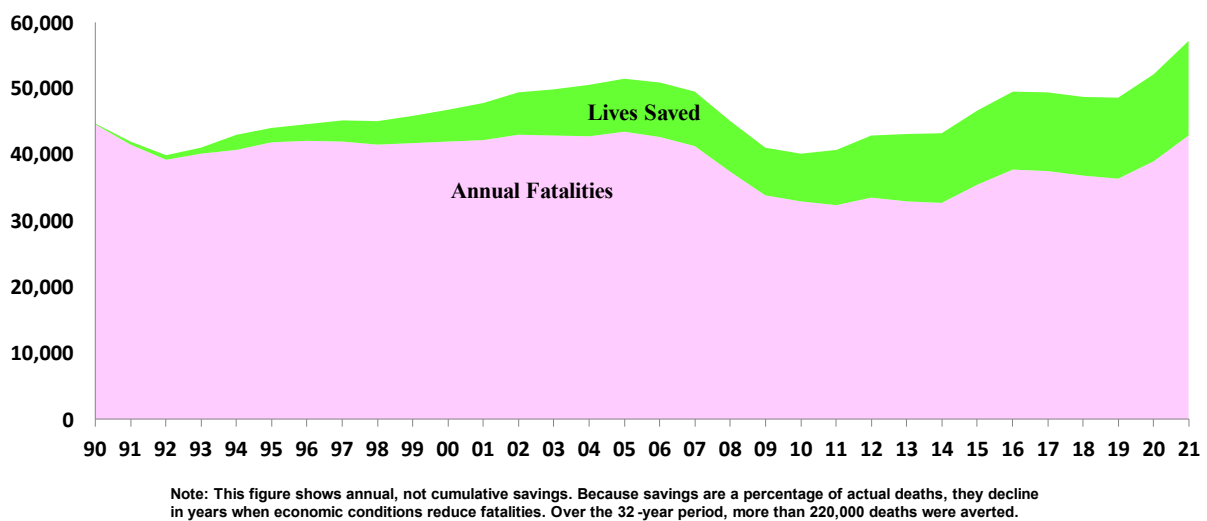


Table 2 shows that the largest life-saving benefits sprang from the airbag and impaired driving laws. Belt use laws also accounted for a major share of the savings. Despite the importance of highly effective laws to the populations they protect, booster seat, graduated driver licensing, and helmet laws had more modest impacts on the total number of lives saved because they affect subpopulations.

³ We proportioned 2019 reductions to 2018 reductions because only a preliminary fatality total was available.

Table 3 lists 12 U.S. Department of Transportation (DOT) safety regulations where Advocates and its partners played a critical role. They promoted federal laws mandating some; their inputs to the rulemaking process increased the safety impacts of all 12. The regulations saved an estimated 37,541 lives through 2021. In 2021, they accounted for 24% of the annual lives saved through Advocates' efforts.

Electronic stability control (ESC) was Advocates' most impactful regulatory achievement in terms of lives saved to date. Advocates was instrumental in leading efforts in Congress that resulted in the adoption of the ESC performance requirement in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59 (2005). In the final rule requiring ESC on new vehicles, NHTSA estimated that ESC would save 5,300 to 9,600 lives each year with half the savings resulting from rollover prevention. Effectiveness estimates in a 2014 NHTSA evaluation suggest ESC delivered as promised, with actual annual savings exceeding 8,000 lives when fully implemented throughout the light vehicle fleet.⁴ Table 3 only counts the 21,934 lives saved directly due to Advocates' efforts, although the expectation of a regulatory mandate saved additional lives by prompting earlier and more widespread voluntary adoption of ESC before the actual regulatory deadline.

Advocates has played a similar role in three regulations that will take effect in 2024-2029: trailer rear impact guards, child restraint side impact, and bus rollover structural integrity. Automatic emergency braking in light and heavy vehicles may also take effect in this time frame. When fully implemented, these regulations will save more than 500 additional lives annually.

NHTSA also is expected to undertake several other lifesaving rulemakings in the coming years as a result of Advocates' success in promoting enactment of other provisions in the bipartisan Infrastructure Investment and Jobs Act (IIJA) (Pub.L.117-58). These include advancing standards on Lane Keeping Assist (LKA) and Lane Departure Warning (LDW); Rear Designated Seating Position identification and alert systems to prevent heatstroke deaths of children in hot vehicles; hood and bumper standards to reduce vulnerable road user deaths and injuries; and automatic shut-off for keyless ignition systems.

⁴ Kahane C. Updated Estimates of Fatality Reduction by Electronic Stability Control, DOT HS 812 020, NHTSA, 2014.

Cost Savings

We assumed the percentage reduction in crash costs would mirror the fatality reduction. We used published crash costs for seven years between 1990 and 2019⁵ to estimate total crash costs from 1990-2021. The costs were built from NHTSA's estimates of cost per crash.

The cost savings associated with the portion of Advocates' efforts mentioned in this report are stunning; the monetary cost savings total \$2 trillion (in 2021 dollars) excluding the value of lost quality of life. These efforts have saved the government alone \$141 billion, with Medicaid and Medicare claims payments dominating the government savings. Since annual crash costs excluding the value of lost quality of life total about \$360 billion^{3,6}, the reduction due to Advocates' contributions over its first 32 years exceeds 5 full years of crash costs. Moreover, the reductions grow year by year. Absent actions by Advocates and its partners, excluding the value of lost quality of life, crash costs would have topped \$535 billion in 2021.⁷

Advocates' safety activities in this report also resulted in substantial savings to the insurance industry that reduced insurance claims payments and claims processing costs by \$1.07 trillion (Table 4). The bulk of the insurance savings was experienced in auto insurance.

And, these are just the efforts we could easily evaluate. Importantly, they exclude the gains from automated enforcement and largely exclude the savings from large truck and bus crash reduction, which accrue almost entirely to Workers' Compensation or to employers directly.

In 2009, in conjunction with Advocates' 20th anniversary, we estimated its savings exclusive of quality of life at \$868 billion (inflated to 2021 dollars for comparability to the current estimate and adjusted to account for gains from laws and regulations implemented by 2009 but not analyzed in the report).⁸ At its 25th anniversary in 2014, we estimated savings at \$1.27 trillion, which grew to \$1.72 trillion in 2019. Because the fatality

⁵ NHTSA's 2022 report providing the 2019 costs is the most recent available.

⁶ Miller TR, Alesha E., On a Crash Course: The Dangers and Health Costs of Deficient Roadways, Washington DC: The Transportation Construction Coalition, 2009.

⁷ All costs are stated in 2021 dollars.

⁸ For a comprehensive view of the laws passed during Advocates formative years, see Miller TR, Bhattacharya S, Zaloshnja E. Fruits of 20 years of highway safety legislative advocacy in the United States, *Annals of Advances in Automotive Medicine*, 55, 357-364, 2011.

reductions keep growing, annual savings in 2020-2021 averaged \$151 billion, more than 3 times the average of \$43 billion over the first 25 years.

Table 4. Cost Savings Resulting from Laws and Vehicle Safety Regulations That Advocates and its Partners Helped to Put in Place, Shape, or Keep in Force by Payer, September 1989 – December 2021 (Inflated to 2021 dollars)

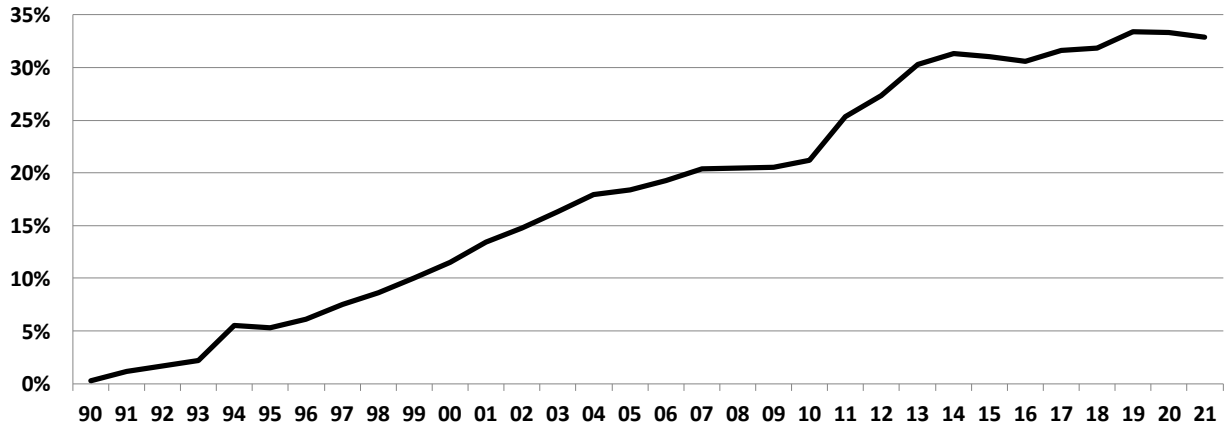
Payer	Savings
Auto Insurance	\$923,310,028,000
Workers' Compensation Insurance	\$22,205,327,000
Private Health Insurance	\$109,653,486,000
Life Insurance	\$16,048,521,000
Sub-total: Private Insurance	\$1,071,217,362,000
Government	\$140,647,502,000
Employers	\$6,340,826,000
Taxpayers	\$805,412,941,000
Total Economic Costs	\$2,023,618,631,000

Return on Investment

The return on investment generated by Advocates' safety successes is extraordinary and growing appreciably. Advocates delivered safety laws and regulations through collaborative partnerships. Very conservatively, if its nurturing leadership was responsible for as little as 10% of what was achieved, the return to reduced claims for auto insurance was \$1,250 per dollar invested in Advocates.

To better understand how the return could be so large, consider that NHTSA estimates the medical costs, work losses, insurance administrative expenses and property damage associated with a single fatality exceed \$1.5 million while Advocates' total annual operating budget these past few years has been just under \$2.5 million. With 14,125 fatalities prevented in 2021, a return of 1,250:1 equates to auto insurers experiencing \$418,000 less in costs for death and injury claims per fatality prevented. By comparison, jury awards for vehicular liability averaged \$664,097 in 2019 and \$2,673,427 in 2020. Moreover, the return has not slowed as the organization matured. Instead, the evaluated subset of Advocates' efforts has steadily averaged a 1% additional reduction in fatalities and crash costs annually in each five-year segment of its existence (Figure 3).

Figure 3. % Reduction in Annual Motor Vehicle Deaths through Legislation and Regulations that Advocates Influenced and Helped to Create or Retain, 1990-2021



Only a Sampling

We have not evaluated the effects of many laws and regulations where Advocates had an impact. For example, Advocates played a key role in securing recent safety improvements including laws calling for rear-facing child seats through age 2, booster seats up to age 8 and 57 inches, safety belt use in rear seats, teen cellphone use restrictions while driving, and event data recorders. We know these initiatives prevent crashes, save lives and control losses, but their effects have not been fully evaluated yet.

As an example, Advocates participated in the effort to limit the spread of longer combination vehicles (LCVs). The 1991 LCV legislative “freeze” in the Intermodal Surface Transportation Efficiency Act (ISTEA), Pub. L. 102-240, stopped the spread of giant, super-long turnpike doubles and triple-trailer trucks beyond the states where they already operated. This legislation has been sustained for 32 years against repeated challenges to weaken or repeal it, producing substantial lifesaving and crash cost reduction benefits that have accumulated year by year. The LCV freeze eliminated the surge in crash risk that would have occurred had many thousands of additional LCVs begun to operate in states where they had been prohibited.

A study conducted on the costs of large truck crashes and released by FMCSA in 2006 found that large trucks in all types of crashes averaged \$130,300 for each crash (inflated to 2021 dollars), but that crashes involving combination trucks with two and three trailers are by far the most costly per truck crash involvement.⁹ Crashes of these multi-trailer large trucks cost an average of \$414,400 per crash, more than three times the average for all large truck crashes.

Except in the cost savings analysis, we also largely have not accounted for the nonfatal injury and noninjury crash reductions that resulted from Advocates' efforts. As Table 3 shows, its regulatory efforts alone have prevented more than 880,000 nonfatal injuries, almost 24 injuries per death averted.

Conclusion

The impact of the subset of Advocates' work that we were able to evaluate is enough to support unambiguous conclusions. Advocates is highly effective. Their positive influence over public health and safety policies as well as their contributions to advancing roadway and auto safety improvements are crucial. The organization regularly sounds the horn and leads the charge in Congress and state legislatures that results in public policy advances that prevent crashes, save lives, and reduce costs.

Skilled advocacy is an excellent and cost-beneficial strategy; it yielded more than a 1,250-fold return on investment. America's roads are much safer because of Advocates' targeted and sustained lobbying, coalition-building and advocacy in Congress, the Executive Branch and state legislatures for vehicle, behavioral and road safety improvements. By 2021, we estimate Advocates helped conservatively to save more than 215,000 lives and \$2 trillion in medical costs, work loss, and property damage. These savings are cause for celebrating the effectiveness and value of this unique consumer and insurance partnership.

Looking to the future, Advocates' federal and state safety agenda portends even more reductions in crashes, deaths, and injuries as well as reduced claims costs for insurers. The annual Roadmap to Safety report that Advocates releases in December to coincide with the January start of most state legislative sessions identifies basic traffic safety laws that each

⁹ Zaloshnja E., Miller T.R., Spicer RS. Revised costs of large truck- and bus-involved crashes. Washington DC: Federal Motor Carrier Safety Administration, 2006.

state is lacking as well as improvements needed on the federal level. Advocates then works to address these deficiencies with the passage of laws and regulations.

The number of state laws that Advocates is able to promote each year is tightly constrained by its modest \$2.2 million budget. At present, 15 states still lack a primary enforcement seat belt law for front seat passengers and 29 states need a comparable law for rear seat passengers. Additionally, more than 30 states need an all-rider motorcycle helmet law, as well as optimal child restraint and booster seat laws. Most states have serious gaps in their graduated driver licensing laws. Critically important in the coming years will be Advocates' work in states to address distracted driving, expand the use of automated enforcement to reduce speeding, and strengthen impaired driving laws including advancing solutions to the issue of impairment caused by marijuana use.

Advocates is a well-respected and trustworthy safety resource in the development and enactment of numerous federal safety laws in the U.S. Congress. Their successful activism and lobbying strategies resulted in the 2021 bipartisan infrastructure law (Public Law 117-58) including several consequential provisions mandating NHTSA rulemakings. These include regulations to make crash avoidance technologies, like automatic emergency braking, standard equipment in all new passenger vehicles and trucks as well as impaired driving prevention technology, vehicular heatstroke prevention technology, upgrades in the existing seat back and headlight standards, and improved consumer information about safety systems in cars. After enactment of the law, the organization has been working to ensure comprehensive Final Rules are issued expeditiously. These include meeting with top officials at the U.S. DOT and the Office of Management and Budget (OMB) and submitting detailed comments to the Federal Docket.

Furthermore, the safety promises of autonomous vehicles (AV), or driverless cars and trucks, can only be realized with comprehensive oversight, proactive involvement, and essential safety rules by federal and state regulators. Advocates is a leading voice on commonsense and cost-effective policies for advancing self-driving technologies that are safe, effective and have public support.

About PIRE and the Author

The author, Dr. Ted R. Miller, is a Principal Research Scientist at the Pacific Institute for Research and Evaluation (PIRE), a non-profit public health research organization. For more than 40 years, PIRE has been involved in studies related to transportation safety. It has done groundbreaking work on issues related to driver behavior including studies of safety belt use, driver distraction, hazard perception, aggressive driving, and fatigue. PIRE also is an international leader and seminal contributor to research on impaired driving and ways to reduce the harm it causes.

PIRE transportation safety research sponsors have included, among others:

- National Highway Traffic Safety Admin
- Federal Highway Administration
- Federal Motor Carrier Safety Admin
- Centers for Disease Control
- Auto manufacturers
- American Automobile Association
- Bloomberg Road Safety Program
- Insurance Institute for Highway Safety
- Mothers Against Drunk Driving
- Motorcycle Safety Foundation
- National Safety Council
- State transportation departments
- Transportation Construction Coalition
- Transportation Research Board/NCHRP and BTSCR

Dr. Miller is an internationally recognized safety economist. He has led 250 studies and authored more than 400 scholarly publications. He is a leading expert on injury incidence, costs and consequences, as well as substance abuse costs. His cost estimates have been used by the U.S. Department of Transportation, the U.S. Consumer Product Safety Commission, the Justice Department, the Coast Guard, and transport departments or auto manufacturers in Australia, Canada, and New Zealand. He began working with the US Department of Transportation on crash costing in 1983 and continues to play a critical role in their crash cost development. He has estimated the return on investment in more than 170 health and safety measures. He founded the Children's Safety Network Economics and Data Resource Center, which has worked since 1992 to forge child safety partnerships between insurers and advocates. The Center received a Nationwide Insurance "On Your Side Highway Safety Award" in 1996. Dr. Miller is a fellow of the Association for the Advancement of Automotive Medicine and has received several national and global awards for his work. He received a PhD in Regional Science (economics), a M.S. in Operations Research, and a Master of City Planning from the University of Pennsylvania.

