Agency Priority Goal Action Plan

Reduce Surface Transportation-Related Fatalities

Goal Leaders:

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Overview

Goal Statement

- DOT will work to reduce surface transportation-related fatalities by 2019, with specific focus on reducing motor vehicle-related roadway fatalities to 1.02 fatalities per 100 million vehicle miles traveled by September 30, 2019.

Challenges

- The Nation has made good progress in reducing overall transportation-related fatalities and injuries during the past two decades, even though the U.S. population and travel increased significantly.
- Since 2000, the number of fatalities on the Nation's roadways has generally trended downward, from 41,945 per year to about 37,000—an 11% reduction overall.
- Though fatalities rose in 2015 and 2016, the numbers started to turn around in 2017, and that trend continued in 2018 with a 1% decrease in fatalities to 36,570. Early estimates for the first 3 months of 2019 showed another decline of 1.1% compared to the same timeframe as 2018, from 1.11 to 1.09.
- Human error, such as impaired driving, texting while driving, or speeding, continues to be a critical factor in more than 90% of serious motor vehicle crashes, according to a crash causation study by NHTSA.

*Note: All of the motor-vehicle related measures and targets are based on the calendar year (CY).

Overview (cont.)

Opportunities

- New technologies and innovations can improve safety in all modes of surface travel. For example, advanced crash avoidance technology offers tremendous promise in reducing crashes, injuries, and fatalities. Six of the most common new technologies already in use are: forward collision warning, autobrake, lane departure warning, lane departure prevention, adaptive headlights, and blind spot detection. See this IIHS Report on how effective they have already been: https://www.iihs.org/media/3b08af57-8257-4630-ba14-3d92d554c2de/mYL9rg/QAs/Automation%20and%20crash%20avoidance/IIHS-real-world-CA-benefits-0518.pdf. Although these technologies can't change human behavior itself, they help reduce the impact of human error.
- New data sources and more powerful analytical tools can help DOT identify problem areas and prioritize safety strategies more quickly.
- The Department uses a data-driven approach to develop and disseminate evidence-based safety countermeasures and to conduct national safety campaigns.

Goal Structure & Strategies

Reduce Motor Vehicle-Related Fatalities (FHWA, FMCSA, NHTSA)						
		CY 2016	CY 2017	CY 2018	CY 2019	CY 2020
Motor vehicle-related roadway fatalities per 100 million vehicle miles traveled	**Targets**	1.02	1.02	1.02	1.02	1.01
	Actuals	1.19	1.16	1.14	1.09*	n/a

DOT's strategies to accomplish the APG include the following:

- Improve and enhance data collection and analysis;
- Research and deploy advanced vehicle technology;
- Develop and enforce vehicle safety standards;
- Conduct national safety campaigns to promote safe driving practices;
- Support roadway infrastructure improvements and safer roadway design;
- Boost implementation of proven safety countermeasures, and address risks that impact vulnerable road users and rural communities; and
- Provide oversight of commercial operators and drivers.

*Note: All of the motor-vehicle related measures and targets are based on the calendar year (CY). For CY 2019, the fatality rate shown is for the first three months (Jan.-Mar.). This rate will likely rise as the year goes on because the fatality rates increases due to increased exposure levels in the spring, summer, and fall.

Goal Structure & Strategies (cont.)

Motor Vehicle-Related Fatality Supporting Indicators (FHWA, NHTSA, FMCSA)						
		CY 2016	CY 2017	CY 2018	CY 2019	CY 2020
Passenger fatalities per 100 million total vehicle miles traveled	Targets	n/a	n/a	0.75	0.74	0.74
	Actuals	0.75	0.73	n/a	n/a	n/a
Large truck and bus fatalities per 100 million vehicle miles traveled	Targets	0.114	0.114	0.114	0.114	0.114
	Actuals	0.144	0.156	n/a	n/a	n/a
Non occupant fatalities (pedestrian, bicycle) per 100,000 population	Targets	2.19	2.15	2.15	2.10	2.10
	Actuals	2.19	2.15	n/a	n/a	n/a
Motorcycle fatalities per 100,000 motorcycle registrations	Targets	62	62	62	62	61
	Actuals	60.9(r)	59.34	n/a	n/a	n/a

Note: Full results for the subcategories of Calendar Year 2018 should be available by early 2020.

Goal Structure & Strategies (FHWA)

Motor Vehicle-Related Fatality Supporting Indicators (FHWA, NHTSA, FMCSA)

FHWA's strategies to accomplish this APG include the following:

- Advances a "safe system" approach to roadway safety. This approach acknowledges the shared responsibility we all have in reducing fatalities and serious injuries, aims to design roads to take human error into account, and implements safeguards and proven safety countermeasures to prevent fatalities and serious injuries when those errors occur.
- Administers the $2.6 billion Highway Safety Improvement Program (HSIP) to States to address their specific safety infrastructure challenges. The HSIP benefit/cost ratio is estimated from a low of 4.76 to a high of 8.64.
- **Publishes and updates the Crash Modification Clearinghouse (CMF).** A Crash Modification Factor is an estimate of the change in crashes expected after implementation of a countermeasure. The CMF Clearinghouse serves as a repository of the CMFs for transportation professionals to use as they are selecting safety countermeasures. Over 8,000 CMFs reside in the clearinghouse; 280 CMFs have been added this reporting period.
- Implements the Focused Approach to Safety initiative that addresses the Nation's most critical safety challenges in three main areas that encompass approximately 90% of traffic fatalities in the United States: **roadway departures**, **intersections**, and **pedestrian/bicycle** crashes.
- Encourages wide-spread implementation of the Proven Safety Countermeasures Initiative to increase the use of infrastructure-oriented safety treatments and strategies that have been proven to be effective. In 2017, six new countermeasures were added, bringing the total to 20.
- Promotes two initiatives for safety through Every Day Counts:
  - **Safe Transportation for Every Pedestrian**: Pedestrians account for an estimated 16% of all roadway fatalities, most at non-intersection locations. This innovation helps transportation agencies address these crashes by promoting cost-effective countermeasures with known safety benefits.
  - **Reducing Rural Roadway Departures**: Roadway departures on the rural road network account for one-third of traffic fatalities. Systemic application of proven roadway departure countermeasures, such as rumble strips, friction treatments, and clear zones, help keep vehicles in their travel lanes, reduce the potential for crashes, and reduces the severity of those crashes that do occur.

Goal Structure & Strategies (NHTSA)

Motor Vehicle-Related Fatality Supporting Indicators (FHWA, NHTSA, FMCSA)

NHTSA's strategies to accomplish this APG include the following:

- **State Highway Safety Grants**
  The $600 million State Highway Safety grant program is the backbone of NHTSA's highway safety programs. States develop data-driven annual safety plans to address the following risk areas: alcohol and drugged driving; distracted or drowsy driving; police traffic services; occupant protection (including child passenger safety); traffic records; motorcycle safety; pedestrian and bicyclist safety; teen drivers and Graduated Driver License programs; speed management; and other innovative safety initiatives to address emerging safety issues. NHTSA works with the States to upgrade and enhance Emergency Medical Services (EMS) providers' capacities to keep pace with telecommunications technology and wireless communication advances. https://www.nhtsa.gov/highway-safety-grants-program
- **High Visibility Enforcement Campaigns**
  NHTSA coordinates three national safety enforcement campaigns to increase seat belt use and decrease impaired driving, in partnership with the States and law enforcement agencies. For more information on these safety campaigns, see Traffic Safety Marketing.gov.
- **Safety Programs Development**
  NHTSA conducts research and demonstration projects to develop evidence-based safety programs for States and other safety organizations and leadership on the development of innovative and data-driven EMS systems. NHTSA provides technical assistance on crash and fatality data analysis to States, transportation researchers and safety partners, and provides technical assistance and training to support State and local traffic law enforcement efforts.
- **Motor Vehicle Safety**
  The automotive industry is in the midst of a technological revolution that promises to improve safety and expand mobility for millions of Americans. NHTSA conducts research and provides national leadership on the safe deployment of Automated Driving Systems and related areas, such as cybersecurity. https://www.nhtsa.gov/technology-innovation
  NHTSA employs a holistic risk management approach to strengthen the cybersecurity posture of the automotive sector. NHTSA also develops and enforces vehicle safety standards, oversees vehicle safety defect investigations and recalls, and supports deployment of safer vehicles through its 5-Star Safety Rating program. https://www.nhtsa.gov/ratings

Goal Structure & Strategies (FMCSA)

Motor Vehicle-Related Fatality Supporting Indicators (FHWA, NHTSA, FMCSA)

FMCSA's strategies to accomplish this APG include the following:

- ***"Our Roads, Our Safety":*** This program helps raise awareness among the general driving public about operating safely around and sharing the road with the more than 12 million commercial motor vehicles on the road. More information can be found at: https://www.fmcsa.dot.gov/ourroads.
- **High-Risk Carriers:** FMCSA continues to conduct high-risk carrier investigations. These carriers are the Agency's top investigative priority. Investigative outcomes show that 45% of high-risk carrier investigations result in enforcement actions compared to a 15% enforcement rate observed on non-high-risk carriers. In FY 2018 FMCSA conducted 2,514 high-risk carrier investigations. FMCSA conducted 1,214 high-risk carrier investigations in the 1st two quarters of FY 2019, which is on track with prior year performance.
- **New Entrant Safety Audits:** FMCSA continues to monitor New Entrants during their initial 18 months of operation and conduct New Entrant Safety Audits. FMCSA conducted 36,751 audits in 2018. In the first two quarters of FY 2019, 19,303 New Entrant Safety Audits were conducted.
- **Electronic Logging Devices (ELD):** The ELD rule is intended to help create a safer work environment for drivers and make it easier to accurately track, manage, and share records of duty status data. The ELD Final Rule is estimated to save 26 lives and prevent 562 injuries, resulting from crashes involving large commercial motor vehicles, annually. Motor carriers must come into full compliance by December 16, 2019.
- **CDL Drug and Alcohol Clearinghouse:** FMCSA will implement the Drug and Alcohol Clearinghouse final rule, which established central database requirements for CDL holders who have verified positive test results for controlled substances and/or alcohol or have refused to submit to testing. This rule will ensure that CDL holders, who have tested positive or have refused to submit to testing, complete the return-to-duty process before driving a truck. The compliance date is January 6, 2020.

Goal Structure & Strategies (FMCSA)

Motor Vehicle-Related Fatality Supporting Indicators (FHWA, NHTSA, FMCSA)

FMCSA's strategies to accomplish this APG include the following (continued):

- **Crash Preventability Determination Program:** FMCSA was planning to end its Crash Preventability Demonstration Program on September 30, 2019. On July 31, 2019, FMCSA announced a continuation of the program and posted a Federal Register Notice (FRN) to the Agency's website that explains the proposed long-term program and requests comments. The FRN proposes 15 crash types and also proposes removing Not Preventable crashes from a motor carrier's Safety Measurement System (SMS) Crash Indicator BASIC. The FRN also proposes noting Not Preventable determinations in the Pre-Employment Screening Program. When implemented, the new Crash Preventability Determination Program will accept crashes of the eligible crash types that occurred on or after August 1, 2019, so that there is no gap in program coverage. Of the determinations made, 93% of the crashes submitted were non-preventable.

- **Research:** FMCSA will partner with NHTSA and FHWA to conduct a systematic review of crash factors and develop potential crash countermeasures. FMCSA and its partners will develop a multi-phased research project to examine existing crash data and augment these data by linking to other USDOT, State, or commercially available data sources. In the final phase, researchers will examine naturalistic driving data to better understand the driver behaviors that precipitate a crash, many of which are underreported. At each phase of the project, FMCSA and its partners will hold joint workshops to review findings and refine priorities, crash countermeasures, and a strategic plan for testing and deploying crash countermeasures.

Goal Structure & Strategies (FTA)

Transit-Related Fatalities per 100 Million Passenger-Miles						
		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Total Fatalities	**Targets**	n/a*	n/a*	278	260	255
	Actuals	260	259	236	n/a**	n/a
Total transit fatalities per 100 million passenger miles by fiscal year	**Targets**	n/a*	n/a*	0.607	0.601	0.596
	Actuals	.592	0.606	0.569	n/a	n/a

Actual data are subject to change and might differ from prior year materials based on the latest information available.
Fiscal year is defined as October 1 through September 30.

**Targets for these measures were changed in FY 2018.*
***FTA will begin collecting FY 2019 data in Oct 2019, which will be published in late 2020.*

FTA's strategies to accomplish this APG include the following:

- Implement Safety Management Systems (SMS) Approach and Agency Safety Plans
- Certification of 31 State Safety Oversight Programs
- Oversight of the State Safety Oversight Program
- Issue and enforce Safety Directives and Advisories
- Safety Certification Training program
- Manage the Drug and Alcohol Testing Program
- Implementation of the Safety Assessment Team
- Implementation of the 2018 – 2021 Public Transportation Agency Safety Plan (PTAP)

Goal Structure & Strategies (FTA)

- Safety Management System (SMS) is the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards. For more information: https://www.transit.dot.gov/regulations-and-guidance/safety/safety-management-systems-sms.

- FTA published the **Public Transportation Agency Safety Plan (PTAP) Final Rule** on July 19, 2018 and is now implementing the 2018-2021 PTASP. This plan includes enhanced technical assistance, training, guidance, tools, templates, webinars, and stakeholder engagement to support over 850 transit providers in implementing their Safety Management Systems and meeting the July 20, 2020 compliance deadline.

- The purpose of the State Safety Oversight program is to oversee safety at rail transit systems. The SSO program is administered by eligible states with rail transit systems in their jurisdiction. FTA provides federal funds through the SSO Formula Grant Program for eligible states to develop or carry out their SSO programs. For more information: https://www.transit.dot.gov/state-safety-oversight

- **Certification of 31 State Safety Oversight Programs.** On March 18, 2019, U.S. Secretary of Transportation Elaine L. Chao announced that all 31 SSO Programs across the country required to be certified before the statutory April 15, 2019, deadline have done so and are providing more rigorous state safety oversight of federally funded rail transit systems. For more information: https://www.transit.dot.gov/regulations-and-guidance/safety/state-safety-oversight-program-certification-status

- **Safety Certification Training program.** The Public Transportation Safety Certification Training Program Final Rule (Training Rule) establishes a uniform curriculum for safety training that consists of minimum requirements to enhance the technical proficiency of rail transit safety personnel.

- The Training Rule sets forth federal requirements for the certification and training of State Safety Oversight Agency (SSOA) personnel and contractors who conduct safety audits and examinations of rail transit systems, and rail transit agency personnel and contractors who are directly responsible for safety oversight. For more information: https://www.transit.dot.gov/regulations-and-guidance/safety/safety-training

- **Manage the Drug and Alcohol Testing Program.** The Omnibus Transportation Employee Testing Act of 1991 mandated the Secretary of Transportation to issue regulations to combat prohibited drug use and alcohol misuse in the transportation industry. For that portion of the transportation industry having to do with the provision of and service to the public of mass transportation, FTA is the agency delegated with the authority and responsibility for issuing these implementing rules. For more information: https://www.transit.dot.gov/drug-alcohol-program

Goal Structure & Strategies (FRA)

Rail-Related Fatalities (FRA)

		FY 2017 (Baseline)	FY 2018	FY 2019 through Q2	FY 2020
Highway-rail grade crossing incident rate per million train-miles**	**Targets**	n/a	2.85	2.84	2.84
	Actuals *	3.006	3.037	3.337(p)	n/a
Rail right-of way trespass incident rate per million train-miles	**Targets**	n/a	1.55	1.51	1.48
	Actuals *	1.513	1.377	1.478(p)	n/a

**Actual data are subject to change and might differ from prior year materials based on the latest information available. As of March 31, 2019.*

***A highway-rail incident is any impact regardless of severity between rail and highway users (vehicles, pedestrians, and bicycles) at a public or private crossing. A trespass incident is any event that causes a death or injury in a rail right-of-way, other than at a highway-rail grade crossing.*

Highway-rail grade crossing and trespass incidents account for almost all rail-related deaths. The number of grade crossing deaths has averaged more than 250 and the number of trespass deaths has averaged more than 450 per year since 2009. FRA recently initiated the National Strategy to Prevent Trespassing on Railroad Property that includes four strategic focus areas: data gathering and analysis, community site visits, funding, and partnerships with stakeholders.

FRA's strategies to reach these targets include the following:

- **Education**: Increasing public awareness through programs about the dangers and consequences of trespassing and safe driving around highway-rail grade crossings.
- **Engineering**: Recommending installation of lights, gates, and dividers, and separating highways from train tracks.
- **Partnerships**: Because FRA does not directly influence some significant grade crossing safety risks, including highway vehicle miles traveled and driver behavior, and has jurisdictional limitations regarding trespass activities, the Agency will work with States, local governments, and organizations that can complement FRA activities. In addition, FRA is validating crossing latitude and longitude data, developing human behavior predictive modeling, enhancing law enforcement and first responder strategies, strengthening State crossing safety action plans, and updating FRA's Crossing Handbook.

Goal Structure & Strategies (PHMSA)

Reduce Pipeline And Hazardous Materials Safety-Related Fatalities				
		FY 2019	FY 2020	FY 2021
Confirmed fatalities caused by the release of hazardous materials transported via pipeline or surface transportation conveyance.	Targets	25	24	22
	Actuals	8(p)	n/a	n/a

(p) preliminary (Actual data will be available in October 2020)

Beginning in FY 2019, PHMSA is replacing its APG measure on "incidents involving fatalities and major injury resulting from the transport of hazardous materials by all modes, including pipelines" with "confirmed fatalities caused by the release of hazardous materials transported via pipeline or surface transportation conveyance." The new measure focuses on fatalities only, rather than incidents, and more closely aligns with this Department's other operating administrations.

PHMSA's strategies to accomplish this APG include:

- Assess all incident data to identify potential contributing causes and take action where necessary and prudent to help protect people and the environment.
- Focus on top safety rulemakings, the safe transportation of energy products, risk-based inspection, and outreach activities.
- Urge operators to be vigilant in their operating practices to prevent accidents.
- Continue to engage with regulated industry to encourage the implementation of Safety Management Systems (SMS) to improve safety culture and performance.

Summary of Progress – FY 19 Q3

Surface Safety

In 2018, an estimated 36,750* people died in motor vehicle crashes, a 1.0% decrease from 2017. The fatality rate per 100 million vehicle miles traveled (VMT) was 1.14. This continues the trend from 2017, when the fatality rate leveled off and started to decline after peaking in 2016 with two years of upward fatality rates.

Transit Safety

Transit is one of the safest transportation modes and FTA continually prioritizes improving safety standards. In April 2016, the SSO final rule took effect, strengthening State Safety Oversight Associations (SSOA) authority. The rule required State Safety Oversight (SSO) Programs to achieve safety certification by April 15, 2019. With FTA's assistance, 100% of the SSOs met this requirement in Q2 of FY 2019. Now that FTA has completed all SSO certifications, FTA initiated its first round of program audits, as required by 49 U.S.C. § 5329(e)(10)(B).

FTA has also launched a new Safety Assessment Team to bring together experts from across FTA to assess safety risks and make recommendations for executive action. FTA continues to provide technical assistance and outreach to its grantees, many of which are required to establish agency safety plans by a deadline of July 20, 2020. As part of this certification process, FTA relinquished its temporary direct safety oversight authority of the Washington Metrorail system, and turned direct safety oversight authority to the newly-certified Washington Metrorail Safety Commission.

FTA issued an immediate action letter on June 22, 2018, requiring the Washington Metropolitan Transit Authority (WMATA) to submit a work plan to set forth actions that WMATA had taken and would take to mitigate the risks posed by the gaps in the BCBs on WMATA's 7000-series railcars. WMATA has completed the actions set forth in its workplan. On May 29, 2019, WMATA submitted its final update regarding efforts to address safety risks associated with BCBs on 7000-series railcars and notified FTA that all 7000-series railcars with chain BCBs had been completed by Kawasaki as of May 21, 2019. All 660 7000-series railcars on-site are equipped with the chain BCBs. Additionally, WMATA stated that they will only fully accept new railcars that are already equipped with the chain BCBs.

Rail Safety

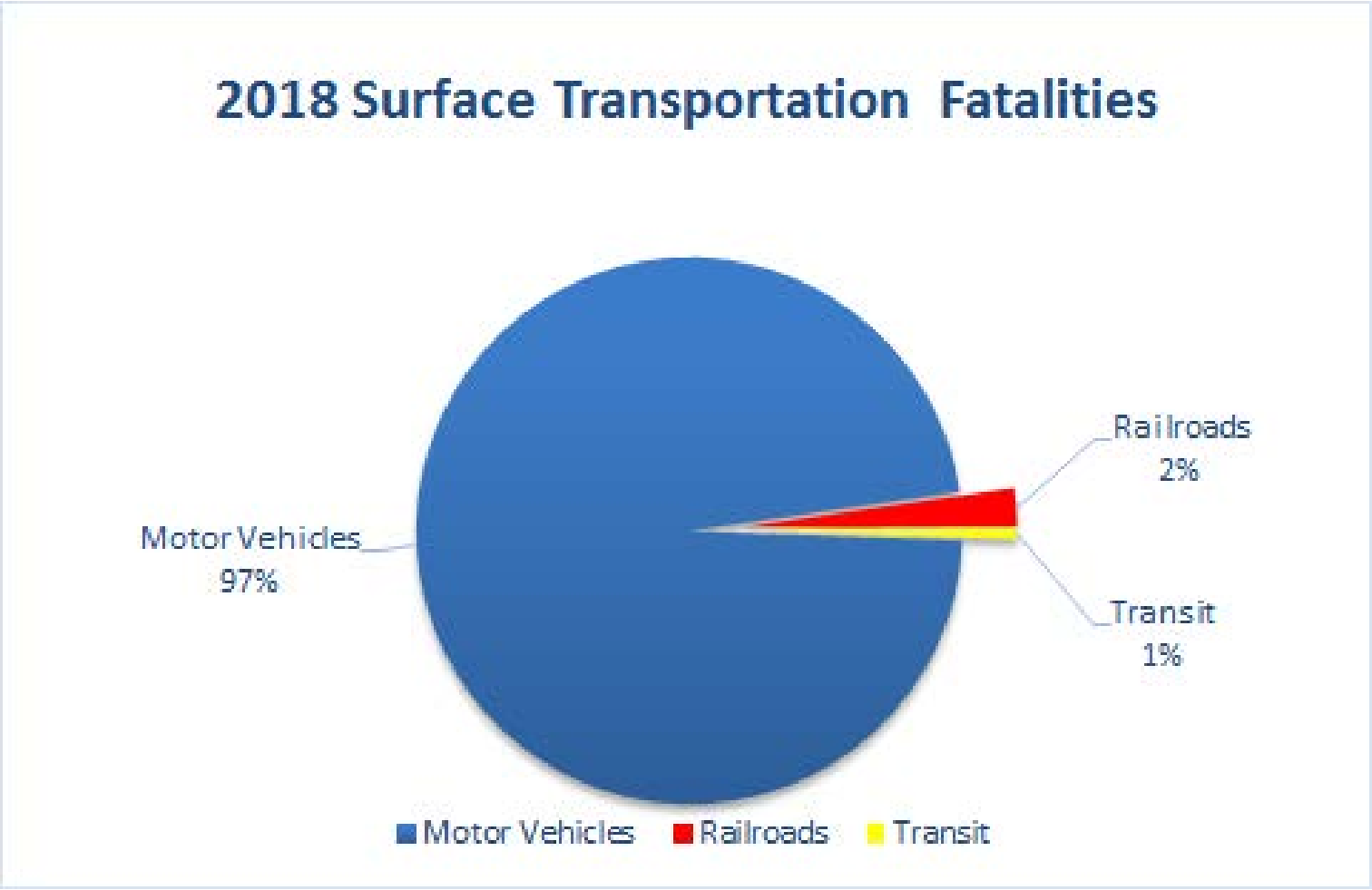
The cumulative grade crossing accident rate through FY 2019 Q2 was 3.337 per million train-miles, compared to the 3.500 at the end of the previous quarter–The trespasser incident rate through Q2 FY 2019 was 1.478, compared to 1.479 at the end of the previous quarter. As the year progresses, FRA will determine whether these results are data anomalies or indications of longer term trends.

Pipeline and Hazardous Materials Safety

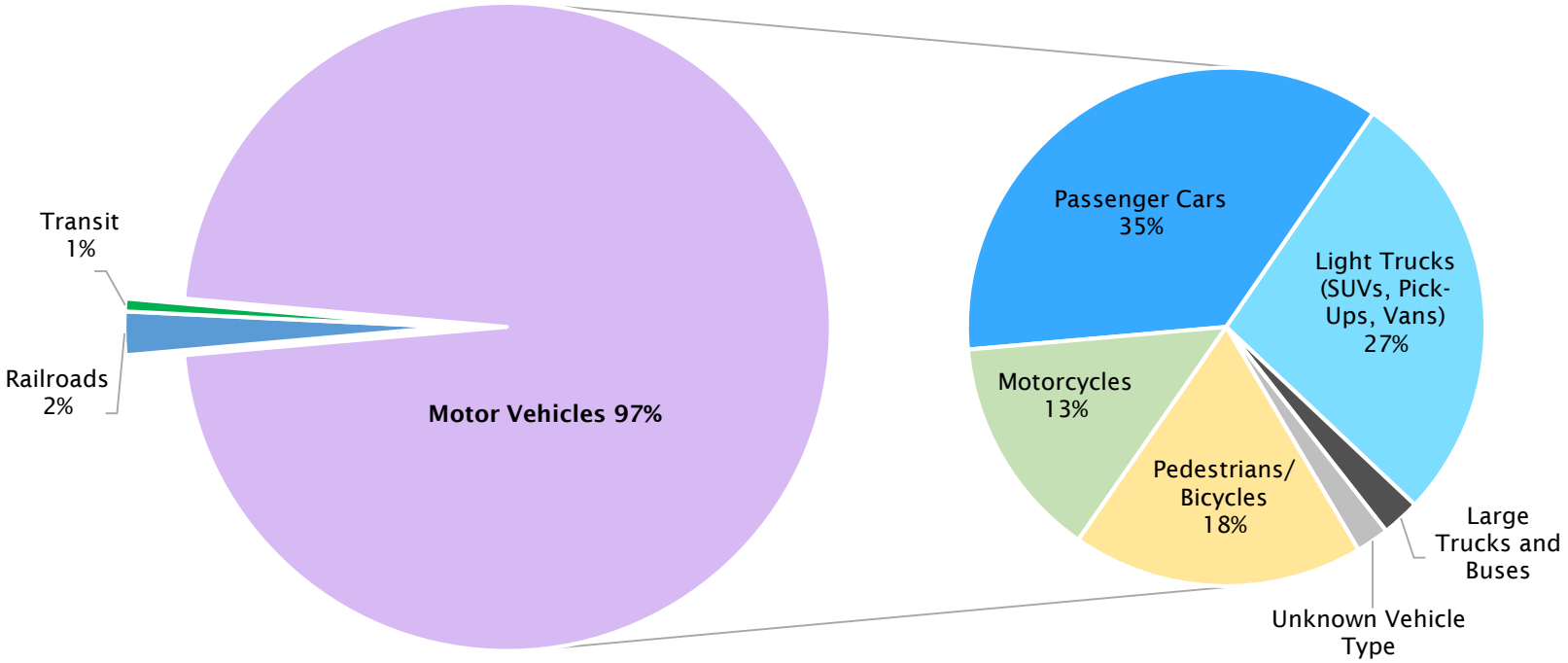
Through Q3 of FY 2019, there were eight fatalities resulting from the transport of hazardous materials by all modes. All were related to local gas distribution pipeline systems. Since 2005, the number of hazmat shipments has increased by 26% to 1.2 million shipments per day, and America's pipeline network has expanded by 15% to 2.8 million miles. While more hazardous materials move via America's highways, rails, skies, waterways, and pipelines than ever before, the number of fatalities resulting from hazardous materials in transportation has dropped 80% over the same time period.

**Note: Statistical projections.*

Baseline for Surface Transportation Fatalities



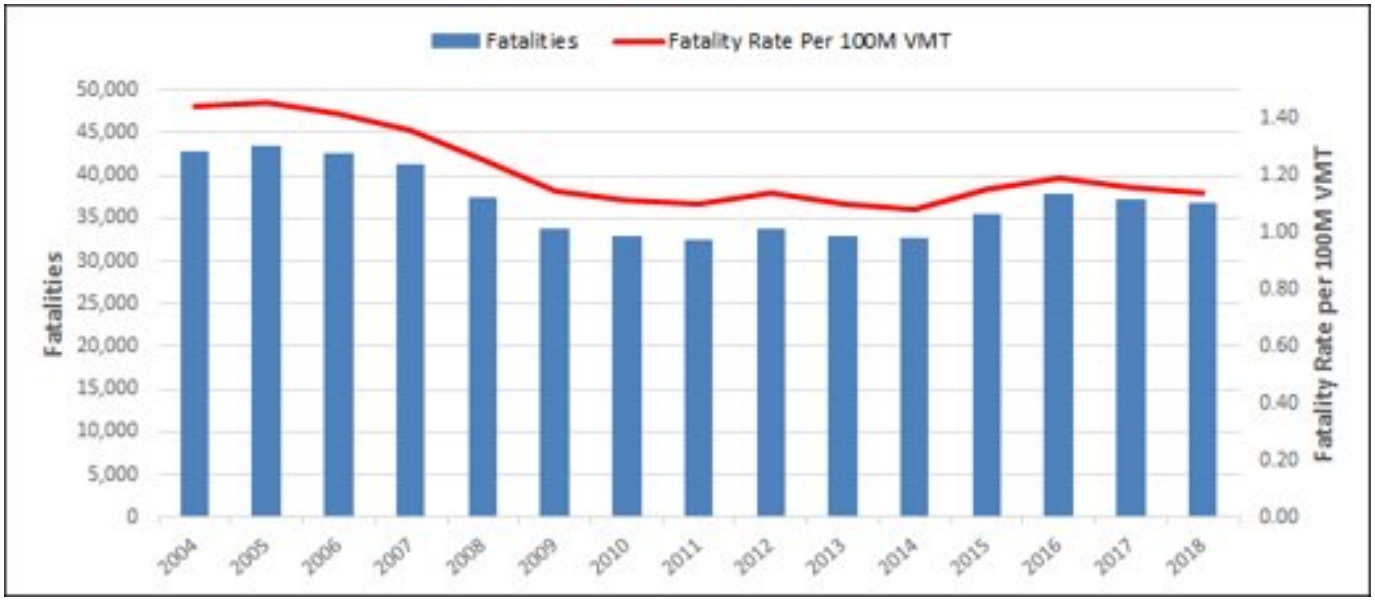
2017 Surface Transportation Fatalities by Mode of Travel



Note: Full year results for 2018 should be available by late summer of 2019.

Key Indicators (Roadway Safety- FHWA, FMCSA, NHTSA)

Total Motor Vehicle Fatalities and Fatality Rate per 100 million Vehicle Miles Traveled



	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Motor Vehicle Related Fatalities	32,893	32,744	35,485	37,806	37,133	36,750
Motor Vehicle Related Fatality Rates per 100 Million Vehicle Miles Traveled (VMT)	1.10	1.08	1.15	1.19	1.16	1.14
Motor Vehicle Fatality Rate Targets	1.03	1.02	1.02	1.02	1.02	1.02

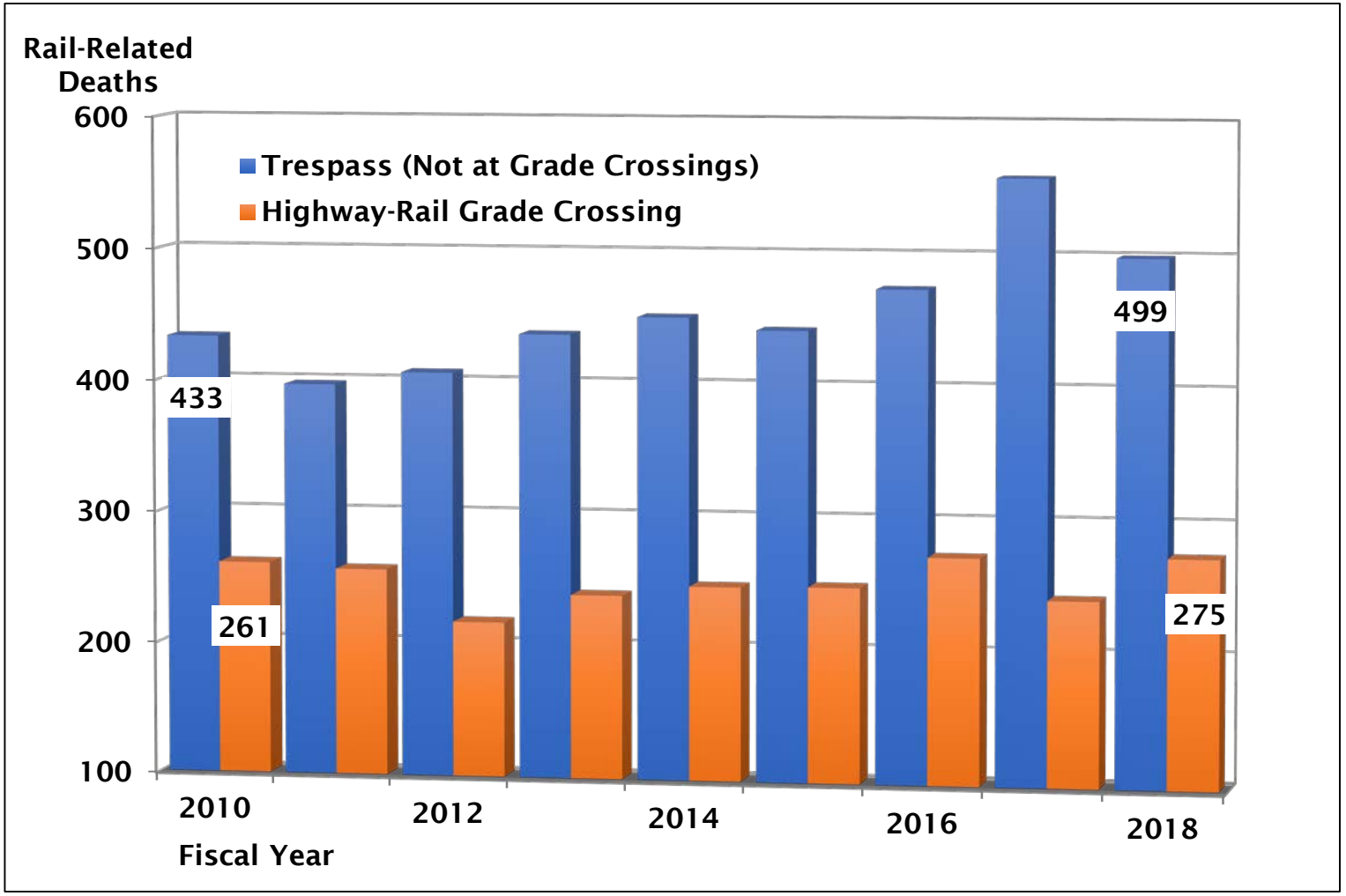
Key Indicators (Surface Safety- FTA)

Transit*	2011	2012	2013	2014	2015	2016	2017	2018	2019 (preliminary data)
Fatalities Rate (per 100M PMT)	0.530	0.607	0.615	0.524	0.583	0.582	0.572	0.593	.52
Fatality Count:	**226**	**265**	**273**	**236**	**254**	**257**	**241**	**250**	**92**
Fatalities by Mode									
Bus (MB)	92	97	104	101	102	108	98	58	28
Heavy Rail (HR)	94	102	111	93	97	105	90	127	43
Light Rail (LR)	36	45	35	39	46	39	49	41	16
Other Modes	4	21	23	3	9	5	23	11	5
Total	**226**	**265**	**273**	**236**	**254**	**257**	**241**	**250**	**92**
Fatalities by Subgroup									
Suicides	62	63	71	61	74	80	68	77	29
Passengers	12	12	18	23	12	14	16	13	4
Revenue Facility Occupants	30	55	38	34	17	35	31	24	10
Total Employee**	3	5	11	5	4	8	4	11	2
Bicyclists	5	6	11	13	7	9	11	5	1
Ped In Crossing	16	14	12	21	19	15	17	15	5
Ped Not In Crossing	19	24	17	13	28	10	6	13	5
Ped Crossing Tracks	5	8	5	9	12	0	0	0	0
Ped Walking Along Tracks	7	11	7	13	9	9	6	4	1
Other Vehicle Occupant	35	47	52	35	51	48	61	40	20
Other	32	20	31	9	21	29	21	48	15
Total	**226**	**265**	**273**	**236**	**254**	**257**	**241**	**250**	**92**

Notes:

- Transit systems may make revisions to their data up until the final calendar year report is made in the spring of the following year
  Fatality rates are calculated by dividing calendar year fatalities by National Transit Database report year passenger miles.
- The following are excluded (**which are regulated by FRA):** All Commuter Rail (CR) modes, PATH Heavy Rail (HR), Portland Tri-Met Hybrid Rail (YR), and Austin Capital Metro Hybrid Rail (YR)
- **Total Employee is the combined count of Employees and Others Workers
- 2019 Preliminary Data is from October 2018 through March 2019

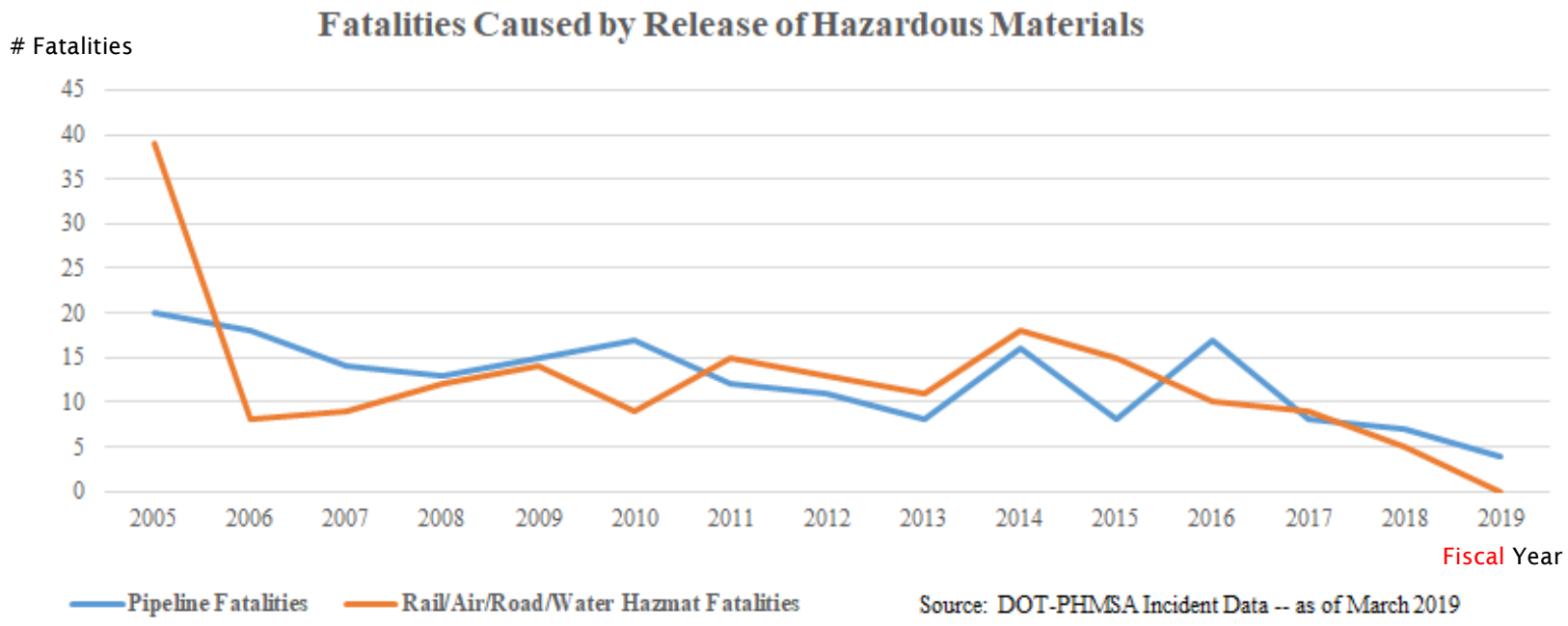
Key Indicators (Surface Safety- FRA)



Key Indicators (Surface Safety- PHMSA)

Performance Goal: Reduce Fatalities Caused by Pipelines and Hazardous Materials (PHMSA)						
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019 (thru Q3)
Metric: Confirmed fatalities caused by the release of hazardous materials transported via pipeline or surface transportation conveyance	34	23	27	17	13(p)	8(p)

(p) preliminary (Actual data will be available one year and one month following the fiscal year)



Data Sources and Methodologies

Pipeline and Hazardous Materials Safety

Methodologies

PHMSA reviews data on incidents resulting from hazardous materials being transported by pipeline or surface transportation modes to derive the number of confirmed fatalities.

Data Sources

DOT/PHMSA incident data are used. For pipeline, these data are derived from pipeline operator reports submitted on PHMSA Form 7100 filings: 7100.1 (gas distribution pipeline incidents), 7100.2-1 (gas gathering, gas transmission and underground natural gas storage pipeline incidents), 7100.3 (liquefied natural gas pipeline incidents), and 7000-1 (hazardous liquid pipeline incidents). For fatalities caused by the release of hazardous materials by modes other than pipeline, PHMSA derives its data from reports submitted on DOT Form 5800.1.

PHMSA Portal Access Page: https://portal.phmsa.dot.gov/

Data Sources and Methodologies (cont.)

Surface Fatality Rates

Methodologies

- The motor vehicle fatality rate measure is calculated by dividing the number of deaths from motor vehicle crashes by 100 million VMT. The fatality rate provides a way of examining motor vehicle deaths relative to the amount of driving (exposure). The fatality rate measure is benchmarked using two national information systems. FARS (Fatality Analysis Reporting System) is used for motor vehicle fatalities nationwide and HPMS (Highway Performance Monitoring System) is used to assess VMT (Vehicle Miles Traveled). For more information on FARS methodology, see https://cdan.nhtsa.gov/tsftables/FARS%20Operations.pdf.
- All 50 States, the District of Columbia and Puerto Rico report a standard set of data on each fatal crash based on police accident reports. A roadway fatality is the death of any vehicle occupant (drivers and passengers), motorcyclists, and non-occupants (pedestrians and bicyclists) in a motor vehicle crashes on a public roadway occurring within 30 days of the crash.

Data Sources

- Fatality Analysis Reporting System (FARS) https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars
- Motor Carrier Management Information System (MCMIS) https://ask.fmcsa.dot.gov/app/mcmiscatalog/c_chap3
- Vehicle Miles Traveled (VMT) https://www.fhwa.dot.gov/policyinformation/travel_monitoring/17juntvt/
- Railroad Safety Information System (RSIS)

  http://safetydata.fra.dot.gov/

Data Sources and Methodologies (cont.)

Transit Fatality Rates

A transit-related fatality is defined as a death or suicide confirmed within 30 days of a reported incident. Does not include deaths in or on transit property that result from illness or other natural causes.

Methodologies

The fatality rate provides a way of examining transit deaths relative to the average passenger trip length (exposure).

The transit fatality rate measure is calculated by dividing calendar year fatalities from all transit modes (excluding FRA regulated transit) by 100 million PMT (passenger miles traveled).

Data Sources

National Transit Database:
https://www.transit.dot.gov/ntd

The fatality rate measure is benchmarked using the National Transit Database, which collects monthly data for safety events and annual data for passenger miles traveled.

Additional Information

Contributing Programs

Organizations

- NHTSA has partnered with the Maryland Department of Transportation on a two-year pilot project to get more vehicles with open recalls repaired by linking recall notices to the time of vehicle registration.
- Under FHWA's **Safety Performance Management Measures Rule**, States and MPOs set targets for and track the number and rate of fatalities, the number and rate of serious injuries, and the number of non-motorized fatalities and serious injuries. The first targets were set in August, 2017. Setting, monitoring, and achieving these performance targets will lead to better investment decision making and ultimately a reduction in fatalities and serious injuries.

Program Activities

- **National Registry for Certified Medical Examiners:** This FMCSA program sets baseline training and testing standards to equip medical examiners with a thorough understanding of DOT fitness standards to ensure that truck and bus drivers meet the physical qualification requirements to operate safely on the Nation's highways and roads.

Regulations

- **Electronic Logging Devices (ELD) FMCSA Final Rule:** Phase 2 of ELD is from December 18, 2017 to December 16, 2019. The ELD rule is intended to help create a safer work environment for drivers by making it easier and faster to accurately track, manage, and share records of duty status data.

Tax Expenditures

- N/A

Policies

- NHTSA released its most recent guidance for the auto industry on automated vehicle technology, *Automated Driving Systems (ADS): A Vision for Safety 2.0,* in September 2017.

Additional Information (cont.)

Stakeholder/Congressional Consultations

Describe how the agency incorporated any views or suggestions through consultations held w/ Congress or other stakeholders

- Through the *Road to Zero* coalition, NHTSA, FHWA, and FMCSA have joined forces with State and local governments, other federal agencies, and 900 organizations around the country to develop a roadmap to reduce fatalities now and work toward the day when there are zero fatalities. While that is a tall order, a future with zero traffic deaths is now more possible than ever with the emergence of automated driving systems and the Safe Systems transportation approach to safety. Moreover, by working together, multiple stakeholders with the same goal can achieve more than individual organizations working independently. For more information, see the *Road to Zero* coalition website at https://www.nsc.org/road-safety/get-involved/road-to-zero.
- NHTSA will continue to conduct meetings and listening sessions to obtain input on future directions in automated driving systems (ADS) with a wide variety of stakeholders, including the auto industry, disability rights organizations, safety advocacy groups, and State transportation agencies. Information on upcoming events will be posted at https://www.nhtsa.gov/events-and-public-meetings as it becomes available.
- PHMSA works closely with its stakeholders to collect and share data and information to provide a standard of reference for safety performance, improve data quality, and motivate changes in behavior. PHMSA also cooperates with other federal agencies, including the Departments of Homeland Security, Energy, State, Interior, and Labor, the Environmental Protection Agency, and others on all pipeline and hazardous materials safety matters.