Agency Priority Goal Action Plan

Reduce Surface Transportation-Related Fatalities

Goal Leaders:

Brandy Hendrickson, Acting Administrator, Federal Highway Administration (FHWA)

Raymond P. Martinez, Administrator, Federal Motor Carrier Safety Administration (FMCSA)

Heidi King, Deputy Administrator, National Highway Traffic Safety Administration (NHTSA)
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 percent reduction overall.
• Though fatalities rose in 2015 and 2016, the numbers started to turn around in 2017, with an estimated 37,133 deaths, compared to 37,806 deaths in 2016.
• Human error, such as impaired driving, texting while driving, or speeding, continues to be a critical factor in more than 90 percent of serious motor vehicle crashes, according to a crash causation study by NHTSA.
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/IHSS-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.
Goal Structure & Strategies

<table>
<thead>
<tr>
<th>Motor vehicle-related roadway fatalities per 100 million vehicle miles traveled</th>
<th>CY 2016 Actual</th>
<th>CY 2017 Target</th>
<th>CY 2017 Actual</th>
<th>CY 2018 Target</th>
<th>CY 2018 Actual</th>
<th>CY 2019 Target</th>
<th>CY 2019 Actual</th>
<th>CY 2020 Target</th>
<th>CY 2020 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.19</td>
<td>1.02</td>
<td>1.16</td>
<td>1.02</td>
<td>TBD*</td>
<td>1.02</td>
<td></td>
<td>1.01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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). Projected estimates for 2018 should be available by Spring 2019.
## Motor Vehicle-Related Fatality Supporting Indicators (FHWA, NHTSA, FMCSA)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>CY 2016 Baseline</th>
<th>CY 2017 Target</th>
<th>CY 2017 Actual</th>
<th>CY 2018 Target</th>
<th>CY 2019 Target</th>
<th>CY 2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger fatalities per 100 million vehicle miles traveled</td>
<td>0.75</td>
<td>0.75</td>
<td>0.75</td>
<td>0.75</td>
<td>0.74</td>
<td>0.74</td>
</tr>
<tr>
<td>Large truck and bus fatalities per 100 million vehicle miles traveled</td>
<td>0.144</td>
<td>0.114</td>
<td>TBD</td>
<td>0.114</td>
<td>0.114</td>
<td>0.114</td>
</tr>
<tr>
<td>Non occupant fatalities (pedestrian, bicycle) per 100,000 population</td>
<td>2.19</td>
<td>2.15</td>
<td>2.15</td>
<td>2.15</td>
<td>2.10</td>
<td>2.10</td>
</tr>
<tr>
<td>Motorcycle fatalities per 100,000 motorcycle registrations</td>
<td>60.9(r)</td>
<td>62</td>
<td>TBD</td>
<td>62</td>
<td>62</td>
<td>61</td>
</tr>
</tbody>
</table>

(r) Revised number based on updated information from NHTSA’s Fatality Analysis Reporting System. Fatality rates for large trucks and buses and motorcycle are expected by early 2019.
FMCSA’s strategies to accomplish the APG include the following:

- **Our Roads, Our Responsibilities**: 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.

- **High-Risk Carriers**: Continue 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.

- **New Entrant Safety Audits**: Continue to monitor New Entrants during their initial 18-months of operation and conduct New Entrant Safety Audits.

- **CDL Drug and Alcohol Clearinghouse**: Implement the Drug and Alcohol Clearinghouse final rule, which established requirements for a central database for verified positive controlled substances and alcohol test results for CDL holders and refusals by such drivers 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.

- **Research**: FMCSA will partner with NHTSA for a multi-phased research project to provide strategic direction to examining crash factors and developing and testing crash countermeasures. The multi-phased research project will develop innovative methods to match various sources of crash data. In this three-phase approach, FMCSA and NHTSA will examine existing DOT-collected crash data, then augment this data by linking crash data to other DOT, State or commercially available data sources. In the final phase, video data will be examined to gain a better understanding of the driver behaviors that precipitate a crash, many of which are often under reported, such as distraction and fatigue. At each phase of the project FMCSA and NHTSA will jointly hold a workshop to go over research findings and develop and refine research priorities, crash countermeasures, and a strategic plan for testing and deploying safety countermeasures. This project will be conducted over a three year period beginning FY 2019.
NHTSA’s strategies to accomplish the APG include the following:

- **Enhancing Data Collection.** NHTSA is continually improving its data systems by, for example, exploring new electronic data transfer technology. The agency also plans to undertake an initiative on the feasibility of performing a new Crash Causation Study. Understanding the events leading up to a crash is crucial in developing new countermeasures and programs to prevent crashes from occurring in the future.

- **Promoting Safer Driving.** Driver error contributes to 94 percent of all serious crashes. NHTSA conducts research and develops safety programs to address these human factors, and provides evidence-based safety programs for States to implement. [Countermeasures That Work](#) provides a range of evaluated safety programs. The agency also conducts national media and enforcement campaigns to reduce alcohol and drug impaired driving and distracted driving, and to increase seat belt use. It also implements initiatives on other safety issues such as education and awareness campaigns on vehicle safety recalls and on proper usage of child safety seats among other safety issues.

- **Strengthening Vehicle Safety.** NHTSA provides national leadership on Automated Driving Systems and related areas, such as cybersecurity by employing a holistic risk management approach to strengthen the cybersecurity posture of the automotive sector. This includes conducting applied research and testing and collaborating with other government agencies, international partners, and industry sectors, to build its knowledge base and proactively work with industry to address vehicle cybersecurity vulnerabilities, threats, and safety risks. NHTSA also develops and enforces vehicle safety standards, oversees vehicle safety defect recalls, and spurs deployment of safer vehicles through its 5-Star Safety Rating program.

- **Improving Survival Rates.** If a crash does occur, swift response by emergency medical services (EMS) can often be the difference between life and death. NHTSA is working with the States to upgrade and enhance the capacity of EMS providers to keep pace with advances in telecommunications technology.
FHWA’s strategies to accomplish the APG include the following:

FHWA administers the Highway Safety Improvement Program (HSIP) program to States to address safety infrastructure challenges, including:

- FHWA’s **Focused Approach to Safety initiative** provides targeted technical assistance and training to the cities with the most pedestrian and bicyclist fatalities.

- Through **Every Day Counts**, FHWA has several new initiatives for safety:
  
  - The **Data-Driven Safety Analysis**: Using tools to analyze crash and roadway data to predict the safety impacts of highway projects allows agencies to target investments with more confidence and reduce severe crashes on the roadways.
  
  - **Safe Transportation for Every Pedestrian**: Pedestrians account for an estimated 16% of all roadway fatalities, the majority of which are at uncontrolled crossings. This innovation helps transportation agencies address pedestrian crashes by promoting cost-effective countermeasures with known safety benefits. See **Everyday Counts** and **Pedestrian Safety** for more information.
  
  - **Reducing Rural Roadway Departures**: Reducing fatalities on rural roads remains a major challenge in the U.S. 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, helps keep vehicles in their travel lanes, reduce the potential for crashes, and reduce the severity of those crashes that do occur. See **Rural Roadway** for more information.

In addition, FHWA focuses on three main areas that encompass approximately 90% of highway fatalities in the US – roadway departure, intersections, and pedestrian/bicycle crashes through the delivery of technical assistance, data analysis and action plan development and training.
Goal Structure & Strategies (FTA)

<table>
<thead>
<tr>
<th>Transit-Related Fatalities per 100 Million Passenger-Miles Traveled (FTA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transit fatalities per 100 million passenger miles by fiscal year</td>
</tr>
<tr>
<td>.582</td>
</tr>
</tbody>
</table>

*Actual data are subject to change and might differ from prior year materials based on the latest information available.*

FTA’s strategies to accomplish the APG include the following:

- Publication of FTA National Safety Plan.
- Implementation of State Safety Oversight Program.
- Safety directives and advisories.
- Temporary direct safety oversight.
- Safety Certification Training program.
- Manage the drug and alcohol program.
- Safety Data Workgroup.
- SSO SOPs.
- SSOA certification of 30 States.
Goal Structure & Strategies

### Rail-Related Fatalities (FRA) *

<table>
<thead>
<tr>
<th></th>
<th>2017 Baseline</th>
<th>2018 Target</th>
<th>2019 Target</th>
<th>2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway-rail grade crossing incident rate per million train-miles</td>
<td>3.006</td>
<td>2.85</td>
<td>2.84</td>
<td>2.84</td>
</tr>
<tr>
<td>Rail right-of way trespass incident rate per million train-miles</td>
<td>1.513</td>
<td>1.55</td>
<td>1.51</td>
<td>1.48</td>
</tr>
</tbody>
</table>

* Actual data are subject to change and might differ from prior year materials based on the latest information available. As of January 31, 2018.

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 over 250 and the number of trespass deaths has averaged over 450 per year since 2009. **FRA’s strategies to accomplish the APG include the following:**

- **Education:** Increasing public awareness 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:** Working together with States, local governments, and organizations that can complement FRA activities, because FRA does not directly influence some significant grade crossing safety risks, including highway vehicle miles traveled and driver behavior.
- 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
Quarter 4 (Q4) FY2018 Agency Priority Goals (APG)

<table>
<thead>
<tr>
<th>Incidents involving death or major injury resulting from the transport of hazardous materials by all modes, including pipelines</th>
<th>2017 Baseline</th>
<th>2018 Target</th>
<th>2019 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>63</td>
<td>63</td>
<td></td>
</tr>
</tbody>
</table>

Incidents involving death or major injury resulting from the transport of hazardous materials is a combined measure of both pipeline- and hazardous materials-related incidents involving death or major injury. Each component is further defined as follows:

- Hazardous materials incidents include those involving a fatality or a major injury requiring admittance to the hospital and/or loss of three days or more from work due to the extent of injury;
- Pipeline incidents include those involving a fatality or injury requiring in-patient hospitalization, but Fire First incidents are excluded. Fire First Incidents are gas distribution incidents with a cause of Other Outside Force Damage and sub-cause of Nearby Fire/Explosion as Primary Cause of Incident.

PHMSA’s strategies to accomplish the APG include the following:

PHMSA is continuing to closely assess all incident data to identify potential contributing causes and take action where necessary and prudent to help protect people and the environment. PHMSA will also continue to focus on its top safety rulemakings, the safe transportation of energy products, risk-based inspection, and outreach activities. PHMSA will also continue to urge operators to be vigilant in their operating practices to prevent accidents. In addition, the implementation of Safety Management Systems (SMS) by pipeline operators and other industries has been demonstrated to achieve results in improving safety. As such, PHMSA will continue to engage with the regulated industry to implement SMS and improve safety culture to further improve performance.
Goal Structure & Strategies
Quarter 1 (Q1) FY2019 Agency Priority Goals (APG)

<table>
<thead>
<tr>
<th>Reduce Pipeline And Hazardous Materials Safety Related Fatalities (PHMSA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Confirmed fatalities caused by the release of hazardous materials transported via pipeline or surface transportation conveyance.</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

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.” This measure focuses on fatalities only as opposed to incidents involving fatalities, etc. and is in keeping with APG measures of other DOT Operating Administrations.
Surface Safety

In 2017, an estimated 37,133 people died in motor vehicle crashes.* The fatality rate per 100 million vehicle miles traveled (VMT) was 1.16. Preliminary data reported by the Federal Highway Administration (FHWA) shows that vehicle miles traveled (VMT) in the first 6 months of 2018 increased by about 5.2 billion miles, or about a 0.3-percent increase. The overall fatality rate for the first six months of 2018 is projected to be 4 percent lower than the same period in 2017. 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 continues to be one of the safest modes. While the transit fatalities rate increased in 2015 and 2016, transit modes experienced a considerable reduction in fatalities during 2017. 2018 preliminary data shows the transit fatalities rate might level or continue to decrease.

Rail Safety

Based on preliminary data, the cumulative grade crossing incident rate through the second quarter increased by 4.7 percent, while the trespass incident rate decreased by almost 1.3 percent, compared to the same period in fiscal year 2017. As the year progresses, FRA will determine whether these results are data anomalies or indications of longer term trends.

Pipelines Safety and Hazardous Materials Safety

As of the end of the fourth quarter of FY 2018, there were 52 incidents involving death or major injury resulting from the transport of hazardous materials by all modes, including pipelines. Of the 52 incidents, 32 were related to gas distribution pipeline systems and four were related to gas transmission pipeline systems. There were 16 serious incidents resulting from the transport of hazardous materials by modes other than pipeline. As more hazardous materials move through America’s highways, rails, skies, waterways, and pipelines than ever before, so far FY 2018 was the safest year for hazmat transportation on record. The number of incidents with death or serious injury resulting from hazardous materials in transportation is at an all-time low, falling over 40% since 2016. These safety gains come as international demand for American chemical and energy products fuels hazmat industry growth at nearly double the rate of the overall economy.

*Note that, for measures based on the fiscal year, it is possible to provide full year results. However, since motor vehicle measures are all based on the calendar year, full year results are not yet available.
Baseline for Surface Transportation Fatalities

2016 Surface Transportation Fatalities

- Highways: 97%
- Railroads: 2%
- Transit: 1%
Baseline of Surface Transportation Fatalities

2016 Surface Transportation Fatalities (Motor Vehicles, Rail, Transit)

- Motor Vehicles: 97%
- Passenger Cars: 35%
- Light Trucks (SUVs, Pick-Ups, Vans): 27%
- Motorcycles: 14%
- Pedestrians/Bicycles: 18%
- Large Trucks and Buses: 2%
- Unknown Vehicle Type: 1%
- Railroads: 2%
- Transit: 1%
Key Indicators (Roadway Safety- FHWA, FMCSA, NHTSA)

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Motor Vehicle Related Fatalities</th>
<th>Motor Vehicle Related Fatality Rates per 100 Million Vehicle Miles Traveled (VMT)</th>
<th>Motor Vehicle Fatality Rate Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatalities</td>
<td>32,893</td>
<td>32,744</td>
<td>35,485</td>
</tr>
<tr>
<td>Fatality Rate</td>
<td>1.10</td>
<td>1.08</td>
<td>1.15</td>
</tr>
</tbody>
</table>

Motor Vehicle Fatality Rate Targets

- CY 2013: 1.03
- CY 2014: 1.02
- CY 2015: 1.02
- CY 2016: 1.02
- CY 2017: 1.02
- CY 2018: 1.02
# Key Indicators (Surface Safety - FTA)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fatalities Rate</strong> (per 100M PMT)</td>
<td>0.530</td>
<td>0.607</td>
<td>0.615</td>
<td>0.524</td>
<td>0.583</td>
<td>0.582</td>
<td>0.572</td>
<td>0.566</td>
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<tr>
<td><strong>Fatality Count:</strong></td>
<td>226</td>
<td>265</td>
<td>273</td>
<td>236</td>
<td>254</td>
<td>257</td>
<td>241</td>
<td>179</td>
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<tr>
<td><strong>Fatalities by Mode</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Bus (MB)</td>
<td>92</td>
<td>97</td>
<td>104</td>
<td>101</td>
<td>102</td>
<td>108</td>
<td>98</td>
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<td>Heavy Rail (HR)</td>
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<td>102</td>
<td>111</td>
<td>93</td>
<td>97</td>
<td>105</td>
<td>90</td>
<td>89</td>
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<tr>
<td>Light Rail (LR)</td>
<td>36</td>
<td>45</td>
<td>35</td>
<td>39</td>
<td>46</td>
<td>39</td>
<td>49</td>
<td>29</td>
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<tr>
<td>Other Modes</td>
<td>4</td>
<td>21</td>
<td>23</td>
<td>3</td>
<td>9</td>
<td>5</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>226</td>
<td>265</td>
<td>273</td>
<td>236</td>
<td>254</td>
<td>257</td>
<td>241</td>
<td>179</td>
</tr>
<tr>
<td><strong>Fatalities by Subgroup</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicides</td>
<td>62</td>
<td>63</td>
<td>71</td>
<td>61</td>
<td>74</td>
<td>80</td>
<td>68</td>
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<tr>
<td>Passengers</td>
<td>12</td>
<td>12</td>
<td>18</td>
<td>23</td>
<td>12</td>
<td>14</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Revenue Facility Occupants</td>
<td>30</td>
<td>55</td>
<td>38</td>
<td>34</td>
<td>17</td>
<td>35</td>
<td>31</td>
<td>20</td>
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<tr>
<td><strong>Total Employee</strong></td>
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<td>5</td>
<td>11</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>4</td>
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<tr>
<td>Bicyclists</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>13</td>
<td>7</td>
<td>9</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Ped In Crossing</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td>21</td>
<td>19</td>
<td>15</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Ped Not In Crossing</td>
<td>19</td>
<td>24</td>
<td>17</td>
<td>13</td>
<td>28</td>
<td>10</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Ped Crossing Tracks</td>
<td>5</td>
<td>8</td>
<td>5</td>
<td>9</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ped Walking Along Tracks</td>
<td>7</td>
<td>11</td>
<td>7</td>
<td>13</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Other Vehicle Occupant</td>
<td>35</td>
<td>47</td>
<td>52</td>
<td>35</td>
<td>51</td>
<td>48</td>
<td>61</td>
<td>31</td>
</tr>
<tr>
<td>Other</td>
<td>32</td>
<td>20</td>
<td>31</td>
<td>9</td>
<td>21</td>
<td>29</td>
<td>21</td>
<td>32</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>226</td>
<td>265</td>
<td>273</td>
<td>236</td>
<td>254</td>
<td>257</td>
<td>241</td>
<td>179</td>
</tr>
</tbody>
</table>

**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.
- Fatalities rates are calculated by dividing calendar year fatalities by NTD report year passenger miles.
- Excluding the following (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.
Key Indicators (Surface Safety- FRA)

Rail-Related Deaths

- Trespass (Not at Grade Crossings)
- Highway-Rail Grade Crossing
Key Indicators (PHMSA)

Reduce Serious Pipeline and Hazardous Materials Incidents (PHMSA)

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018 (thru Qtr 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidents involving death or major injury resulting from the transport of hazardous materials by all modes, including pipelines</td>
<td>61(r)</td>
<td>53</td>
<td>69(r)</td>
<td>57*</td>
<td>44*</td>
<td>52*</td>
</tr>
</tbody>
</table>

*preliminary
(r)Revised

Pipeline Incidents with Death or Major Injury (1988-2017)

Hazmat Incidents with Death or Major Injury (1988-2017)

Incidents involving death or major injury resulting from the transport of hazardous materials by all modes, including pipelines

Source: DOT-PHMSA Incident Data -- as of October 2017
Pipeline and Hazmat

Methodologies

- Incidents involving death or major injury resulting from the transport of hazardous materials is a combined measure of both pipeline- and hazardous materials-related incidents involving death or major injury. For hazardous materials incidents, this metric is derived by counting the number of incidents with DOT Form 5800.1 filings that have been verified as having a death or serious injury resulting from hazardous materials in transportation.

- For pipeline incidents, this metric is derived by counting the number of pipeline incident reports that have been verified as having a death or serious injury resulting from pipelines.

Data Sources

The sources of data for this measure include: (1) DOT Form 5800.1 filings for hazmat incidents; and (2) PHMSA Form 7100 filings, Datalink file (PIPES) and/or U.S. DOT Pipeline Data Mart (PDM) for pipeline incidents.
Data Sources and Methodologies

Surface Fatality Rates

Methodologies

• The motor vehicle fatality rate measure is calculated by dividing the number of deaths from motor vehicle crashes by 100 M 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/
Transit Fatality Rates

Methodologies
The transit fatality rate measure is calculated by dividing calendar year fatalities from all transit modes (excluding FRA regulated transit) by 100 M PMT (passenger miles traveled). The fatality rate provides a way of examining transit deaths relative to the average passenger trip length (exposure). 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.

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
- National Transit Database - https://www.transit.dot.gov/ntd
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 the 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, and make it easier, faster to accurately track, manage, and share records of duty status data.

Tax Expenditures

- N/A

Policies

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 500 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](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 on 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](https://www.nhtsa.gov/events-and-public-meetings) as it becomes available.
Contributing Programs
Organizations
• Pipeline and Hazardous Materials Safety Administration
• Federal Aviation Administration, Federal Railroad Administration, Federal Motor Carrier Safety Administration

Program Activities
• Pipeline Safety Program
• Hazardous Materials Safety Program

Regulations
• Pipeline Safety Regulations (PSR; 49 CFR parts 192-199)
• Hazardous Materials Regulations (HMR: 49 CFR parts 171-180)

Other Federal Activities
• PHMSA cooperates with Department of Homeland Security’s U.S. Coast Guard on enforcement of the HMR as it applies to vessel transportation of hazardous materials
• PHMSA also cooperates with Department of Energy’s (DOE) Federal Energy Regulatory Commission on siting of pipelines, the State Department for cross-borer pipeline issues, and Department of Interior’s (DOI) Bureau of Safety and Environmental Enforcement for offshore pipeline safety.
• PHMSA also works with the DOI’s Bureau of Land Management, Department of Labor’s Occupational Safety and Health Administration, DOE, the Environmental Protection Agency, and others on all safety matters and by virtue of our expertise in hazardous materials transportation.

Stakeholder/Congressional Consultations
• 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.