



National Transportation Safety Board

National Child Passenger Safety Board

Member Michael Graham

AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE



Our Mission

The NTSB is an independent Federal agency charged by Congress with **investigating** every civil aviation accident in the United States and significant accidents in the other modes of transportation – highway, marine, railroad and pipeline – and **issuing safety recommendations** aimed at preventing future accidents.

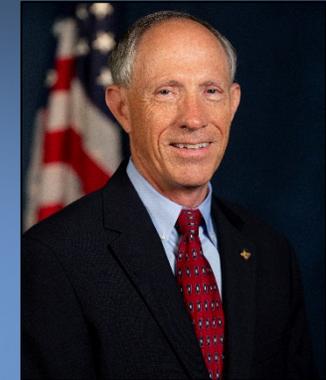
BOARD MEMBERS AND STAFF

5 Board Members

- Chairman Robert L. Sumwalt
 - Vice Chairman Bruce Landsberg
 - Member Jennifer Homendy
 - Member Michael Graham
 - Member Thomas Chapman
-
- 400 staff
(HQ, 4 Regional Offices, Training Center)



Chairman
Robert Sumwalt



Vice Chairman
Bruce Landsberg



Member
Jennifer Homendy



Member Michael
Graham



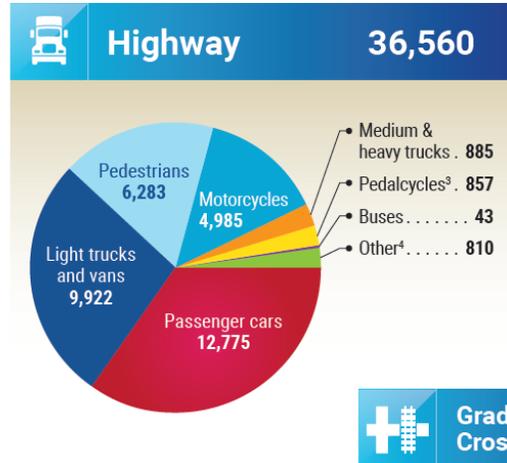
Member
Thomas Chapman



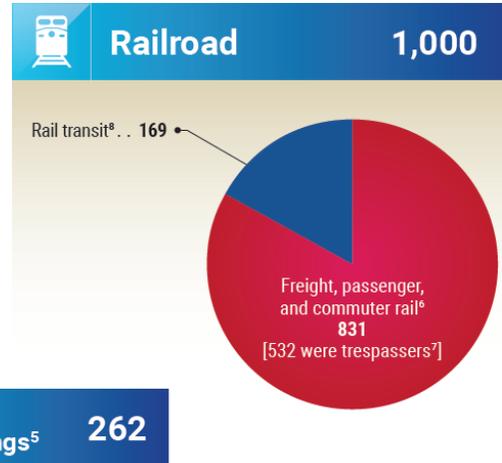
National Transportation Safety Board US Transportation Fatalities in 2018¹ – by Mode

Total: 38,515²

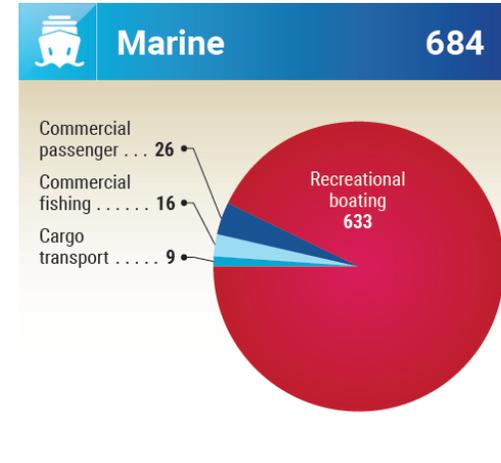
Aviation data is sourced from the NTSB's [1999–2018 Preliminary Aviation Statistics](#). For other transportation modes, the NTSB used data from the Bureau of Transportation Statistics, [Transportation Fatalities by Mode](#).



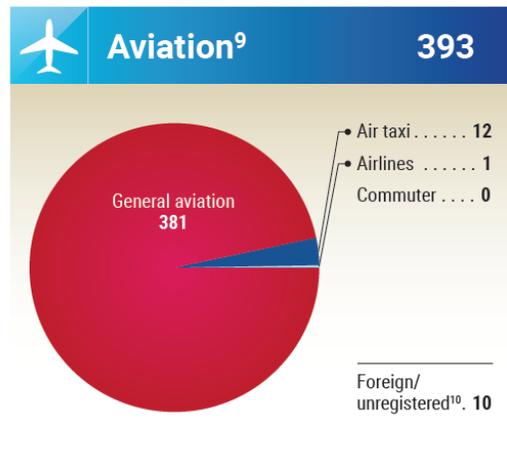
[National Highway Traffic Safety Administration](#)



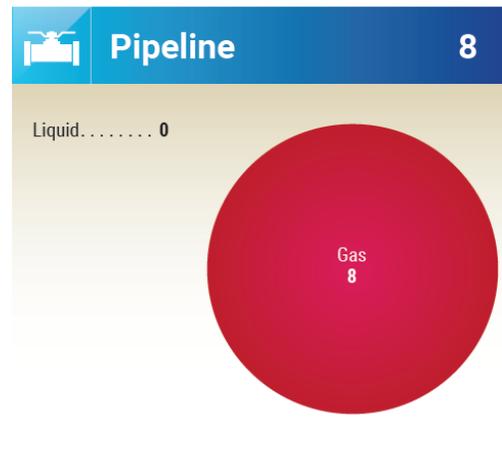
[Federal Railroad Administration](#) and [Federal Transit Administration](#)



[Department of Homeland Security/US Coast Guard](#)



[National Transportation Safety Board](#)



[Pipeline and Hazardous Materials Safety Administration](#)

Footnotes

- Numbers for 2018 are preliminary estimates. Aviation data are from the [NTSB](#); marine data are reported by the US Department of Homeland Security; all other data are reported by the [US Department of Transportation](#).
- To reduce double counting, BTS excludes railroad fatalities involving motor vehicles at public highway-rail grade crossings and transit fatalities involving non-rail modes from the overall total fatalities.
- Pedalcycles include bicycles and other cycles.
- Other refers to occupants of other vehicle types, other non-motorists, and unknown.
- Grade crossing fatalities are reported as a separate category but should not be added to the total because they are included in the highway and rail fatalities as appropriate.
- Freight, passenger, and commuter rail data are reported by the Federal Railroad Administration. The FRA does not include suicides.
- Trespassing fatalities are reported as a separate category but should not be added to the total because they are included in the freight, passenger, and commuter rail fatalities. Trespassing fatalities are not included for rail transit.
- Rail transit data are reported by the Federal Transit Administration and include fatalities (including suicides) involving heavy rail, light rail, cable car, inclined plane, monorail/automated guideway, streetcar rail, and hybrid rail.
- Total fatalities may not equal the sum of each category because accidents may involve multiple categories.
- Foreign/unregistered includes non-US registered aircraft involved in accidents in the United States.

OFFICE OF HIGHWAY SAFETY

- Total staff of 30 - managers, investigators, writers, and support staff
- Crashes monitored 24-7 from NTSB's Response Operations Center
- Ready to "Launch" at a moment's notice



NTSB INVESTIGATIONS

- NTSB's three teams of highway investigators launch to about 21 crashes per year
- Launch selection criteria
 - **High public interest?**
 - New or emerging issues?
 - Can we make a difference?
 - Do we have the resources?



TYPES OF HIGHWAY INVESTIGATIONS



Valhalla, NY 2/3/15



Gray Summit, MO 8/5/10



Williston, FL 5/7/16



Orland, CA 4/10/14



Minneapolis, MN 8/1/07

ASPECTS OF THE INVESTIGATION

- Human Performance
- Survival Factors
- Highway Factors
- Vehicle Factors





Aircraft Category:	Jet
Year Built:	1998
Operator:	Trans-Pacific Air Charter LLC
Air Carrier Operator Certificate:	1418
Operator Designation:	1418
Operator Does Business As:	Trans-Pacific Jets
Weatherological Information and Flight Plans	
Altitude at Accident Site:	Visual Conditions
Location Facility, Elevation:	1120, 9 ft msl
Distance from Accident Site:	1 Statistical Miles
Weather Cloud Conditions:	Scattered / 4500 ftagl
Air Ceiling:	None
Water Setting:	26-73 inches Hg
Pressure Point:	Philadelphia, PA (PHL)
Damage and Impact Information	
Number of Injuries:	2 Fatal
Number of Aircraft Damaged:	1 Aircraft Destroyed
Number of Injuries:	None
Number of Aircraft Damaged:	1 Aircraft Destroyed
Number of Injuries:	2 Fatal
Administrative Information	
Investigator in Charge (IC):	James P. Silliman
Other Participating Persons:	Donald Brown, Teterboro FSDO, Teterboro, NJ Michael Lewis, Boardmember, Annapolis, MD David Mulholland, Boardmember, Phoenix, AZ



On-scene Investigation

Preliminary Report

Public Hearing

Board Meeting

Final Report

NTSB process at a glance

Organizational meeting
Groups & parties
Progress meetings
Media briefings
Press releases

Factual information

Fact finding
Depositions
Witnesses
Docket

Docket
Findings
Conclusions
Probable cause
Safety recommendations

NTSB

GOVERNMENT IN THE SUNSHINE ACT

NTSB SAFETY RECOMMENDATIONS

- Safety recommendations are the Board's most important product
- Developed to remedy system, hardware, operational or policy failures identified during investigations or safety studies



“These safety recommendations, if acted upon, would prevent future tragedies similar to these.”

SAFETY STUDIES AND SPECIAL REPORTS

- Examine relevant topics including:
 - Effectiveness of/need for action by a Government agency to reduce transportation loss
 - Analysis of accident data
 - Emerging technologies
- Study results yield facts, conclusions, and recommendations
- Recent reports:
 - Bicyclist Safety
 - Pedestrian Safety
 - School Bus Crashes
 - Lithium-Ion Batteries (forthcoming)



- Increase Implementation of Collision Avoidance Systems in All New Highway Vehicles
- Ensure the Safe Shipment of Hazardous Materials
- Improve the Safety of Part 135 Aircraft Flight Operations
- Strengthen Occupant Protection
- Implement a Comprehensive Strategy to Reduce Speeding-Related Crashes
- Eliminate Distractions
- Reduce Fatigue-Related Accidents
- End Alcohol and Other Drug Impairment
- Require Medical Fitness – Screen for and Treat Obstructive Sleep Apnea
- Fully Implement Positive Train Control

2019–2020 NTSB
**MOST
WANTED
LIST** OF
TRANSPORTATION
SAFETY
IMPROVEMENTS



Strengthen Occupant Protection

CHILD PASSENGER SAFETY STATISTICS

- NHTSA 2018 Children Traffic Safety Report:
 - 1,038 of 36,560 (3%) total motor vehicle fatalities were children 14 and younger
 - 10% decrease from 2017
 - 736 of 22,697 (3%) passenger vehicle occupants killed were children
 - 236 of the 736 (35%) were unrestrained

CURRENT USAGE

- <1 year old: 92.1% in rear-facing car seat
- 1-3 years old: 85.1% in rear or forward-facing car seat
- 4-7 years old: 68.5% in forward-facing car seat or booster seat, 20.8% in seat belt, 10.6% unrestrained
- 8-12 years old: 10.7% booster seat, 74.7% seat belt, and 13.5% unrestrained



NTSB RECOMMENDATIONS

- H-96-14: To all 50 States, DC, and Puerto Rico: ensure that children up to 8 years old are required by the state's mandatory child restraint use law to use child restraint systems and booster seats.
- H-15-42: To all 50 States, DC, and Puerto Rico: Enact legislation that provides for primary enforcement of a mandatory seat belt use law for all vehicle seating positions equipped with a passenger restraint system.

STATE OVERVIEW

- Strong occupant restraint laws are critical to increasing the use of child car seats and seat belts
 - In 2018, when the drivers involved in fatal crashes were unrestrained, 63 percent of the children were also unrestrained
- 49 states & DC have a seat belt law
- 34 states have primary enforcement laws
- All 50 states & DC require booster seats or other appropriate child restraint device for children who have outgrown car seats
 - 18 states have a booster seat law that does not protect children through age 7

NTSB Advocacy

- Testifying before state legislatures urging lawmakers to strengthen seatbelt laws
- Meeting with industry partners and advocacy groups
- Podcasts and webinars
- Social media campaigns



CONNECT WITH NTSB



@NTSB



@MikeGrahamNTSB



@NTSBgov



NTSB Podcast



@NTSBgov



NTSB Blog – Safety Compass



[linkedin.com/company/NTSB](https://www.linkedin.com/company/NTSB)



[youtube.com/user/NTSBgov](https://www.youtube.com/user/NTSBgov)



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