

FEBRUARY 20, 2025



House Transportation Committee

Department of Transportation & Public Facilities

Highway Safety

Alaska Department of Transportation & Public Facilities

Pam Golden, P.E., State Traffic & Safety Engineer

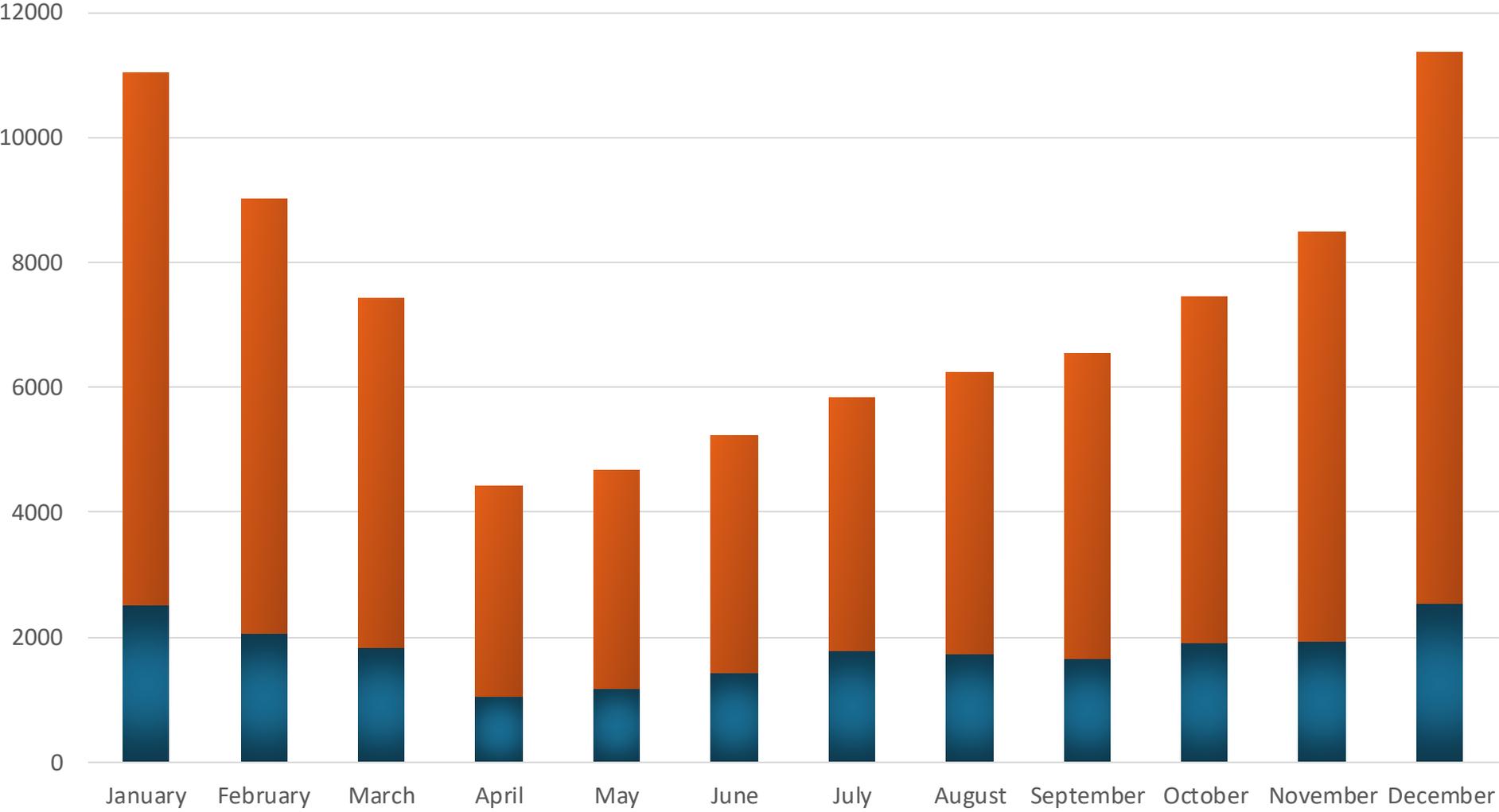
Shannon McCarthy, Communications Director

Dan Smith, Director, Measurement Standards and Commercial Vehicle Compliance



URBAN VS RURAL: OVERALL CRASHES

All Crash Severities, 2014-2023

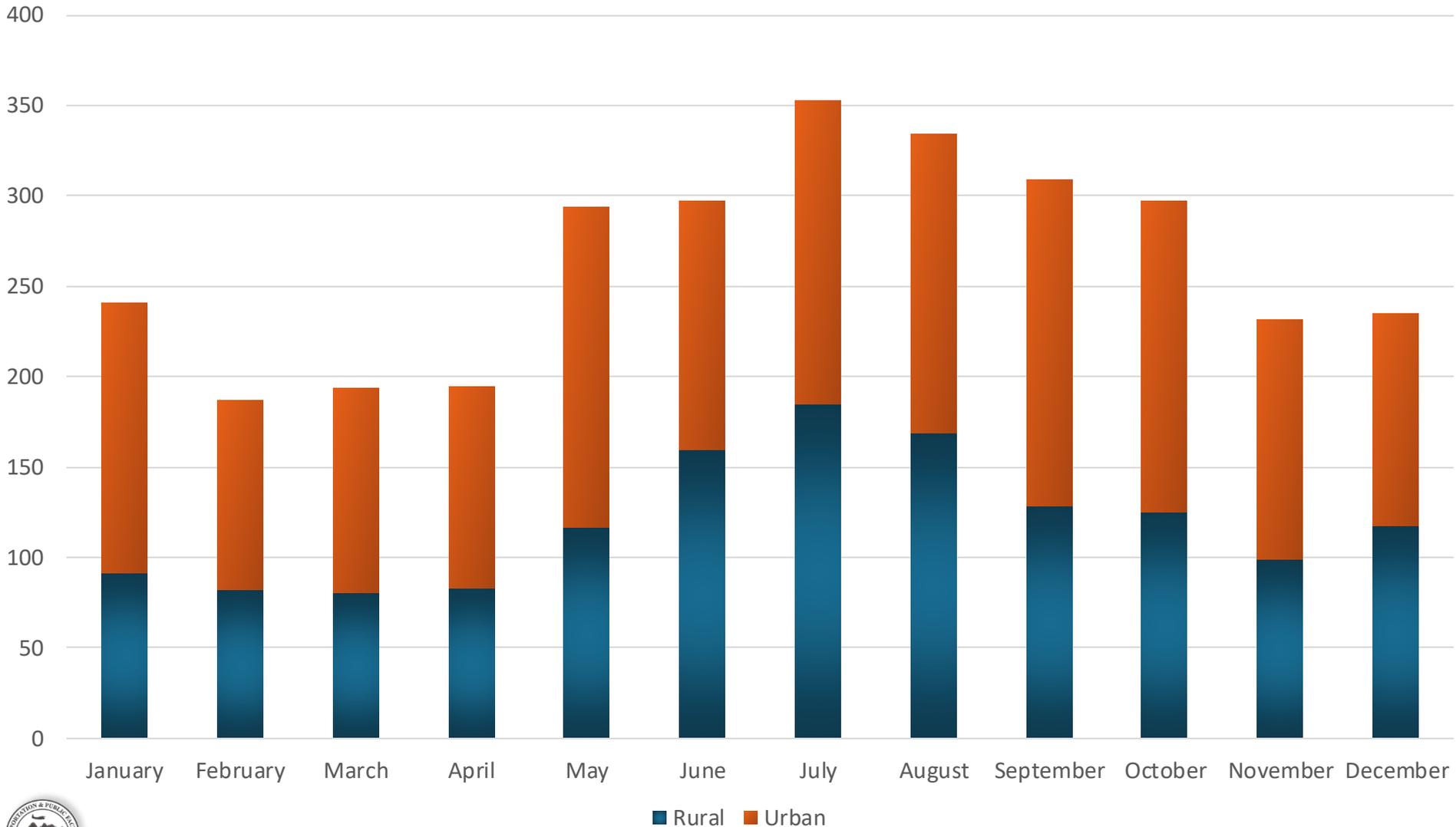


■ Rural ■ Urban



URBAN VS RURAL: SERIOUS INJURIES & FATALITIES

Serious Injury and Fatal Crashes, 2014-2023

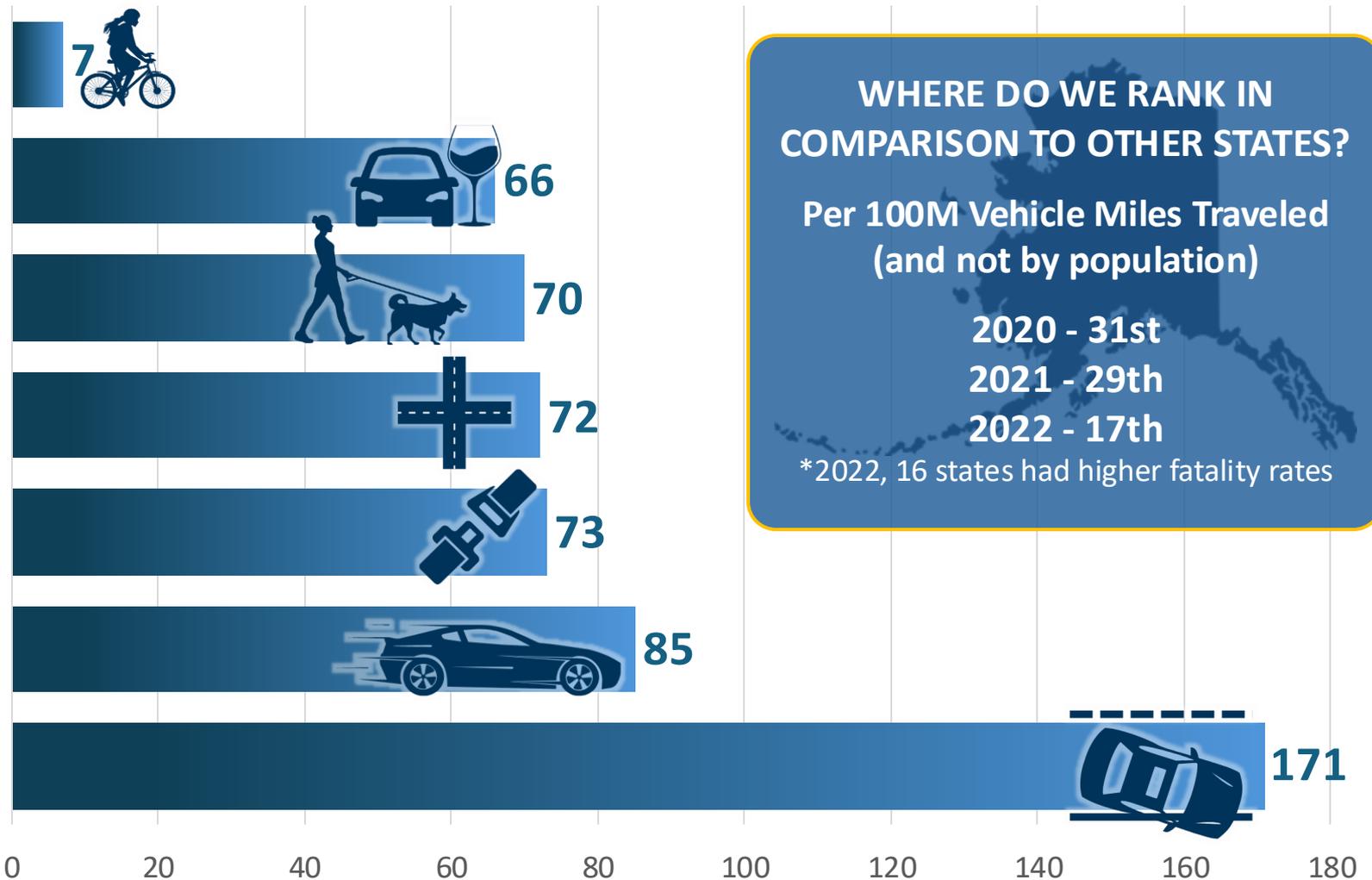


■ Rural ■ Urban



ALASKA FATALITIES

Different Crash Types REQUIRE Different Solutions



(Five-years of fatal crash data)



PURSuing IMPROVEMENTS: SAFETY CORRIDORS

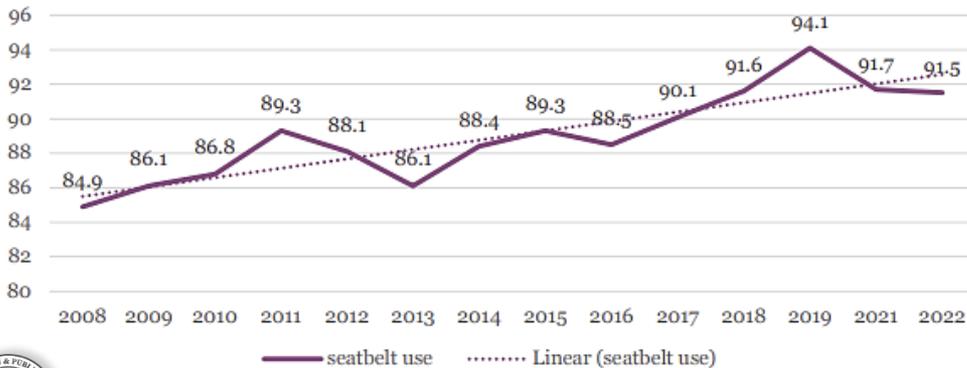
- **Designated Safety Corridors**
 - Seward Highway (May 2006)
 - Parks Highway (October 2007)
 - Knik Goose Bay Road (July 2009)
 - Sterling Highway (July 2009)
- **Rural Highways** - elevated fatal and serious injury crashes
- **Designation** = Partnership and Support for Education, Enforcement, Engineering, and Emergency Response
- **De-Designation** with Reconstruction
 - Parks Reconstruction (complete)
 - Knik Goose Bay (in progress)
 - Seward Highway
 - Sterling Highway
- **What's next?** Urban Safety Corridors



PURSuing IMPROVEMENTS: SEAT BELT USE

Borough	2016	2017	2018	2019	2021	2021	2022	2023	2024
Anchorage	89.4	90.1	93.5	96.5	94.9	94.9	93.7	98.3	93.8
Fairbanks	89	88.5	84.9	91.2	93.5	93.5	91.4	94.4	92.6
Juneau	86.9	86.6	89.4	84.7	81.5	81.5	97.6	96.4	80.3
Kenai	81.3	90.7	90.6	96.8	85	85	85.9	85.2	94.3
Mat-Su	95	93.4	97.6	91.6	85.1	85.1	85	88.5	85.7

Weighted seatbelt use by year (percent)




Statewide:
2023 seat belt use 95.2%
2024 seat belt use 92.1%



PURSuing IMPROVEMENTS: INTERSECTIONS

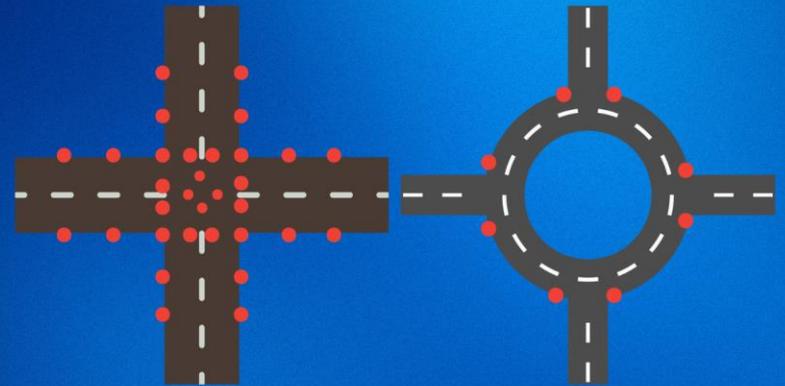
- Signal conspicuity = making it obvious (upgrading to have signal head for each approaching lane)
- Implementing leading pedestrian intervals
- Technologies to support law enforcement and Emergency Medical Services
- Roundabouts first where they make sense



TRADITIONAL INTERSECTION

32

Possible opportunities for a collision. Many of those are dangerous, high speed, head-on, or angle collisions.



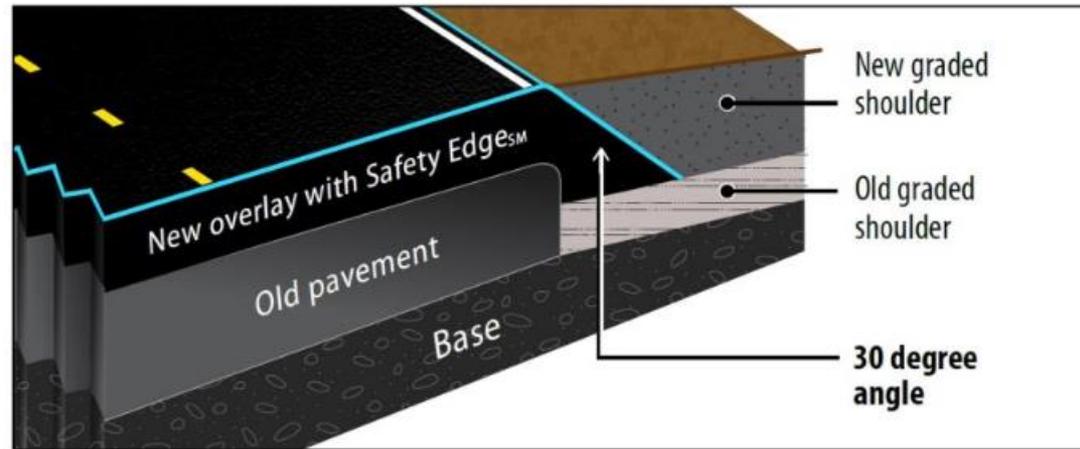
ROUNDAABOUT INTERSECTION

8

Possible opportunities for a collision. Plus the collisions that do happen are slower and less serious.

PURSuing IMPROVEMENTS: RURAL TWO-LANE

- Guardrail Upgrades
- Passing Lanes
- Curve Warning Signs
- Rumble/Mumble Strips and Stripes
- SafetyEdgeSM
- Improved Traveler Info



Cross-section view of an overlay with the SafetyEdgeSM.

Source: FHWA-SA-17-044



PURSuing IMPROVEMENTS: PARTNERSHIPS



PURSUIING IMPROVEMENTS: WINTER OPERATIONS DASHBOARD

Public Dashboard

Alaska DOT Winter Operations Center

Home Vehicles Dashboard Northern Region Central Region South Coast Region

Total Vehicles: 40 | In Service: 38 | Fleet Vehicles: 14 | Contractor Vehicles: 2

Vehicle ID	Vehicle Name	Fleet or Contractor	Location and Site	Plow Function	Salt Capacity	Blow Capacity	Make and M
40067	40047 FB M&O	Entire Fleet	Vendor A&I Only				Mack GUT1
40239	40159 FB M&O	Entire Fleet	Vendor A&I Only				Mack GUT1
40203	40203 FB M&O	Entire Fleet	Vendor A&I Only				Mack G&M4F
40204	40204 FB M&O	Entire Fleet	Vendor A&I Only				Mack G&M4F
40220	40220 FB M&O	Entire Fleet	Vendor A&I Only				Mack G&M4F
40791	40791 FB M&O	Entire Fleet	Vendor A&I Only				Mack G&M4F

Entire Fleet Vehicle 40204

Vehicle Status: In Service / Out for Repair

Vehicle Details: Make and Model: Mack G&M4F, Plow type: Plow, Salt Capacity (tons): , Blow Capacity (gallons):

Internal Fleet Management

Alaska DOT&PF Winter Operations

Cameras

Current Plow Location

Snow Plow History

- 1 hour
- 6 hours
- 12 hours
- 18 hours
- 24 hours
- 30 hours

Road Priority Level

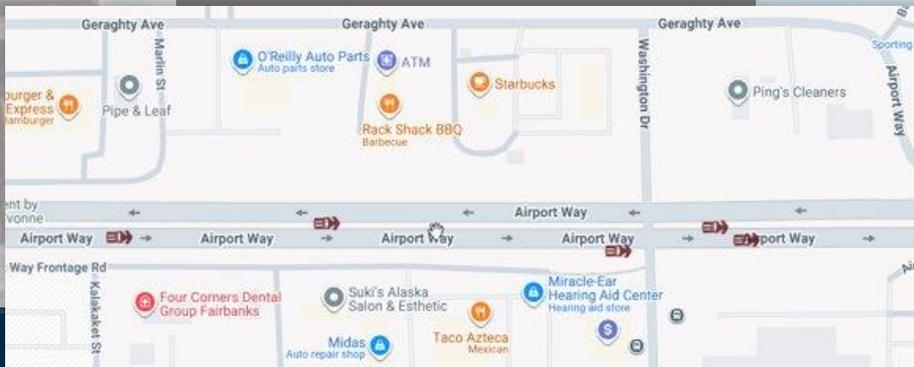
- Priority Level 1
- Priority Level 2
- Priority Level 3

Read more about winter maintenance priority here

Not all vehicles have tracks at this time but we are adding more every week. Check back soon.

Last 1 Hour | Last 6 Hours | Last 12 Hours | Last 18 Hours | Last 24 Hours | Last 30 Hours

511 – Audible Alerting



PURSuing IMPROVEMENTS: 511 – KNOW, *EVEN MORE*, BEFORE YOU GO

399K

ACTIVE USERS

NEARLY

1M

SESSIONS

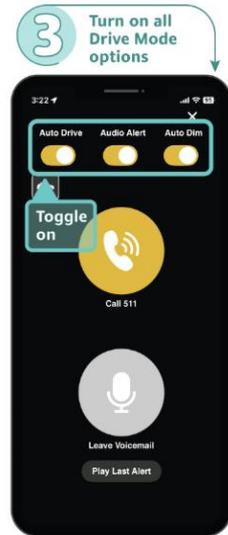
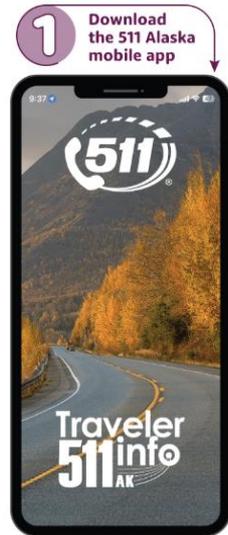
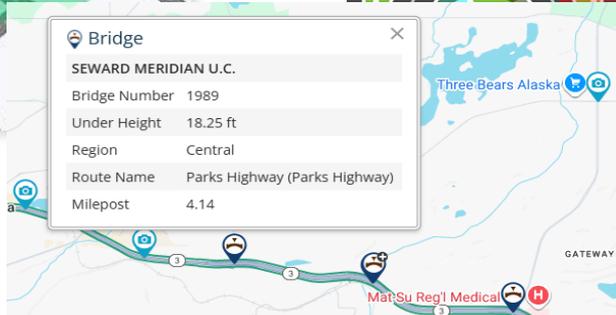
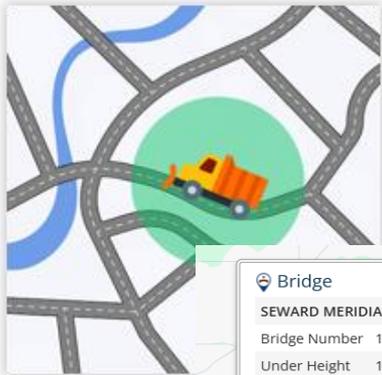


152

INCIDENTS
EVENTS
CONDITIONS

504

ROAD
WORK
EVENTS

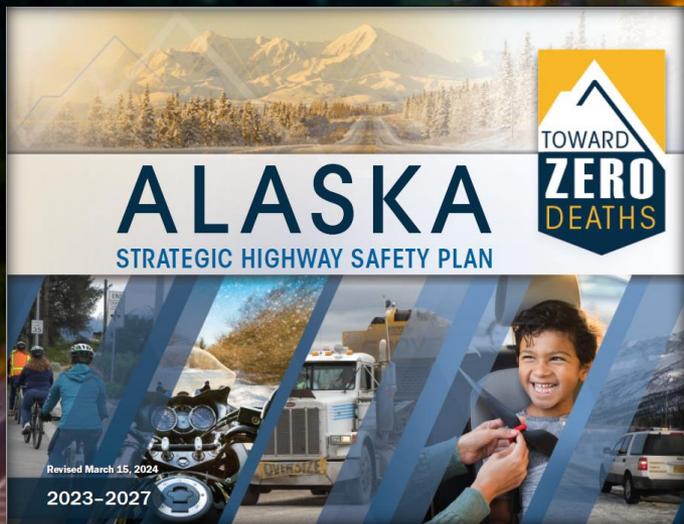


AK HIGHWAY SAFETY OFFICE (AHSO) *Improving Behaviors*

High-Visibility Enforcement
Car Seat/CarFit Checks
Impaired Driving Education
Pedestrian and Bicycle Safety Education
Seat Belt Education

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) *Improving Roadways*

Road Safety Audits
Signals and Signs
Crosswalk Markings/Crosswalk
Enhancements
Guardrail and Crash Cushions
Intersection Improvements



TRAFFIC AND SAFETY ENGINEERING



[Appropriate Speed Limits for All Road Users](#)



[Variable Speed Limits](#)

Speed Management

Pedestrian \ Bicyclist

Intersections



[Backplates with Retroreflective Borders](#)



[Corridor Access Management](#)



[Dedicated Left- and Right-Turn Lanes at Intersections](#)



[Reduced Left-Turn Conflict Intersections](#)



[Roundabouts](#)



[Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections](#)



[Yellow Change Intervals](#)



[Bicycle Lanes](#)



[Crosswalk Visibility Enhancements](#)



[Leading Pedestrian Interval](#)



[Medians and Pedestrian Refuge Islands in Urban and Suburban Areas](#)



[Pedestrian Hybrid Beacons](#)



[Rectangular Rapid Flashing Beacons \(RRFB\)](#)



[Road Diets \(Roadway Reconfiguration\)](#)



[Walkways](#)

Roadway Departures



[Local Road Safety Plans](#)



[Pavement Friction Management](#)



[Road Safety Audit](#)



[Enhanced Delineation for Horizontal Curves](#)



[Longitudinal Rumble Strips and Stripes on Two-Lane Roads](#)



[Median Barriers](#)



[Roadside Design Improvements at Curves](#)



[SafetyEdgeSM](#)

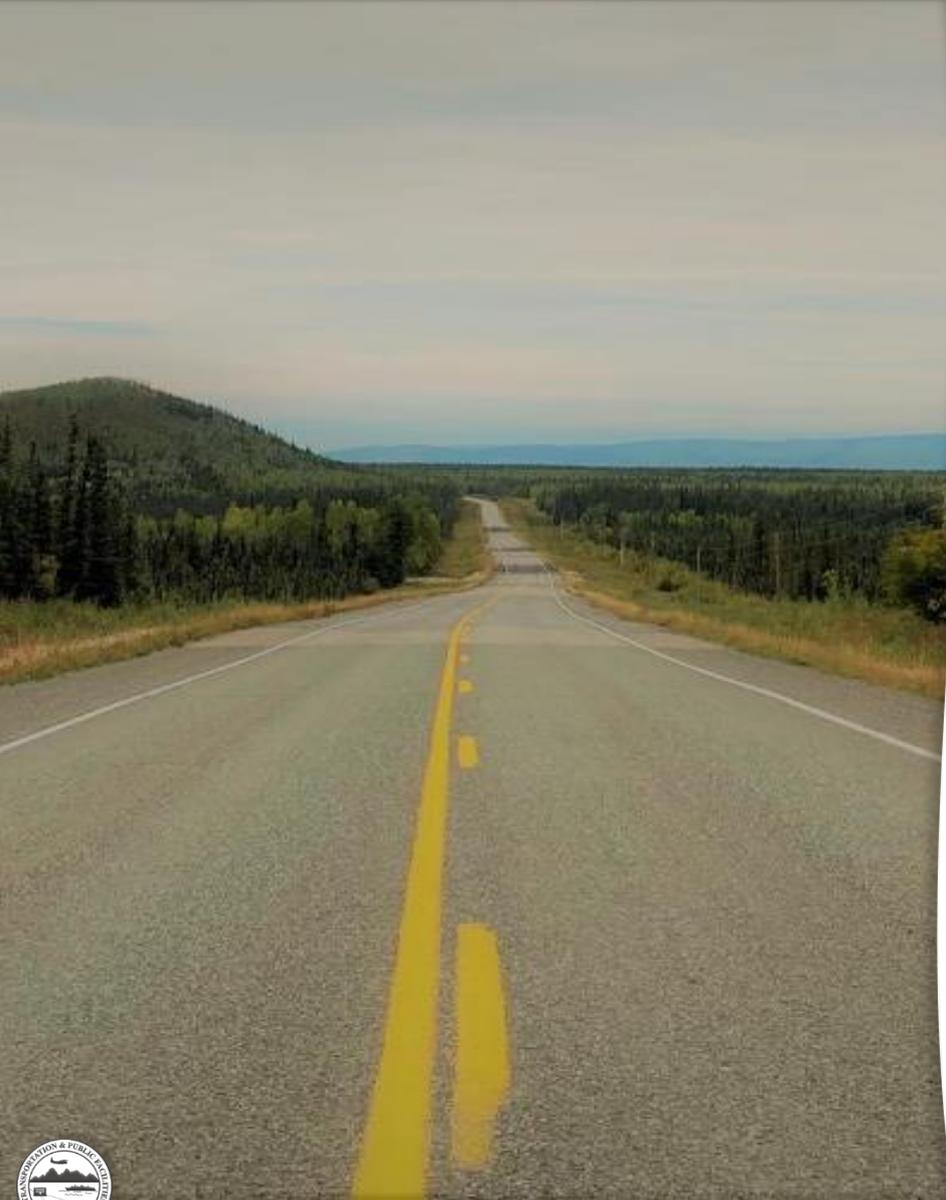


[Wider Edge Lines](#)

Crosscutting



SAFE SYSTEMS APPROACH: TETLIN TO FT. KNOX



- Ore haul route: Tetlin to Ft. Knox
- Established Technical Advisory Committee (TAC) to inform the research
- Commissioned Corridor Study – Kinney Report
- \$1m Brush cutting in advance of haul to increase sight distance
- 511 upgrades
 - Audible bus & plow alerting
 - Bridge heights
 - Winter operations dashboard

PROGRAMS: MEASUREMENT STANDARDS AND COMMERCIAL VEHICLE COMPLIANCE

The goal is to reduce commercial motor vehicle-involved accidents, fatalities, and injuries through a consistent, uniform, and effective safety program.



Nine Weigh Stations Statewide

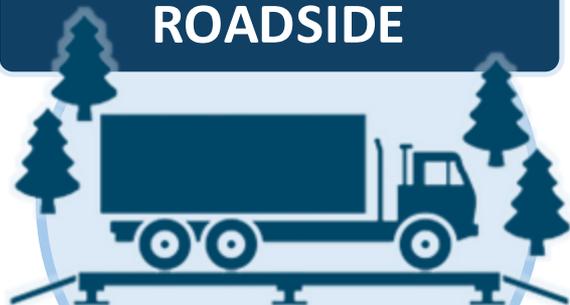
- **Fairbanks (4 stations) – 6 filled PCNs**
- **Anchorage (3 stations) – 10 filled PCNs**
- **Tok (1 station) – 4 filled PCNs**
- **Sterling (1 station) – 3 filled PCNs**



MEASUREMENT STANDARDS AND COMMERCIAL VEHICLE COMPLIANCE

FFY2024 – SAFETY EFFORTS

ROADSIDE



250 CMVs
Weighed

Weight Compliance
Rate = 97.3%

WEIGH STATIONS



68,908 CMVs
Weighed

DRIVER / VEHICLE SAFETY INSPECTIONS



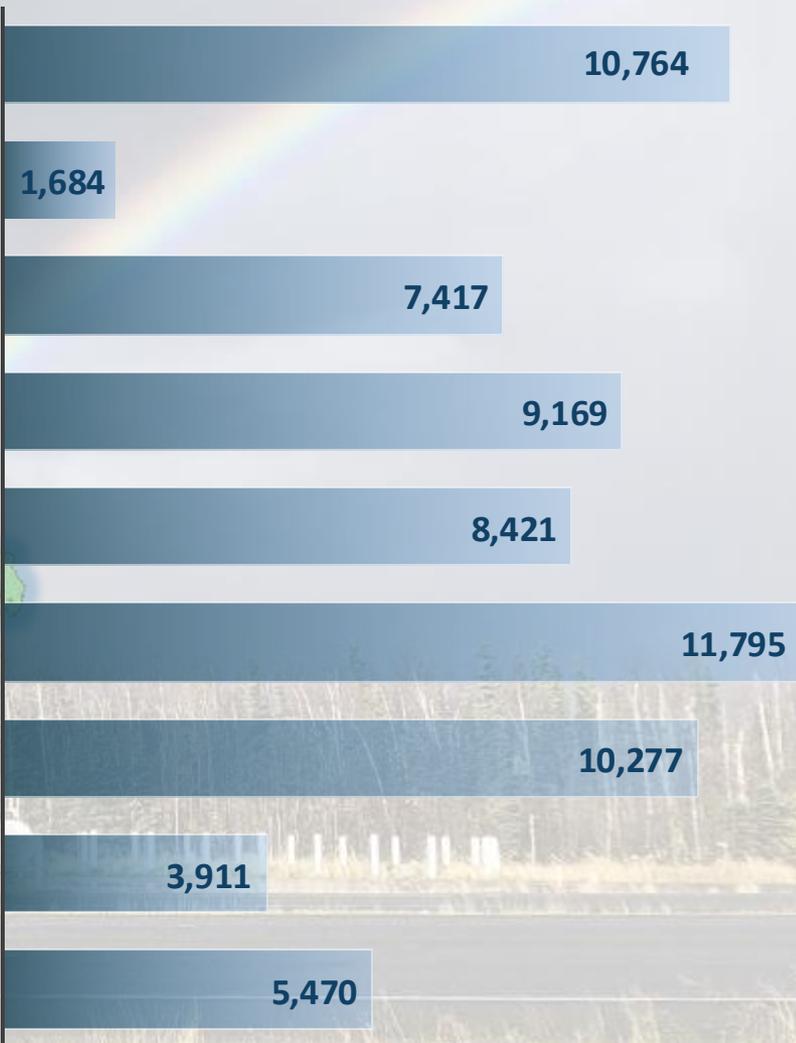
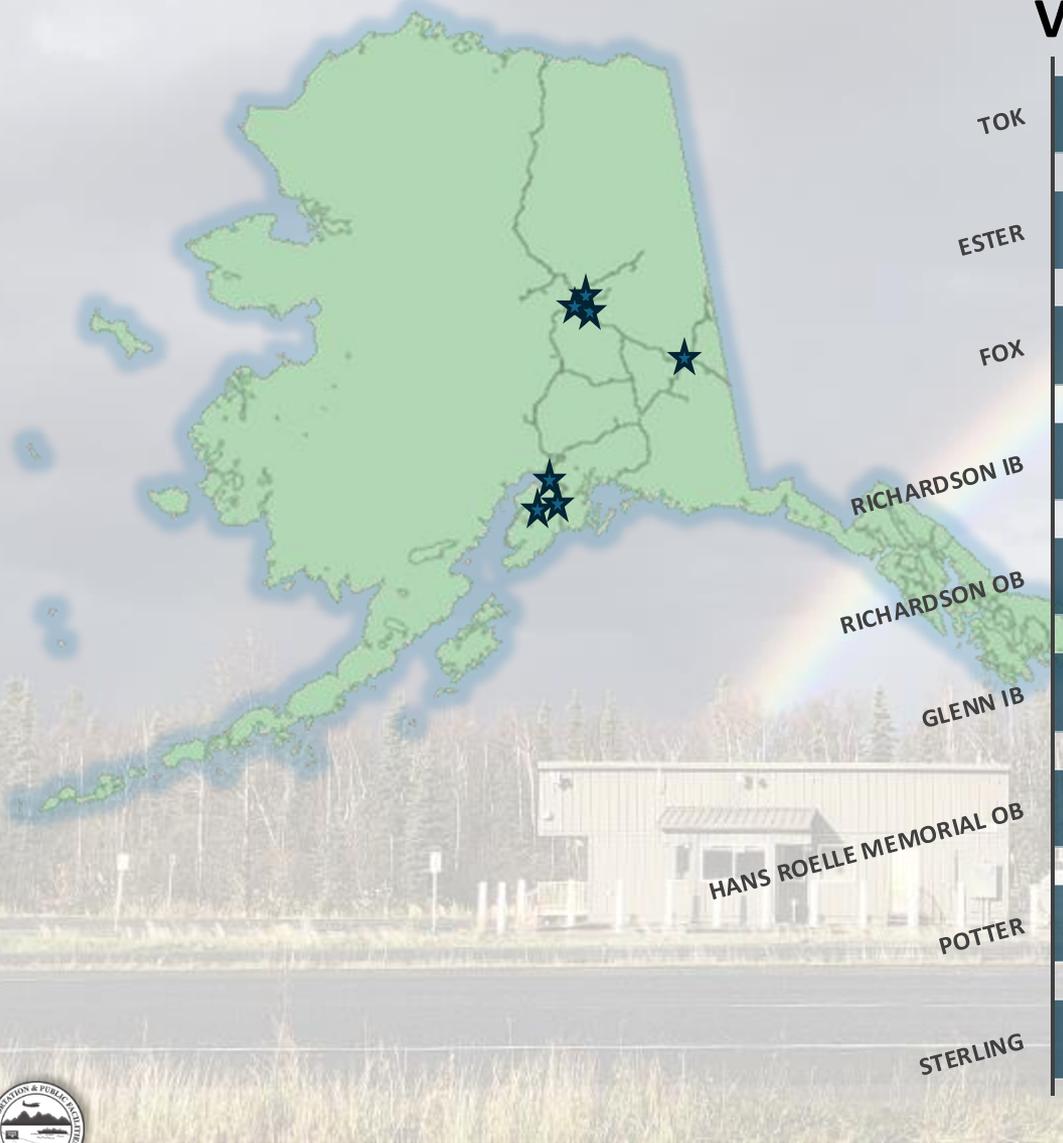
8,310
Inspections

Of the **8,310** Driver/Vehicle Safety Inspections, **82%** of the vehicles and **98%** of the drivers inspected did not have any out-of-service violation.



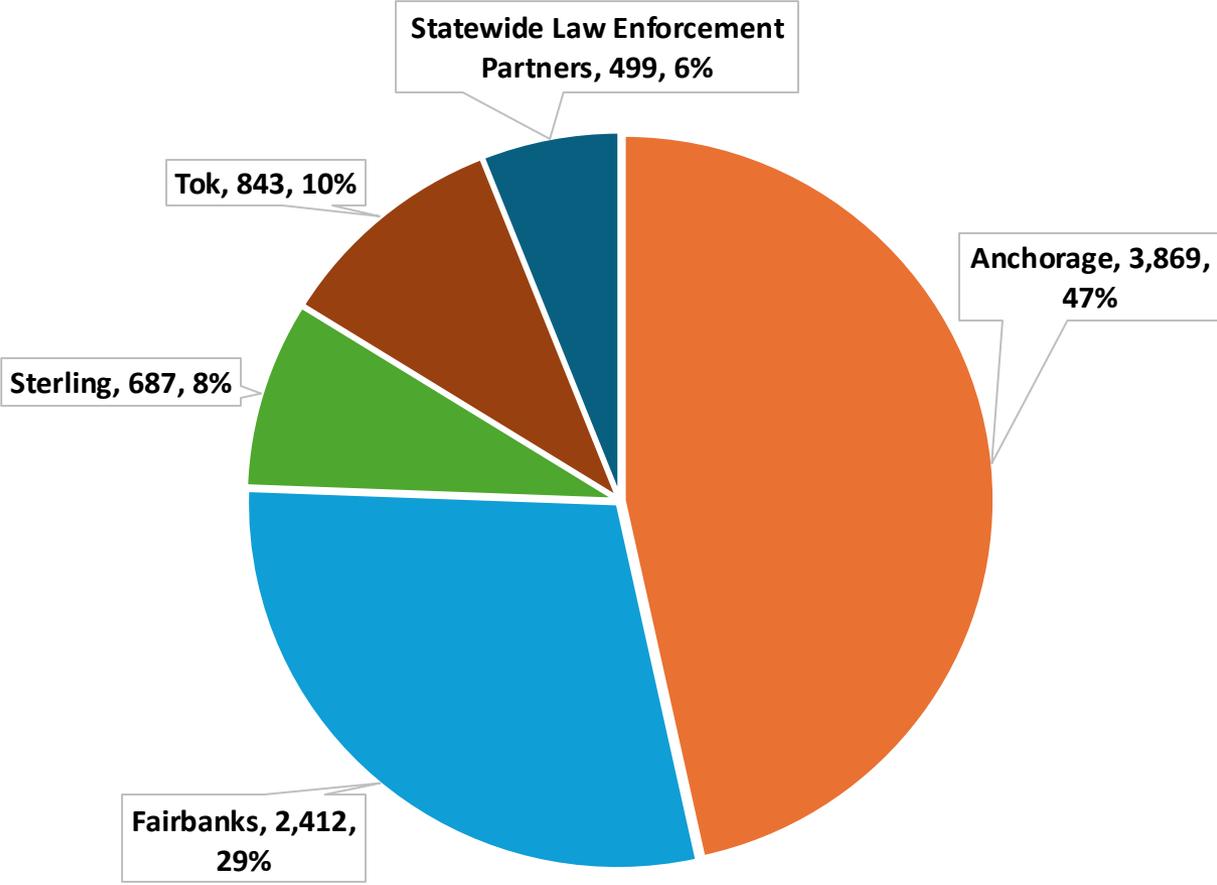
MEASUREMENT STANDARDS AND COMMERCIAL VEHICLE COMPLIANCE

VEHICLES WEIGHED PER STATION



MEASUREMENT STANDARDS AND COMMERCIAL VEHICLE COMPLIANCE

Driver/Vehicle Safety Inspections by Area



MEASUREMENT STANDARDS AND COMMERCIAL VEHICLE COMPLIANCE

Public Education and Outreach Events

35 total



- Carrier Safety Talks – 24
- CMV Safety Belt Education – 1
- State Trucking Association – 1
- State-Sponsored Events – 3
- Local Education Events – 5
- Teen Safety Events – 1



THANK YOU

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Dan Smith, Director, Measurement Standards and Commercial Vehicle Compliance

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