



# Alaska Department of Transportation & Public Facilities

## Non-Motorized and Vulnerable Road Users (VRU)

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February 28, 2023

Our mission is to **Keep Alaska Moving** through service and infrastructure.

# Safety is a Core DOT&PF Value

**Integrity:** Doing the right thing even when no one is watching. Doing what you say you are going to do

**Excellence:** Commitment to continually improve

**Respect:** Positive regard for customers, stakeholders, investors and colleagues

**Safety:** Commitment to safeguarding transportation systems and users while promoting a safety culture in the workplace





# Non-motorized and vulnerable user update: 2023

**Tracking Trends:** Fatalities have increased in 2021, 2022

**Review Results:** Alaska's Safety Plan 2023 5-year Strategic Highway Safety Plan (SHSP) wrapping up

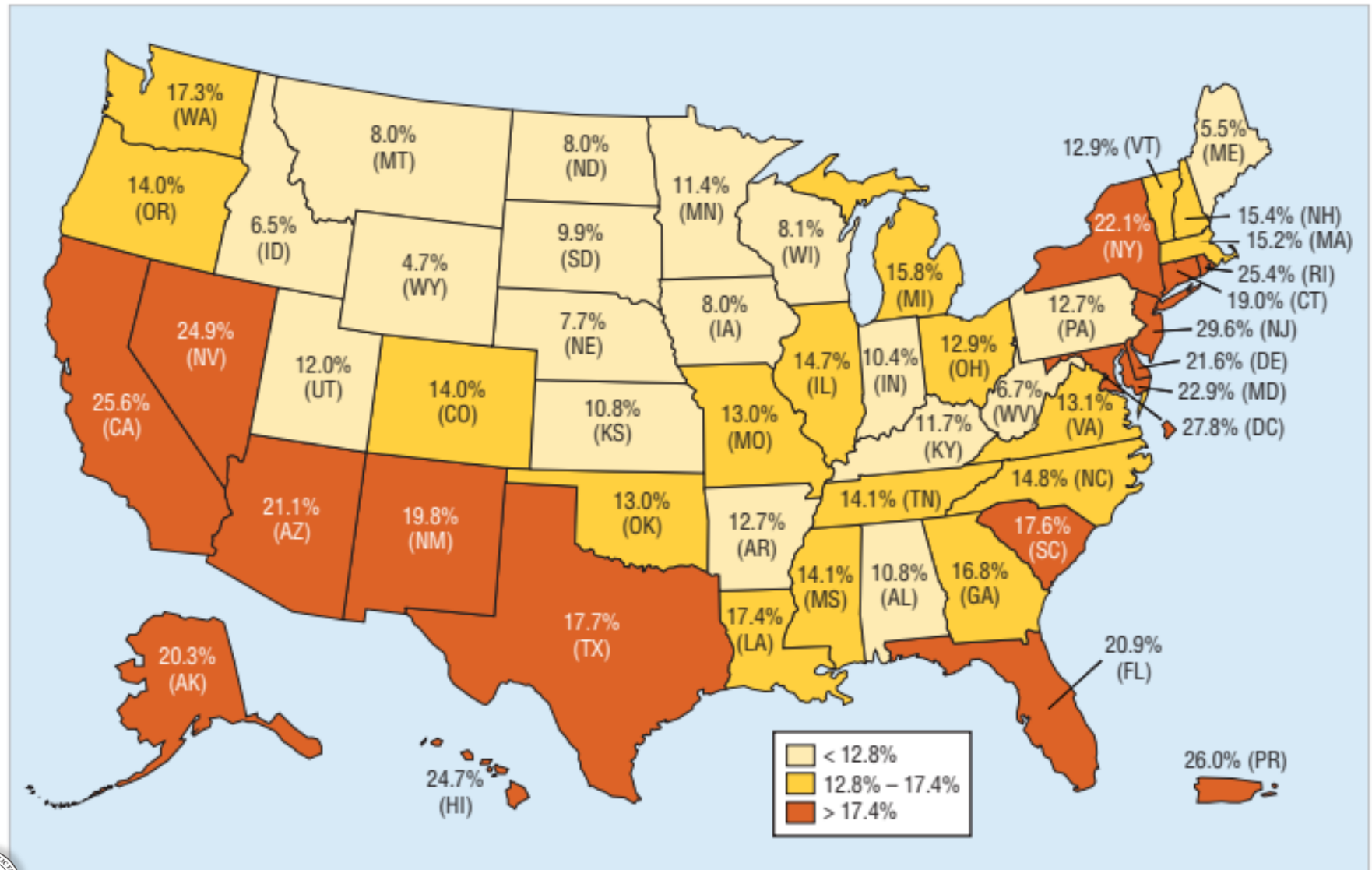
**Improve Outcomes:** Highway Safety Improvement Plan (HSIP) projects annually (data driven)

**Renewed Focus & New Funding Eligibilities:** Eliminate deaths and serious injuries statewide



# PROBLEM: Pedestrians are Over-Represented in Alaska Fatality Counts

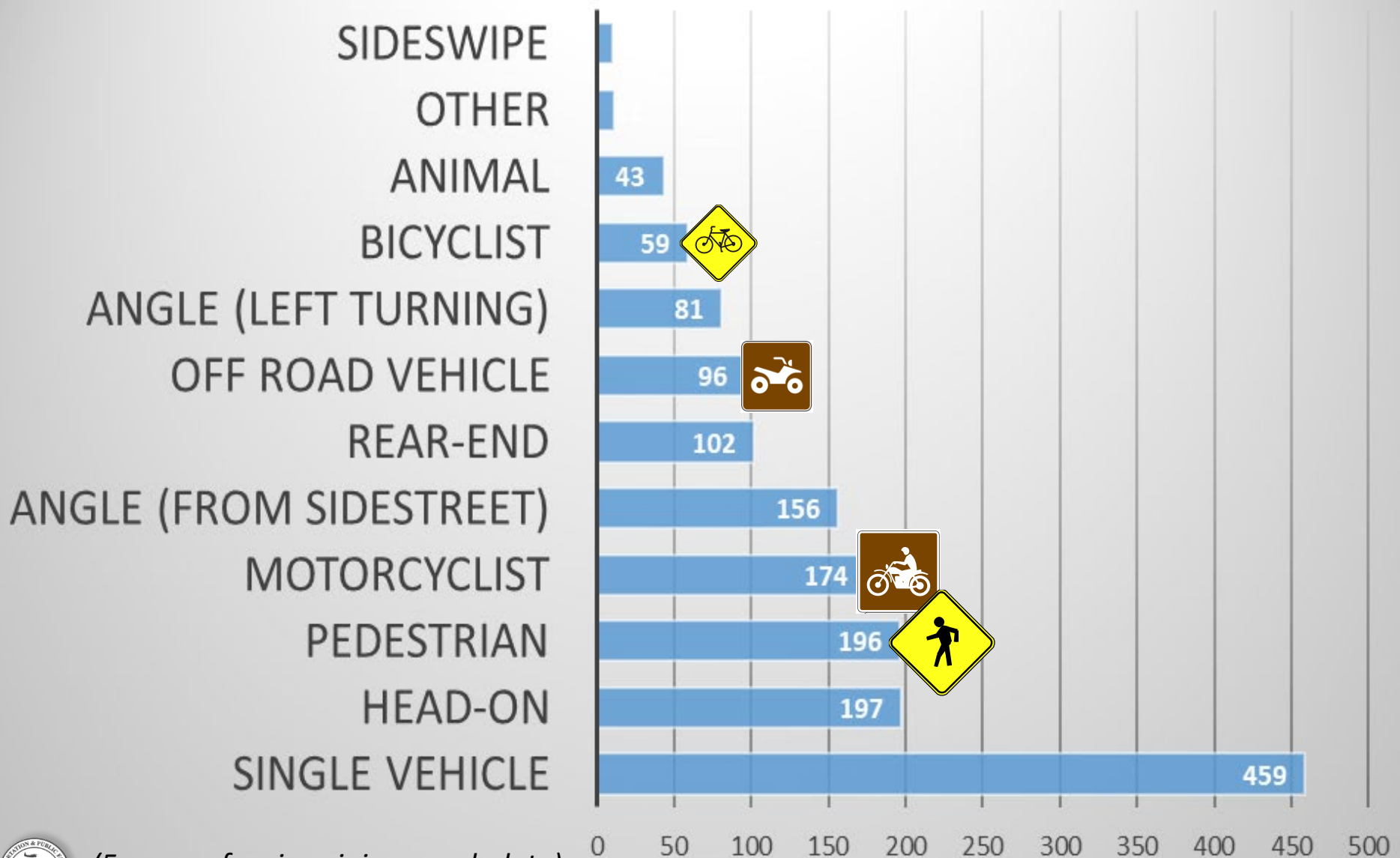
Percentage of Total Fatalities Who Were Pedestrians, by State, 2020



Source: FARS 2020 ARF



# PROBLEM: Different Crash Types REQUIRE Different Solutions

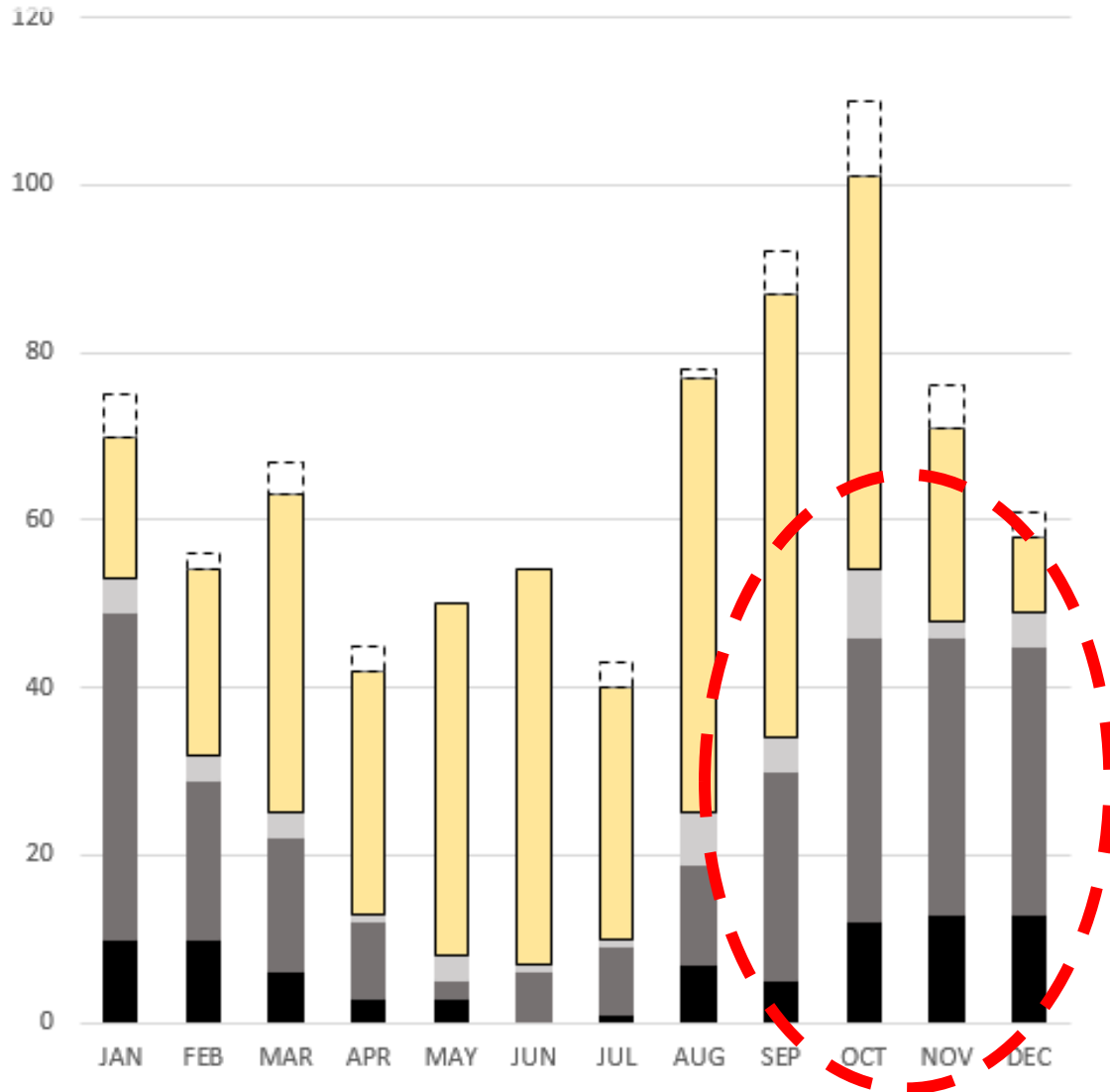


(5-years of serious injury crash data)

# Pedestrian injury crash factors in Alaska

800+ Ped crashes; 160+ / yr (2016-2020)

- Dark
- Fall-Winter
- Rain, Snow, Ice
- 4-7 PM
- Similar injury profile



# Pedestrian Crash Data

## Reported Crash Data

- ~160 crashes per year
- 3 out of 4 are in Anchorage
- 85% injury
- 1 in 4 are serious or fatal
- 1 in 5 of all statewide fatal crashes
- Trend: total crashes declining while fatalities are increase again
- Increasing fatalities past 5 years

- Dark
- Fall-Winter
- Rain, Snow, Ice
- 4-7 PM





# Bicyclist Crashes

## Reported Crashes

- ~120 crashes/year
- 3 out of 4 are in Anchorage
- 85% injury
- 1 in 10 are serious or fatal (no change)
- 1 in 100 of all statewide fatal crashes
- Trend: total crashes declining while fatalities are increase again
- Mostly at sidestreets, driveways





# Motorcyclist Crashes



## Reported Crashes

- ~115 crashes/year
- Half are in Anchorage
- 85% injury
- 1 in 3 are serious or fatal
- 1 in 10 of all statewide fatal crashes
- Mostly uncontrolled intersections (sidestreet STOPS, driveways)

### Some factors:

- Skid resistance
- Visibility
- Safety gear
- Safety training





# Challenges



**Extreme winter conditions**

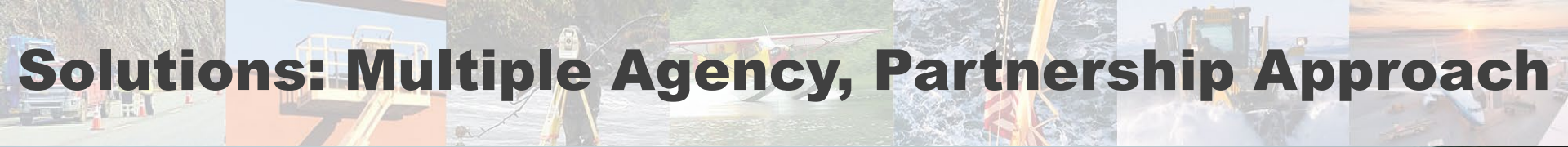
**Pedestrian  
movements increasing**

**Lack of snow storage areas  
results in snow on  
pedestrian facilities**

**Slower-moving equipment  
contributes to delays is  
sidewalk clearing**

**Durable infrastructure  
needed to withstand climate**





# Solutions: Multiple Agency, Partnership Approach



EMS

ENGINEERING

ENFORCEMENT

EDUCATION

EVERYONE

**Emergency lifesaving:**  
Best equipment, training

**Build forgiving roads:**  
All modes, less conflict

**Presence:** Encourage better behavior

**Educate about all “E”s:**  
All angles, community conversation, awareness

**Discuss:** Drive, walk, and bike safely, reasonably







# Challenge: Solution

**Transportation Alternative Program (TAP)  
partnership with Fairbanks North Star  
Borough (FNSB) for Bike Interchange –  
Steese & Graehl Park**

**Created connection between Steese  
pathway and park**

**DOT&PF addressed drainage plaguing the  
parks**

**FNSB maintained park amenities  
including some in state right of way**

**Result: more orderly parking,  
improved bicycle and pedestrian  
access to the park and downtown  
Fairbanks**







# Challenge: Solution

**Crosswalks and traffic calming during summer - by the City with DOTPF agreement**

**Partnership with City of Homer**

**Seasonal low speed zone extension – tied to vulnerable road user congestion**







# Challenge: Solution

**Girdwood: Alyeska Highway at Hightower Avenue pedestrian crossing**

**Community-driven solution by the Girdwood Board of Supervisors, Municipal of Anchorage, with DOT&PF partnership**

**Seasonal pedestrian traffic control – tied to vulnerable road user congestion**







# Challenge: Solution

**Safety solutions have different risk levels and different cost levels**



# Challenge: Solution

## Glenn Highway & Bragaw Street: 2005 vs 2020

Before



After



Anchorage Metropolitan Area Transportation Solutions  
(AMATS): Connect Anchorage



# Strategic Highway Safety Plan Update

**Comprehensive 5-year transportation safety plan**

**Coordinated with other State safety plans including:**

- Highway Safety Improvement Program
- Highway Safety Plan (HSP)
- Commercial Motor Vehicle Safety Plan (CMVSP)
- Statewide Transportation Improvement Program (STIP)
- Long Range Transportation Plan (LRTP)

**Updated plan expected May 2023**

**Will incorporate the Safe System Approach**

**Focus Area Teams meet three times annually to implement Emphasis Area Action Plans**



# SHSP Emphasis and Focus Areas

## Safe Vehicles

### Vehicle Safety

- Commercial vehicles
- Vehicle safety equipment
- Connected & autonomous vehicles

## Safe Roads and Safe Speeds

### Roadways

- Departures
- Intersections

### Speed Management

## Safe Road Users

### Vulnerable Road Users

- Pedestrians
- Bicyclists
- ATV
- Motorcycles
- Young & Older Drivers

### Dangerous Driving

- Aggressive
- Distracted
- Drowsy
- Speeding
- Impaired
- Occupant Protection

Occupant Protection Task Force

Impaired Driving Task Force

## Post-Crash Care

### Emergency Response and Traffic Records

Traffic Records Coordination Committee

#### LEGEND

Emphasis Area

Focus Area

Existing Task Force or Committee



# **Alaska Statewide Active Transportation Plan (ASATP)**

**Improve safety**

**Increase agency-user  
coordination and progress  
measures**

**Promote healthy lifestyles**

**Develop a safer and more  
efficient active transportation  
network and infrastructure to  
encourage walking and bicycling**





# Alaska Statewide Active Transportation Plan Policy and Procedure Lead Role

## DOT&PF is moving to modernize policies:

- Complete Streets Policy and Implementation Strategy
- Policy and Procedure, Manual Updates
- Track Federal Funding
- Data Collection





# Americans with Disabilities Act (ADA)

**ADA issue if insufficient width to navigate the sidewalk**

**Solution: Gambell Street utility undergrounding (to begin 2024/2025)**

**DOT&PF's ADA Transition plan identifies methods for system screening, inventorying, and prioritizing barriers to accessibility**

- DOT&PF ADA Transition Plan is currently being updated

**Each DOT&PF region has an ADA Improvement Project for small projects focused on fixing ADA deficiencies**





# Raised and Leading Crosswalks

## Raised crosswalks:

- Several on local roads in Anchorage
- Option on case-by-case basis
- Maintenance challenges
- Could have targeted use in conjunction with local planning

**Other crossing solutions possible based on traffic speed, volumes, walking age, and demand.**

## Leading Pedestrian Interval (LPI):

- LPI signal timing
- Option on a case-by-case basis
- Best used at intersections with heavy pedestrian volume & heavy vehicle turning
- Hasn't been implemented yet in Alaska



Boston, MA. Photo: Peter Furth





# Safety: Where do we take our next steps?

Transportation safety is important in all of Alaska

Every community has a problem area

Where should we work together next?



# Next Priorities: Strategic, Accountable Process



## How to Start?

**Community Suggestions, Partnerships:** Begin with broad support thru Cities, Boroughs, community group written requests, plan or ...

**Resolution**

### Staff

#### Study

- Traffic, crashes, conflicts
- Match proven countermeasures
- Write **Action Plans**, \$\$ for 4E's

### Governor, Legislature

- Direct **Funding** for Solutions



### Commissioners DOT&PF, DPS

- **Approve** Action Plans
- Require **Annual Audits**



### Regional Directors to HQ

- **Recommend** Action Plans
- Assign staff



### Staff Review Team

- EMS
- Engineers: DOT&PF
- Enforcement DPS
- Education: PR
- Human Factors: Dept Health







**Continue making all urban roads and walkways safer**

**Improved lighting**

**More winter plowing resources...**

**9<sup>th</sup> Ave., MOA**



**Continue making all urban roads and walkways safer**



**Mid-block islands and/or signals**

**Planning a low-speed network**



# Continue making urban arterials safer

Urban lighting  
levels

Managed access conflicts  
median refuge

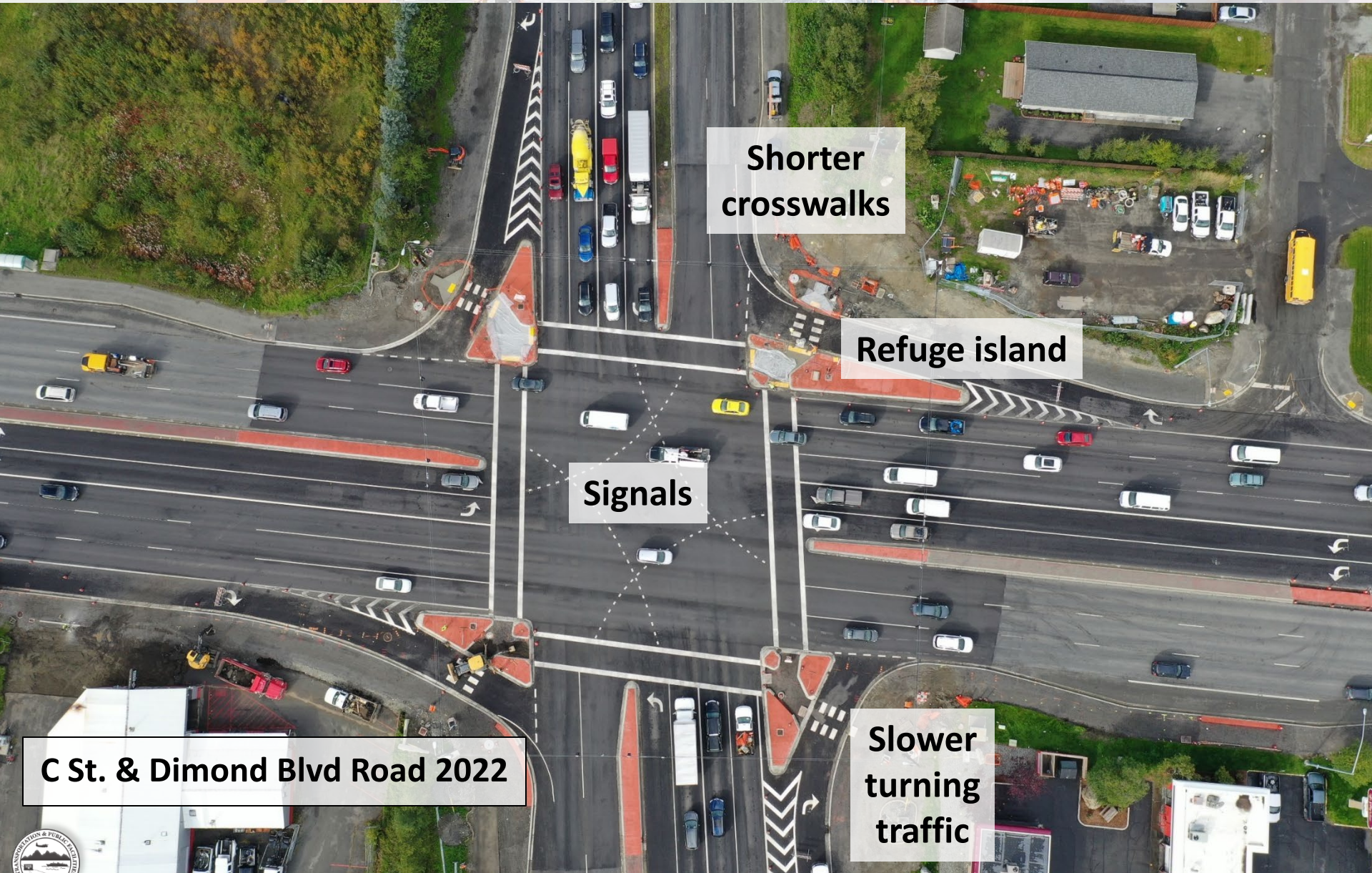
Sidewalks, paths, and/or  
bike lanes

**Tudor Road 2022**





# Continue making urban intersections safer



Shorter  
crosswalks

Refuge island

Signals

Slower  
turning  
traffic

C St. & Dimond Blvd Road 2022







# Roads are a shared system

More risk, more conflicts,  
more crashes





# Pedestrian crash factors in Alaska



**30% of fatal crashes are hit and run**

**20% of crashes, alcohol is suspected**

**30% of crashes are at signals**

**20% of crashes are at side streets with stop signs**

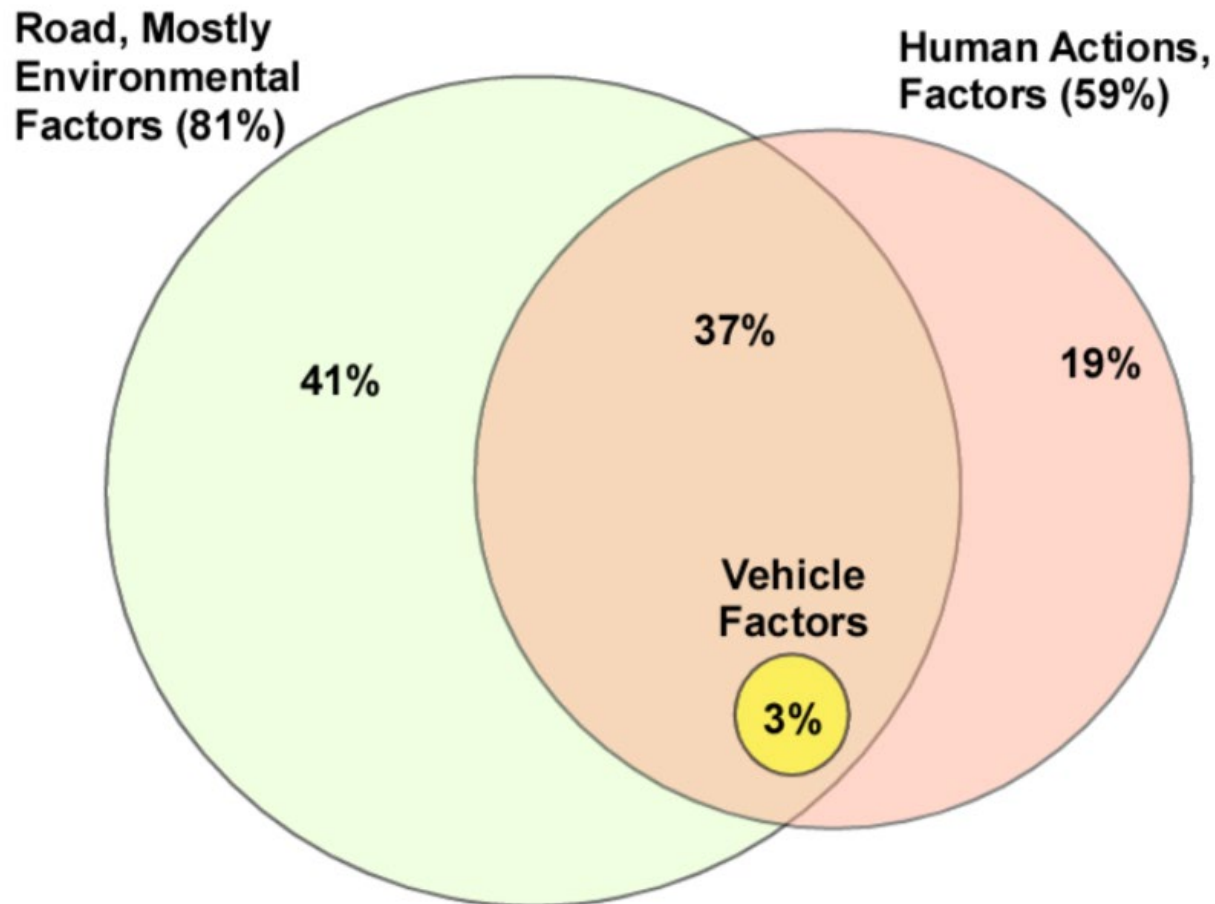
**50% of crashes are crossing midblock**

**50% of crashes are on arterials—half on state roads, half on local roads**



# Alaskans must work together

***The #1 safety feature in any vehicle is the DRIVER.***



**Typical Reported Contributing Factors of Crashes  
in ALASKA, 2017-2021**

# Thank you. Questions?

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