



Alaska Department of Transportation & Public Facilities

Intelligent Transportation Society of Alaska 10th Annual Meeting

Marc Luiken, Commissioner

September 6, 2018

Keep Alaska Moving through service and infrastructure

Alaska DOT&PF's Mission

Keep Alaska Moving
through service and infrastructure

Seward Highway at night, from McHugh Creek. Photo by Dave Krause, Alaska DOT&PF

DOT&PF impacts nearly every Alaskan, every day.

5,629 center line miles
11,766 lane miles of
roads / highways



836
Bridges



239 State Airports;
2 International Airports



10 Ferries serving
35 Communities



731
Public Facilities



~\$8.1B
in Transportation
Assets



Results Based Alignment: 4 Core Services

PRESERVE ALASKA'S TRANSPORTATION INFRASTRUCTURE

Projects and activities that extend the life of existing infrastructure

Infrastructure Repair

Bridge Preservation

Vehicle Management

Vessel/Terminal
Preservation

Project Delivery

Brush Cutting

OPERATE ALASKA'S TRANSPORTATION INFRASTRUCTURE

Support safe and efficient movement on existing infrastructure

Snow & Ice
Management

Operate Certificated
Airports

Signals

Intelligent
Transportation
Services

Traffic Operations

MODERNIZE ALASKA'S TRANSPORTATION INFRASTRUCTURE

Improve infrastructure to meet current standards and capacity

Project Delivery



PROVIDE TRANSPORTATION SERVICES

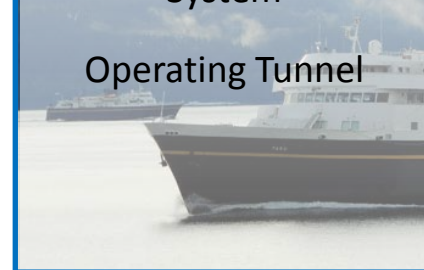
Services that move people and goods on existing infrastructure

Operating Ferries on
Routes

Operating Ferry
Terminals

Operate Alaska
International Airport
System

Operating Tunnel



Autonomous Vehicle Transportation in Alaska



NBA star LeBron James is featured in an Intel ad about self-driving cars.
Courtesy of Intel



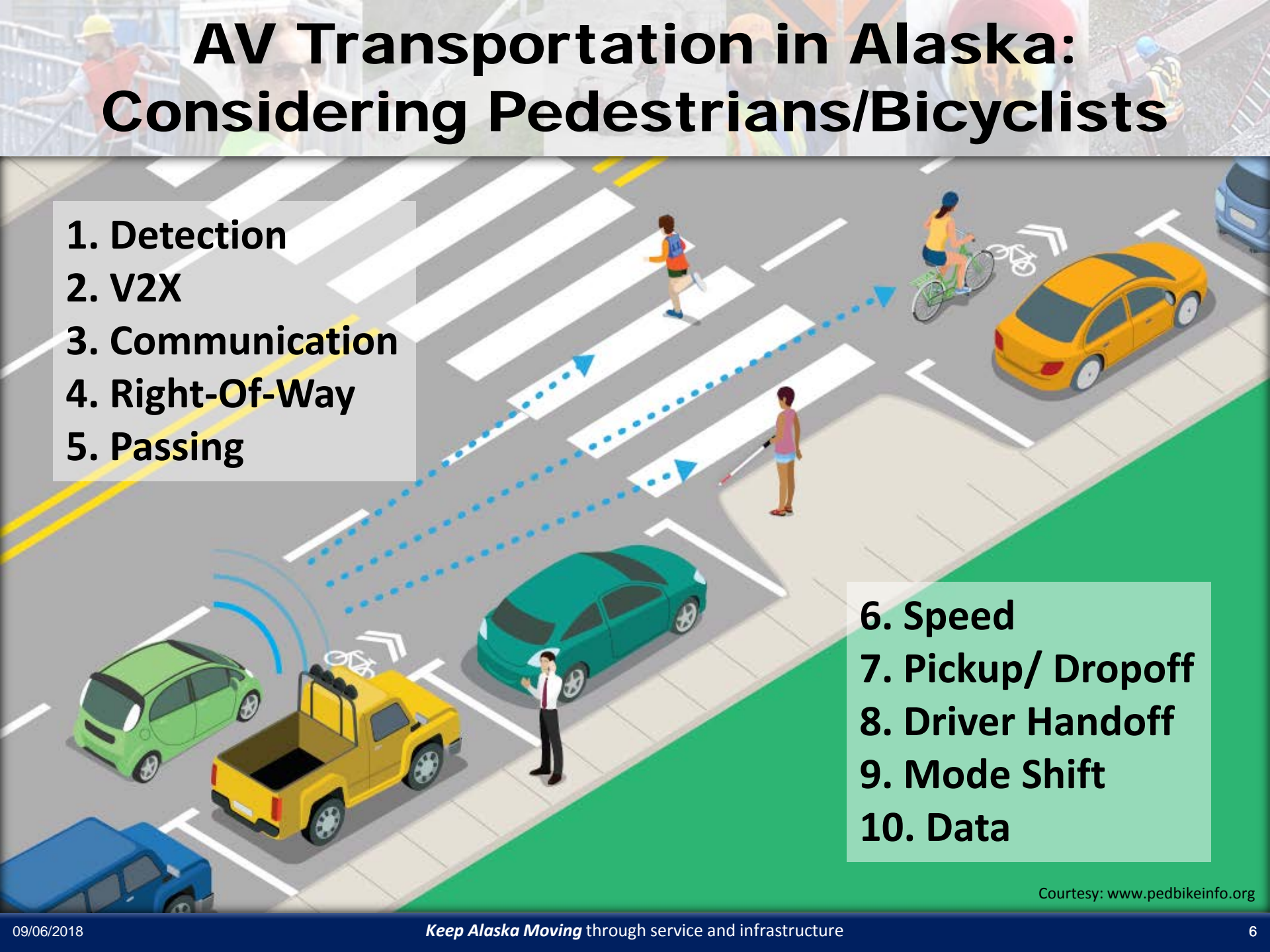
Mercedes Future Bus
Courtesy TechRepublic.com



A row of Google self-driving cars
Courtesy Time.com

Background image courtesy CLEPA.eu

AV Transportation in Alaska: Considering Pedestrians/Bicyclists

- 
- An isometric illustration of a city intersection. A yellow autonomous car is stopped at a red light. A green car is in the adjacent lane, and a yellow pickup truck is in the lane next to it. A pedestrian is crossing the street, and a bicyclist is riding across it. Blue dotted lines with arrows represent the vehicle's field of vision or sensor range, extending across the intersection. The scene is set on a city street with crosswalks and traffic lights.
1. Detection
 2. V2X
 3. Communication
 4. Right-Of-Way
 5. Passing

6. Speed
7. Pickup/ Dropoff
8. Driver Handoff
9. Mode Shift
10. Data

Courtesy: www.pedbikeinfo.org



Thank You

Marc Luiken

Commissioner

Marc.Luiken@alaska.gov

(907) 465-3900



Juneau's Channel Drive Wayside and Macaulay Salmon Hatchery on an autumn day. Photo by John Orbistondo, Alaska DOT&PF