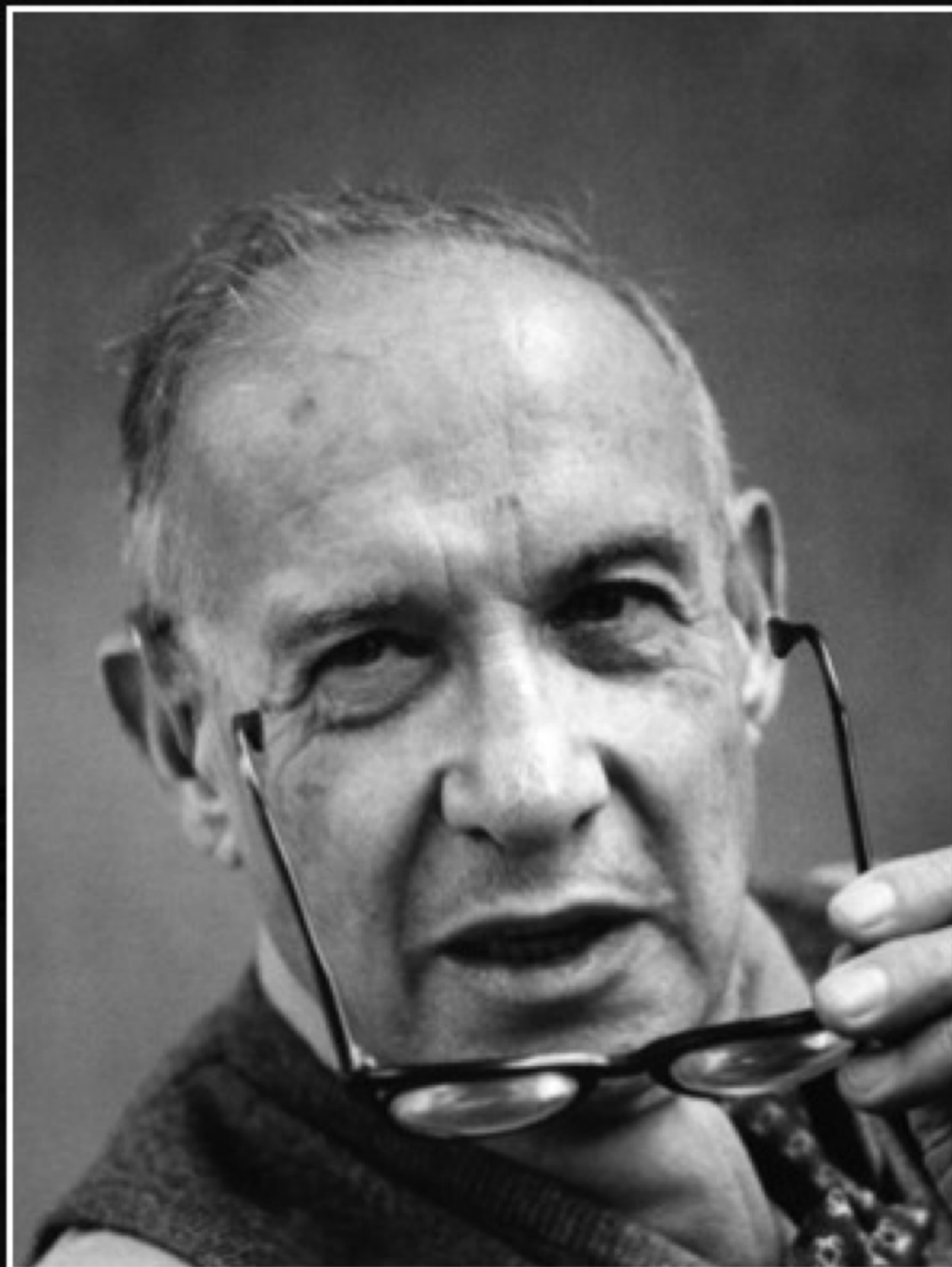


Ongoing Implementation Initiatives Related to Cooperative Automated Transportation

16th Annual AASHTO International Day

Carlos Braceras, P.E., Executive Director
Utah Department of Transportation





Culture eats strategy
for breakfast.

- Peter Drucker

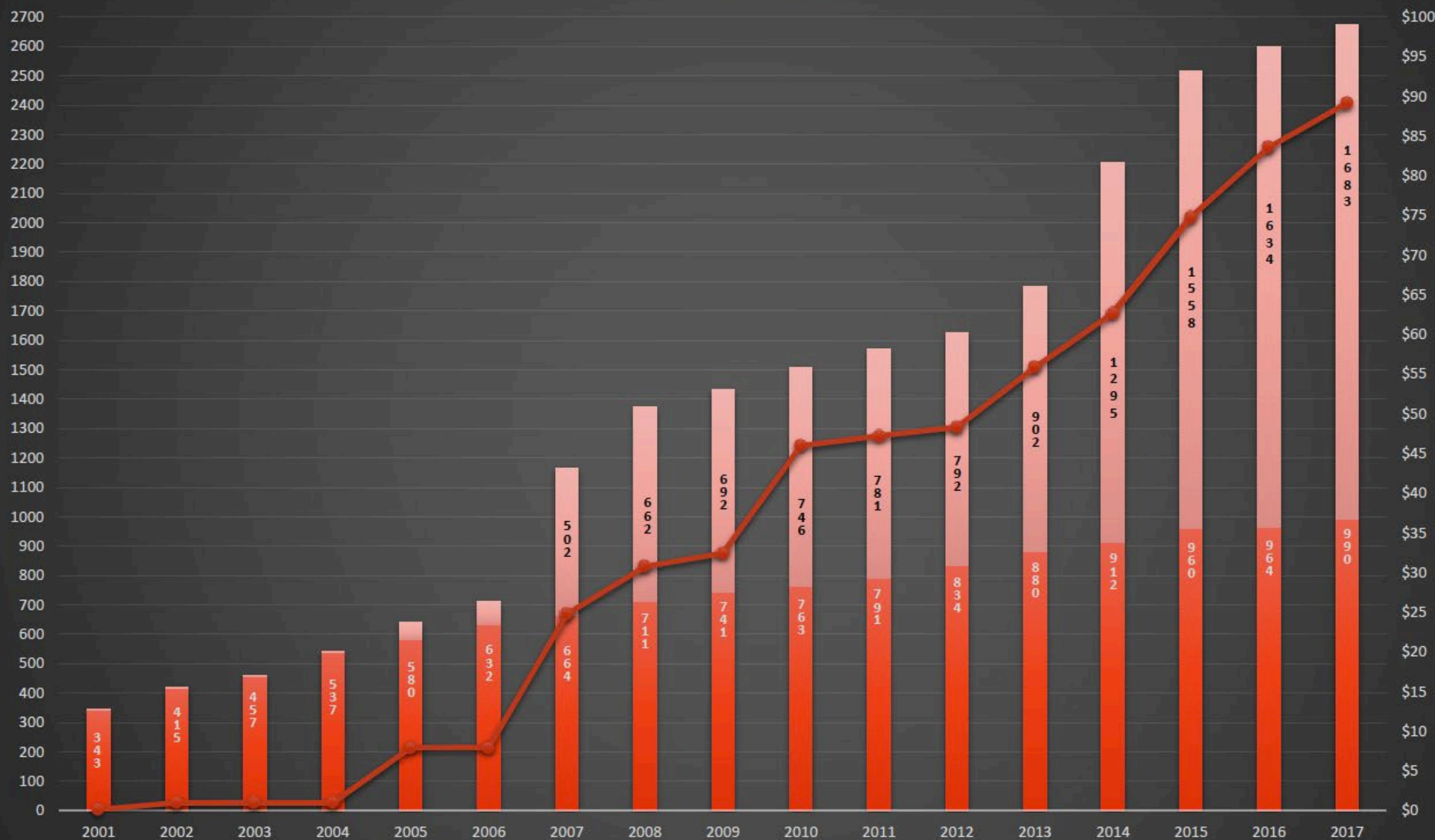
UDOT's Fiber Optic Network 17 Years

TOTAL COMBINED FIBER/CONDUIT/CIRCUIT MILES

CUMMULATIVE TRADE VALUES FOR CONDUIT/FIBER/CIRCUITS

Miles

Millions



UDOT Miles - Fiber/Conduit

Trade Miles - Fiber/Conduit/Circuit

Trade Value



Connected Transit Signal Priority

Redwood Road (400 S. to 8020 S.)

- 25 intersections
- Bus Request Signal Priority
- Goal: Improve transit reliability
- Operational since Nov 2017
- Schedule reliability improved 6%

Dedicated Short Range
Communication device
(DSRC)



Provo-Orem BRT (UVX)

- 10.5-mile corridor
- 47 Intersections
- 25 Buses
- Operational December 3, 2018
- Study of effectiveness underway



Snow Plow Signal Priority

- 5 corridors
- 55 Intersections
- 46 Snow Plows
- Pre-emption when plowing
- Budget: \$473,000
- Operational March 2019
- Study on Effectiveness



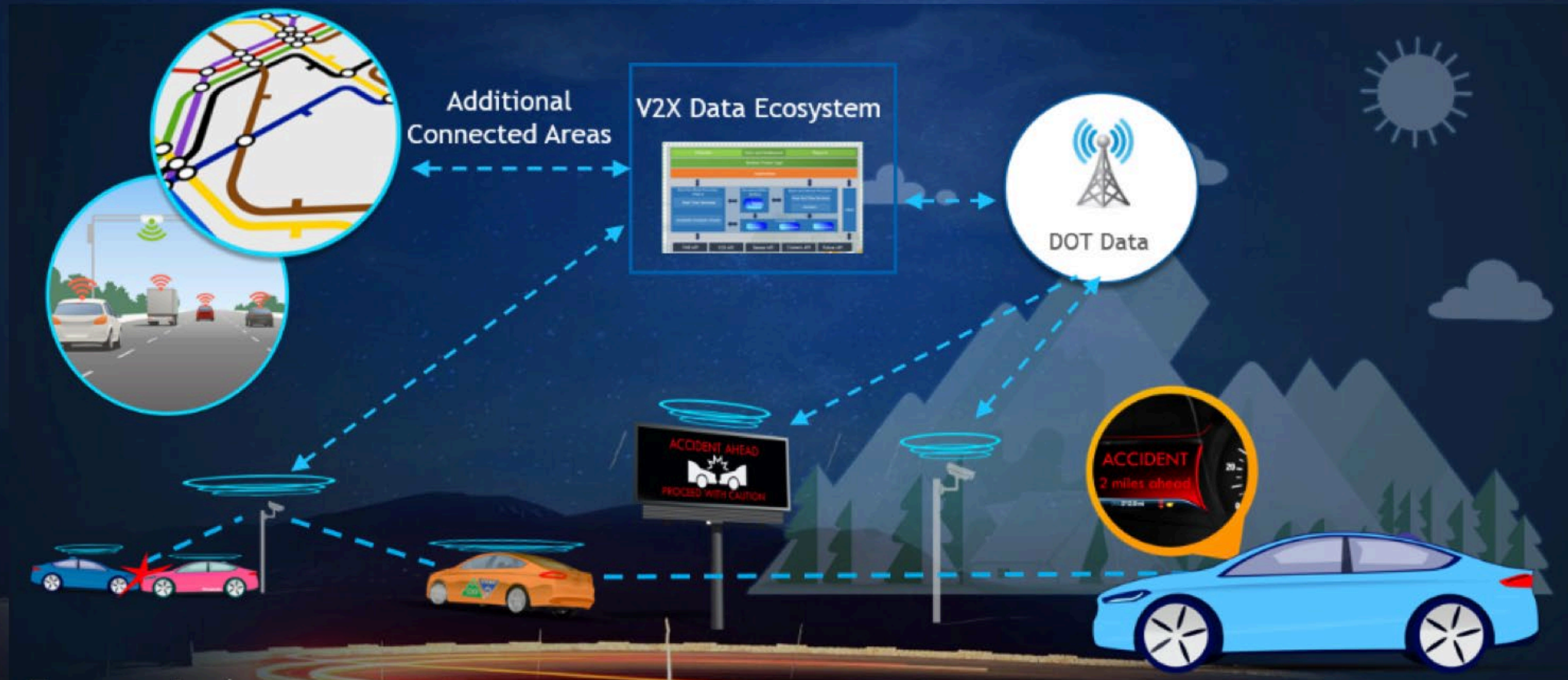
Autonomous Vehicle Shuttle Pilot

- AV shuttle deployed in several locations until March 2020
- Joint UDOT/UTA project
- Study potential uses and capabilities
- Evaluate public perception and attitudes



Panasonic | UDOT CV Data Ecosystem Project

Advancing Connected Vehicle Technology via creation of an INTEROPERABLE Connected Vehicle (CV) Ecosystem leverages broad data availability and yields safety and mobility benefits soon and into the future

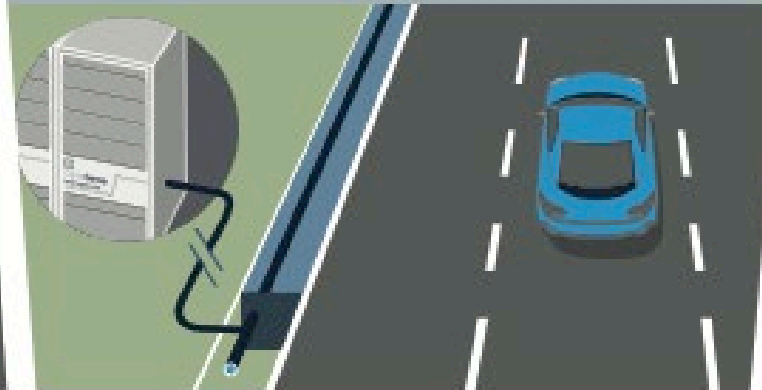


Acoustic Fiber Sensing

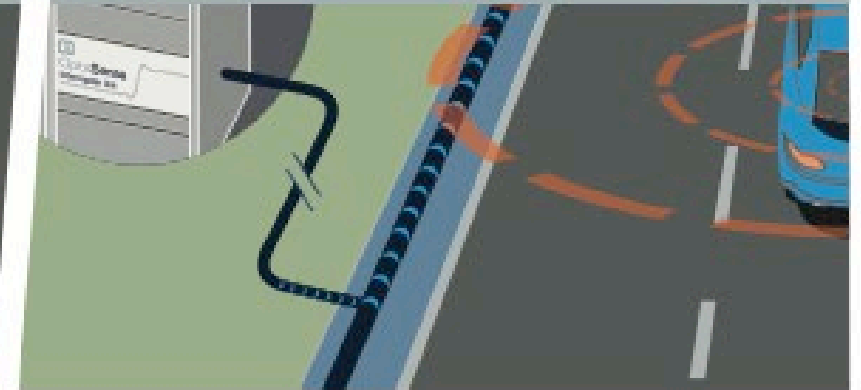
1 Convert roadside optical fibre into a traffic sensor



2 Each OptaSense installation can monitor up to 80km



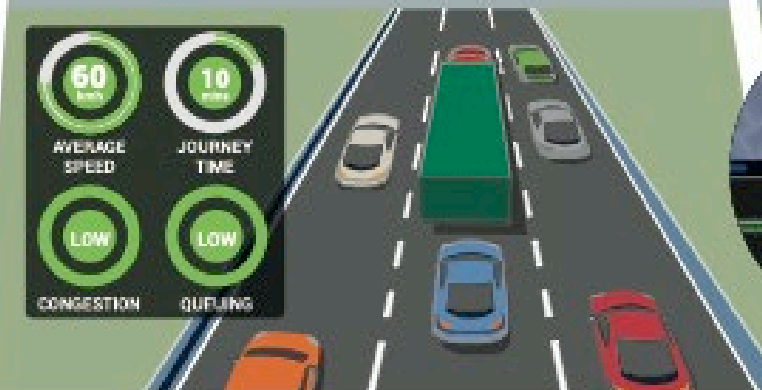
3 Fibre-optic sensing technology creates an array of intelligent sensors



4 Detecting passing traffic along the entire monitored road



5 Delivering highly accurate and timely traffic flow indicators



6 Providing better information for traffic engineers and road users

