



New Mobility

Ushering in the Next Era in Transportation

Sterling Anderson

Co-founder & Chief Product Officer, Aurora

A dark blue, low-key photograph of the front of a car. The car is centered in the frame, with its headlights and side mirrors visible. On the roof, there is a prominent sensor dome, likely a lidar or camera. The background is a solid, dark blue color.

OUR MISSION

Deliver the benefits of self-driving technology
safely, quickly, and broadly



< 3,000 Miles
average annual mobility in U.S.



1900



< 3,000 Miles
average annual mobility in U.S.

1900



Model T Production
low-cost personal mobility

1908



< 3,000 Miles
average annual mobility in U.S.

1900



Model T Production
low-cost personal mobility

1908



> 13,000 Miles
driven per year within U.S.

TODAY

The Cost of Human-Driven Automobiles

A dark blue world map is visible in the background of the slide, showing the continents and oceans.

~1.3 million
fatalities/year

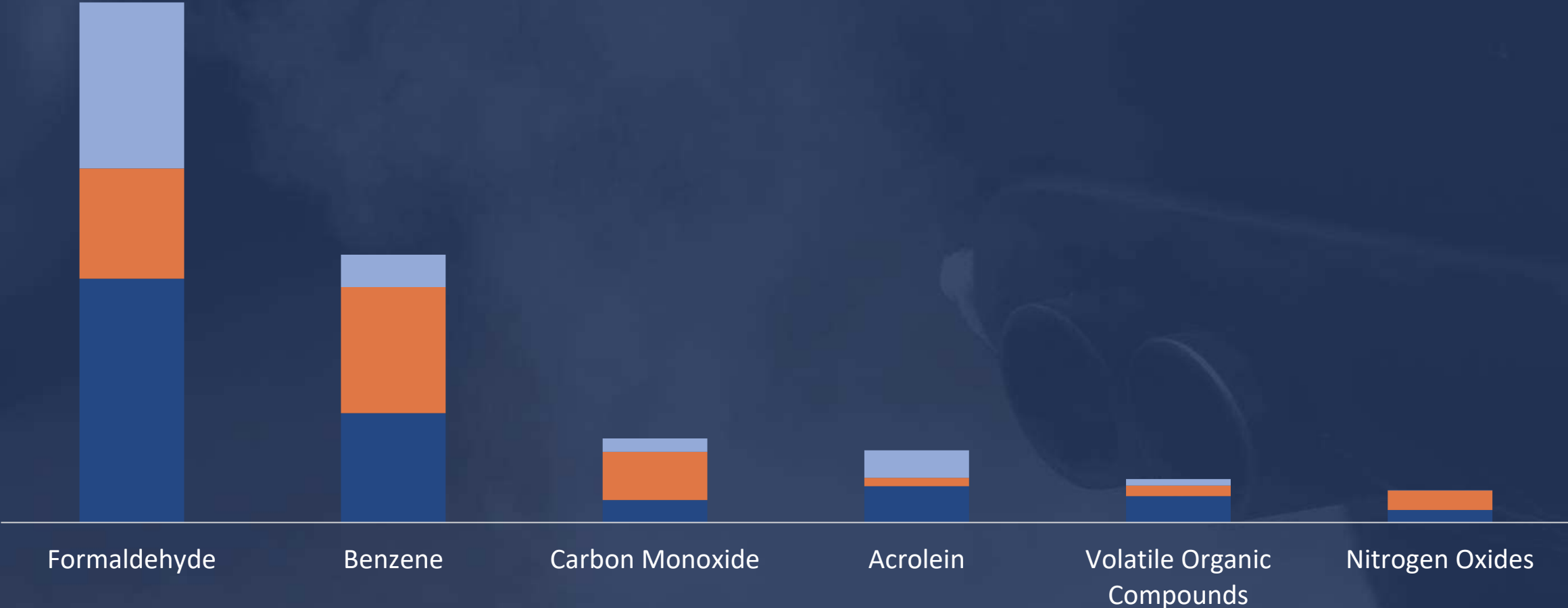
20-50 million
injuries/year

>\$500 billion
economic cost / year

Impact on Our Cities

AIR POLLUTION

Stationary Sources Mobile Sources Fire Sources



Impact on Our Cities

CONGESTION

~80 hours

average annual time lost to congestion in Dubai

Impact on Our Cities

URBAN DESIGN

>90%

daily average idle time per
vehicle

3,590 sq. miles

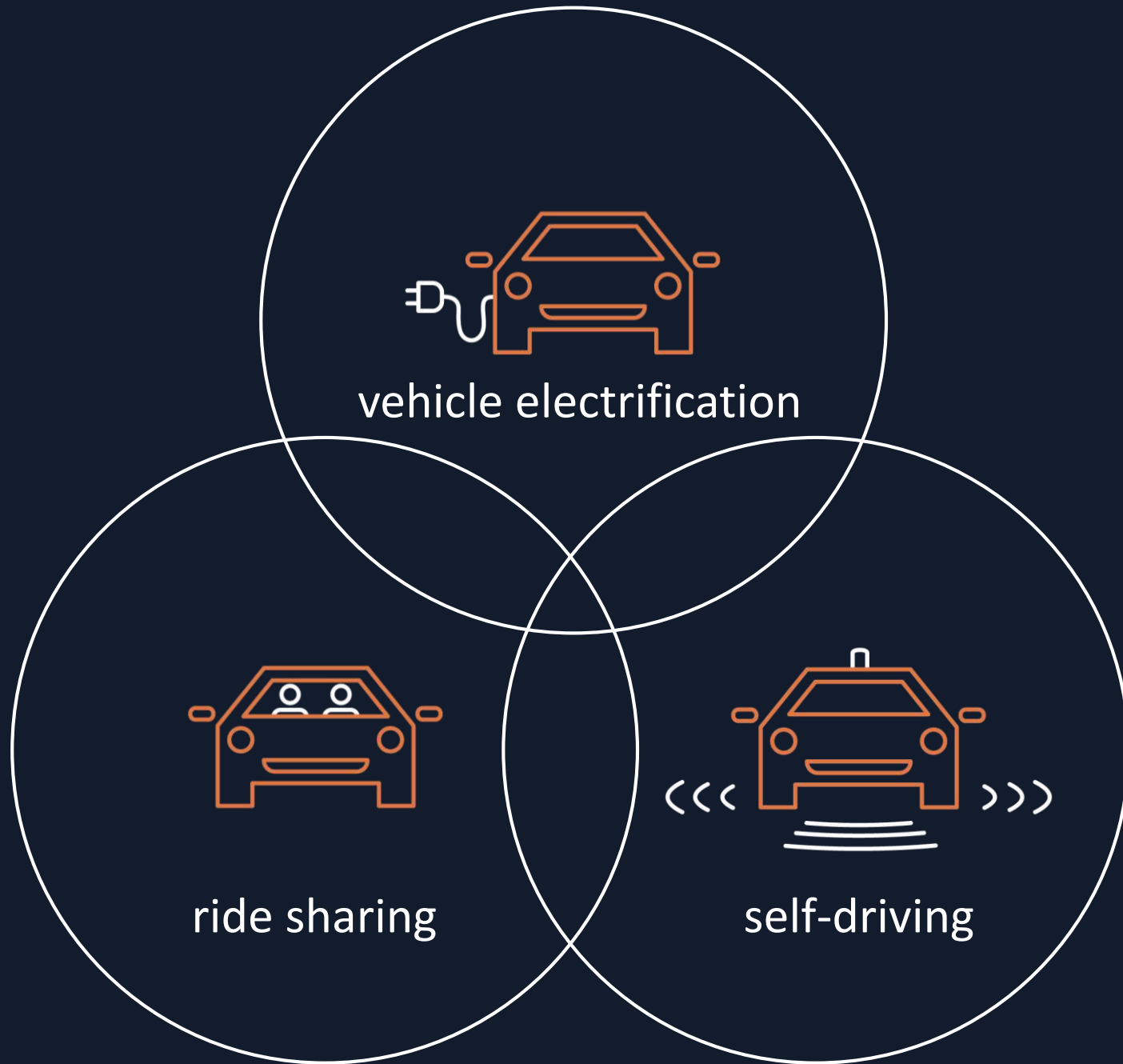
U.S. land area covered in parking lots to
accommodate unproductive vehicles

Access

~1 billion

people living with disabilities globally







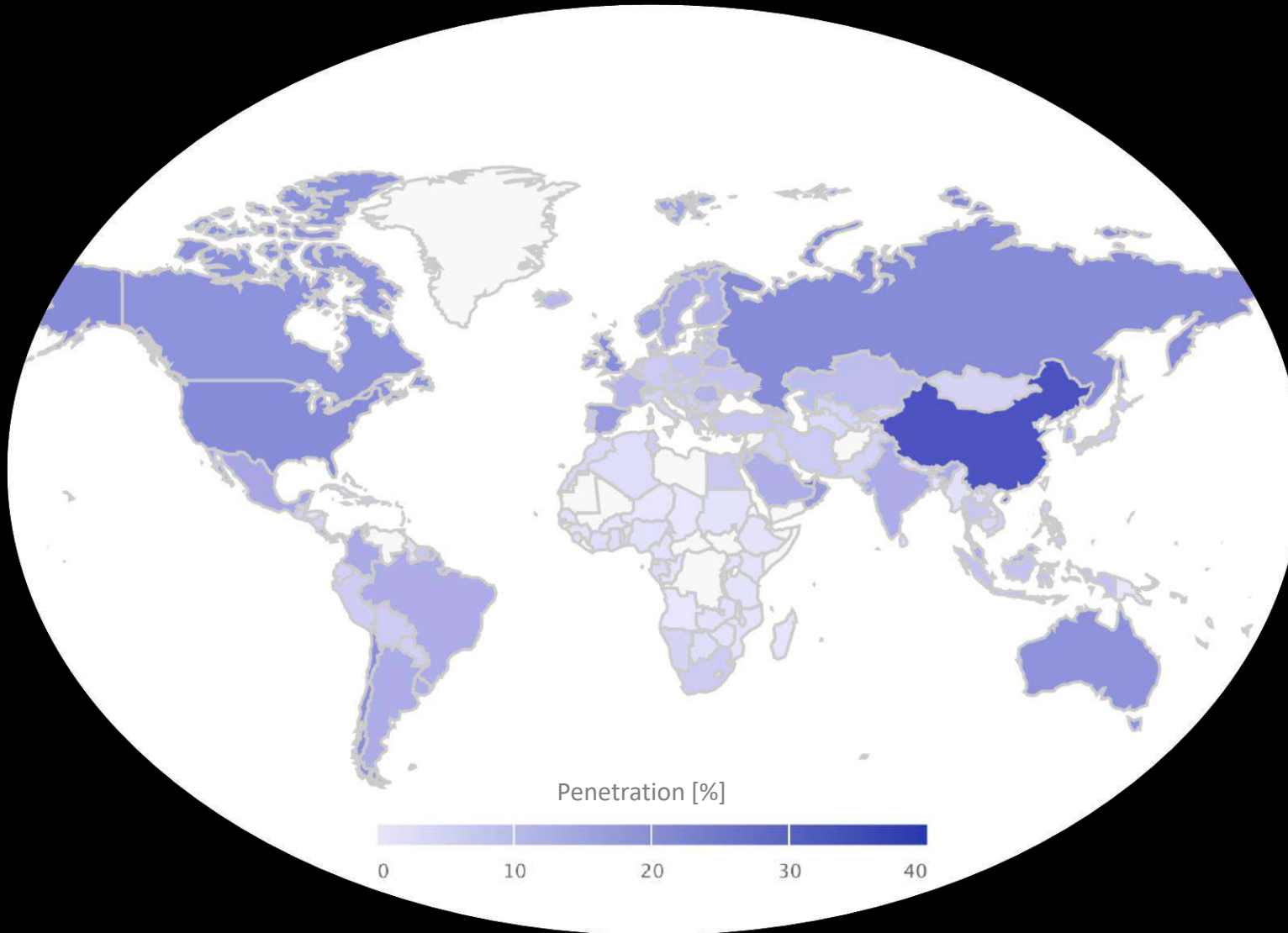
Vehicle electrification





Ride Sharing

Ride Sharing Growth

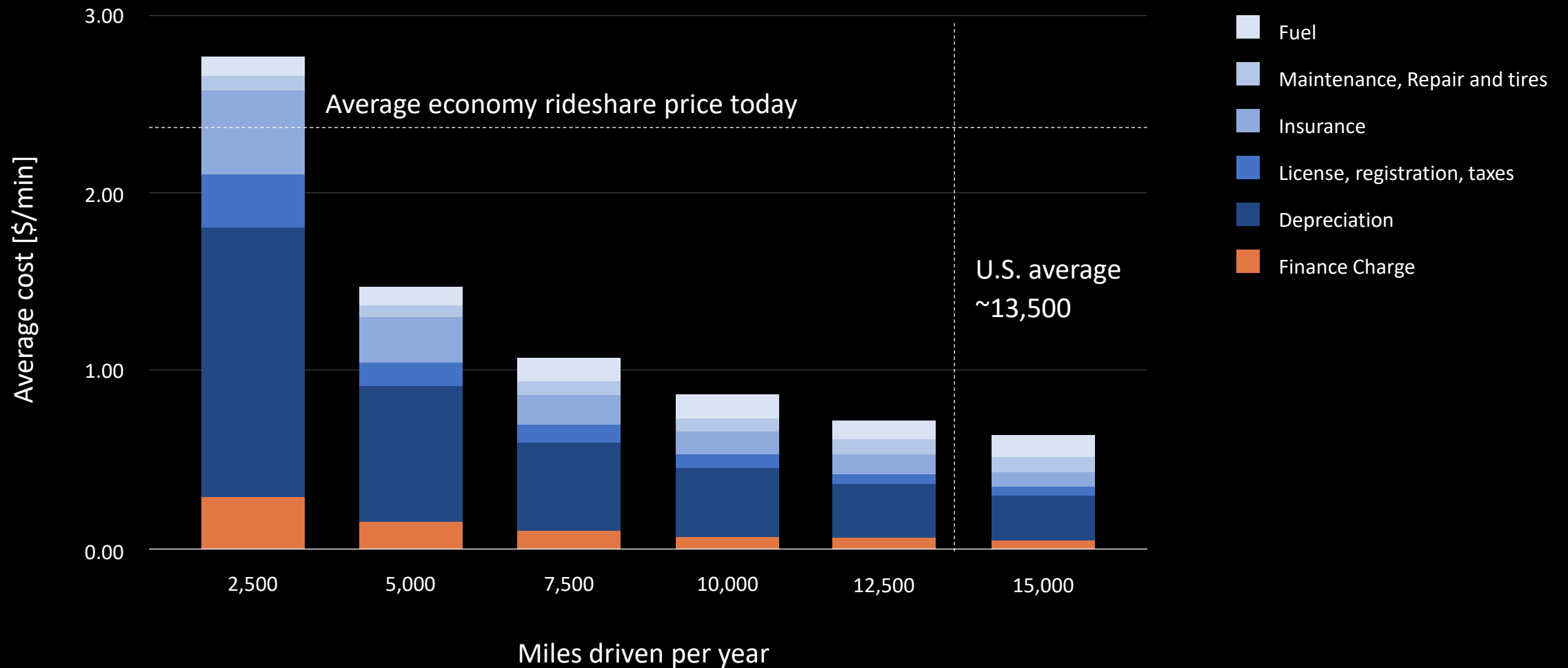


~1B annual users

>\$180M annual revenue

~20% estimated CAGR

Where We're Going | Ride Sharing





Self-driving

History of Autonomous Vehicles



Phase I

2004 - 2009

Phase II

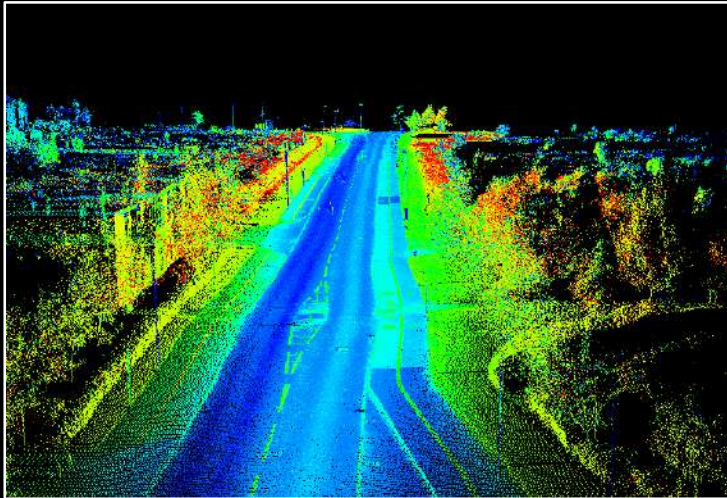
2009 - 2015

Phase III

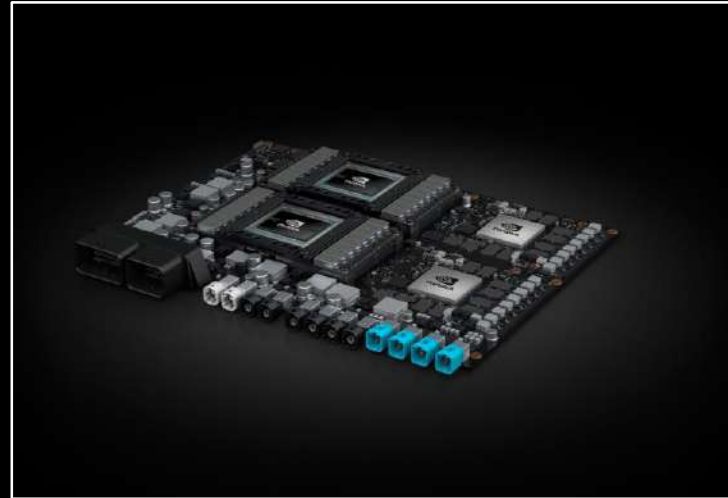
2015 - 2018

Recent Technological Advances

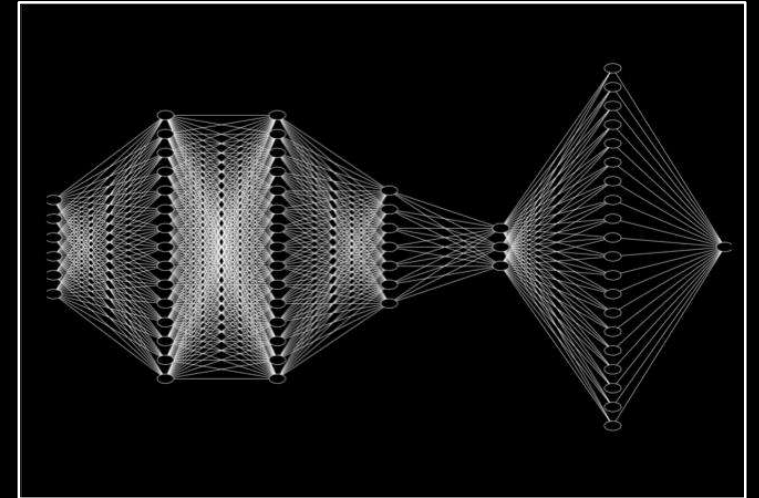
Sensing



Computation



Machine Learning



Where We are Today

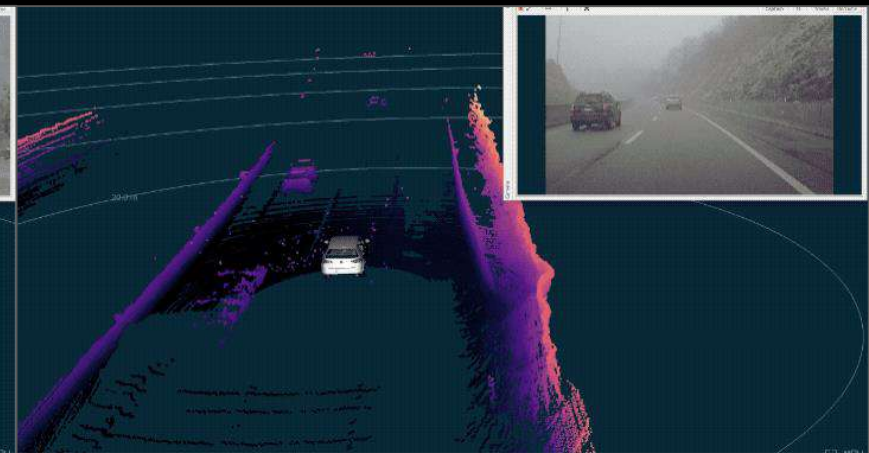
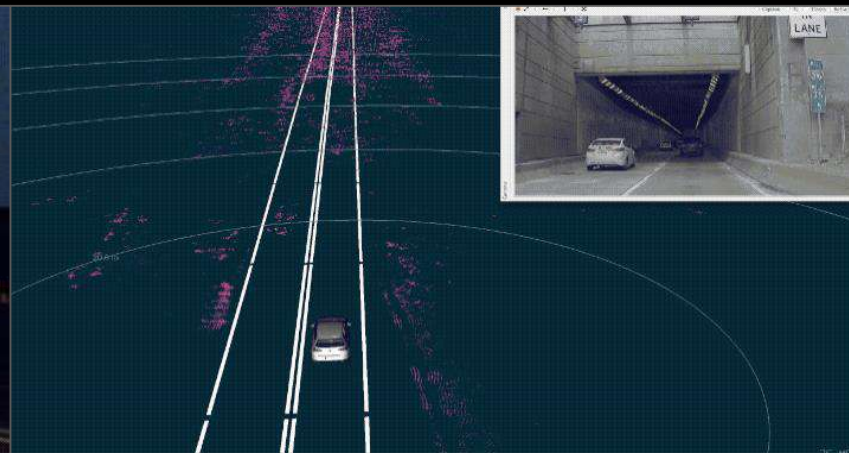
>25 Full stack self-driving
development companies

>\$25B In invested capital (2010-2019)

~100% Participation from major OEMs

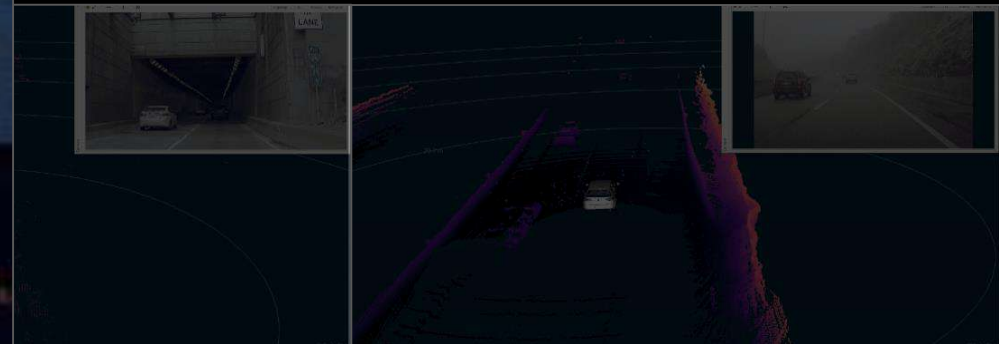
>95 Cities with announced initiatives

Where We're Going | Next-Gen Sensor Fusion

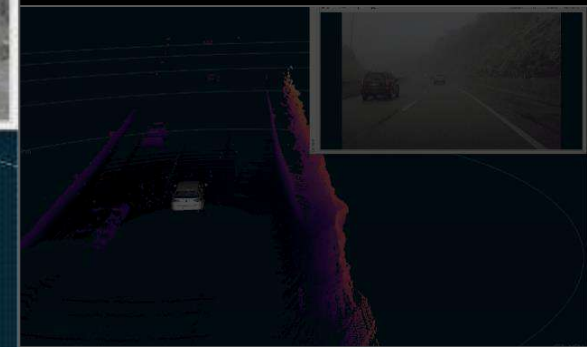
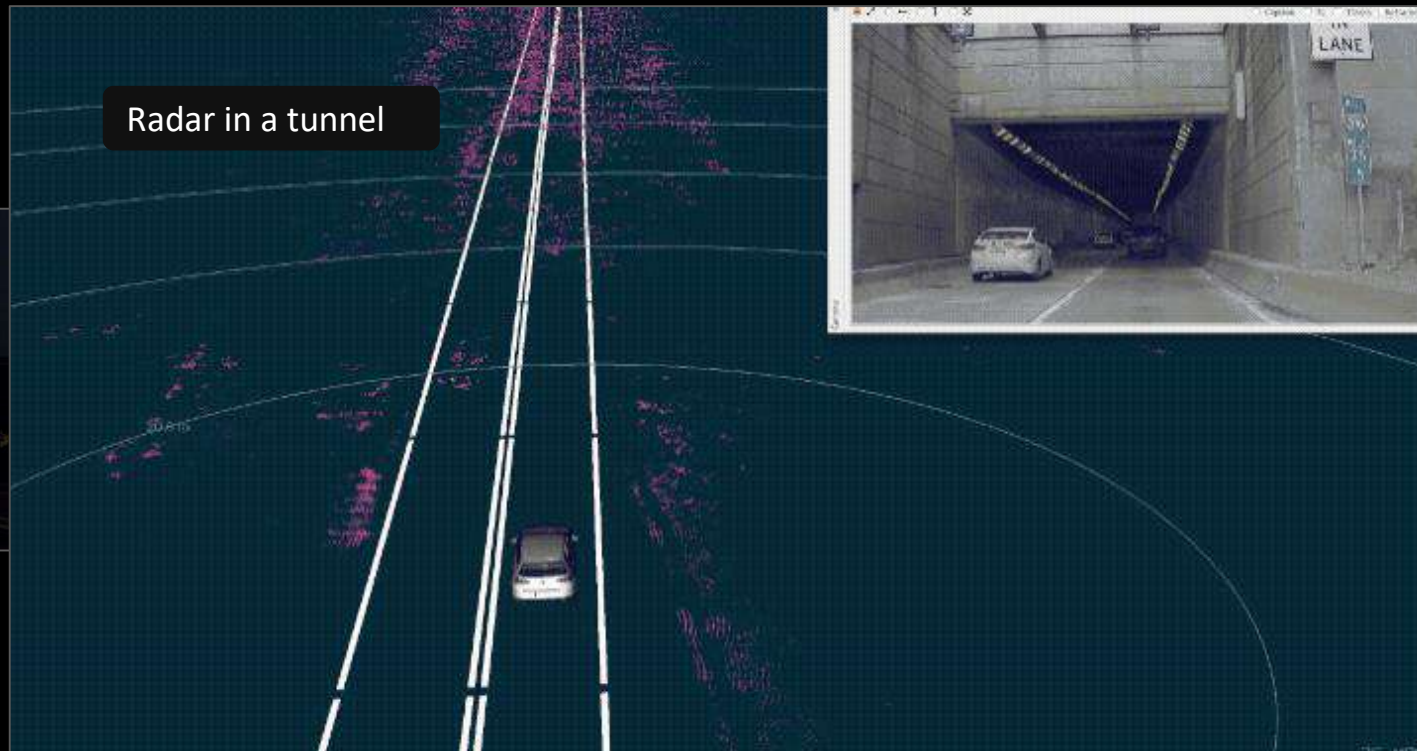


Where We're Going | Next-Gen Sensor Fusion

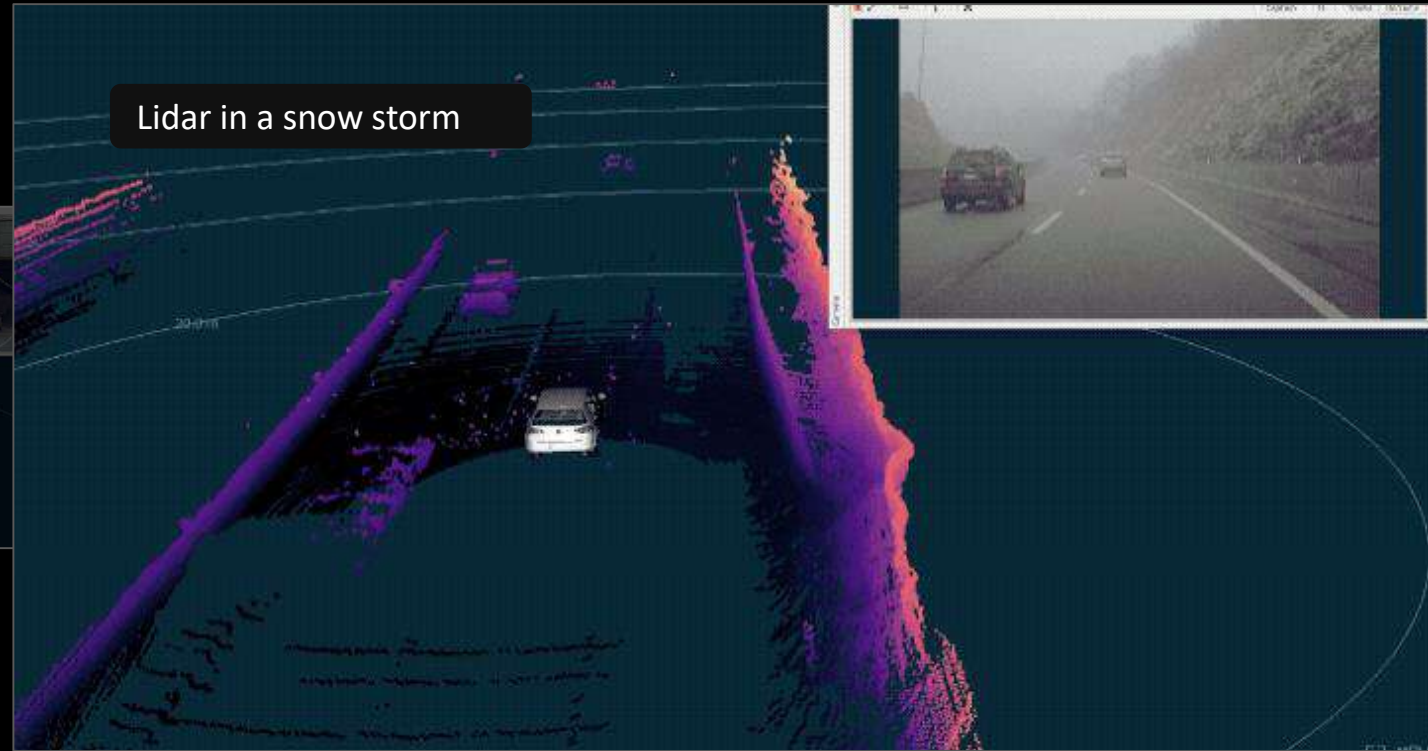
Camera for actors at dusk/night



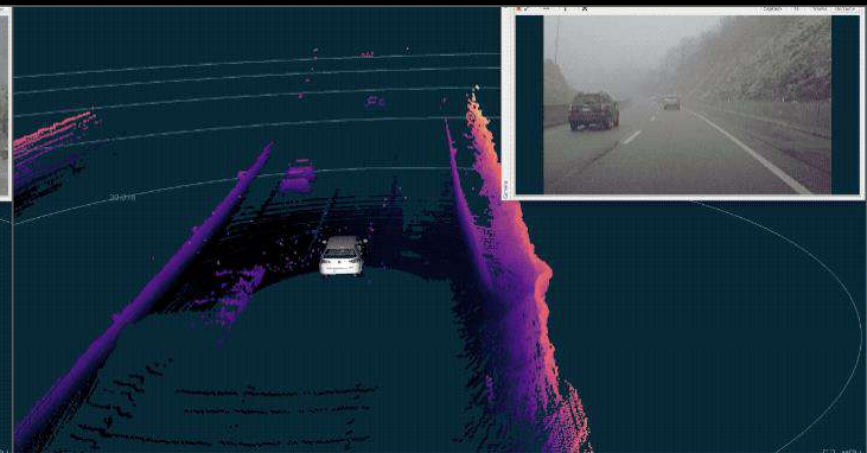
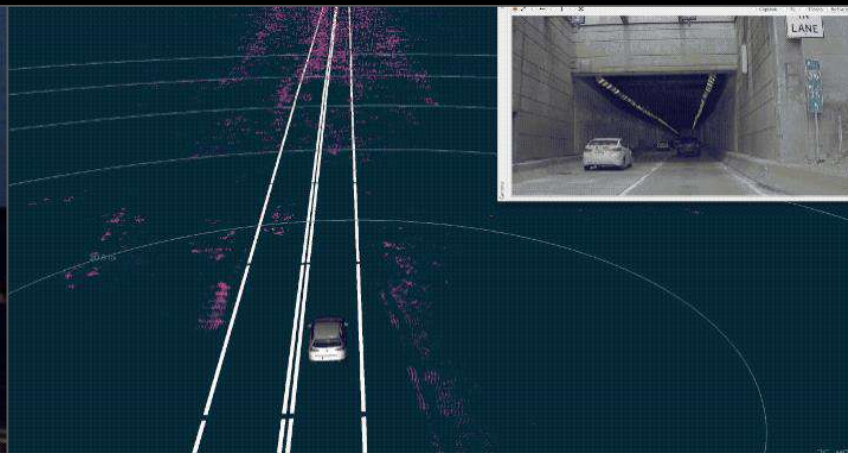
Where We're Going | Next-Gen Sensor Fusion



Where We're Going | Next-Gen Sensor Fusion

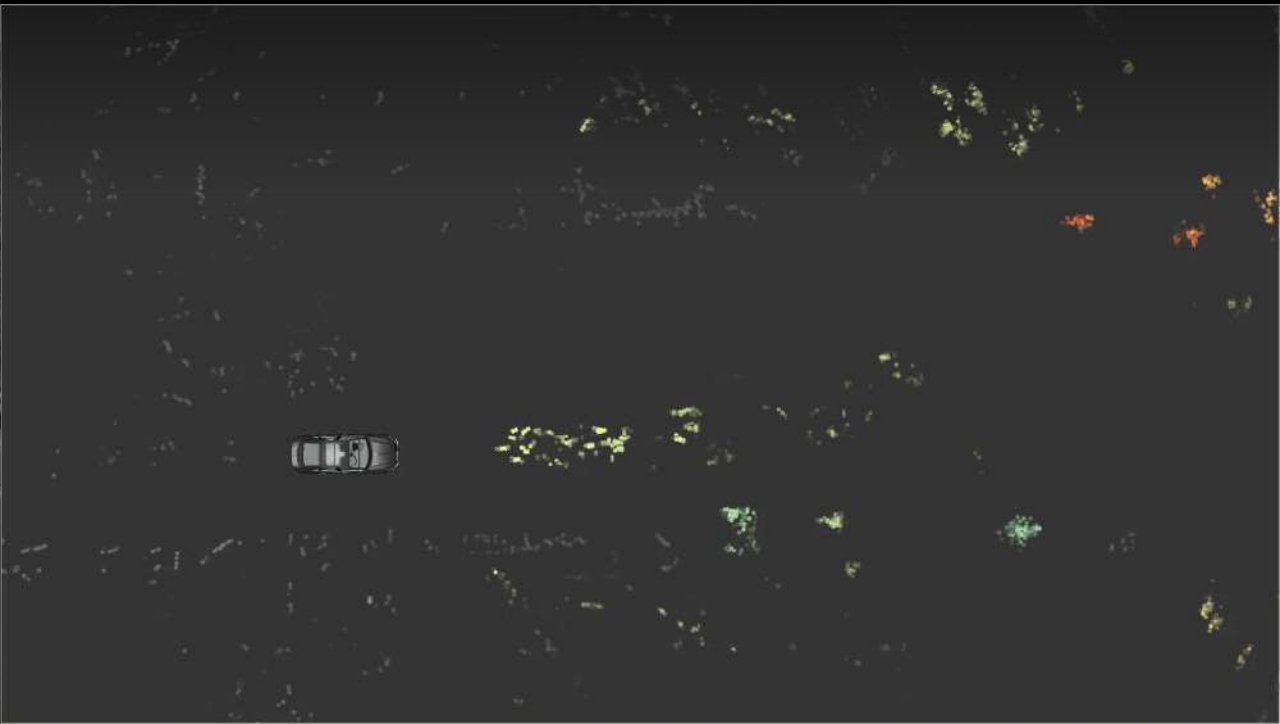
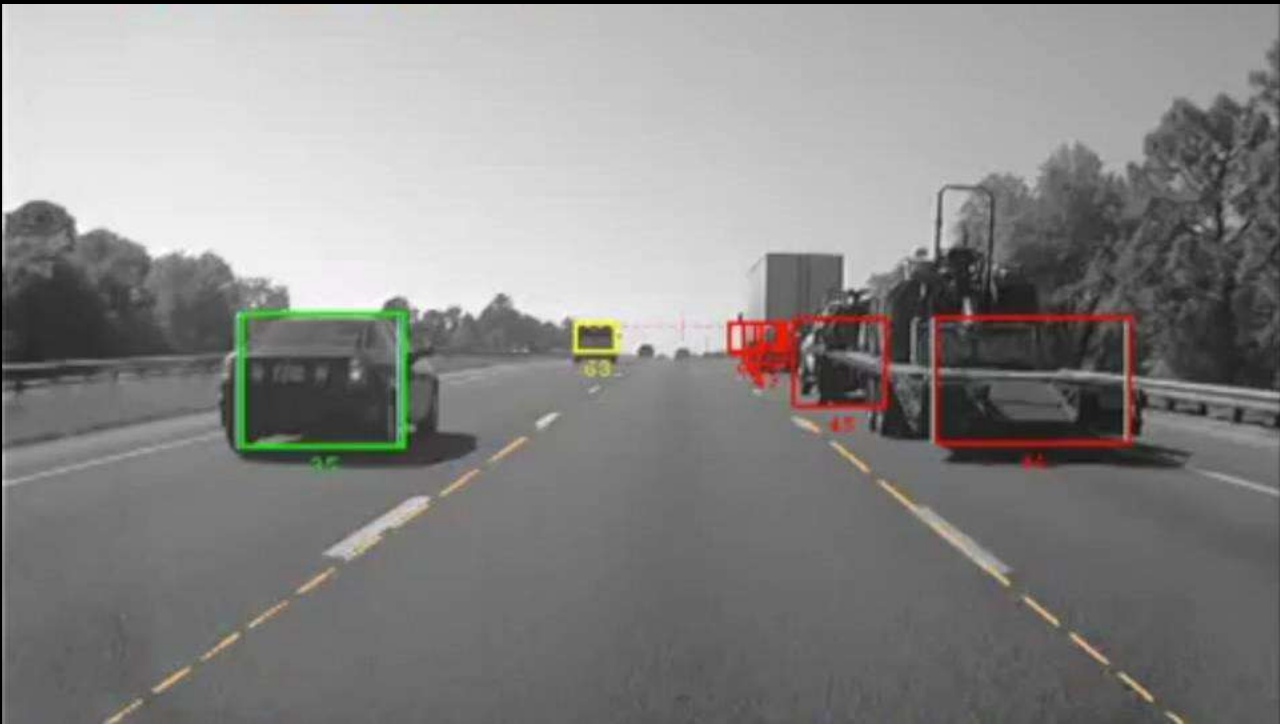


Where We're Going | Next-Gen Sensor Fusion



Where We're Going | **Next-Gen Lidar**

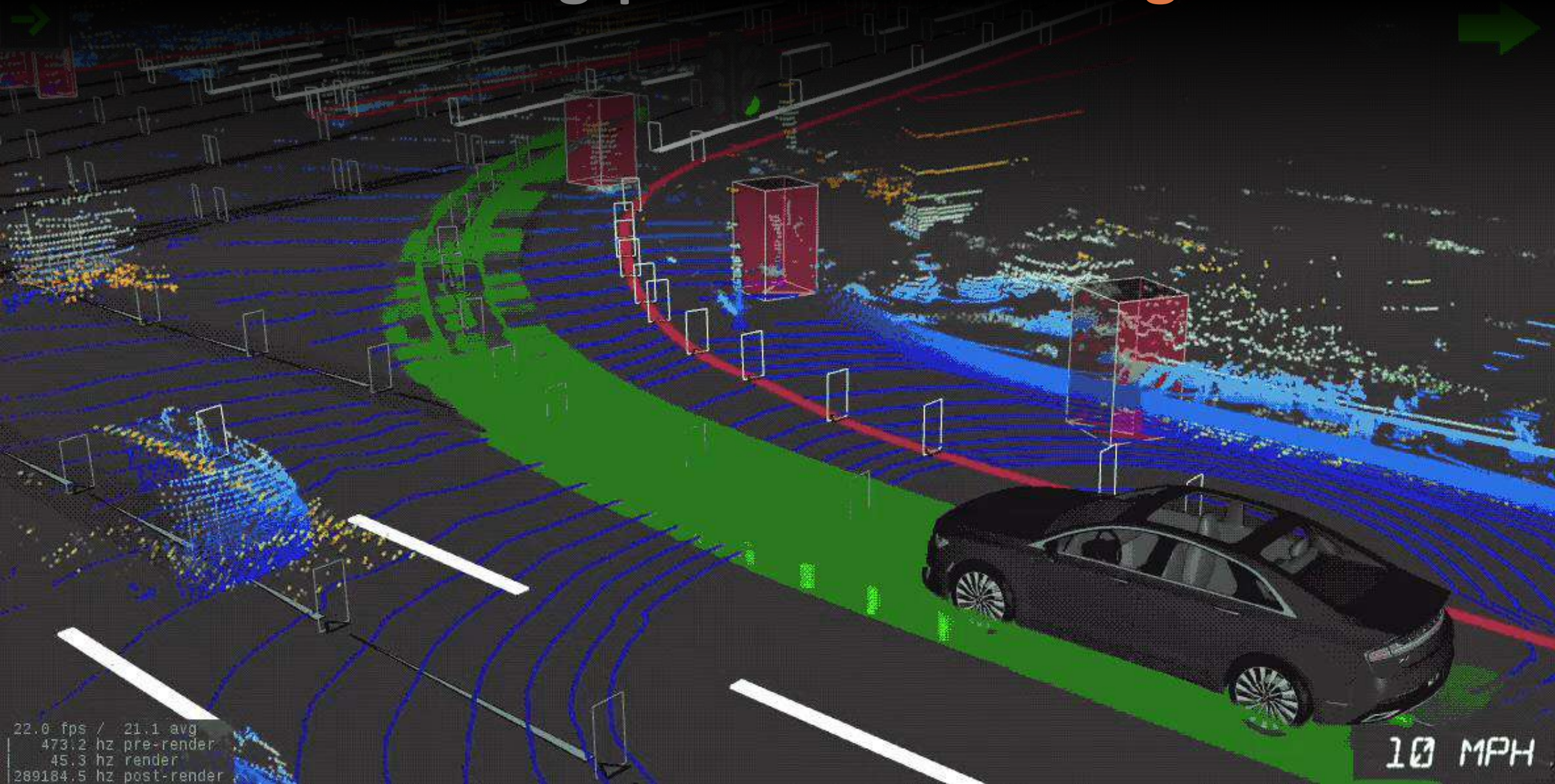
Where We're Going | Next-Gen Radar



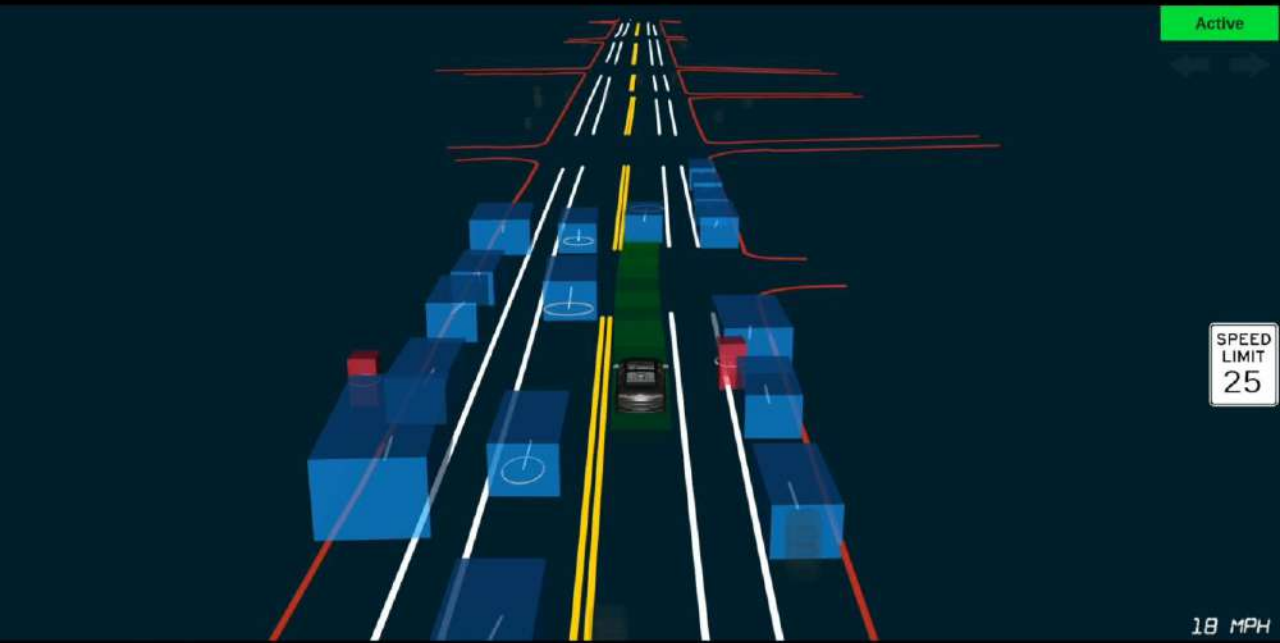
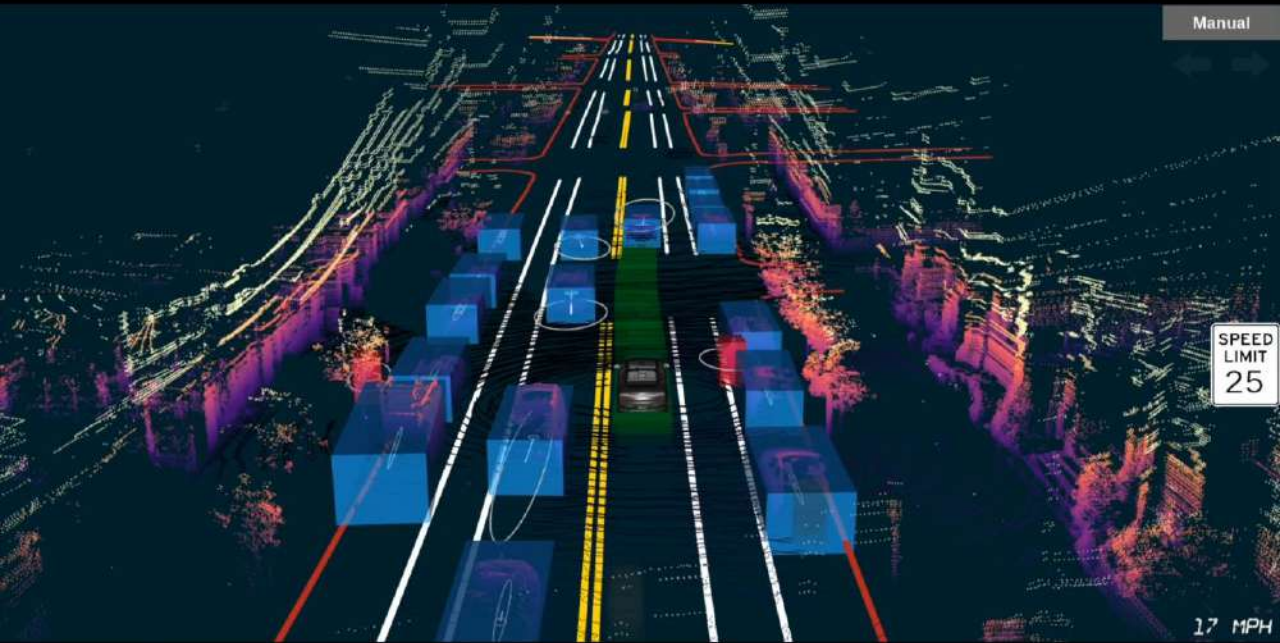
Where We're Going | Next-Gen Computing



Where We're Going | Simulated Testing



Where We're Going | Virtual Development



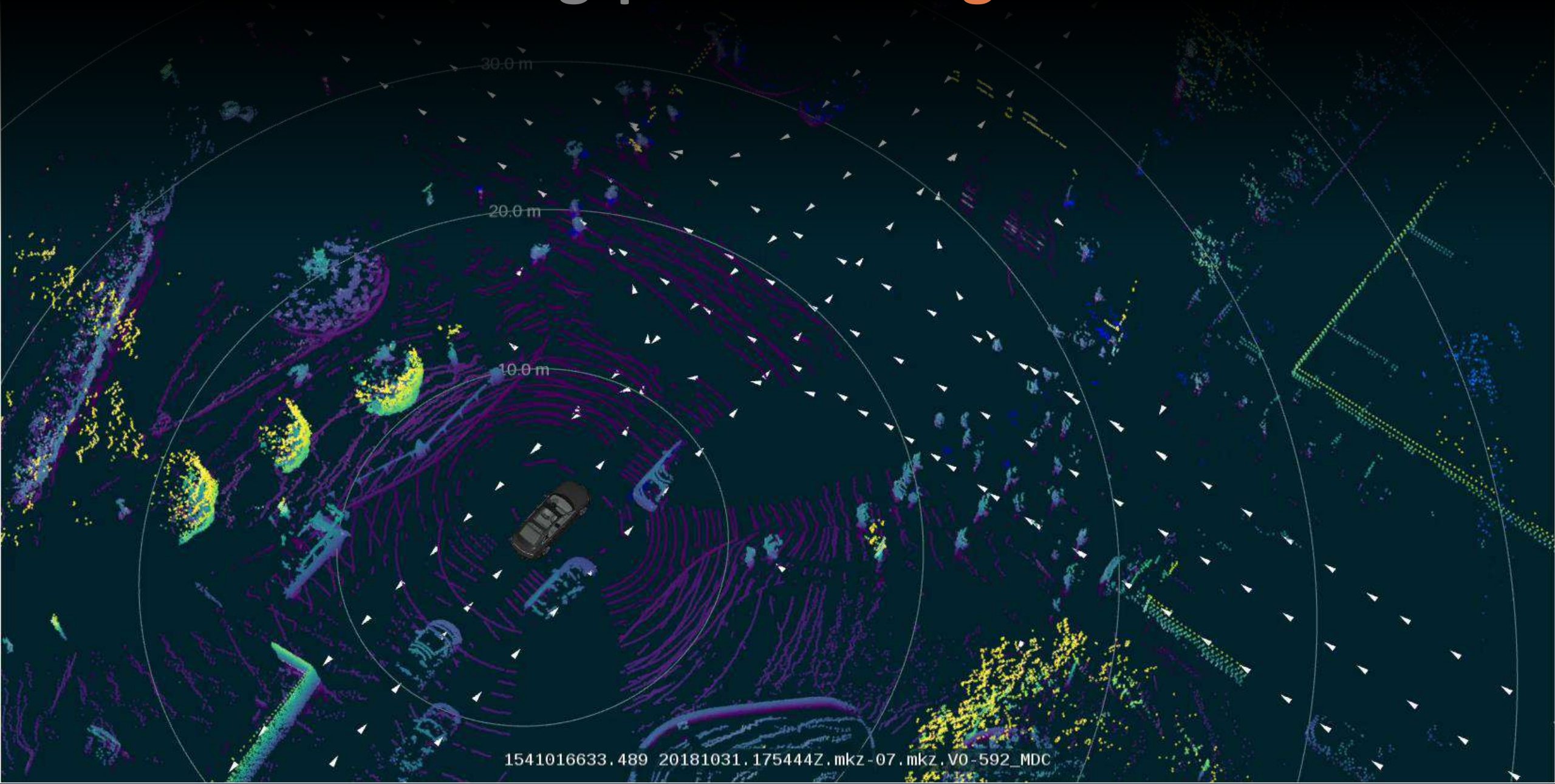
Where We're Going | Perception



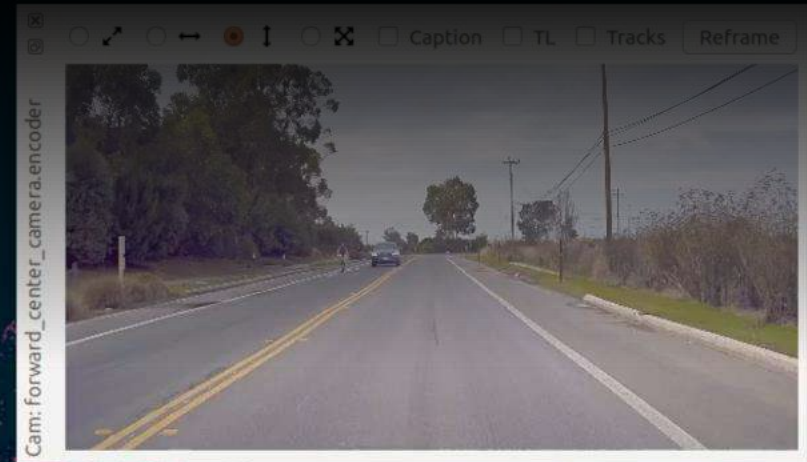
Where We're Going | Perception



Where We're Going | Forecasting



Where We're Going | Forecasting



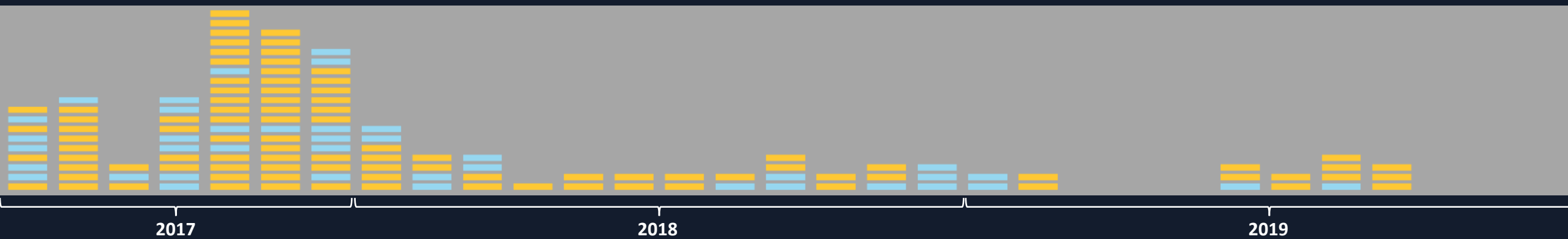
60.8 fps / 47.2 avg
470.3 hz pre-render
197.9 hz render
254388.2 hz post-render

17 MPH

Where We're Going | Decision Making



Where We're Going | Regulatory Progress



millions of lives
saved

tons of pollution
eliminated

thousands of square miles
liberated

billions of hours
freed

millions of people
mobilized

The Aurora logo features a stylized blue starburst icon to the left of the word "Aurora" in a bold, blue, sans-serif font. The background is a night-time aerial view of a city with a prominent skyscraper and light trails from traffic.

Aurora