



Planning for the Future(s)

The FDOT Initiative to
Develop Guidance about
LRTP Impacts of ACES

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A
Automated
Vehicle capable of guiding itself with little or no human input



C
Connected
Vehicle having systems linked to other devices to improve safety or efficiency

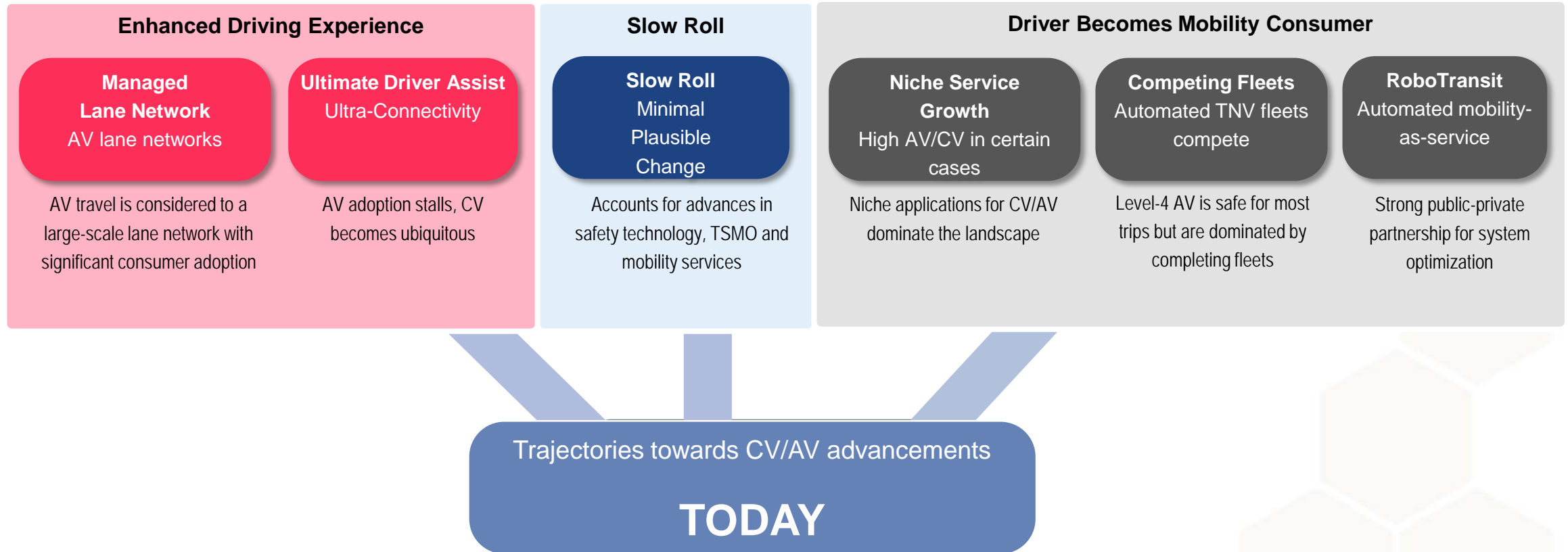


E
Electric
Vehicle using one or more electric motors for propulsion



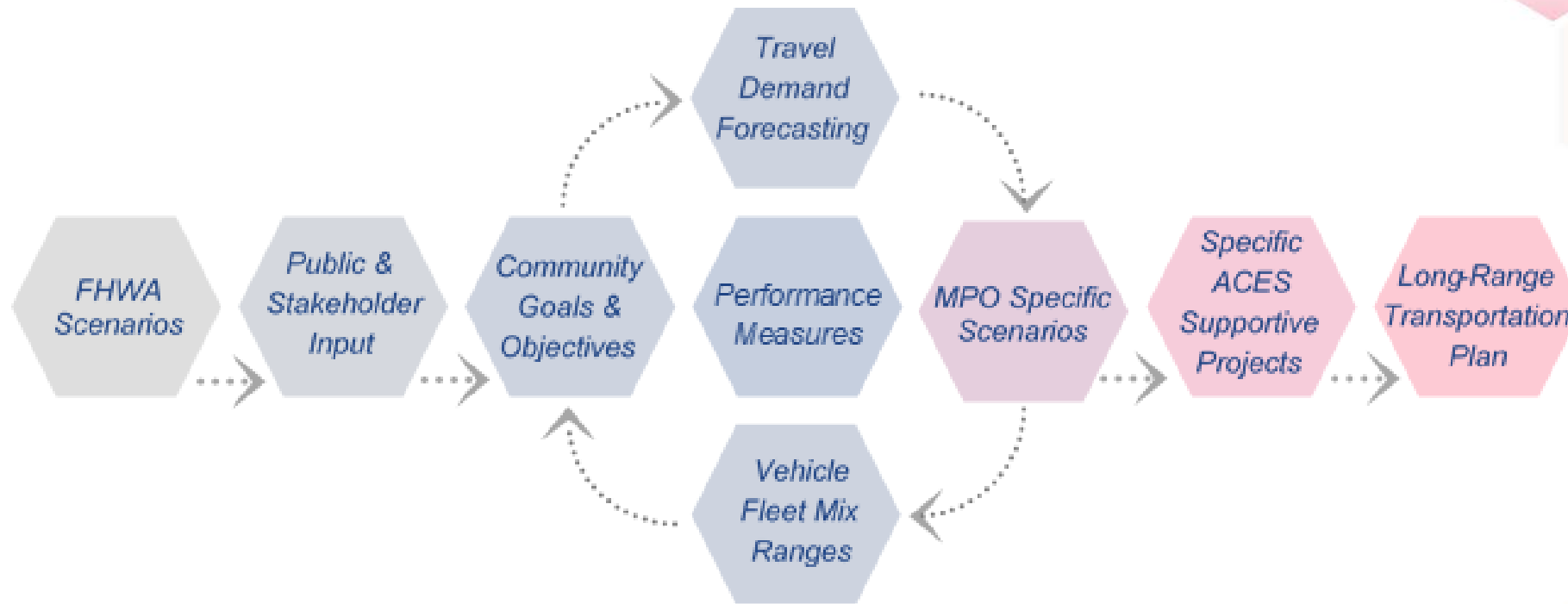
S
Shared-use
Vehicles used (not necessarily owned) by more than one person or organization

FHWA 2035 CV/AV Scenarios



Source: FHWA, Scenario Planning for Connected and Automated Vehicles, DRAFT Scenario Descriptions, December 2017.

Integrating ACES into the Planning Process

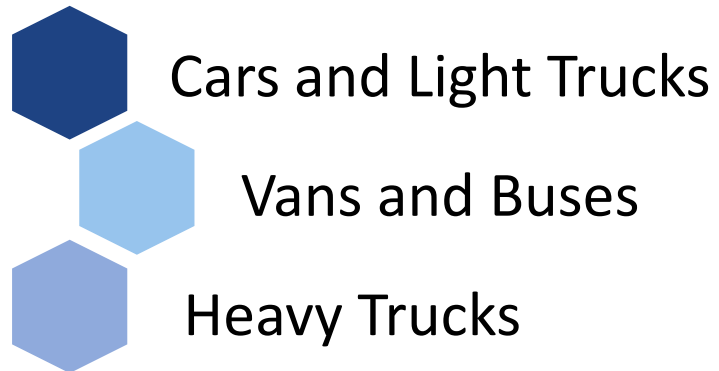


ACES Supportive Projects

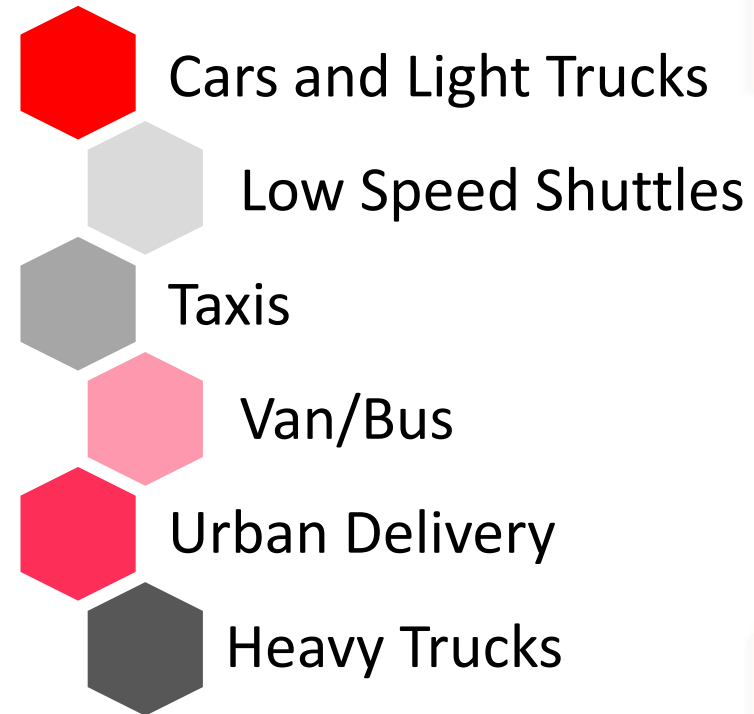
<p>Road Maintenance <i>(State of Good Repair)</i></p>	<ul style="list-style-type: none"> Lane marking improvements/maintenance for machine vision Pavement maintenance improvements for safe automated vehicle operation
<p>Travel Lanes <i>(Capacity)</i></p>	<ul style="list-style-type: none"> Conversion of on-street parking to other uses Designation/planning of AV-only limited access arterial lanes or AV only transportation zones
<p>Curb Management <i>(Shared Mobility)</i></p>	<ul style="list-style-type: none"> Designated pick-up/drop-off zones Curbspace value capture policy plans
<p>Parking <i>(Land Use/Urban Design)</i></p>	<ul style="list-style-type: none"> Activity center master plans to guide conversion of parking Conversion of public parking facilities Electric vehicle charging stations and related support systems
<p>Transit <i>(Trunk and Feeder)</i></p>	<ul style="list-style-type: none"> Transit plans to guide investments in urban corridors Dedicated high-occupancy AV expressway and arterial lanes Mobility hubs First/last mile or paratransit partnership opportunities
<p>Freight <i>(Long-Haul and Local)</i></p>	<ul style="list-style-type: none"> Dedicated AV truck corridors Suburban/weigh station truck terminals Intermodal terminal automation Lane management and restrictions planning
<p>Smart Cities <i>(Internet of Things)</i></p>	<ul style="list-style-type: none"> V2I roadside units Traffic signal prioritization and interconnects Transportation operations management centers/upgrades Transportation data processing centers Fleet management facilities

Vehicle Fleet Mix – Automation Use Cases

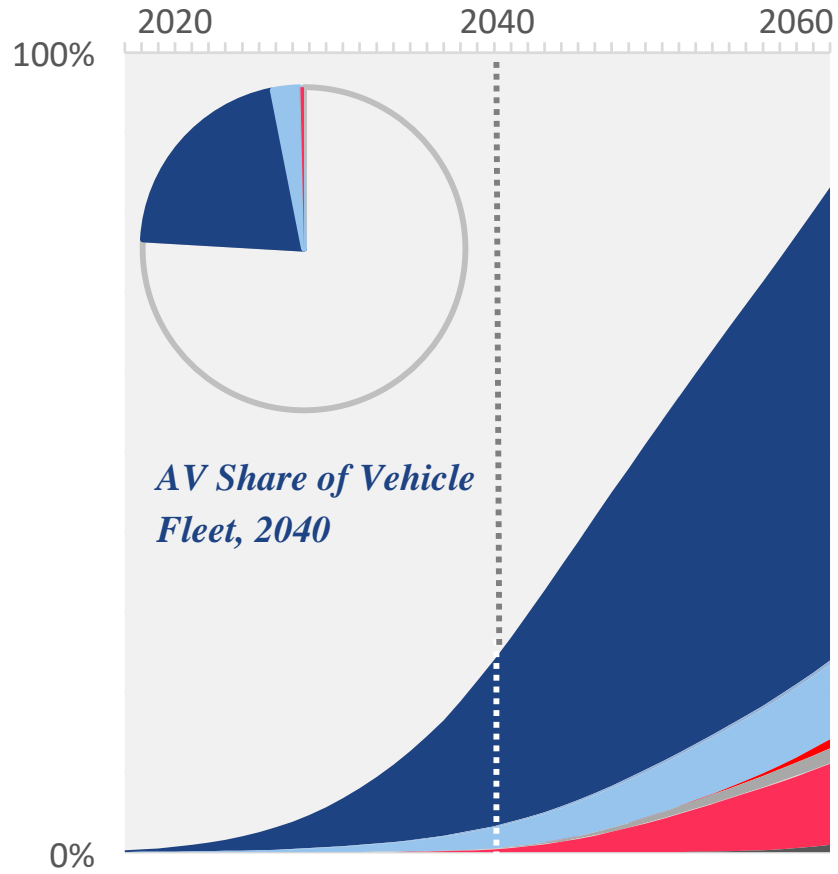
Level 2-3



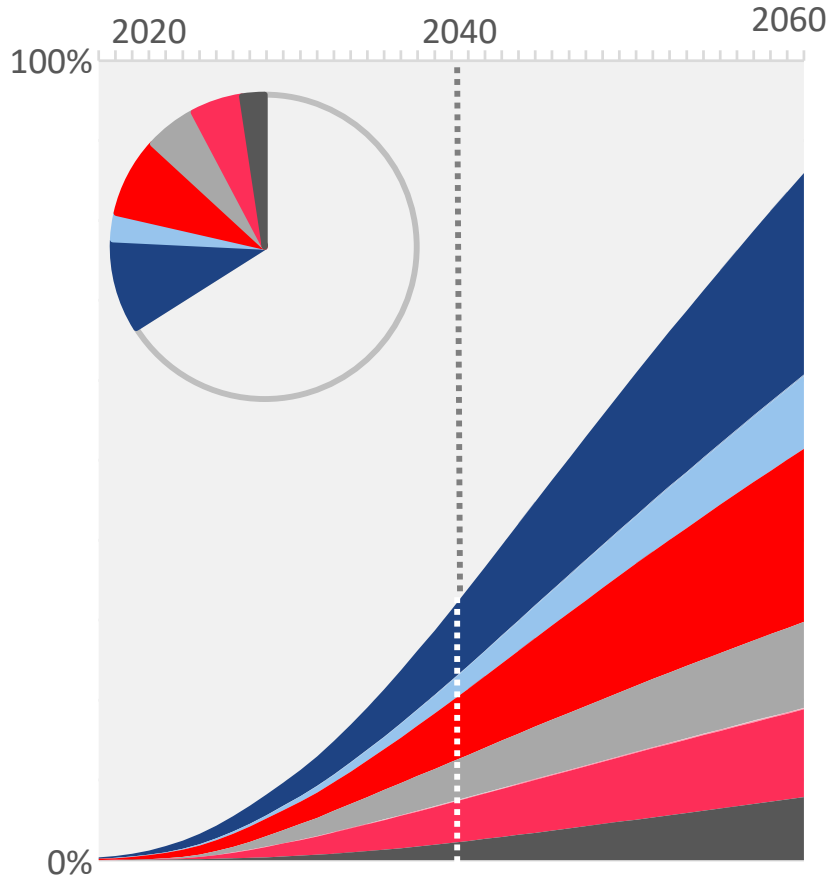
Level 4-5



Slow Roll
AV Share of Vehicle Fleet



RoboTransit
AV Share of Vehicle Fleet



Level 0-1

Conventional Vehicles

Level 2-3

Cars and Light Trucks

Vans and Buses

Heavy Trucks

Level 4-5

Cars and Light Trucks

Low Speed Shuttles

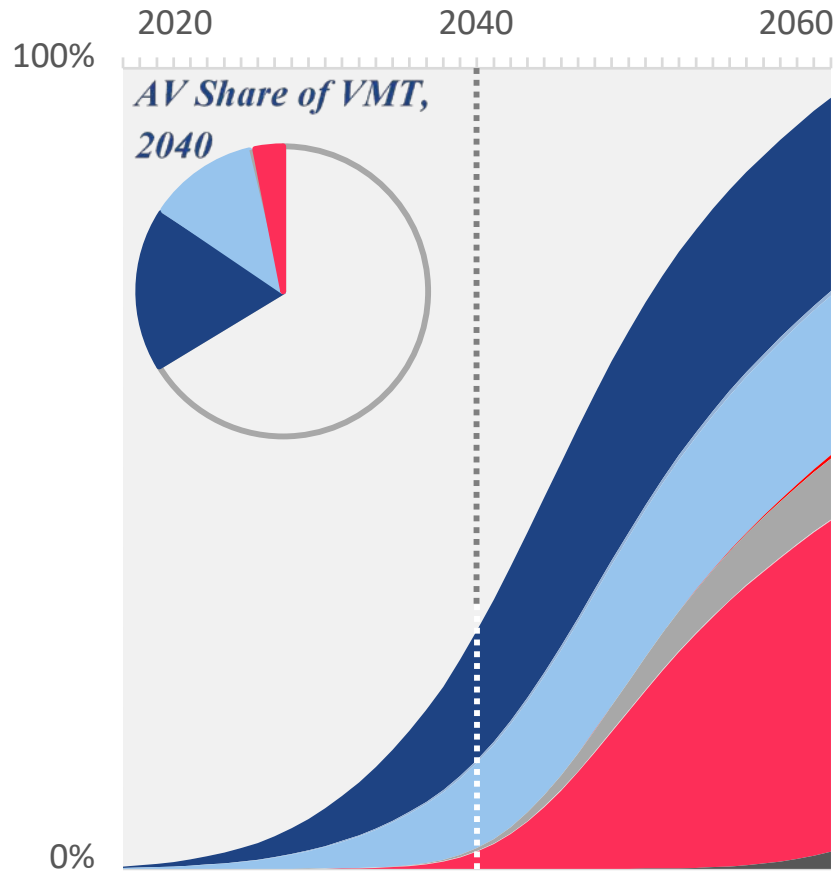
Taxis

Van/Bus

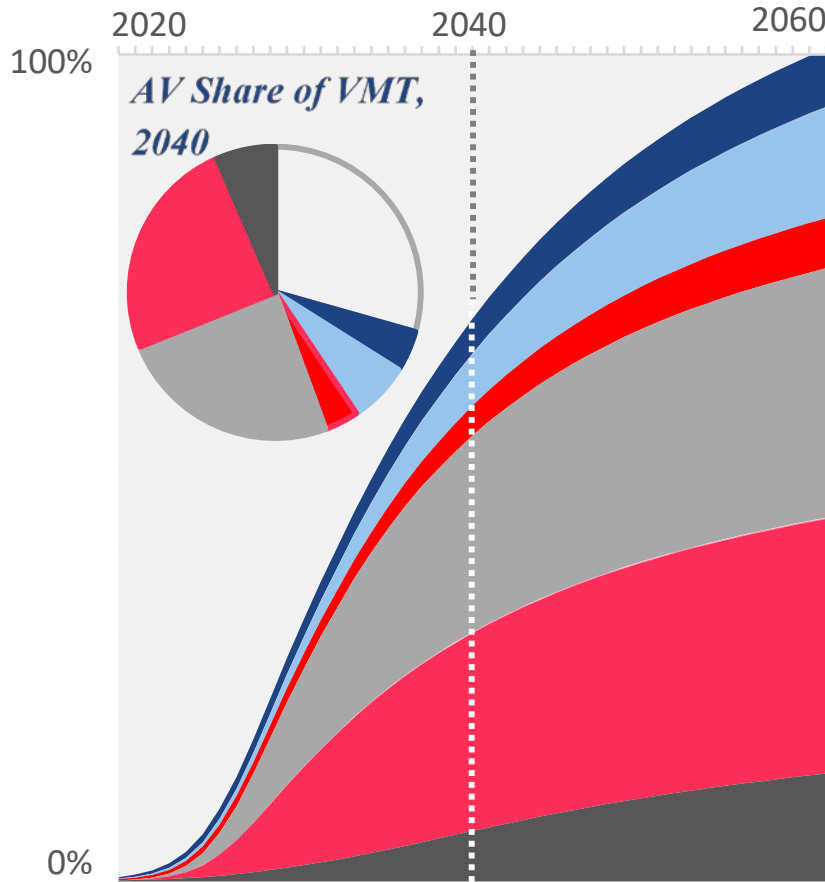
Urban Delivery

Heavy Trucks

Slow Roll
AV Share of VMT



RoboTransit
AV Share of VMT



Level 0-1

Conventional Vehicles

Level 2-3

Cars and Light Trucks

Vans and Buses

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Level 4-5

Cars and Light Trucks

Low Speed Shuttles

Taxis

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Next steps

