Electric Vehicle
Policy Innovation
Electrification Programs

**Planning Efforts**
- FAST Act
- Alternative Fuel Corridors
- Colorado EV Plan
- REV West

**Funding Programs**
- Alt Fuels
- Colorado
- Charge Ahead
- Colorado
- Volkswagen Settlement

A sustainable statewide alternative fuels market
Recent Developments

- Increasing variety of brands and models available in Colorado
- Colorado ZEV Rule approved in August 2019
- Point of Sale tax credit extended through 2026 (with phase out)
- Ongoing infrastructure development (public and private)

Source: Navigant
Reduce pollution in our air and congestion on our roads by expanding multimodal transportation options, utilizing traditional and emerging mobility technologies.
The law directed CDOT to convene a stakeholder group to:

“examine the impacts of technological and business changes related to motor vehicles used for commercial purposes” and to identify means to mitigate negative or promote positive impacts.

Impacts to Consider

- ENVIRONMENTAL
- ECONOMIC
- TRANSPORTATION SYSTEM

Between May and November 2019, CDOT gathered feedback from nearly 30 appointed stakeholders, inventoried existing fees on covered providers, and modelled potential fee structures and their impacts.
## Emerging Mobility Providers Included in SB 19-239

<table>
<thead>
<tr>
<th>PROVIDER</th>
<th>DEFINITION</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Network Company (TNC)</td>
<td>A company that relies upon a mobile application to pair riders with drivers.</td>
<td>Uber, Lyft, Hop Skip Drive</td>
</tr>
<tr>
<td>Peer Car Share</td>
<td>A car sharing company that enables individuals to rent personal vehicles to others.</td>
<td>Turo, Drift, Getaround, Maven</td>
</tr>
<tr>
<td>Non-Peer Car Share</td>
<td>A car sharing company that operates a fleet of vehicles for use by individuals.</td>
<td>Streetcar, ZipCar, ShareNow</td>
</tr>
<tr>
<td>Taxi</td>
<td>A company that provides taxicab service.</td>
<td>Freedom Cabs, Metro Taxi</td>
</tr>
<tr>
<td>Car Rental</td>
<td>A company that rents vehicles to individuals.</td>
<td>Enterprise, Avis, Hertz, Budget</td>
</tr>
<tr>
<td>Residential Delivery</td>
<td>A company that relies on a mobile application to pair commercial vendors/stores/restaurants to private drivers to deliver goods to residential addresses in personally owned or fleet-owned vehicles having a gross vehicle weight rating under 14,000 lbs.</td>
<td>UberEats, Grubhub, AmazonFlex, grocery stores delivery</td>
</tr>
</tbody>
</table>
### Fee Structures Considered

<table>
<thead>
<tr>
<th>Flat Fee</th>
<th>Mileage-Based Fee</th>
<th>Percentage-Based Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>The same, flat charge on top of every trip</td>
<td>The fee is assessed on a per-mile basis, increasing with the length of the ride or</td>
<td>The fee is a percentage of the total fare, daily rental</td>
</tr>
<tr>
<td>regardless of length or other factors.</td>
<td>delivery route.</td>
<td>charge, or delivery cost.</td>
</tr>
</tbody>
</table>


Estimates of the emerging mobility industries’ current emissions, VMT, and trip dynamics

Forecasts of the emerging mobility industries’ emissions and VMT in 2030

The estimated impacts of fee structures and ZEV infrastructure funding on 2030 projections

• By 2030, the total VMT of emerging mobility providers expected to grow 140% to approximately 11 million (with an estimated range between 5 million and 28 million VMT per day), representing 7% of the state’s total VMT (with an estimated range between 3% and 17%).

• Travel behavior and emissions impacts were modeled for each of the fee types (flat, mileage-based, percentage-based) and for a high and low range of rates and elasticities of demand (i.e. the sensitivity of demand to increases in the price of fares).

• Based on examples of existing fee levels across the U.S., these forecasted fees generated between $14 - $80 million (including all of the services covered under S.B. 19-239, such as taxis, car rentals, and ride hailing).
## Forecasted 2030 Trips, VMT, Emissions & Revenue

<table>
<thead>
<tr>
<th></th>
<th>Mileage-Based Fee</th>
<th>Flat Fee</th>
<th>Percentage-Based Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low-End Impact</td>
<td>High-End Impact</td>
<td>Low-End Impact</td>
</tr>
<tr>
<td>Trips (Daily)</td>
<td>1,805,688</td>
<td>1,796,374</td>
<td>1,805,866</td>
</tr>
<tr>
<td>VMT (Daily)</td>
<td>11,334,490</td>
<td>11,107,701</td>
<td>11,346,179</td>
</tr>
<tr>
<td>Percentage Change from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030 Baseline</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CO2e Daily Emissions (tons)</td>
<td>3,099</td>
<td>3,034</td>
<td>3,102</td>
</tr>
<tr>
<td>Annual Revenue for 2030</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2019$, undiscounted)</td>
<td>$26,797,999</td>
<td>$79,904,095</td>
<td>$13,814,320</td>
</tr>
</tbody>
</table>
Graduated Fees to Reflect Intent of SB 19-239

Lowest Fee

Discounted Fee

Highest Fee

Shared AND Zero Emission Vehicle

Zero Emission Vehicle OR Shared

Solo Ride in Internal Combustion Engine Vehicle
The diverse working group came to general agreement that any fees:

- Be lower or waived for trips taken in ZEVs, or trips that are shared/pooled.
- Consider impacts on social equity, economic development, the availability of transportation options (especially in rural areas), and existing fees levied on emerging mobility providers.
- Be flexible enough to adapt to evolving technologies (e.g. autonomous vehicles), business models, and state data collection/enforcement capacities.
- Additional data is needed on number of trips for emerging mobility providers including E-commerce/residential deliveries.

**Next Steps:**

**November 2019**
Stakeholder Working Group report finalized

**January 8th 2020**
2020 State Legislative Session begins

**January 15th 2020**
SMART Hearing to Transportation Legislation Review Committee with CDOT recommendations

**May 6th 2020**
2020 State Legislative Session ends

**May - Dec 2020 (Interim Session)**
Final report to Transportation Legislation Review Committee

**October 2020**
CDOT rule promulgation deadline for SB19-239

**NOTE:** All dates provided are estimates only.
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To be continued...
Working Group Recommendations

Link to website with report and appendices:
https://www.codot.gov/library/studies/emerging-mobility-impact-study
Contacts

Michael King
(303) 757-9997
michael.king@state.co.us
# Fee Structure Assumptions

## Table 5-1. Fee Structure Scenarios for Testing Demand Response and Revenue Generation

<table>
<thead>
<tr>
<th>Ride Type</th>
<th>Mileage-Based Fee Low</th>
<th>Mileage-Based Fee High</th>
<th>Flat Low</th>
<th>Flat High</th>
<th>% of Transaction Low</th>
<th>% of Transaction High</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICE, Single Occupancy</td>
<td>$0.009</td>
<td>$0.027</td>
<td>$0.106</td>
<td>$0.324</td>
<td>0.8%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Shared Ride or ZEV</td>
<td>$0.005</td>
<td>$0.018</td>
<td>$0.053</td>
<td>$0.181</td>
<td>0.3%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Shared Ride and ZEV</td>
<td>$0.000</td>
<td>$0.009</td>
<td>$0.000</td>
<td>$0.013</td>
<td>0.0%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>