



City of Bellevue

# **Update on the Automated Vehicle Strategic Vision**

Chris Long | Transportation Department

Daniel Lai | Transportation Department

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# Information

Tonight's Study Session will provide Council with a summary of the Automated Vehicle Strategic Vision final document and future actions the city may take to prepare for AV technology.

# AGENDA



AV Strategic Vision Overview



Recommended Actions

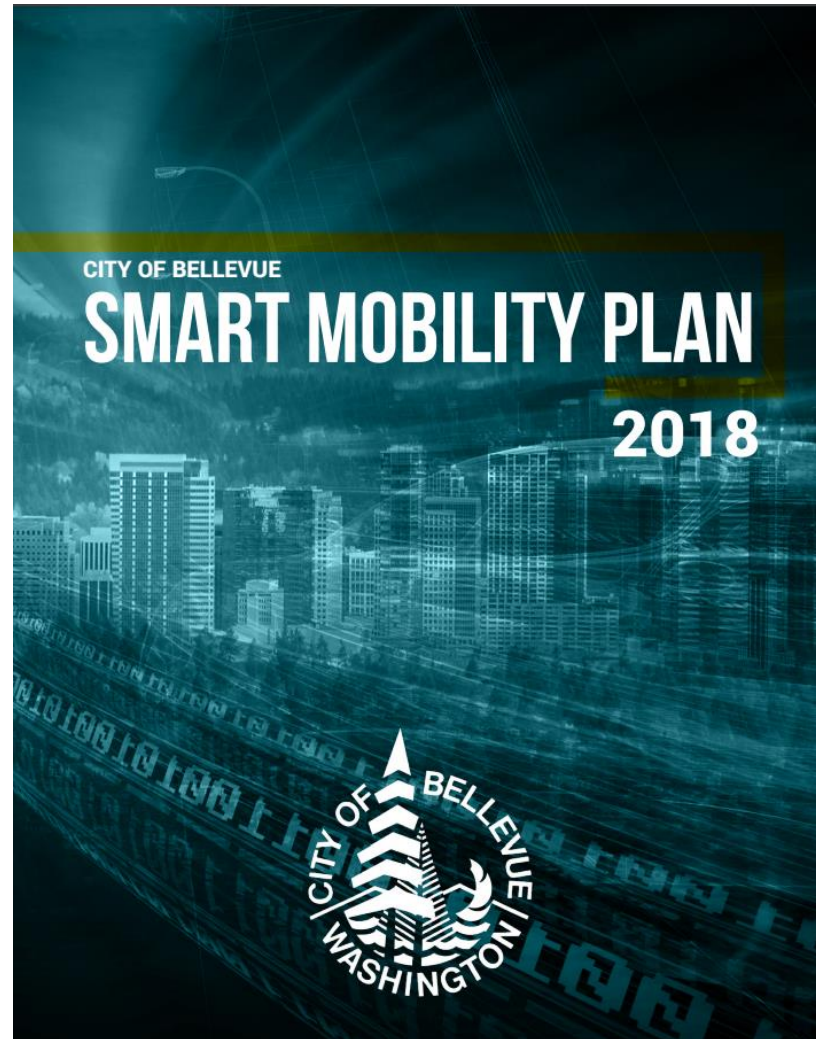


Update on current AV testing in Bellevue



Future AV Project Opportunities

# Smart Mobility Plan



# Strategic Vision for Automated Vehicles



# Regional Goals for Bellevue/Seattle



Improve Safety



Invest in Innovation



Ensure Transportation Equity



Leverage Strategic Partnerships



Increase Mobility Options



Enhance Sustainability

*Adapted from City of Bellevue 2018 Smart Mobility Plan; SDOT 2017 New Mobility Playbook, and Washington State AV Work Group 2018 Cooperative Automated Transportation Policy Framework*

# Stakeholder Outreach Findings

## Public Agency Outreach:



Seattle  
Department of  
Transportation



Puget Sound Regional Council



WASHINGTON STATE  
AUTONOMOUS VEHICLE  
WORK GROUP

## AV Manufacturer Outreach:



Motional

cruise

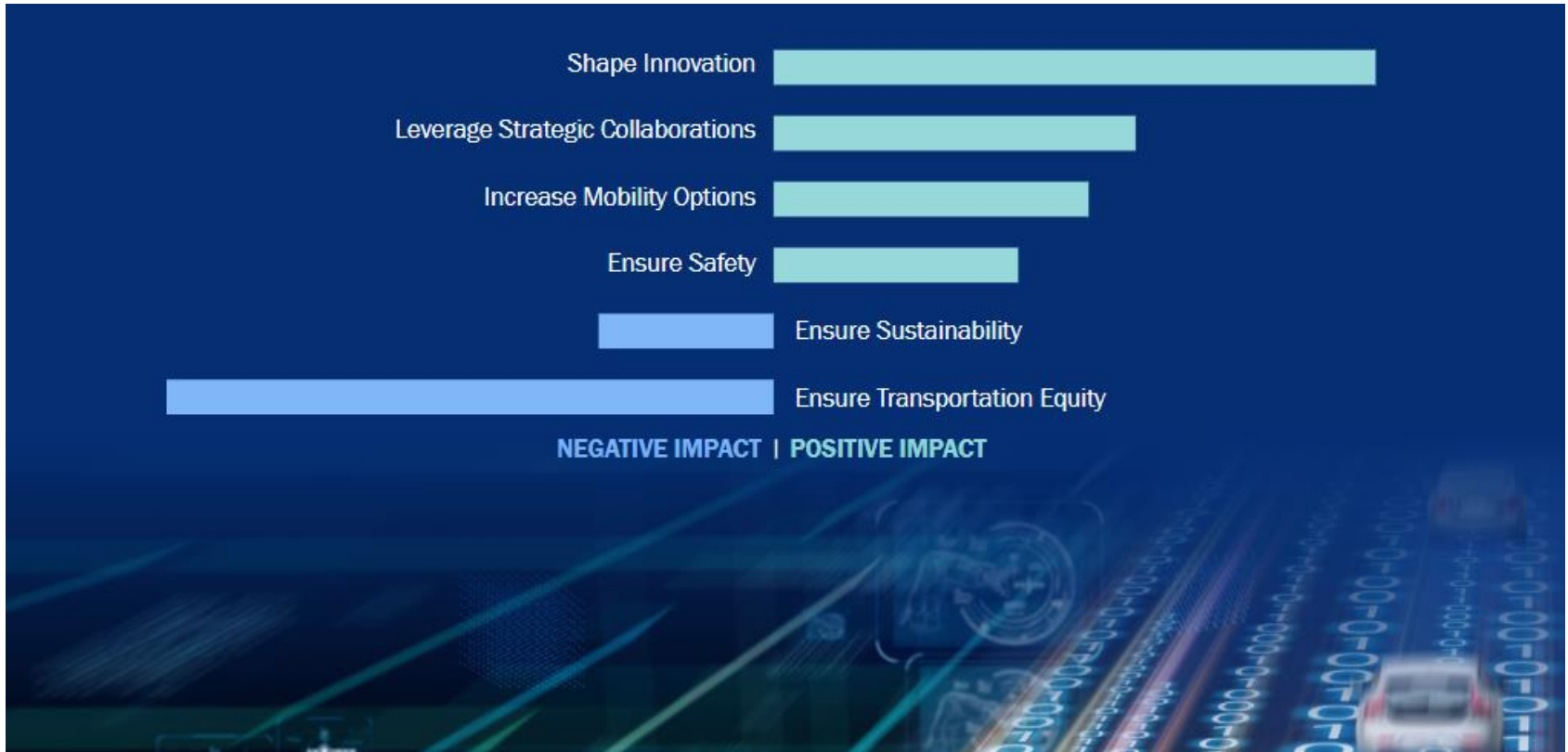


ZOOX

## Key Themes:

- **Consider AV Curb Usage**
- **Ensure Safety of AVs on Public Roads**
- **Improve Public Awareness for Technology**
- **Develop Streamlined Permitting Process**

# Sentiment Regarding AVs





# Top Opportunities and Risks for AVs

## Opportunities

1. New mobility options
2. Reduced collisions
3. Transit network support
4. Decreased vehicle ownership
5. Big Data insights

1. Increased congestion
2. Inequitable outcomes
3. Safety risks
4. Lack of infrastructure readiness
5. Technology obsolescence

## Risks

# Contrasting Between Two Approaches

Shaping the Outcome:



- Bellevue can identify AV service models that enhance the livability of the city.

Leaving it to Chance:



- AV companies may rely on services models that are profitable, which may not meet regional goals.

# AV Strategic Vision Actions



## Leverage Strategic Collaborations

Develop attributes for a successful strategic collaboration between the public and private sector using input from both the community and AV industry.

- Support educational initiative to improve trust in AVs
- Form partnerships with Bellevue communities in developing compatible AV service models
- Identify small scale pilots that provide opportunities for public experience



## Ensure Safety

Establish and implement a regulatory and legal framework for the safe testing and commercial operations of AVs on city streets across multiple jurisdictions.

- Establish local authority pathway to regulate AV testing and commercial operations
- Establish permit requirements for AV testing and commercial operations.

# AV Strategic Vision Actions



## Shape Innovation

Invest in infrastructure and policy to streamline integration of emerging transportation technology within the region's transportation network.

- Designate AV testing areas
- Identify opportunities to expand charging infrastructure to support electric AVs



## Ensure Transportation Equity

Drive performance goals to ensure equitable distribution of AV benefits and commit to ongoing monitoring of AV impacts.

- Formalize key performance indicators that can be used to evaluate the effectiveness of AV deployments on their ability to meet city goals.

# AV Strategic Vision Actions



## Increase Mobility Options

Identify and advocate for communities and user groups that can benefit the most from AVs.

- Identify high priority, community-focused use cases for AVs and partner with private sector for those use cases.
- Search for commonalities in goals among neighboring jurisdictions and stakeholders that inform policy decisions.
- Identify existing services that can be more efficiently and effectively served by AVs.



## Enhance Sustainability

Work proactively to shape the future land use and sustainability impacts of AVs.

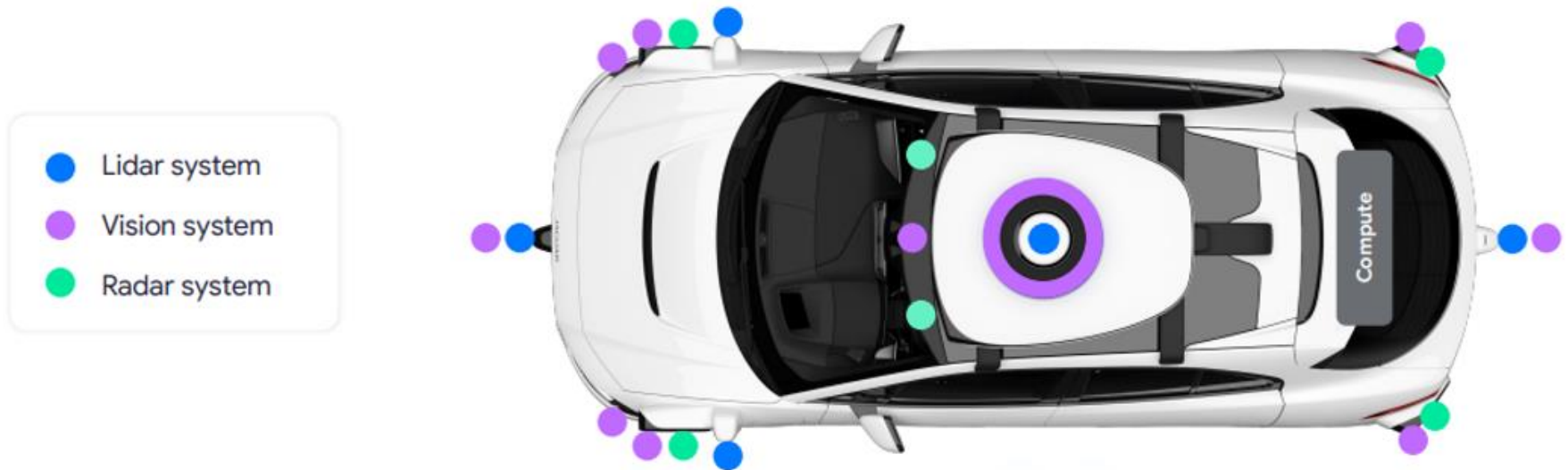
- Emphasize the need to reduce deadhead (or ZOV) miles and emissions
- Assess curbside assets

# Automated Vehicle Testing in Bellevue

- Waymo Jaguar i-PACE Vehicles
  - Level 4 Autonomy
  - 5 Vehicles
- Conducting inclement weather testing citywide
- Testing Period: October 2022 – April 2023
- Testing in fully autonomous mode with safety driver




# Automated Vehicle Testing in Bellevue



Waymo claims that the array of sensors allow the vehicles to see 3 football fields around it

# Automated Vehicle Testing in Bellevue

- Waymo is operating under the Washington Department of Licensing's Statewide AV Self-Certification Process
- No further permitting requirements specific to Bellevue

**Autonomous Vehicle Program  
Self-Certification**

**Business information**

Business name \*

Address \*

City \* State \* ZIP code \*

Contact name \*

Contact phone with area code (xxx-xxx-xxxx) \*

Contact email \*



# Upcoming Project Opportunities

- USDOT Strengthening Mobility and Revolutionizing Transportation (SMART) Grant
- WSDOT (State-Sponsored) AV Pilot – recommended for funding by WSTC

