



# AUTONOMOUS VEHICLES IN THE PACIFIC NORTHWEST

JULY 30, 2018 WORKSHOP, SEATTLE, WA

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# Workshop Goals

- **Understand Public/Private Sector Needs and Motivations**
- **Align Around Climate and Equity Goals**
  - **Areas of Coordination**
  - **Areas of Concern**
  - **Opportunities to Define Landscape**
- **Identify Actionable Next Steps**
- **Establish Ongoing Dialog**

# Baseline Report

- Literature Review
- Policy Comparative Analysis
- Workshop #1



## AVS IN THE PACIFIC NORTHWEST: REDUCING GREENHOUSE GAS EMISSIONS IN A TIME OF AUTOMATION

FINAL DRAFT BASELINE REPORT | JULY 2018



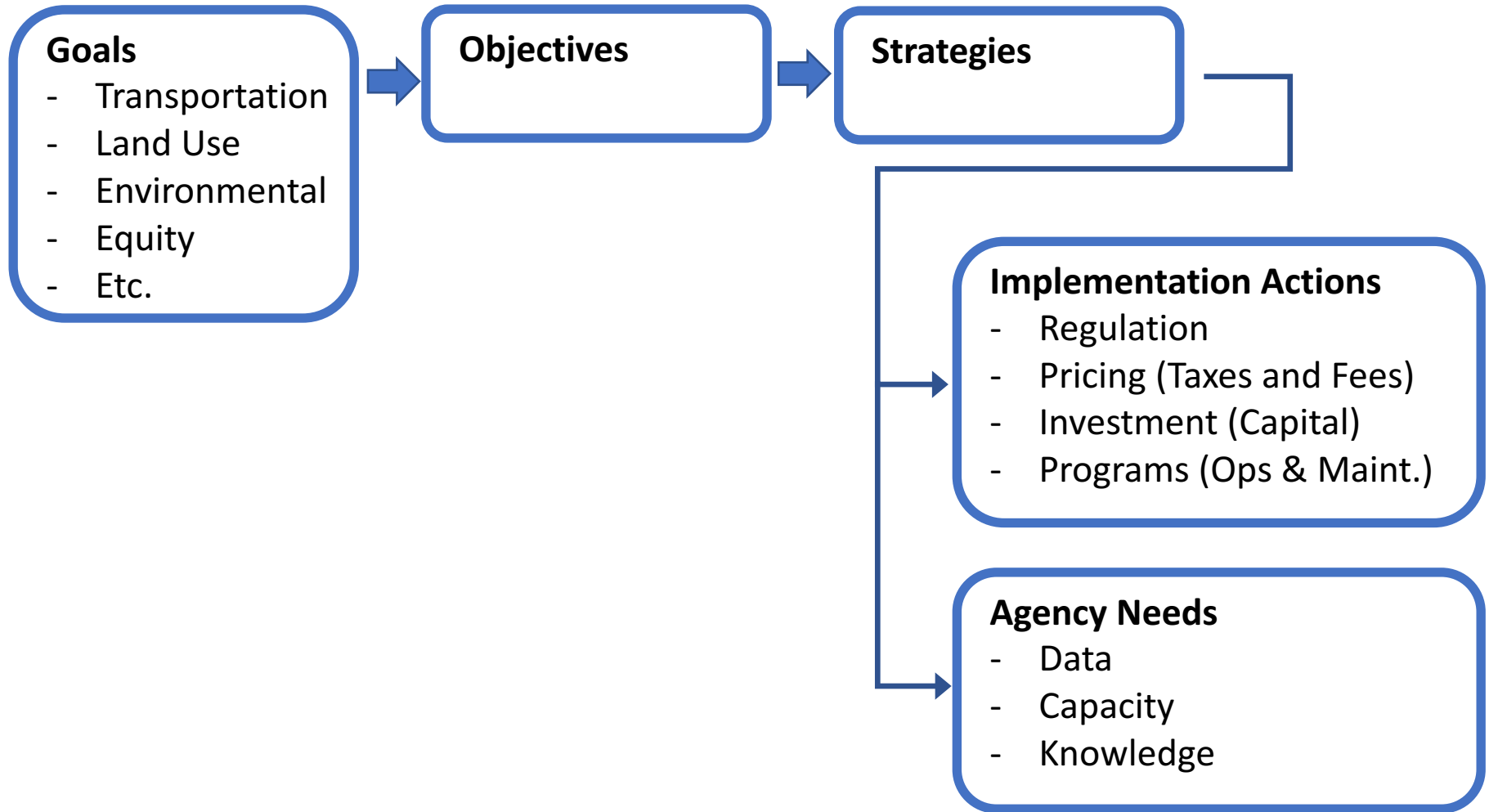
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# NEW MOBILITY POLICY DEVELOPMENT



# **GOAL: MINIMIZE GREENHOUSE GAS EMISSIONS**

## **POLICY OBJECTIVES**

1. Maximize Accessibility While Reducing Energy Use
2. Enable Efficient Freight and Goods Movement
3. Prioritize Clean Energy Sources
4. Limit Metropolitan Footprint Expansion
5. Adapt to Land Use Changes Over Time

# **GOAL: MINIMIZE GREENHOUSE GAS EMISSIONS**

## **GOVERNANCE AND OPERATIONAL OBJECTIVES**

1. Update Structures and Facilitate Communication
2. Promote Culture of Innovation and Flexibility

# Workshop Agenda

- 9:00 Welcome and Introduction**
- 9:20 Background and Goals**
- 9:40 City Goals and Key Strategy Questions**
- 10:00 Equity Framework**
- 10:30 Technology and the City (Company Presentations)**
- 12:00 Lunch**
- 12:30 Discussion on Climate and Equity Goals**
- 4:00 Report Back / Large Group Discussion**

# URBANISM NEXT | FRAMEWORK

## SECONDARY IMPACTS

### LAND USE



#### RETAIL/COMMERCIAL/ OFFICE/INDUSTRIAL (EMPLOYMENT USES)

How will the changing nature of travel, employment and shopping impact retail, commercial, and industrial districts?



#### HOUSING

What are the opportunities to increase housing through infill? Will people choose to locate in cities? Or move farther out in the suburbs?



#### PARKS & OPEN SPACE

How do we protect open space under the pressure to expand cities? What opportunities are there to reclaim parking lots for parks?

### URBAN DESIGN



#### METROPOLITAN FOOTPRINT

When proximity to workplaces and goods/services is no longer holding people in cities, what will happen to their already sprawling footprints?



#### STREET DESIGN

As cities make plans for future expansions, changes to their street network, the inclusion of various modes/complete streets, and overall street design – what should they be considering?



#### CENTERS AND CORRIDORS

Will AVs support transit to strengthen current nodes and corridors or will they lead to more dispersal with continuous low-density development?



#### DENSIFICATION

How and where will AVs and new mobility increase or decrease development density?



#### PLACE/IDENTITY

When shopping and transportation can be acquired anywhere, what happens to business districts, shopping districts and neighborhoods?



#### PARKING (URBAN FORM)

How will reduced need for parking impact urban form?

### TRANSPORTATION



#### WALKING

How will we regulate the interactions between pedestrians and vehicles? What happens when pedestrians can stop AVs by simply stepping into the street?



#### BIKING

Will the mixing of modes be frowned upon because it is such a limitation to AV efficiency? Will some areas ban bikes? How will bikes work around curbside deliveries and dropoff.



#### PARKING (TRANSPORTATION)

What happens if parking utilization needs drop dramatically over a short period of time. How quickly will parking requirements shift with that?



#### VEHICLES

One of the biggest questions is: Preliminary models of individual ownership of AVs show VMT increasing dramatically. Will AVs be fleets or individually owned?



#### TRANSIT

Already, transit ridership has declined approximately 10% because of ridesharing companies. What happens to transit when AVs are deployed?

### REAL ESTATE



#### LAND VALUE

A reduction in demand for parking will open up between 10% and 20% of land for redevelopment. How will this impact land value and project feasibility?



#### PROJECT FEASIBILITY

Development will likely get more risky as market conditions related to parking demand and commercial and retail viability change. How do we reduce risk?



#### BUZZ/VITALITY

What will draw people to places in the future? How important will entertainment factor in to where people want to congregate? How do we create "buzz"?



#### QUALITY

If location in relation to other areas of the city is no longer a strong factor in housing/commercial building location, will quality of design become more relevant in attracting and keeping people in cities/neighborhoods?

## IMPLICATIONS FOR ...

### EQUITY

How will the impacts of emerging technologies impact vulnerable and low income populations? What opportunities are there to improve services and reduce inequities?

### HEALTH

Preliminary research finds that people are replacing walking, biking, and transit trips with rideshare services. If this trend continues and is exacerbated by AVs, what will the impact be on our health? What are the impacts of E-commerce on health?

### ENVIRONMENT

How can we take advantage of emerging technologies to improve sustainability and environmental outcomes? Can we reduce GHG emissions? Can we improve stormwater treatment?

### ECONOMY

Up to 4 million people drive for a living. What happens to their jobs with the deployment of AVs? Brick-and-mortar stores are closing as shoppers go online. How will emerging technologies disrupt the economy?

### GOVERNANCE

Emerging technologies will disrupt revenues for cities, counties, and states. How do we provide a great level of service and support thriving communities?

## RESPONSE

### WHAT SHOULD WE DO?

Given the possible range of secondary impacts of emerging technologies on land use, urban design, transportation, and real estate, and the implications on equity, the economy, and the environment, **how should governments, companies, and institutions respond to maximize the benefits and minimize the risks?** How do policies, programs, and infrastructure investments need to adapt and change?





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