Automated Mobility in Portland, Seattle, and Vancouver, B.C.

Aligning Priorities, Principles, and Outcomes for Automated Mobility
“Instead of adapting our cities to accommodate new transportation technologies, we need to adapt new transportation technologies to our cities in ways that make them safer, more efficient, and better places to live and work.” – Janette Sadik – Kahn
Portland New Mobility Goals & Policies

New mobility will:

• Advance Vision Zero for all users, especially for vulnerable road users
• Cut vehicle climate pollution
• Increase equitable access to new mobility services and prevent displacement by expanding economic opportunity
• Increase the mode share of active and shared trips

Portland will: establish clear rules and incentives to support services that advance our values
Seattle’s New Mobility Playbook

Anticipating change based on values

• Establish people-centered framework to shape changes (rather than react to changes)
• Acknowledge changes
• Daylight upsides and downsides
• Adapt our response iteratively
Seattle’s New Mobility Playbook
Anticipating change based on values

Our five plays are to:

**PLAY 1:**
Ensure new mobility delivers a fair and just transportation system for all

**PLAY 2:**
Enable safer, more active, and people-first uses of the public right of way

**PLAY 3:**
Reorganize and retool SDOT to manage innovation and data

**PLAY 4:**
Build new information and data infrastructure so new services can “plug-and-play”

**PLAY 5:**
Anticipate, adapt to, and leverage innovative and disruptive transportation technologies
Vancouver’s Future Mobility Workplan

1. Planning & Policy Development
2. Working with Others
3. Explore & Test Innovation
4. Planning for Resilience
5. Future Proof Parking & Civic Infrastructure

TRANSPORTATION PLAN TARGETS

- 2008: 40% of all trips on foot, bike, or transit
- 2020: at least half of all trips on foot, bike, or transit
- 2040: at least two-thirds of all trips on foot, bike, or transit

Motor Vehicle | Transit | Walk | Bike

07/30/2018
Vancouver’s Future Mobility Workplan
## Shared Automated Mobility Emerging Priorities, Principles, and Outcomes

<table>
<thead>
<tr>
<th>Eliminate fatalities and serious injuries (Vision Zero)</th>
<th>Increase the mode share of active and shared trips</th>
<th>Cut climate pollution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase equitable access and economic opportunity</td>
<td>Partner with communities and service providers</td>
<td>Adopt clear rules that support community values</td>
</tr>
</tbody>
</table>
How might we...

**CATEGORY 1: SAFETY, EQUITY, AND WEALTH BUILDING**

- ...achieve Vision Zero (zero fatalities and serious injuries)?
- ...use technology to make the street friendlier for people walking and biking, and encourage active transportation?
- ...increase access to jobs, education, and daily needs for disadvantaged people?
- ...prevent displacement by building wealth (e.g. jobs) for disadvantaged people?
- ...allow people to book and pay for automated mobility services without a credit card, a bank account, or a smartphone/device?
How might we...

CATEGORY 2: CLIMATE AND SYSTEM MANAGEMENT

• ...reduce Vehicle Miles Traveled (VMT) and significantly increase walking, bicycling, transit, and shared ride mode shares?

• ...manage the number of personal delivery trips to prevent adding to congestion and climate pollution?

• ...share information (real time data) so cities can effectively and efficiently manage the transportation system and ensure compliance while protecting trade secrets and personally identifiable information?

• ...create incentives and nudges to encourage people to use the most economical, most operationally efficient, and environmentally-friendly shared or new mobility service?

• ...encourage and create a system that uses data, technology, and smaller, cleaner, multi-use vehicles to deliver e-commerce and urban goods?
Equity Frameworks for Automated Mobility

Centering the AVs around equitable and just outcomes in Portland, Seattle, and Vancouver

CNCA/USDN AVs and GHG Project Workshop
Seattle Department of Transportation
Naomi Doerner
07/30/2018
Transportation Equity Framework

• Background
• Key Systemic Challenges
• Transportation Equity Program Overview
• Insights from EU-US Transportation Research Board Symposium
• Q/A
Battling Inequality, Seattle Bets on Transit-Oriented Housing

KEVIN LAPP

A new regional revolving loan fund will support affordable homes close to bus or rail corridors throughout the Puget Sound area.
Background

• Seattle is one of the fastest growing U.S. cities; We’ve gained over 100K residents in the last 20 years (57 people per day) and anticipate gaining another 120K residents in the next 20 years;

• Our growth has created jobs and wealth for many; It has also deepened the income inequality gap along racial lines

• Transportation is the 2nd highest household cost after housing, disproportionately affecting cost-burdened households

• As our population grows, how equitably we connect people to opportunity through affordable transportation options will determine our city’s long-term success
Background

• In Seattle, low-income people and families most cost-burdened are:
  • People of color, immigrant and refugee communities, and other underserved populations
  • Live in areas where barriers to access to transportation and opportunity persist
  • Are at high risk of displacement

• In 2014, Seattle voters approved the Seattle Transportation Benefits District, which generates $45M annually to expand transit service, including $2M for a low-income access to transit program:
  • $1M for low-income access to transit (ORCA Lift)
  • $1M for low-income youth access to transit (Youth ORCA)

• In 2015, SDOT’s annual free-floating parking permit was revised to create income-eligible access to new mobility services and off-set related services costs
  • $500 per vehicle per permit
Resolution 31773

Affirms the City and SDOT’s commitment to RSJI and recognized the Creation of the Transportation Equity Program

Relevant to the Transportation Equity Committee:

“...support the creation of a group or committee comprised of those affected by barriers to safe, environmentally sustainable, accessible, and affordable transportation options to provide guidance on the program’s development and strategies” Section 2A2

“...prioritize affordability and co-create additional transportation equity goals, strategies, indicators, and measures in partnership with community members and stakeholders, as well as the Mayor, City Council, and City of Seattle departmental agency and equity leads.” Section 2C3
Executive Order 2017-13: Race and Social Justice Initiative

An Executive Order affirming the City of Seattle’s commitment to the Race and Social Justice Initiative (RSJI).

Section 2.

The City continues to hold racial equity as a value and shall apply a racial equity lens in its work, with a particular focus in 2018 on actions relating to:

• Affordability
• Transportation Equity
New Mobility, Equity, and Climate:

Known equity and climate challenges

Systemic

• Decision-making and “Advancements” “for us, without us”
• Displacement and associated mobility impacts
• Affordability
• Digital equity
• Geographic and physical accessibility – “Tech-lining”
• Banking, securitization, and payment options
• Data security, ownership and targeted advertising
New Mobility, Equity, and Climate:

Known equity and climate challenges

Enabling

• Access, availability, and discrimination
• Integration with lifeline public transit
• Culturally-appropriate services (e.g., vehicle size), education, and marketing
• Language access

Build an agenda by the real experts... the community!
Program Overview

The Transportation Equity Program was established in 2017 using a racial equity and social justice lens to:

• Provide safe, environmentally sustainable, accessible, and affordable transportation options

• Support low-income communities to thrive in place:
  • Communities of color
  • Immigrant and refugee communities
  • People with disabilities
  • People experiencing homelessness or housing insecurity
  • LGTBQ people
  • Women and girls
  • Youth
  • Seniors

• Mitigate racially disparate outcomes related to displacement
Program Overview:
Community-based and equity-centered Framework

- **Stakeholders**
  - Community members
  - Community-based Organizations
  - City staff
  - Elected Officials
  - Funders

- **Methods**
  - Listening & learning
  - Community events
  - Site Visits & Tours
  - Capacity building

- **Activities**
  - Test & pilot
  - Assess & Refine
  - Track Progress
  - Report Progress

- **Targets**
  - Needs
  - Goals
  - Strategies
  - Measures

- **Affordability**
- **Programming**
- **Engage**
- **Build**
- **Implement**
- **Define**
Program Overview:
Focus areas

Cross-sector partnerships with organizations serving low-income communities.

- Affordable Housing & Housing Security
- Health & Food Access
- Environment & Access to Recreation
- Job Access & Workforce Development
- High-risk Displacement Areas
- Schools & Youth-Based
- Arts, Culture, & Faith-based

Engagement
Capacity Building
Research & Policy Innovation
Programming
Agenda Setting
2018 Work Plan Highlights

Engagement, Programming, & Policy Innovation (Q1 – Q4; Cont.)

- Ambassador Program
- Go SEA! Mobility Fairs
- Income eligible access to transit
- DON Community Conversations
  - Income eligible car share pilot
  - Affordable housing + income eligible transit access pilot
  - Marketing and communications

Research & Capacity Building (Q1-Q3)

- Hire program staff
- Baseline research & assessments
- Hire facilitation consultant
- Establish & convene paid community-based transportation equity committee
- Provide equity advisement to T&M managers and build staff capacities
- Seek funding resources & partners

Agenda Setting (Q3 – Cont.)

- Identify Transportation Equity opportunities
- Co-create a shared vision for Transportation Equity
- Establish goals
- Create key performance indicators
- Define data collection and methods for tracking indicators and outcomes
- Draft, review & publish Agenda
Seattle’s DOT Is Rethinking Transportation Equity

BY JOSH COHEN | JANUARY 12, 2018

In one of its first actions of 2018, the Seattle City Council unanimously adopted a resolution affirming its commitment to racial equity and social justice in...
Socio-Economic Impacts of Connected & Automated Vehicles (CAVs): EU-US Transportation Research Board (TRB) Symposium

• Purpose: Discuss and compare the impacts CAVs have/will have on workforce, economy, community, land-use and transportation equity

• Outcome: Refined research questions and case studies are needed for better decision-making understanding; TRB Research RFPs will be announced in Jan. 2019

• Takeaways:
  • Unregulated CAV future is detrimental to society and economy, with highest cost and burden on vulnerable communities
  • Benefits of well regulated CAV will require assessment and affirmation of values, legal frameworks and ethics
  • Liability, insurance and data security risks are among some of the greatest challenges and questions
Socio-Economic Impacts of Connected & Automated Vehicles (CAVs):
EU-US Transportation Research Board (TRB) Symposium

• European Commission “Horizon 2020”
  “proposal to generate ideas, growth and jobs through the world’s largest collaborative programme for research and innovation (2014-2020).”

• Four main priorities for transport research under Horizon 2020 are:
  • Making transport more sustainable: resource-efficient transport that respects the environment.
  • Making transport and transport systems seamless: better mobility, less congestion, greater safety and security.
  • Keeping transport competitive: the European transport industry as a global leader.
  • Making transport research responsive: socio-economic research and forward-looking activities for policy-making.