What job do we need AVs to do?

- Deliver resources and goods to homebound populations (ex. medicine, food, etc.)
- Data and information must be collected and delivered to vehicles in real-time
- AVs must reduce crashes and improve safety
- Connect to larger transit system through scaled services (first/last mile/ shuttles)
How can AV technology expand access to healthcare, employment, education & recreation for all users of the transportation system and all ages, abilities, and incomes?

- Ambulatory services & connected passengers – mobile information hubs could deliver medical information and a diagnosis to hospital or medical facility before a patient arrives by AV.
- Improve transportation reliability for low-wage workers to get to work and reduce turnover for employers.
- AV technology could be used to provide one-way car sharing.
How will AVs impact the transportation ecosystem?

- Public roads could become privatized
- Insurance market impacts
- Access and sharing of data could become problematic – as services become privatized, data becomes a commodity that governments are required to purchase in order to provide high quality infrastructure and appropriate programming
- Privacy concerns and increased exposure to advertising and marketing
- Mobility and transportation could shift to a subscription service
- There will be new economic opportunities as companies develop products and services that can be offered while using an AV.
Other Benefits/Costs of widespread deployment of AVs for cities & metropolitan regions

- AVs could provide an opportunity for the acceleration of smart grid and EV charging technology (i.e. inductive charging) that can reduce the need for new power plants.
- Better information can improve government programs and services.
- Data sharing or an open data system can improve government transparency and cultivate an environment for innovation that could deliver improved or new products and services.
SMART COMMUNITIES TASK FORCE

AV/CV – Readiness

Part 2: June 13, 2018

Where are we now?
Identify key issues & topic areas
Discuss roles & responsibilities

What are barriers to:
- adopting new technologies
- AV/CV-Readiness

Identify solutions to barriers & challenges

Create an Action Plan
Federal responsibilities:

- Setting safety standards for new motor vehicles & motor vehicle equipment;
- Enforcing compliance with safety standards;
- Investigation & managing the recall & remedy of non-compliances & safety-related motor vehicle defects on a nationwide basis;
- Communicating with & educating the public about motor vehicle safety issues;
- When necessary, issuing guidance to achieve national safety goals
State responsibilities:

• Licensing (human) drivers & registering motor vehicle sin their jurisdictions;
• Enacting & enforcing traffic laws & regulations;
• Conducting safety inspections, when States choose to do so; and
• Regulating motor vehicle insurance & liability
Local & regional responsibilities:

1. Planning & Policy Recommendations
2. Capital project programming
3. Funding sources
What is the definition of successful AV deployment?
What infrastructure is needed to support AVs?
What are the barriers to AV deployment?
What planning tools are already available to communities?

How can they be adapted for AV-Readiness?
<table>
<thead>
<tr>
<th>Topic</th>
<th>Example Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity and Accessibility</td>
<td><strong>EA1:</strong> Ensure the benefits of automated mobility are equitably distributed across all segments of the community and that the negative impacts of automated mobility are not disproportionately borne by traditionally marginalized communities.</td>
</tr>
<tr>
<td>Pilots and Partnerships</td>
<td><strong>PP1:</strong> Develop strategic pilot partnerships to test automated vehicle technology in Seattle’s climate, hilly terrain, and urban traffic conditions.</td>
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</tbody>
</table>
| Infrastructure and Street Design | **IS1:** As vehicle ownership decreases and reliance on shared automated vehicle fleets increases:  
  • Capitalize on system efficiencies to implement our transit, bicycle, and pedestrian master plans.  
  • Capitalize on opportunities to invest in placemaking features and expand the pedestrian realm.  
  • Identify and phase in corridors and zones dedicated to transit, walking, and high-occupancy automated vehicles only. |
| Mobility Economics           | **ME1:** Develop a tiered and dynamic per-mile road use pricing mechanism for automated vehicles operating in highly congested areas and corridors of Seattle:  
  • Tier 1 (elevated surcharge): Zero-occupant automated vehicles  
  • Tier 2 (base surcharge): Single-occupant automated vehicles  
  • Tier 3 (reduced surcharge): Automated vehicles using smart lanes with less than three passengers  
  • Tier 4 (no surcharge): Automated vehicles using smart lanes with three or more passengers  
  • Tier 5 (additional surcharge on Tiers 1–3): Peak travel period surcharge for all nonpublic transit vehicles trips with less than three passengers, including freight |
| Land Use and Building Design | **LB1:** Ensure automated vehicles advance our land-use goals and capture the value of transit-oriented development. |
How can communities use AV-Readiness to repair sprawl?
How does transit stay competitive?

**Red Ocean Strategy**
- Competition: Shared mobility rivals
- Fight in 20% of market
- Protectionism
- Marginal gains/loss
- Unchanged customer volume

**Blue Ocean Strategy**
- Competition: Private owned cars
- Target 80% of market
- Partnering
- Expansion

5% = 25% more shared mobility
How do we educate local policy makers, planners, engineers & user-consumers?
How do we support local AV-Readiness planning?
Funding AV-Readiness
User fees
  - Gas tax
  - Tolling
  - VMT fee

General taxes (everyone pays)

Non-user beneficiary (mobility provider)
Next Steps

Where are we now?

Identify key issues & topic areas

Discuss roles & responsibilities

What are barriers to:
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Identify solutions to barriers & challenges

Create an Action Plan
Thank You

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