Preparing for Autonomous Vehicles

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IPMA Forum

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- Works like magic
- No stylus
- Far more accurate
- Ignores unintended touches
- Multi-finger gestures
- Patented!
“There’s no chance that the iPhone is going to get any significant market share. No chance....”

Steve Ballmer, CEO Microsoft, 2007

“The iPhone’s impact will be minimal. It will only appeal to a few gadget freaks. Nokia and Motorola have nothing to worry about.”

Bloomberg Analyst, 2007
• Promise
• Peril
• Plan

Get Ready!
GM's Self-Driving Cars to Be Ready for Ride-Sharing in 2019

Uber signs deal to buy up to 24,000 autonomous vehicles from Volvo

Waymo to buy 'thousands' of minivans for self-driving vehicle service
Convergence

https://electrek.co/
Trends reinforce

Person Miles Traveled

Electric Vehicles

Vehicle sharing w/smart-phone

Autonomous Vehicles
Trends reinforce

Person Miles Traveled

Electric Vehicles

Vehicle sharing w/smart-phone

Autonomous Vehicles
Trends reinforce

Person Miles Traveled

0% 50% 100%

Electric Vehicles 90%

Vehicle sharing w/smart-phone 90%

Autonomous Vehicles 90%
BETTER & CHEAPER

- No driving
- No parking
- No fueling
- No repairs
- Safer

- 10X utilization
- Falling vehicle cost
- Low operating cost
- Low insurance
- Low finance
W. Seattle to Boeing Field

- Transit > 1 hour
- $0.55 per mile → $0.16
- 70% cost savings
- Annual savings: $3,300
**Resist**
- Love of driving
- Fear & distrust
- Liability
- Job loss

**Embrace**
- Love of tech
- Ride-sharing
- Millennials
- Labor shifts
Urban mobility transformed in 10 years
Greenhouse emissions slashed
Land freed from parking cars

Projected trends in fleet size and composition

- Individual ownership
- TaaS
- Stranded individual ownership

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Rethinking our streets
Percentage of respondents reporting a shock over a 12-month period, by type.

- Major home repair: 24%
- Major car repair: 30%
- Divorce, separation, or widowing: 4%
- Trip to hospital: 24%
- Pay cut: 24%
- Other large expense: 10%

Notes: This data is from a 2015 national survey of more than 7,800 households. Respondents could have experienced none, one or more of the identified shocks.

Source: Pew Charitable Trusts
increase productivity
Reduced Cost

Improved Mobility

Increased Safety

Reduced GHGs

Land from parking

Reduced Congestion*

Boost to Productivity

Improved Regional Competitiveness*
Potential downsides

- Job loss
- Road finance
- Congestion
- Sprawl
- Privacy & data security
## Potential downsides

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
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<tbody>
<tr>
<td>Job loss</td>
<td><strong>Create pathways to growing sectors</strong></td>
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<tr>
<td>Road finance</td>
<td></td>
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<tr>
<td>Congestion</td>
<td><strong>Price roads efficiently</strong></td>
</tr>
<tr>
<td>Sprawl</td>
<td></td>
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<tr>
<td>Privacy &amp; data security</td>
<td><strong>Set rules</strong></td>
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GET READY
Co-producer & regulator

- Private fleets on public roads
- Guard the public interest
Action agenda: 2018

1. Build capacity to engage new policy area
2. Convene regional players
3. Recruit companies for 2019
4. Identify funding
Action agenda: 2018 - 2019

1. Rules of the road
   a. Clarify roles & responsibilities
   b. Regulatory framework for TNCs

2. Model ordinances for cities
   a. Public safety
   b. Roadway & sidewalk rules
   c. Parking

3. Policy to mitigate downsides
   a. Ensure competition
   b. Variable road pricing by time of day and location
   c. Pathways for displaced workers
Thank you!

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