Distance Based User Fees with Shared Mobility

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Overview

- Quick background on Distance Based User Fees
- Why our partnership with FHWA is focused on Shared Mobility
- Leveraging emerging trends in transportation
- Benefits of clarity and simplicity
- Timeline
Distance Based User Fee
the reasons you should

Price $ Use

Loss of Purchasing Power

Source: USDOT FHWA
Distance Based User Fee
the reasons you shouldn’t

Administrative expense

Scalability

Privacy

Public concerns

Getting the fee right is a challenge
Responding to shift in how we do transportation

- **CURRENT**
  - Individual Ownership
  - Perception
  - Relationship with Transportation
  - User Pays

- **EMERGING**
  - Shared Mobility
  - Perception
  - Relationship with Transportation
  - User Pays
Objective

Prove that on-board embedded technology in Shared Mobility fleet vehicles can be used to efficiently and effectively collect distance based fees.
Advantages To This Approach?

• Incremental

• Leverages the opportunity of an emerging, but existing use of transportation

• Data already available on shared use vehicles

• Avoids many – but not all – privacy concerns related to individual vehicle ownership

• Allows the motor fuel tax to continue to perform where appropriate
Challenges Ahead?

• Not an immediate and universal path to implementation
• Requires an added burden to shared mobility providers
• State and federal agencies are needed for implementation
• Some form of regulation in the long run
Convergence
Automated Vehicle Adoption Forecast

The Transportation Futures Project: Planning for Technology Change, January 2016, Dr. David Levinson, University of Minnesota; Research conducted for the Minnesota Department of Transportation. 
Clarity & Simplicity
Benefits Shared Mobility, Electrification and Automation

Source:
sunvalleysolar.com
Sharedmobilitycenter.com
Google.com
Shared Mobility
Benefits the system & aligns with our transportation Vision

- Opportunity to reduce VMT
- Green house gas reduction
- Provide multi modal options
- Equitable access to mobility
- Efficient and affordable

Source: Shared Use Mobility Center
<table>
<thead>
<tr>
<th>City</th>
<th>Applicable Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoboken, New Jersey</td>
<td>7% sales tax (state)</td>
</tr>
<tr>
<td></td>
<td>$5 fee per auto rental (state)</td>
</tr>
<tr>
<td>Pittsburgh, Pennsylvania</td>
<td>7% sales tax (state &amp; county)</td>
</tr>
<tr>
<td></td>
<td>2% auto rental tax (state)</td>
</tr>
<tr>
<td></td>
<td>$2 fee per auto rental (county)</td>
</tr>
<tr>
<td></td>
<td>$2 fee per auto rental (state)</td>
</tr>
<tr>
<td>Tempe, Arizona</td>
<td>9.3% sales tax on rentals (state, county &amp; city) 3.25% rental surcharge (county), minimum $2.50</td>
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<tr>
<td>Philadelphia, Pennsylvania</td>
<td>8% sales tax (state &amp; county)</td>
</tr>
<tr>
<td></td>
<td>2% vehicle rental tax (state)</td>
</tr>
<tr>
<td></td>
<td>2% vehicle rental tax (county)</td>
</tr>
<tr>
<td></td>
<td>$2 fee per day per rental (state)</td>
</tr>
<tr>
<td>Miami, Florida</td>
<td>7% sales tax (state &amp; county)</td>
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<tr>
<td></td>
<td>$2 per day auto rental surcharge (state)</td>
</tr>
<tr>
<td>Albuquerque, New Mexico</td>
<td>7% sales tax (state, county &amp; city)</td>
</tr>
<tr>
<td></td>
<td>5% auto rental tax (state)</td>
</tr>
<tr>
<td></td>
<td>$2 per day auto rental surcharge (state)</td>
</tr>
<tr>
<td>Colorado Springs, Colorado</td>
<td>7.4% sales tax (state, county &amp; city) 3% auto rental tax (county &amp; city)</td>
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<tr>
<td></td>
<td>$2 per day auto rental fee (state)</td>
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<tr>
<td>Fayetteville, Arkansas</td>
<td>9.25% sales tax (state, county &amp; city) 10% auto rental tax (state)</td>
</tr>
<tr>
<td></td>
<td>3.25% auto rental tax (local)</td>
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<tr>
<td>Hartford, Connecticut</td>
<td>6% sales tax (state)</td>
</tr>
<tr>
<td></td>
<td>3% auto rental tax (state)</td>
</tr>
<tr>
<td></td>
<td>$1 per day tourism surcharge (state)</td>
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<td>New York, New York</td>
<td>8.875% sales tax (state, city)</td>
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<tr>
<td></td>
<td>6% auto rental tax (state)</td>
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<tr>
<td></td>
<td>5% auto rental tax (metro commuter district)</td>
</tr>
<tr>
<td>Seattle, Washington</td>
<td>9.5% sales tax (state, county, local) 9.7% auto rental tax (state/local)</td>
</tr>
</tbody>
</table>
Electric Vehicles
Cost clarity & simplicity

Source: energy.gov
Our Goals

1. Develop a reliable and secure DBUF model that can be integrated with state revenue systems
2. Get the price right
3. Efficiency of administration
4. Chart path forward for wider implementation
Research Team

Federal Highway Administration (Research Grantee)

Minnesota Department of Transportation (Lead)

University of Minnesota (Social/Economic Research)

WSP Consultants (Technical Evaluation and Planning)
Fall 2017 – Conduct baseline research with shared mobility providers, public sector administrators, and transportation stakeholders

Winter 2017 – Develop concept of operations

Spring 2018 – Conduct small scale pilot (proof of concept)

Summer 2018 – Deliver concept of operations and demonstration plan to Federal Highway administration
Thank you!

For further information please contact me at:

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