The benefits and impacts of road usage charges

June 14, 2019
The motor fuel tax will not be sustainable in the long term

State motor fuel tax revenue with rate increased by 19 cents and indexed to inflation, forecasted (draft)

Source: Chicago Metropolitan Agency for Planning analysis of National Highway Traffic Safety Administration Corporate Average Fuel Economy Fact Sheets; Illinois Department of Transportation data; 2009 National Household Travel Survey data.
Vehicle fuel economy is forecast to increase

Source: Chicago Metropolitan Agency for Planning analysis of National Highway Traffic Safety Administration Corporate Average Fuel Economy Fact Sheets; Illinois Department of Transportation data; 2009 National Household Travel Survey data.
To meet growth in capital costs and needs, more revenue will be needed.

State motor fuel tax revenue with rate increased by 19 cents and indexed to inflation, forecasted (draft).

Revenues from road usage charge, forecasted (draft).

Source: Chicago Metropolitan Agency for Planning analysis of National Highway Traffic Safety Administration Corporate Average Fuel Economy Fact Sheets; Illinois Department of Transportation data; 2009 National Household Travel Survey data.
ON TO 2050 recommends replacing the motor fuel tax with a road usage charge
A long-term solution that can adapt to emerging trends
User fees paid by those who gain the most benefit from the system.
State government participation in road usage charge pilot programs

- **Completed pilot**
- **Planning/implementing pilot**
- **Coalition member**

What should a pilot program look like in Illinois?

Emphasize public education and build acceptance

Allow sufficient time to devise, implement, and evaluate the program

Include wide ranging representation in project oversight and on advisory committees

Set guiding principles to shape the program

Consider unique opportunities for Illinois
Transitioning to a road usage charge would have small impacts on most households.
## Impact varies by vehicle model

<table>
<thead>
<tr>
<th>Model</th>
<th>Miles per gallon</th>
<th>Annual MFT payment ($0.19 per gallon, 10,000 miles)</th>
<th>Payment change from $98 annual RUC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chevrolet Volt 2013 Plug-in Hybrid</td>
<td>37</td>
<td>$51</td>
<td>$46</td>
</tr>
<tr>
<td>Honda CR-V 2013</td>
<td>26</td>
<td>$73</td>
<td>$24</td>
</tr>
<tr>
<td>Chevrolet Impala 2007</td>
<td>21</td>
<td>$90</td>
<td>$7</td>
</tr>
<tr>
<td>Toyota Sienna 2011</td>
<td>19</td>
<td>$100</td>
<td>-$3</td>
</tr>
<tr>
<td>Dodge Caravan/Grand Caravan 2005</td>
<td>18</td>
<td>$106</td>
<td>-$8</td>
</tr>
<tr>
<td>Ford F150 2010</td>
<td>16</td>
<td>$119</td>
<td>-$21</td>
</tr>
</tbody>
</table>

Estimated median vehicle fuel economy,
by municipality and Chicago community area

Note: Municipalities with fewer than 80 odometer observations are omitted from this analysis.

Source: Chicago Metropolitan Agency for Planning Analysis of American Community Survey estimates for 2011-2015; odometer readings from the Illinois Environmental Protection Agency, 2015-17; and fuel economy estimates from the U.S. Environmental Protection Agency.
Average annual miles traveled per household, by municipality and Chicago community area

Note: Municipalities with fewer than 80 odometer observations are omitted from this analysis.

Source: Chicago Metropolitan Agency for Planning Analysis of American Community Survey estimates for 2011-2015; odometer readings from the Illinois Environmental Protection Agency, 2015-17; and fuel economy estimates from the U.S. Environmental Protection Agency.
Change in estimated annual payment under a revenue neutral road usage charge for a typical household, by municipality and Chicago community area

Note: Municipalities with fewer than 80 odometer observations are omitted from this analysis.

Source: Chicago Metropolitan Agency for Planning Analysis of American Community Survey estimates for 2011-2015; odometer readings from the Illinois Environmental Protection Agency, 2015-17; and fuel economy estimates from the U.S. Environmental Protection Agency.
What did we learn about the impact of replacing the MFT with a road usage charge on typical households?

- Typical change in each community ranges from a decrease of 5 percent to an increase of 16 percent in annual payment.
- Typical households in exurban communities would pay the same amount or less under a road usage charge.
- Communities with higher median household income experienced a greater increase than communities with lower median household income.
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