New Hampshire Road User Fee
*Update on Analysis and Findings*

*presented by*
Cambridge Systematics, Inc.
Chris Porter & Michael Marks

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Overview

- Objectives and Approach
- Revenue Drivers, Trends, and Projections
- Equity Implications
- Public Opinion
- Implementation Considerations
Objectives

- Project motor fuel tax revenue through 2030
- Evaluate effectiveness of proposed Road Usage Fee (RUF) at making up for declines in fuel tax revenue
- Consider equity implications of RUF

### Proposed New Hampshire Road Usage Fees

<table>
<thead>
<tr>
<th>MPG Range</th>
<th>Fee</th>
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<tbody>
<tr>
<td>20 or less</td>
<td>$10.00</td>
</tr>
<tr>
<td>greater than 20 to 30</td>
<td>$25.00</td>
</tr>
<tr>
<td>greater than 30 to 40</td>
<td>$50.00</td>
</tr>
<tr>
<td>greater than 40 to 50</td>
<td>$75.00</td>
</tr>
<tr>
<td>greater than 50</td>
<td>$100.00</td>
</tr>
<tr>
<td>no gasoline</td>
<td>$125.00</td>
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Approach

- Matched 2018 vehicle registrations with EPA MPG ratings
- Estimated revenues from RUF
- Projected future MPG distributions and fuel tax/RUF revenues
- Conducted sensitivity tests
- Examined incidence of gas tax and RUF
- Conducted survey and focus groups
- Discussed practical implications with NH DMV staff
Revenue Drivers, Trends, & Projections
Factors Affecting Motor Fuel Tax Revenues

- MPG of vehicle fleet
- Total vehicles
- VMT per vehicle
- Electrification/alternative fuel use
Vehicle-MPG Matching

- 1,266,037 vehicles registered in 2018
  - Nearly 90% matched with MPG

- Approximate match based on make, model & engine displacement
  - Trim features such as transmission type, turbo, 2/4WD not considered

- Heavy duty vehicles (8,500 lb. GVWR) are not assigned an MPG rating by EPA

- Due to inconsistencies in make and model data entry, not all light-duty vehicles could be matched
Historical and Projected Average MPG

Vehicle Model Year

- Avg MPGe
- Projected Future MPGe

2018 Fuel Economy Fleet Distribution
VMT Trends (Light-Duty)

VMT (millions) or VMT per capita

- LDV VMT (millions)
- LDV VMT Per Capita (miles)
Fuel Efficiency Projections (National)

New Light-Duty Vehicle MPG

Source: U.S. DOE
Annual Energy Outlook
2019 Reference Case
“Baseline” Assumptions

- Population increase of 0.2%/year based on state projections
- Number of vehicles proportional to population
- Constant VMT per vehicle
- Fuel economy increase based on Model Year 2017-2025 Federal standards
- Low electrification rates (national projections)
Range of Revenue Projections

Highway Fund Unrestricted Revenue from MPG-rated Light-Duty Vehicles ($M)

- Gas Tax Historic Revenue
- Gas Tax Projected Revenue Lowest Estimate
- Gross RUF + Gas Tax Lowest Estimate
- Gas Tax Projected Revenue Highest Estimate
- Gross RUF + Gas Tax Highest Estimate
Historic and Projected Revenue Adjusted for Purchasing Power

Highway Fund Revenue from MPG-rated Light-Duty Vehicles ($M)
## Summary of Revenue Projections

### 2030 % Change vs. 2020

<table>
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</thead>
<tbody>
<tr>
<td>National MPG Projections</td>
<td>-24%</td>
<td>-43%</td>
<td>10%</td>
<td>-18%</td>
</tr>
<tr>
<td>NH MPG Trend</td>
<td>-10%</td>
<td>-33%</td>
<td>16%</td>
<td>-14%</td>
</tr>
<tr>
<td>CAFE Rollback</td>
<td>-9%</td>
<td>-32%</td>
<td>16%</td>
<td>-13%</td>
</tr>
<tr>
<td>Higher VMT per Vehicle</td>
<td>-18%</td>
<td>-39%</td>
<td>16%</td>
<td>-14%</td>
</tr>
<tr>
<td>Moderate Electrification</td>
<td>-25%</td>
<td>-44%</td>
<td>11%</td>
<td>-14%</td>
</tr>
<tr>
<td>High Electrification</td>
<td>-29%</td>
<td>-47%</td>
<td>12%</td>
<td>-17%</td>
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</tbody>
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Equity Implications
Fuel Tax + RUF by MPG Category

- Avg NH gas tax
- Avg RUF

- <20 MPG
- 20-30 MPG
- 30-40 MPG
- 40-50 MPG
- 50-60 MPG
- Electric Vehicles (>60 MPG)
Total Fuel Cost + RUF by MPG

Note: does not include electricity costs
Fuel Tax + RUF by MPG and Distance Driven

Miles Driven per Year

- $50
- $100
- $150
- $200
- $250

MPG
- 20
- 30
- 40

Maximum RUF

- 5,000
- 7,500
- 10,000
- 12,500
- 15,000
- 17,500
- 20,000
Incidence by Vehicle Age

Average Fuel Cost, Fuel tax, and RUF by Model Year

- Average Gas Cost
- Average Gas Tax
- Average RUF
Incidence by Geography

Average Annual Cost per Vehicle

- <20 MPG
- Over 20 to 30 MPG
- Over 30 to 40 MPG
- Over 40 to 50 MPG
- >50
- No Gas

Legend:
- Second City Gas Cost
- Suburban Gas Cost
- Small Town Gas Cost
- Rural Gas Cost
- Road User Fee
Incidence by Residents vs. Visitors

- 15% of VMT in New Hampshire is estimated to be taken by visitors (contributing estimated 15% of fuel tax revenues)
- RUF would be paid fully by residents
- Visitors would continue to pay fuel tax but share of transportation revenues paid by visitors would decline modestly
Incidence by Household Income

Avg NH gas tax  Avg RUF

Income Ranges:
- Less than $10k
- $10k-$15k
- $15k-$25k
- $25k-$35k
- $35k-$50k
- $50k-$75k
- $75k-$100k
- $100k-$125k
- $125k-$150k
- $150k-$200k
- $200k or more

$0  $50  $100  $150  $200  $250  $300  $350
Public Opinion

- Granite State Poll Questions – Fall 2019
- Four Focus Groups
How well do the components of NH’s transportation system meet needs for getting around?

- **The state’s roads and highways:**
  - Very Well: 65%
  - Somewhat Well: 29%
  - Not Too Well: 5%
  - Not Well At All: 0%

- **Bicycle and pedestrian facilities in the state:**
  - Very Well: 22%
  - Somewhat Well: 38%
  - Not Too Well: 20%
  - Not Well At All: 20%

- **Buses and rail in the state:**
  - Very Well: 13%
  - Somewhat Well: 28%
  - Not Too Well: 22%
  - Not Well At All: 37%

The graph uses different colors to indicate the level of satisfaction:
- Blue: Very Well
- Light Blue: Somewhat Well
- Pink: Not Too Well
- Red: Not Well At All
- Gray: Don’t Know
How do you feel about the state's current level of investment in its transportation system?
If the state were to keep transportation funding level over time, please indicate if you support or oppose the following sources:

- Increasing tolls on highways: 18% Strongly Support, 31% Somewhat Support, 16% Neither Support Nor Oppose, 32% Strongly Oppose
- A fee based on the fuel efficiency of a vehicle charged at the time of registration, also known as the Road User Fee: 17% Strongly Support, 22% Somewhat Support, 6% Neither Support Nor Oppose, 14% Somewhat Oppose, 37% Strongly Oppose, 4% Don’t Know/Not Sure
- Increasing the gasoline tax: 14% Strongly Support, 24% Somewhat Support, 5% Neither Support Nor Oppose, 20% Somewhat Oppose, 36% Strongly Oppose
- A user fee based on the number of miles a person drives in a year: 14% Strongly Support, 17% Somewhat Support, 18% Neither Support Nor Oppose, 45% Strongly Oppose
- Increasing vehicle registration fees: 6% Strongly Support, 17% Somewhat Support, 19% Neither Support Nor Oppose, 54% Strongly Oppose
Focus Group Findings

- Knowledge of current transportation funding is very limited
- Gasoline tax seen as fair – the more you drive, the more you pay
- EVs – recognize not paying fair share, but concern about introducing disincentive
- Information about current funding focused discussion on focused on lack of sustainability and lack of fairness
- Support for RUF concept as fairer than current system, but also seen as a new or additional tax
Implementation Considerations
Current Registration/Fee Assessment Process

- Vehicles are registered both with State (DMV) and city/town
- 230 of 234 municipalities provide option of city/town completing the state portion as “municipal agents”
- State and municipal fees assessed annually
Assign and track MPG rating for every registered vehicle
   » Need field in DMV database
   » Need default (e.g., $10) if MPG cannot be assigned

Currently registered vehicles: one-time State effort to assign MPG

New vehicles sold in NH: dealer include on title?

Vehicles moved to NH: DMV vendor assign rating at time of registration
Next Steps

- Determine method for assigning an MPG rating to vehicles whose registration is transferred from other states.
- Outreach to sample of municipal clerks to discuss feasibility of proposed system and identify training and support needs.
- State legislature should require that EPA combined MPG rating be listed on title of new vehicles sold in NH.
- DMV add field for EPA combined city/highway MPG to the state’s registration database and assign MPG ratings to existing vehicles.
- Public outreach/education.