CAMBRIDGE SYSTEMATICS



New Hampshire Road User Fee

Update on Analysis and Findings

presented by

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February 10, 2020



- 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

MPG Range	Fee
20 or less	\$10.00
greater than 20 to 30	\$25.00
greater than 30 to 40	\$50.00
greater than 40 to 50	\$75.00
greater than 50	\$100.00
no gasoline	\$125.00



- 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

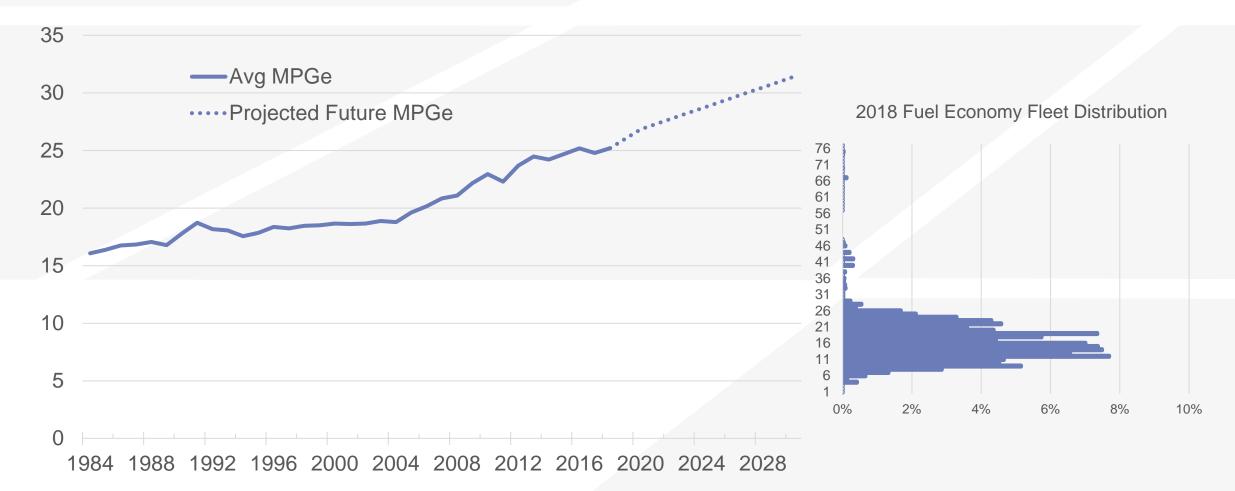
Factors Affecting Motor Fuel Tax Revenues

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

Vehicle-MPG Matching

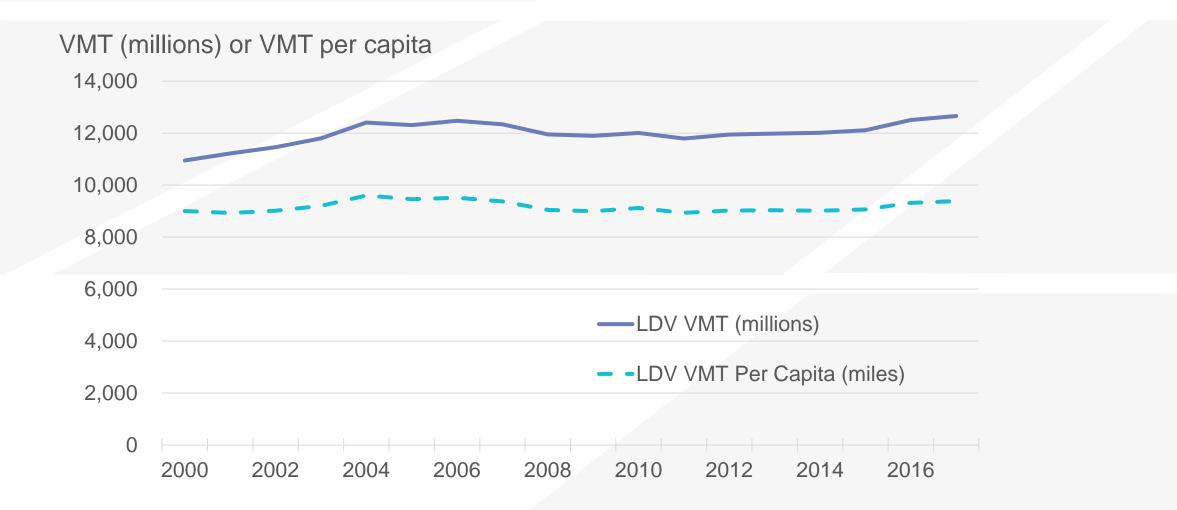
- 1,266,037 vehicles registered in 2018
 - » Nearly 90% matched with MPG
- Approximate match based on make, model & engine displacement
 - » Trim features such as transmission type, turbo, 2/4WD not considered
- Heavy duty vehicles (8,500 lb. GVWR) are not assigned an MPG rating by EPA
- Due to inconsistencies in make and model data entry, not all light-duty vehicles could be matched

Historical and Projected Average MPG

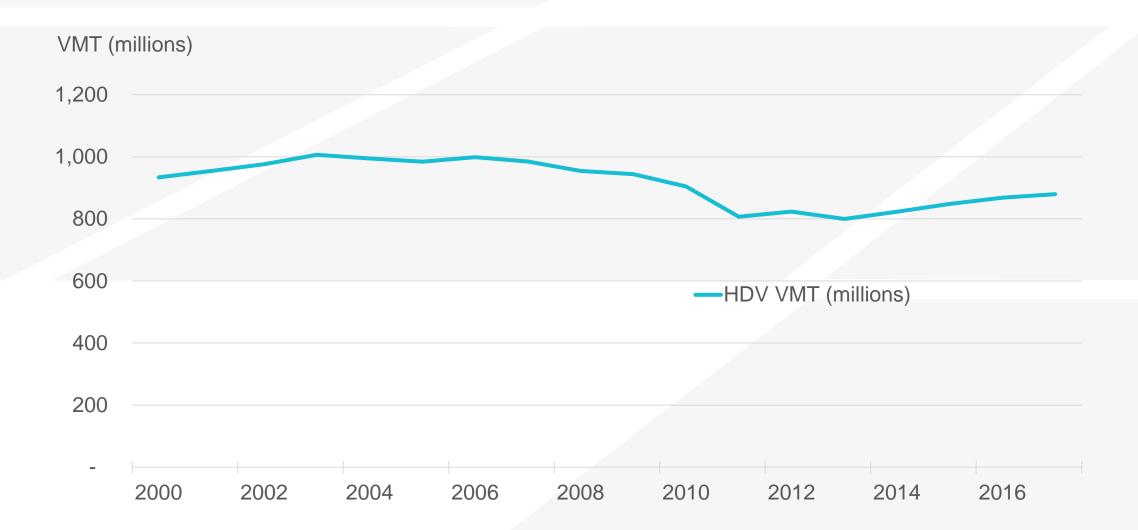


Vehicle Model Year

VMT Trends (Light-Duty)

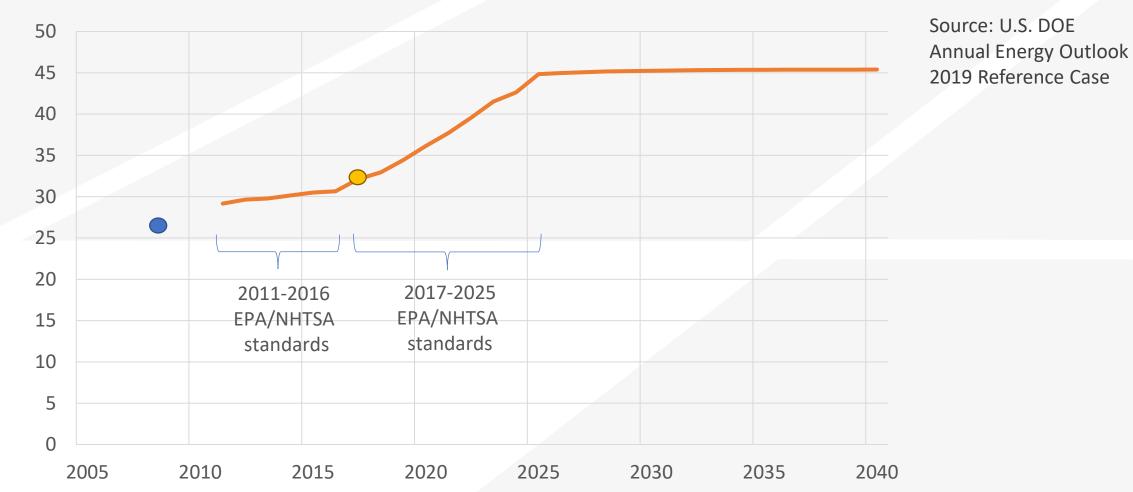


VMT Trends (Trucks)



Fuel Efficiency Projections (National)

New Light-Duty Vehicle MPG



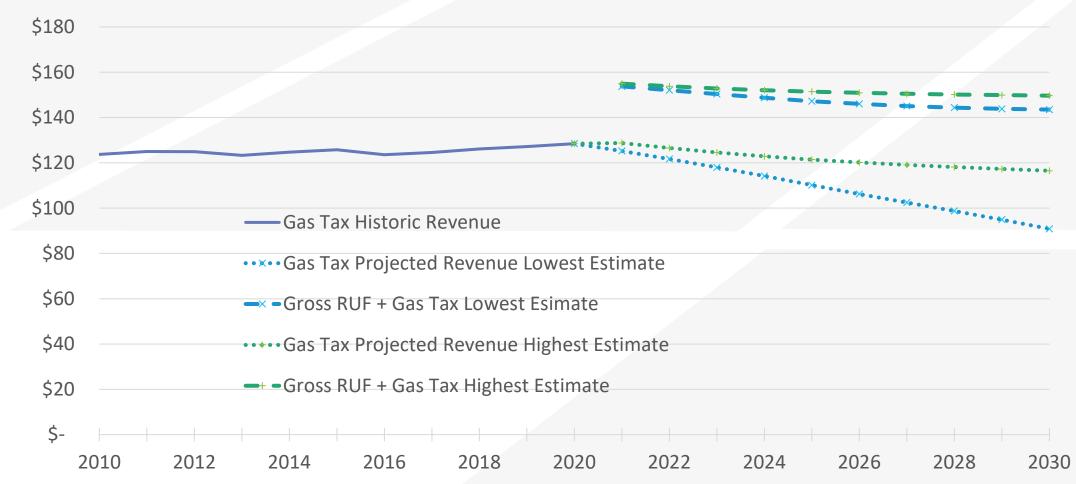
"Baseline" Assumptions

Population increase of 0.2%/year based on state projections

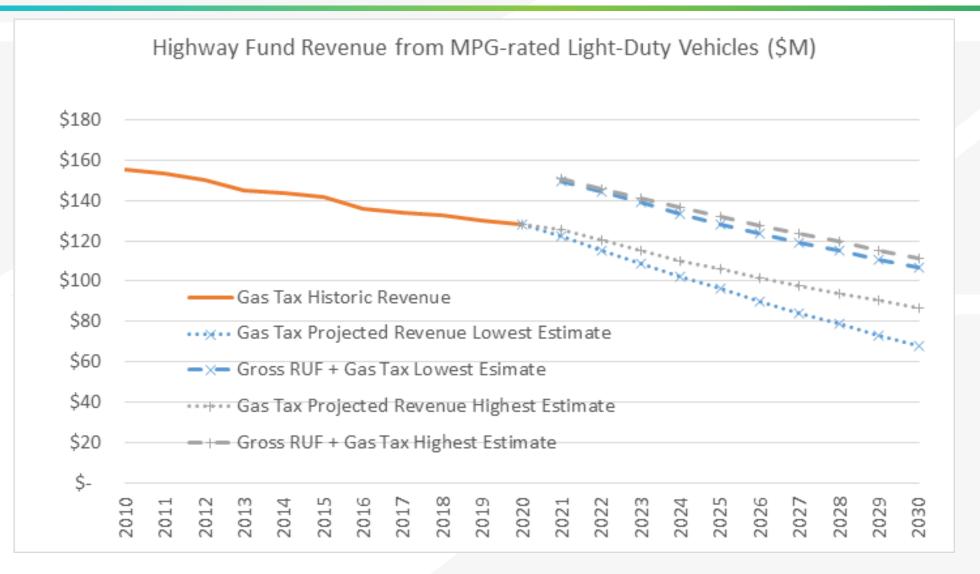
- Number of vehicles proportional to population
- Constant VMT per vehicle
- Fuel economy increase based on Model Year 2017-2025 Federal standards
- Low electrification rates (national projections)

Range of Revenue Projections

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



Historic and Projected Revenue Adjusted for Purchasing Power

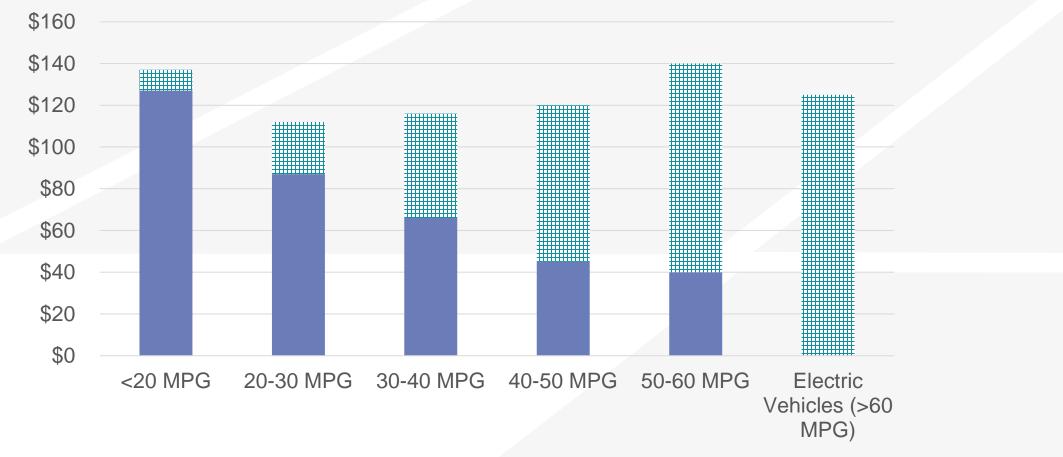


Summary of Revenue Projections 2030 % Change vs. 2020

Scenario	Fuel Tax - Nominal	Fuel Tax – Real	Fuel Tax + RUF – Nominal	Fuel Tax + RUF - Real
National MPG Projections	-24%	-43%	10%	-18%
NH MPG Trend	-10%	-33%	16%	-14%
CAFE Rollback	-9%	-32%	16%	-13%
Higher VMT per Vehicle	-18%	-39%	16%	-14%
Moderate Electrification	-25%	-44%	11%	-14%
High Electrification	-29%	-47%	12%	-17%

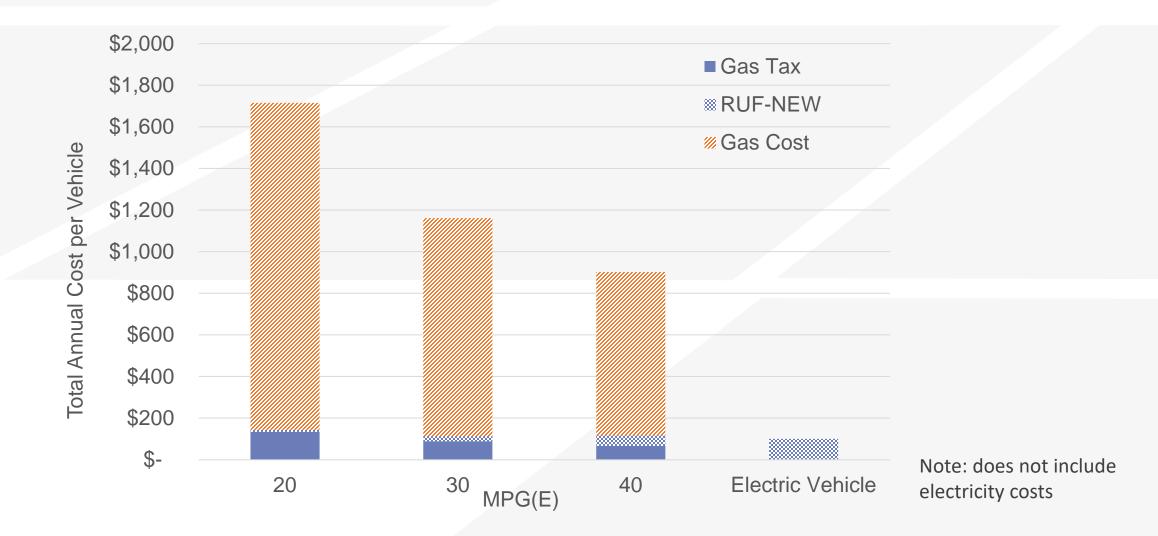
Equity Implications

Fuel Tax + RUF by MPG Category

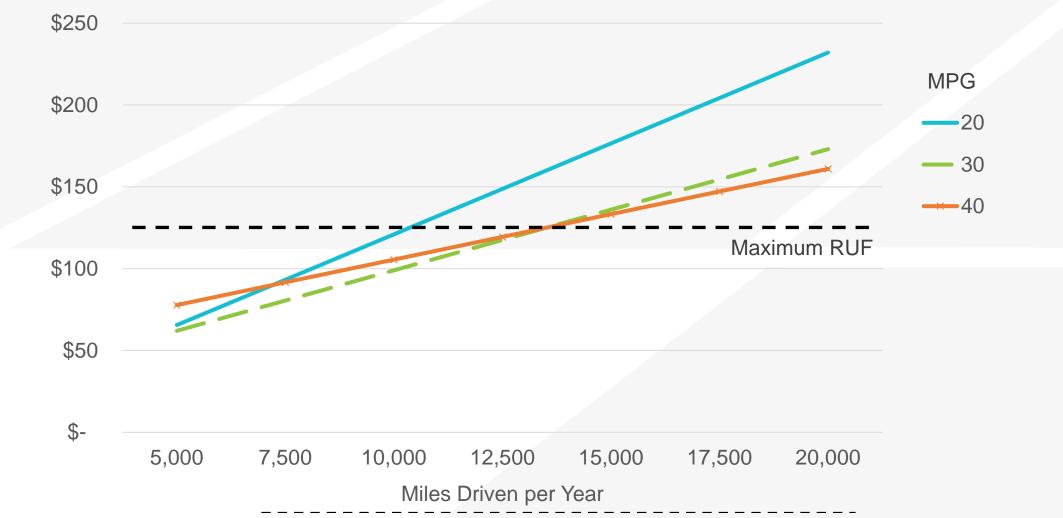


Avg NH gas tax # Avg RUF

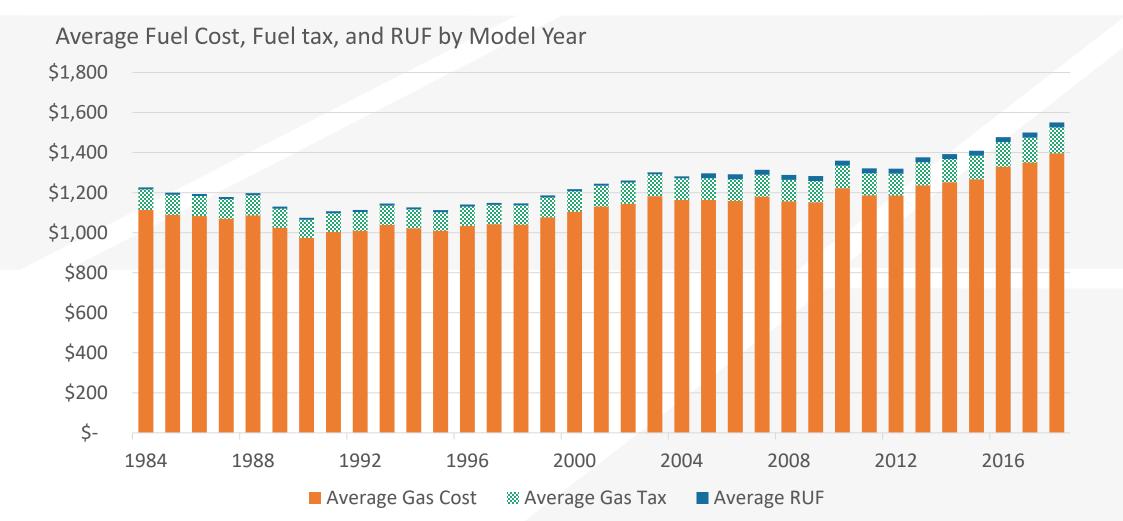
Total Fuel Cost + RUF by MPG



Fuel Tax + RUF by MPG and Distance Driven

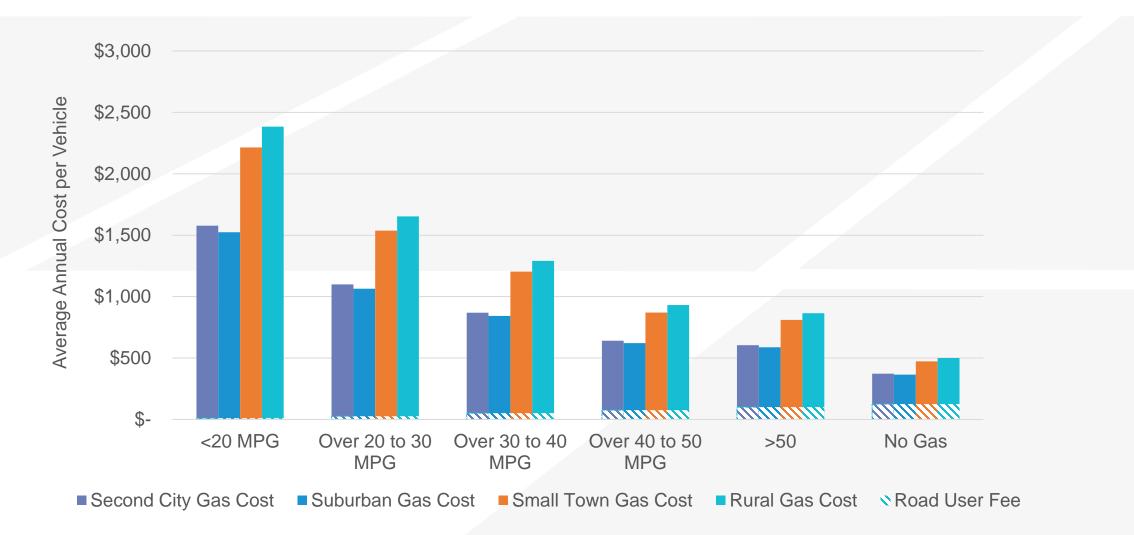


Incidence by Vehicle Age



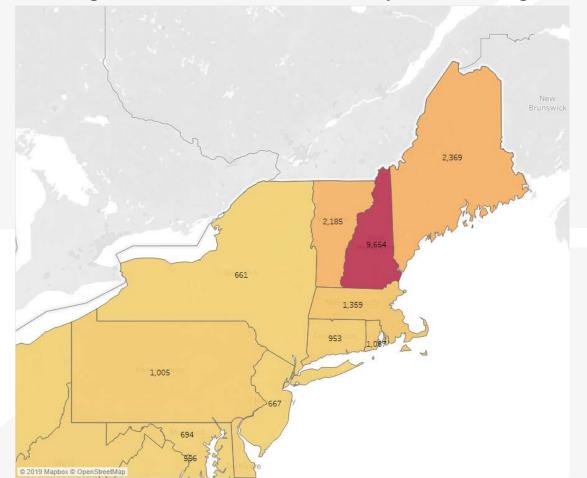
20

Incidence by Geography



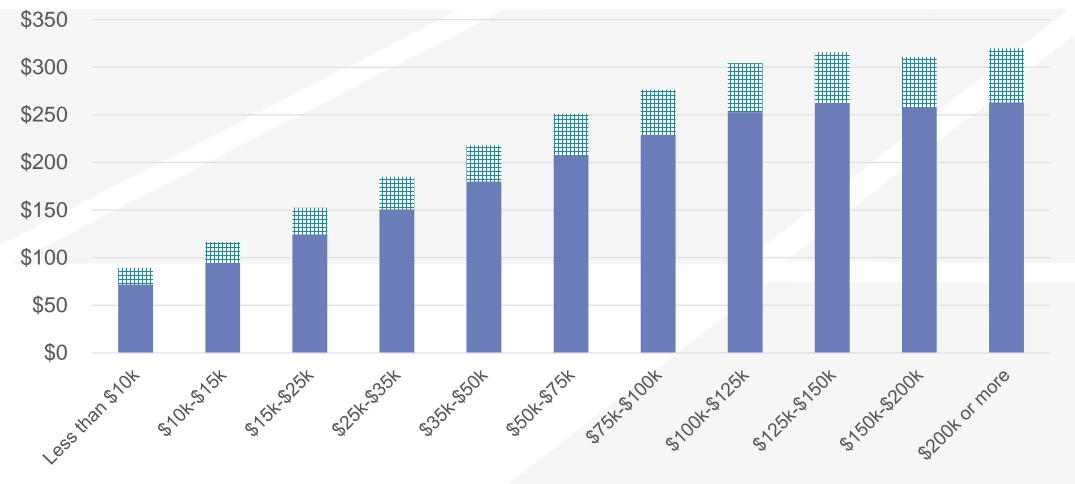
Incidence by Residents vs. Visitors

- 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



Average mi/vehicle driven in NH by state of origin

Incidence by Household Income



Avg NH gas tax # Avg RUF

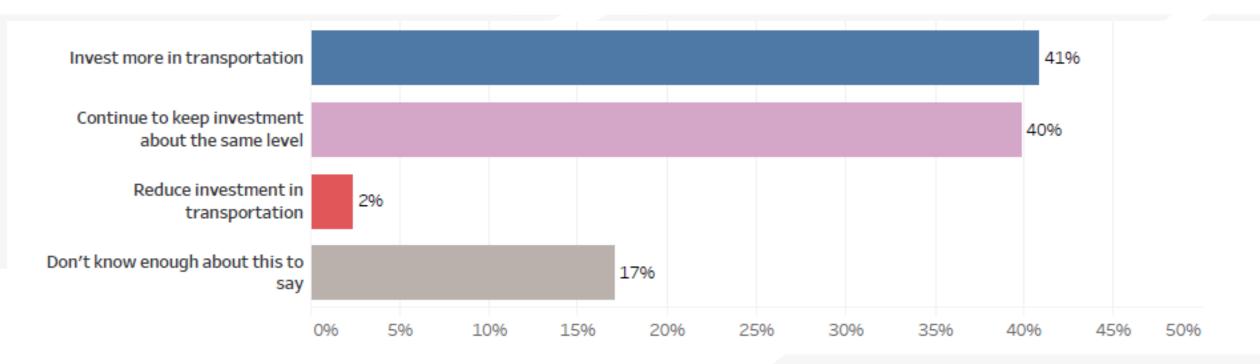
Public Opinion

- Granite State Poll Questions Fall 2019
- Four Focus Groups

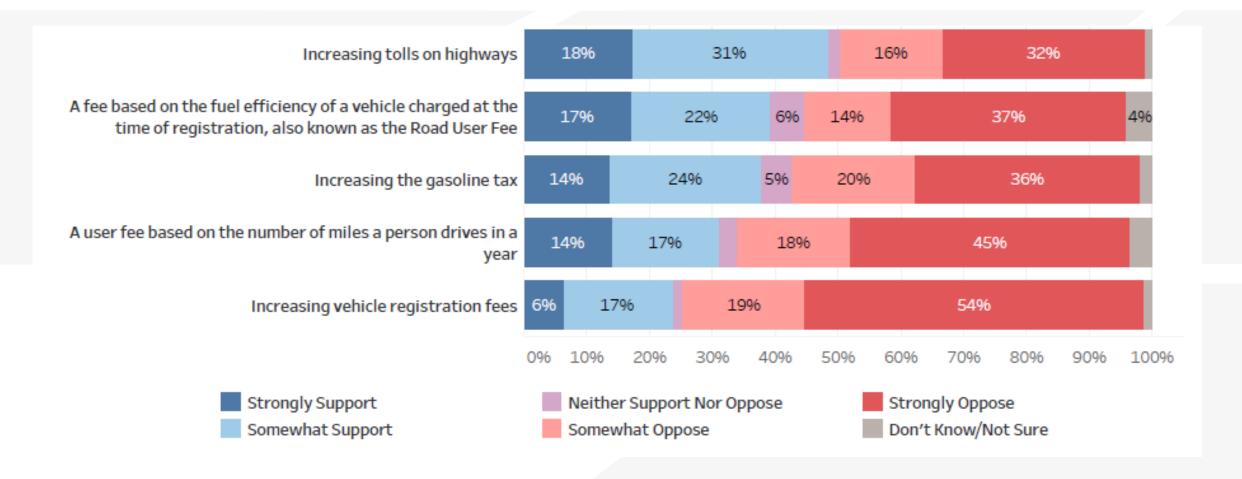
How well do the components of NH's transportation system meet needs for getting around?



How do you feel about the state's current level of investment in its transportation system?



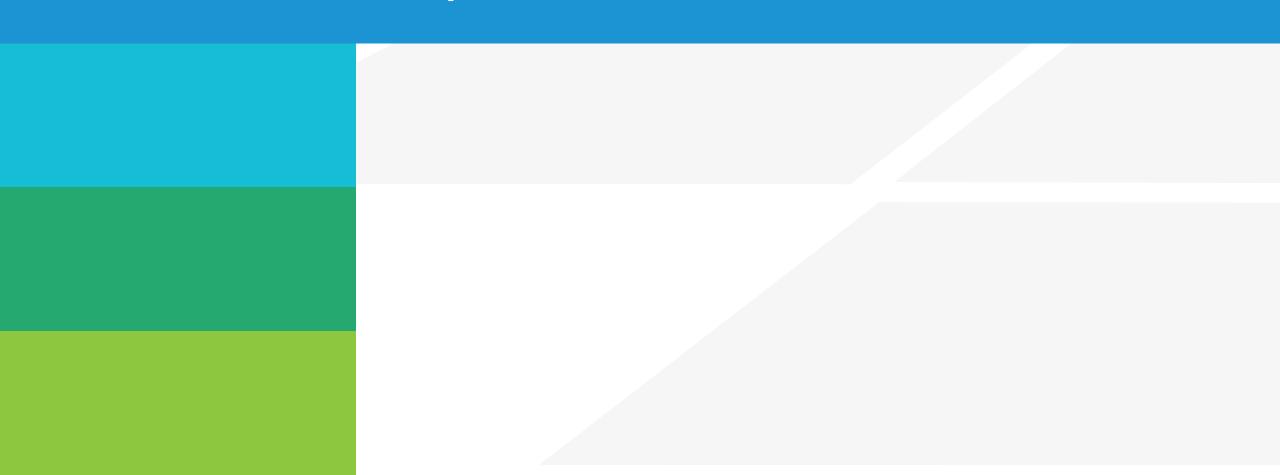
If the state were to keep transportation funding level over time, please indicate if you support or oppose the following sources:



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

Additional Steps to Collect RUF

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



- 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