

Cost Responsibility Between Light and Heavy Vehicles

Highway Cost Allocation Study and the HB 2017 Passenger Vehicle Cost Responsibility Study

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What is the Highway Cost Allocation Study?

- HCAS is a Constitutional mandate (Article IX Section 3a) that light and heavy vehicles must contribute proportionally to the costs they impose on the road system in Oregon
- A study is conducted by DAS every two years to evaluate the proportionality of costs and revenues by light and heavy vehicles
- Study Review Committee including road owners, tax payers, and others provides input to the study
- Results are presented to the Legislature to adjust rates to ensure proportionality
- This is Oregon's 23rd study; the first was in 1937 by Conde McCullough



Highway Cost Allocation Study

2023-2025 Biennium

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How cost responsibility is determined

- Revenue is assigned to light or heavy classes based on the fee or tax source
- Expenditures are assigned to work types (68 total) and summed into four main categories:
 - Modernization
 - Preservation
 - Maintenance and Operations
 - Other – Administration, Bike/Ped, Safety, PE, ROW
- Each work type has a specific allocation for how much of the expenditure is light versus heavy
- Changes in the mix of investments across these four categories impact cost responsibility due to the allocation differences by work type – ie, more Preservation investment shifts costs to heavies; more Other shifts toward lights

Vehicle Class	Modernization	Preservation	Maintenance & Operations	Bridge	Other
Light Vehicles (1 to 10,000 lbs.)	83%	25%	65%	64%	85%
Heavy Vehicles (10,001 lbs. and up)	17%	75%	35%	36%	15%

The Equity Calculation

Once revenues and expenditures are attributed to each class equity ratios are calculated. Below are the results of the 2023 Study.

$$\text{Light Vehicle Equity} = \frac{\text{Light Vehicle Share of Revenue}}{\text{Light Vehicle Share of Expenditures}} = \frac{63.9\%}{72.7\%} = 0.88$$

$$\text{Heavy Vehicle Equity} = \frac{\text{Heavy Vehicle Share of Revenue}}{\text{Heavy Vehicle Share of Expenditures}} = \frac{36.1\%}{27.3\%} = 1.32$$

Why does the HCAS matter now?

Over the past two studies, Oregon's system of highway financing has shifted away from being equitable, with light vehicles paying less than the costs that they impose, and heavy vehicles paying more



	Equity Ratio, Full-Fee	
	Basic	Heavy
2011	1.00	1.01
2013	0.99	1.01
2015	1.00	1.00
2017	1.01	0.99
2019	0.98	1.03
2021	0.93	1.16
2023	0.88	1.32

Heavy vehicles are defined as > 10,000 lbs⁵

Why the sudden change?

Project Types

- Mix of investments have changed, with more responsibility on light vehicles
- Light vehicles are responsible for most of the costs for project types like bicycle paths because they are largest amount of vehicle fleet
- Heavy vehicles responsible for outsized share of pavement costs because of their weight

Revenues

- Pandemic changed traffic flows and types of traffic
- Registration and fuel sales for light vehicles remain below pre-pandemic levels while trucking activity is up
- Shifts occurred during rate adjustments for HB 2017

Pavement Factors

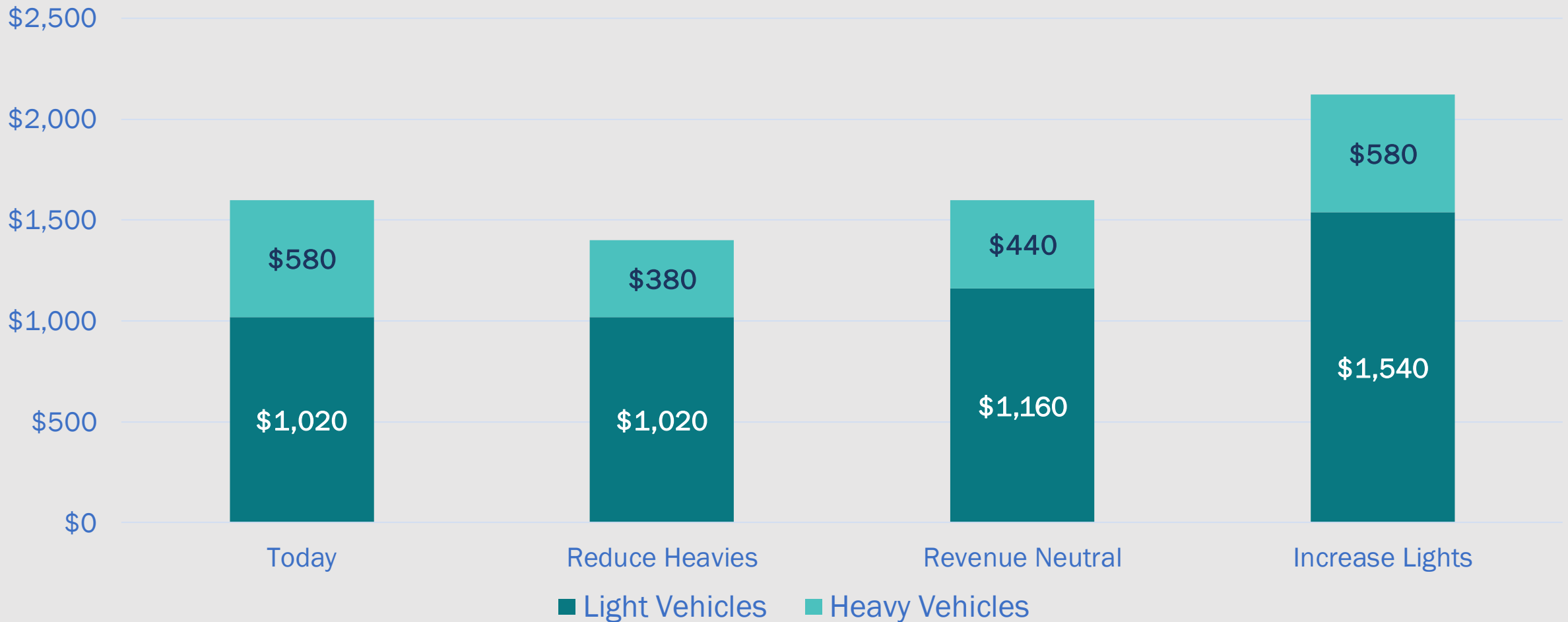
- New data has improved traffic count estimates
- More granular estimates across vehicle classes and road types were incorporated into study

What is the Legislature going to do about it?

- HCAS is a forward-looking exercise, estimating equity during the upcoming biennium and a new study will commence in early 2024
- HB 3406 (2023), requires reexamination of past three HCAS's to see how equity estimates align with what came to pass
- Legislature is likely to act in the 2025 Session
- Section 75 Study could be used to resolve some of the gap

Illustrative HCAS Rebalance Options

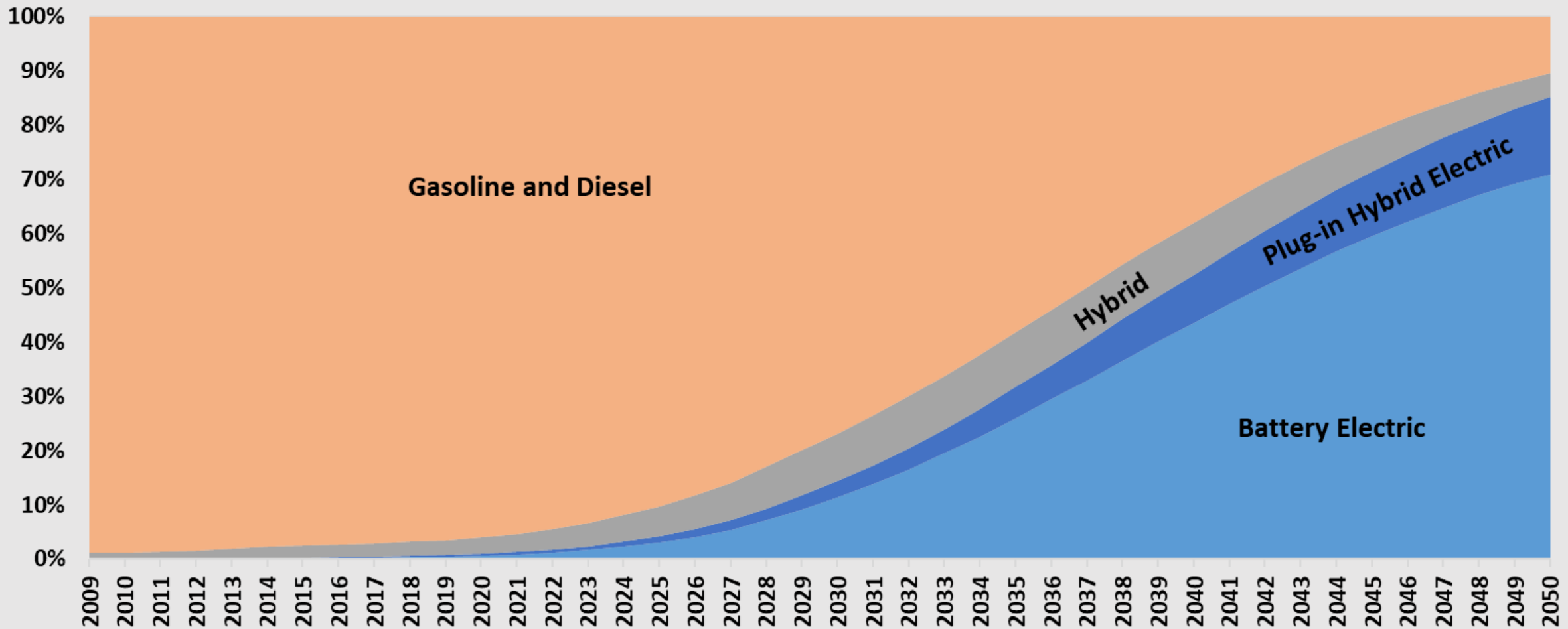
In millions of dollars annually



HB 2017 Passenger Vehicle Cost Responsibility (Section 75) Study

- Required OTC to determine “the proportionate share that users of vehicles that are powered by different means should pay for the costs of maintenance, operation, and improvement of the highways” and whether they are paying that share
- ODOT used methodology similar to HCAS and the same contractor to conduct the study
- Results provide insight into why light vehicles are underpaying and potential solutions that can be considered as part of effort to rebalance light and heavy vehicle equity

Passenger Vehicles in Oregon are becoming more Fuel Efficient



Source: Oregon Department of Transportation April 2023 Passenger Vehicle Stock Forecast. Actuals through 2022, forecast begins in 2023

Results – Current conditions

Vehicle Class		Annual User Fees	Scaled Equity Ratio	Registration Fees
N/A	Under 20 MPG	476,073,558	1.0568	\$63
N/A	20 to 39 MPG	512,016,447	0.7781	\$68
N/A	40 MPG and over	23,776,496	0.5883	\$78
EV	N/A	8,651,039	0.6664	\$158
Basic Vehicle Subtotal		1,020,517,540		
All Vehicle Total		1,598,121,340		

Equity Ratios Defined
 <1.0 = Underpayment
 1.0 = Equity
 >1.0 = Overpayment

Source: ECONorthwest

- Lowest MPG class overpays relative to the higher MPG classes
- Increasing fuel efficiency generally increases underpayment

Achieving Parity – Scenario 2

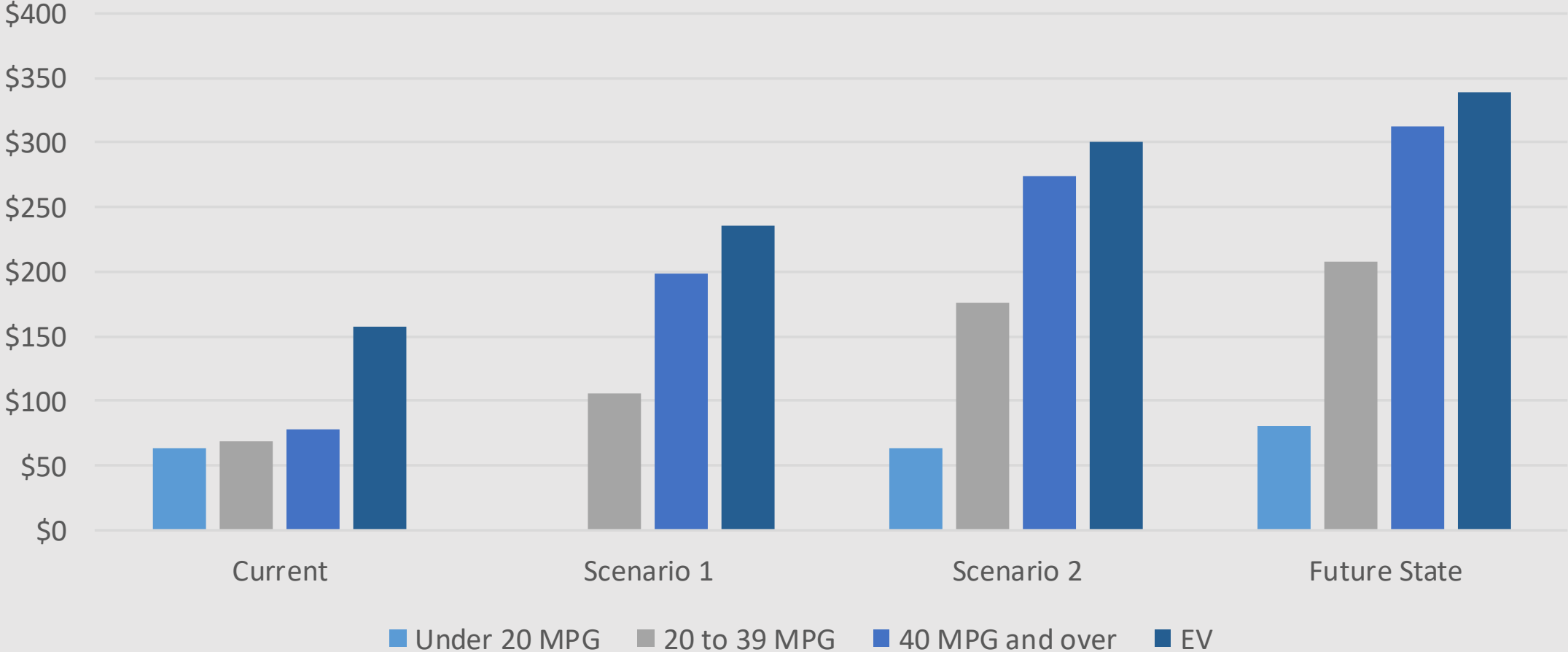
Adjust Annual Registration Fees holding the Under 20 MPG registration fee constant at current rate

Vehicle Class		Annual User Fees	Scaled Equity Ratio	Registration Fees	Change from Current Fees
N/A	Under 20 MPG	476,073,558	0.9355	\$63	\$0
N/A	20 to 39 MPG	695,249,001	0.9353	\$176	\$108
N/A	40 MPG and over	42,688,291	0.9350	\$274	\$196
EV	N/A	13,710,764	0.9350	\$300	\$142
Basic Vehicle Subtotal		1,227,721,614			
All Vehicle Total		1,805,325,413			

Source: ECONorthwest

- Equity ratios increase yielding over \$200 million per year in additional revenue
- MPG classes over 20 and EV's see even larger fee increases to maintain equity

Annual Registration Fee Summary by Scenario



Recommendations

- Increase vehicle registration fees to balance payments of vehicle classes
- Simplify the tiered fee structure by eliminating the tiered title fee
- Direct the Section 75 study be regularly updated or included in the HCAS
- Evaluate the conversion to a motive-power registration system
- Maintain a per-mile road usage charge for efficient vehicles as an opt out option for higher registration fees
- Ensure the totality of vehicle taxes, fees and rebates incentivize the purchase of high-efficient vehicles

A worker in a red safety suit and hard hat stands on a blue lift bucket, working on a steel bridge structure. The background is a dense forest of evergreen trees. The scene is dimly lit, suggesting dusk or dawn.

Thank you.