Cap-and-invest issue paper: Highway Cost Allocation Study

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Modeling Cap-and-Invest in HCAS

- As a demonstration of how a C&I program would interact with HCAS, we use the 2017 – 2019 analysis
- New C&I revenues are treated similarly to an increased fuel tax (weighted by carbon content) in the model
- Revenues are then distributed across work types from the previous analysis

Modeling Assumptions

- We assume the cost of importing fuels will be passed on entirely to the end-user in proportion to the carbon content of the fuel
- As a result, “exempt” vehicles under the current tax scheme still generate revenue for the C&I program
- Since the study period is for the biennium, we assume no behavioral response from any vehicle class in the model

Results

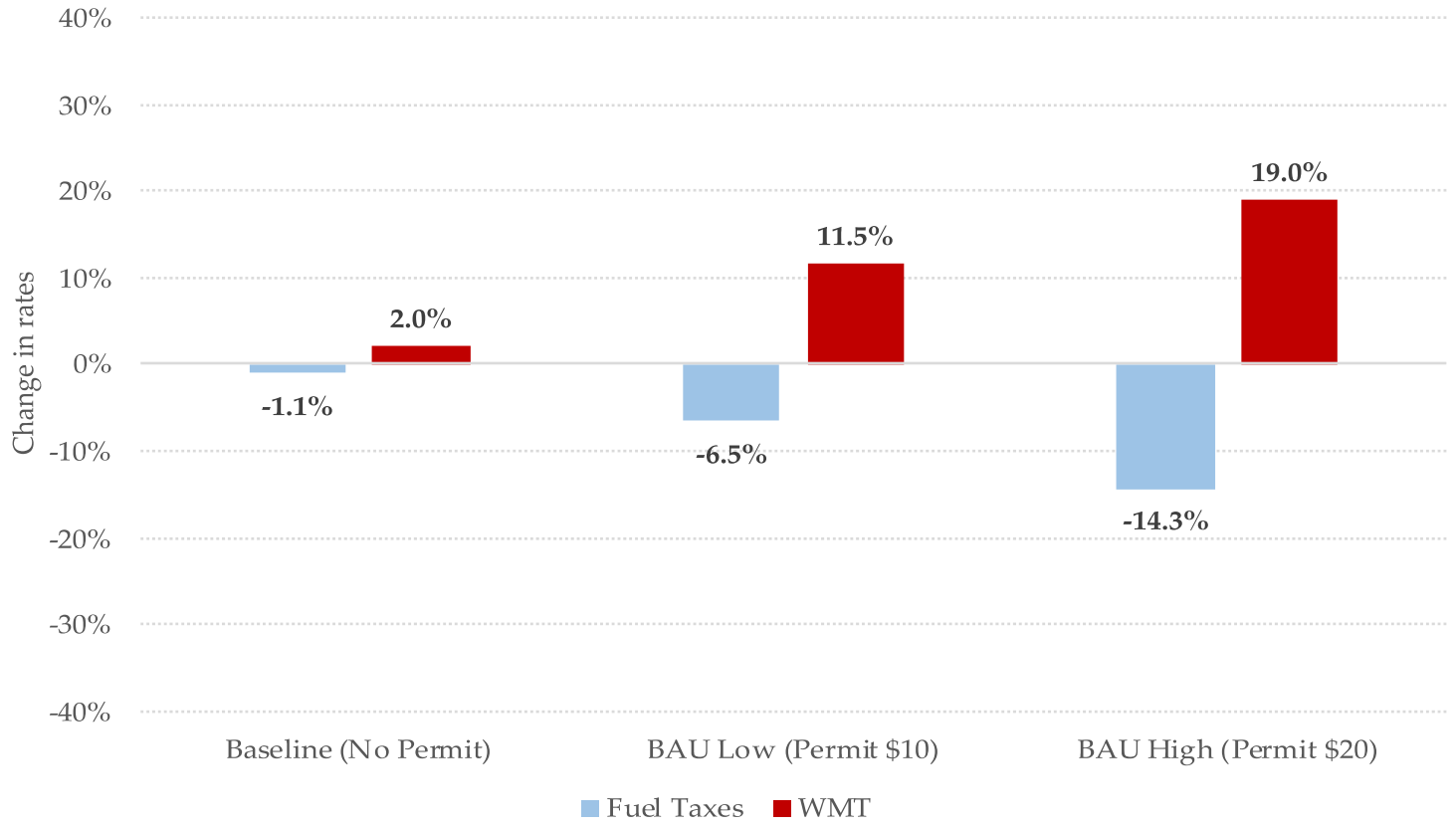
- We estimate C&I revenue generation of $209 million to $418 million under the current assumptions, with light vehicles experiencing the largest increase in user fees

- Incidence will fall primarily on light vehicles who account for the overwhelming amount of VMT and fuel consumption

- Equity between light and heavy vehicles will be determined both by permit prices spending decisions for the various cost scenarios

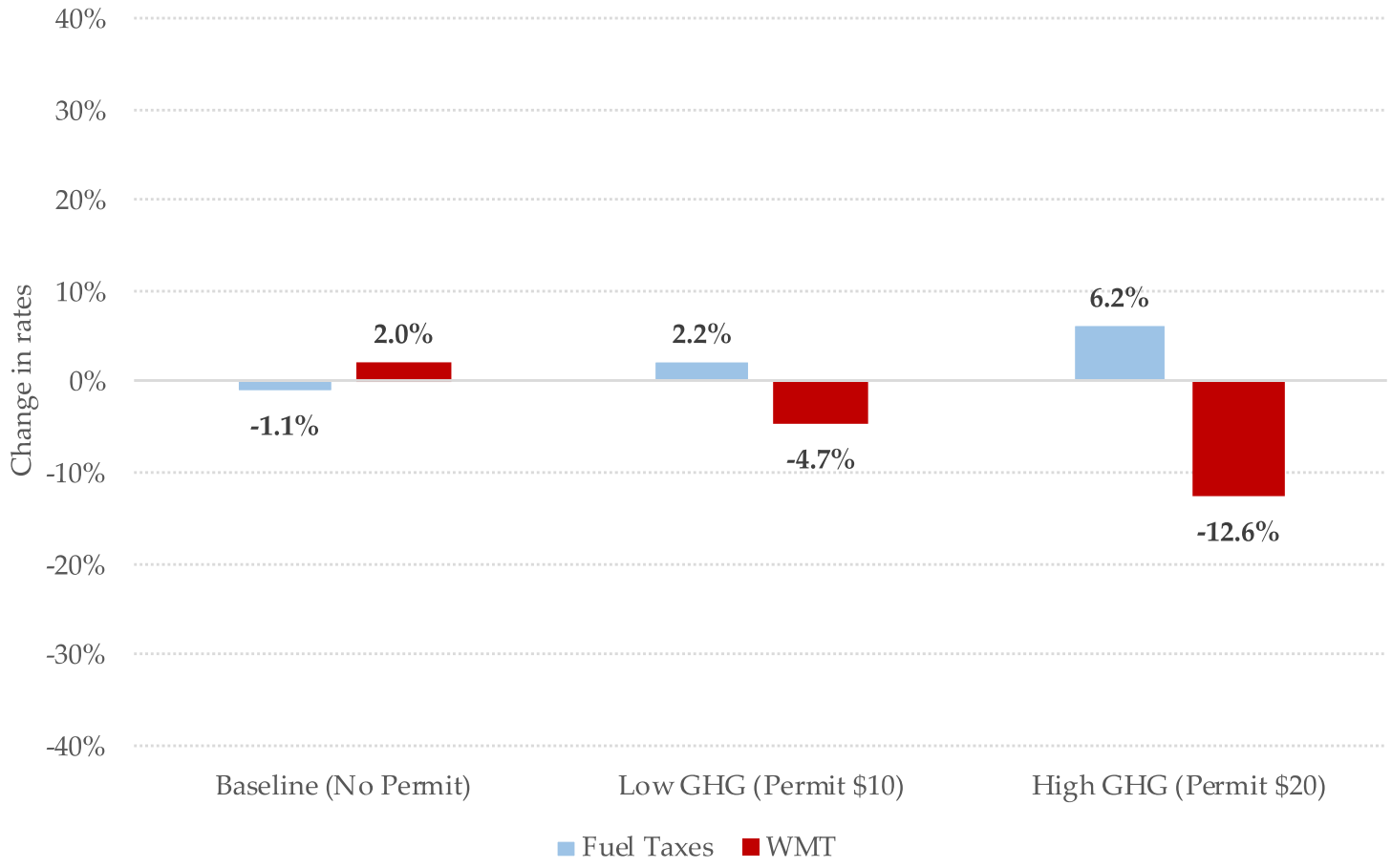
Getting to equity - BAU

- Achieving equity across weight classes will require adjustments to the gas and weight-mile taxes under various policy scenarios. Our analysis assumes a revenue-neutral approach to achieve equity.



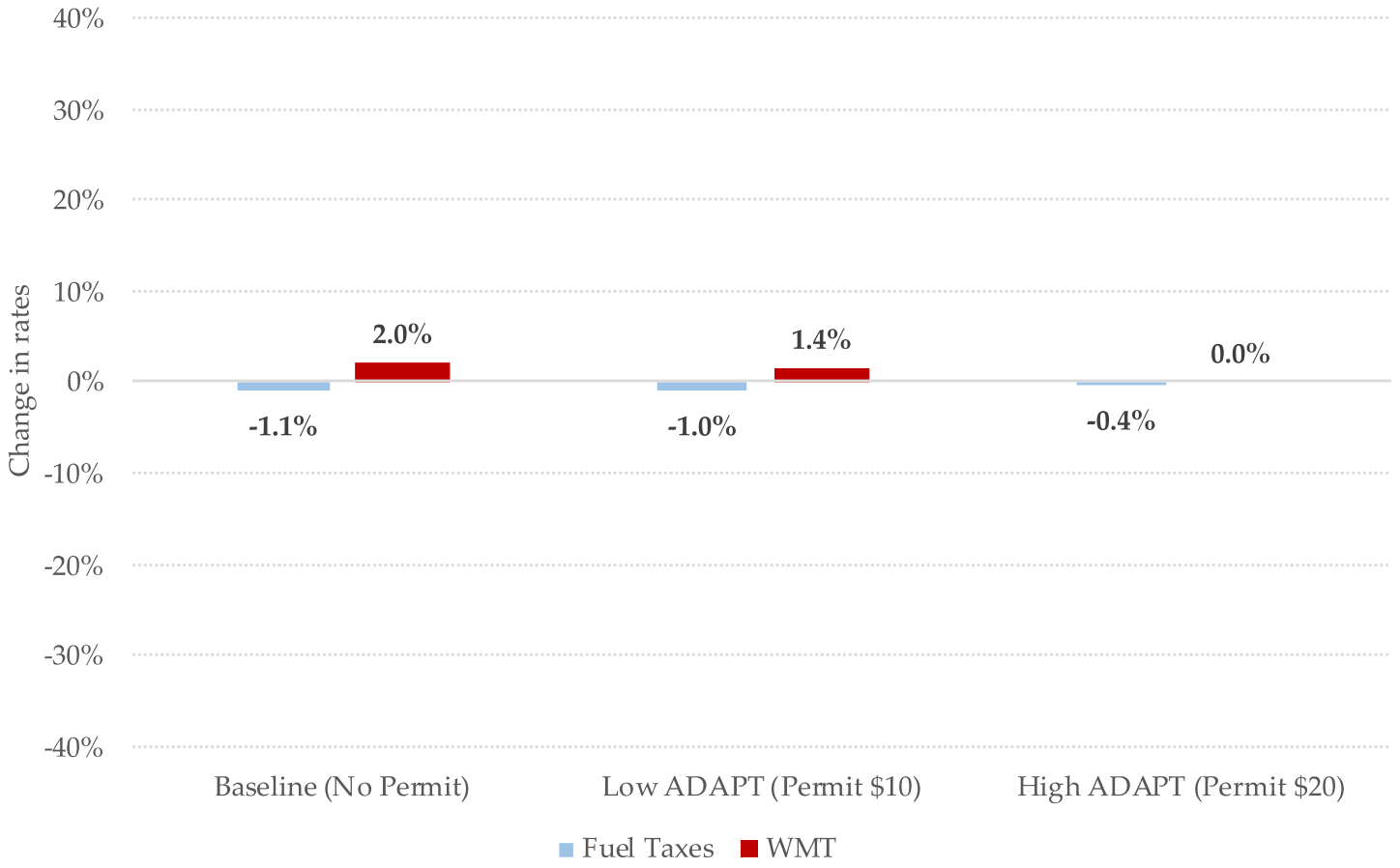
Getting to equity – GHG Reduction

- Oriented towards transportation expenditures to reduce GHG within the transportation system.



Getting to Equity - Adaptation

- Mimics a strategy of allocating allowance revenues to projects dedicated to mitigation and adaptation of extreme events that may result from climate change.



Study Recommendations

- Performing future highway cost allocation studies under a cap-and-invest system can be more robust with improved assumptions:
  - Fuel consumption estimates
  - Updated MPG calculations
  - VMT calculations by weight class
  - Detailed gas/diesel distribution by weight class

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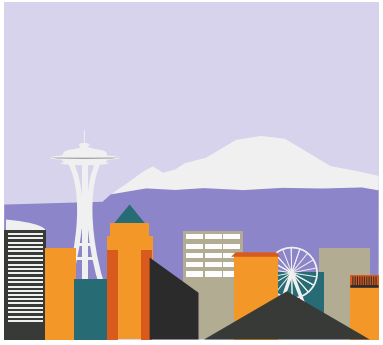

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