RUC West Steering Committee Fall Quarterly Meeting: *Parameters of a RUC Rate*

RUC WEST STEERING COMMITTEE

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NEW PATHS TO ROAD FUNDING

Overview

- Congestion Pricing and RUC Technology and Opinions Review
- Financial Analysis
  - Methodology Comments
  - Parameters Reviewed
  - Formulas Tested
  - Results
- Conclusions and Discussion

Questions to be Answered

- Effect of factors other than VMT in a RUC rate formula?
- Feasibility of integrating tolling with road usage charges (public acceptance)
- Technological feasibility of multiple objectives
- Rates for heavier vehicles
- Incentivization for highly efficient vehicles (e.g., EVs or alternative-fuel vehicles) and equity in revenue stream
- Other significant factors that should be considered in setting RUC rates

Congestion Pricing and RUC: Technology Assessment and Public Opinion

Review of Literature and Surveys

- Major findings:
  - Public is unfamiliar with mileage-based road user charges
  - Public lacks knowledge and understanding of transportation funding
  - Respondents are open to a RUC but do not necessarily see a need to replace the gas tax
  - Congestion pricing concepts not well understood
  - Public acceptance increases with familiarity and direct experience with pilot programs or through education campaigns
  - Privacy protection, administrative cost and fairness to other drivers remain significant concerns
  - Little research exists on combining congestion pricing and road user charges

Technologies for Congestion Prices/User Charges

	Priced Corridor	Tolled Facility	HOT Lane	Cordon	Area
Periodic Odometer Reporting	●	●	●	●	●
OBD-II, no GPS	●	●	●	●	●
OBD-II + GPS	●	◔	◔	●	●
License Plate Recognition	●	●	●	●	◔
Transponder + Gantry	●	●	●	●	◔

● Does not support ◔ Support in most circumstances ◔ Limited support in some circumstances ● Does support

Outcomes Literature and Technology Review

Conclusions

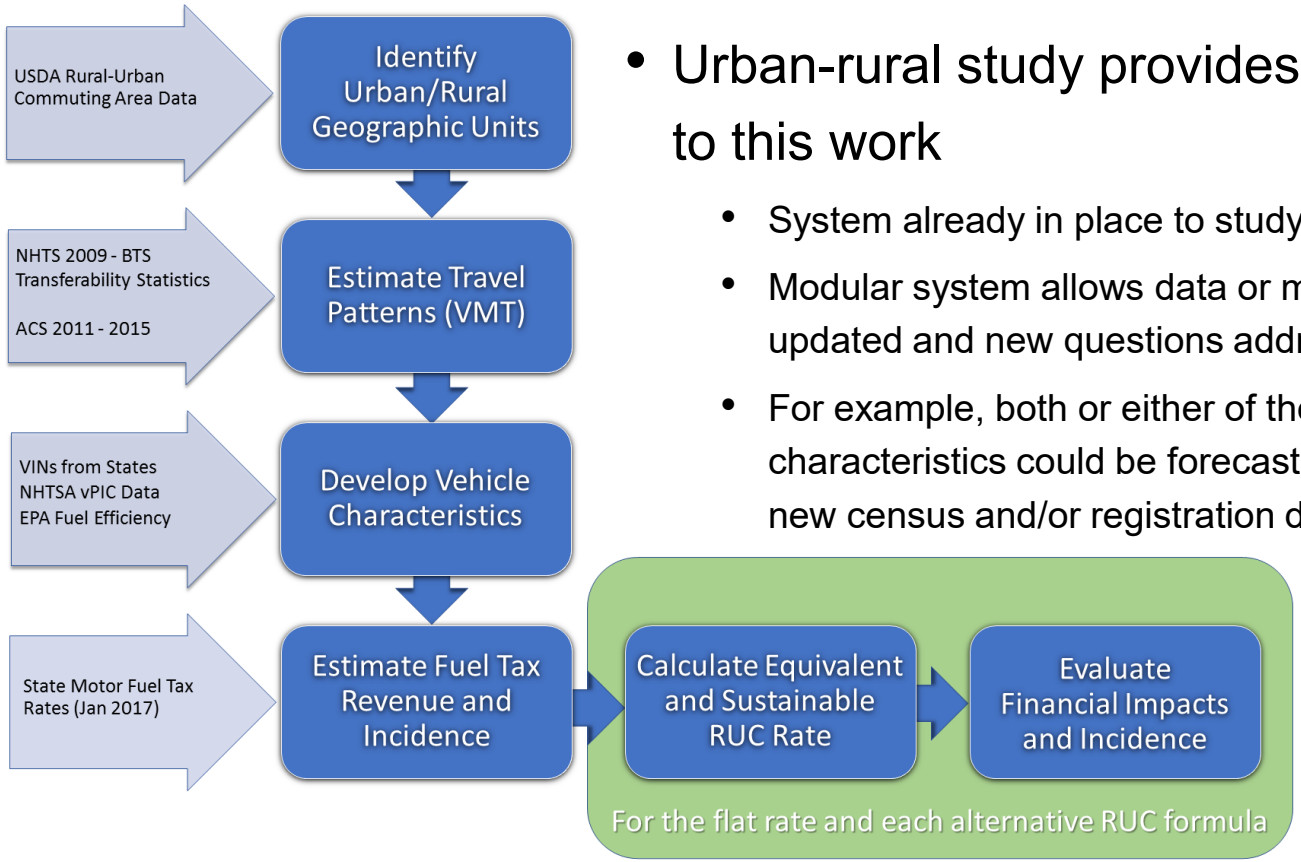
- With any technology or even low-tech methods of RUC measurement, administrators should plan for a trust building period through education and experience
- Different technologies have strengths and weaknesses (GPS is affected by building heights and other physical barriers, ANPR and transponder cordons don't offer an easy way to track miles traveled within the cordon)

Implications

- Developing systems that can utilize multiple technologies will be important for offering users flexibility, choice, and robust features
- RUC systems do have potential to be integrated into value pricing and systems management programs if agencies desire the coordination

Financial Analysis

Methodology for Parameters Analysis



- Urban-rural study provides framework to this work
  - System already in place to study parameters
  - Modular system allows data or methods to be updated and new questions addressed
  - For example, both or either of the VMT and vehicle characteristics could be forecast or updated with new census and/or registration data

Potential Parameter Identification

Reviewed parameters for those that might be technically and politically feasible, were testable, and were meaningfully related to transportation system costs or other policy objectives.

Vehicle Characteristics

- **Vehicle Fuel Efficiency**
- **Vehicle Fuel Type**
- Vehicle Weight
- Vehicle Age
- Vehicle Emissions

Owner Characteristics

- Place of Residence (Urban/Rural)
- Household Income

Roadway Characteristics

- Tollways
- HOT Lanes
- Type of Facility

Mileage Thresholds

- **Initial Allowance**
- Mileage Brackets
- Upper Mileage Threshold

Parameter Formulas Tested

	All Vehicles	Fuel Type		Fuel Efficiency		
	General Allowance	Zero Emissions Vehicles	Hybrid, Flexfuel, Other Fossil	Most efficient 1/3rd	Most Efficient 1/4th	Least Efficient 1/3rd
Formula 1	First 2,000 miles free					
Formula 2		First 2,000 miles free	First 1,000 miles free			
Formula 3		10% lower rate	10% lower rate			
Formula 4					First 2,000 miles free	
Formula 5				20% lower rate		20% higher rate
Formula 6		First 2,000 miles free	First 1,000 miles free	20% lower rate		20% higher rate

Fuels and Motor Fuel Excise Tax Rates

Current Tax Rates (dollars per mile)

State	Gasoline	Other Fossil	Biofuels
Arizona	0.180	0	0.180
California	0.297	0.090	0.090
Colorado	0.220	0.100	0.205
Hawaii	0.160	0.040	0.032
Oregon	0.300	0.300	0.300
Utah	0.294	0.145	0.294
Washington	0.494	0	0.494

- More fuel tax categories added compared to the Urban-Rural study
- Many states subsidize alternative fuels under current policy
- All rates are state taxes only – no county, local or federal tax.

Biofuel assumptions

- We did not have good data to inform these assumptions
- Assume 80 percent of flex fuel vehicles fill up with gasoline today
- Assume 90 percent of flex fuel vehicles using biofuel pay taxes for it
- Parameters may differ by state or within states in reality
- Reducing biofuel percentages brings more new mileage under the RUC revenue regime
- Surveys of flex fuel vehicle owners could be necessary
- Spatial data does exist about the location of alternative fuel stations

Household Payments under Current Policy

State	Annual Household Mileage		
	10,000	15,000	25,000
Arizona	$86	$129	$214
California	$141	$212	$354
Colorado	$105	$157	$262
Hawaii	$76	$114	$190
Oregon	$143	$214	$357
Utah	$140	$210	$350
Washington	$235	$353	$588

- Important to always anchor our discussion with how households are currently impacted by gas taxes.
- Based on gasoline rates from the last slide and 21 mpg – most states are around this average fuel efficiency.
- Even a family traveling 25,000 per year in Washington is only contributing $49 per month to state gas tax revenues.
- A 5% increase in payments would be between less than $4 per year for a household traveling 10,000 miles a year in Hawaii, and less than $30 per year for the household traveling 25,000 miles in Washington.

RUC Payments v. Current Fuel Excise Taxes

State	Urban	Mixed	Rural	Urban-Rural Range
Arizona	0.8%	-2.0%	-7.7%	8.5%
California	0.3%	-2.6%	-6.7%	7.0%
Colorado	1.5%	-4.5%	-7.3%	8.8%
Hawaii	0.9%	-2.0%	-5.8%	6.7%
Oregon	1.3%	-3.7%	-5.8%	7.1%
Utah	0.8%	-4.4%	-7.4%	8.2%
Washington	1.1%	-3.9%	-5.3%	6.4%
All States	0.7%	-3.3%	-6.4%	7.0%

Findings – Percent Change for All States

Formula	Formula Description	Urban	Mixed	Rural
Base	Flat Rate	0.7%	-3.3%	-6.4%
1	2000-mile global exemption	1.0%	-4.9%	-9.4%
2	2000-mile exemption for electric and 1000-mile exemption for other non-gas (including hybrid)	0.7%	-3.4%	-6.5%
3	10% lower rate for non-gas vehicles	0.7%	-3.3%	-6.4%
4	2000-mile exemption for 25% most fuel efficient	0.6%	-2.9%	-5.4%
5	20% increase 33% least efficient vehicles & 20% decrease 33% most efficient vehicles	0.3%	-1.5%	-3.1%
6	Both the Formula 2 and 5 parameters are applied	0.3%	-1.6%	-3.2%

Findings of RUC Rate Assessment by State

- Only notable difference in rates in Formula 1.
- Formula 1 exempts the greatest number of miles from the RUC, shrinking the tax base.
- Formulas 5 and 6 produce the least change from gas tax.
- Revenue estimates for current and RUC regimes are made prior to the cost of administration.
- Equivalent rates influenced by fuel economy across the state.
- Statewide effects depend on alternative fuel penetration overall and by type.

Equivalent RUC Rates (cents per mile)

State	Base	F_1	F_2	F_3	F_4	F_5	F_6
Arizona	0.80	0.93	0.81	0.81	0.83	0.80	0.80
California	1.10	1.26	1.10	1.10	1.14	1.11	1.12
Colorado	1.04	1.19	1.05	1.05	1.07	1.04	1.05
Hawaii	0.71	0.80	0.71	0.71	0.73	0.71	0.71
Oregon	1.44	1.67	1.44	1.45	1.49	1.41	1.42
Utah	1.30	1.47	1.31	1.32	1.34	1.31	1.31
Washington	2.21	2.54	2.22	2.22	2.29	2.22	2.23

- F_1: 2000-mile allowance for all vehicles;
- F_2: 2,000-mile allowance for EVs & 1,000-mile allowance for other non-gas;
- F_3: 10% lower rate for non-gasoline vehicles;
- F_4: 2,000-mile allowance for 25% most fuel-efficient vehicles;
- F_5: 20% lower rate for the 33% most efficient vehicles & 20% higher for the 33% least efficient vehicles; and
- F_6: A combination of F_2 and F_5.

Observations – Across States and Formulas

- Payments consistently fall for mixed and rural aggregations under a RUC – out of 7 states and 6 formulas
  - Only for AZ mixed tracts in formula 1 do any mixed or rural aggregations see increases.
- Urban/Mixed/Rural balance is least affected by parameters in CA
  - Penetration of flex fuel/other fossil fuel vehicles is the lowest
  - All regions have higher fuel efficiency than other states
- Changes for urban households dependent on share of gas taxes paid in base case
  - CA urban households see the smallest percentage increase
- CO experiences largest effect because it has the largest difference in fuel efficiency between geographies and also high registration of alternative fuel vehicles
- Hawaii's data produces the smallest changes in payments across all geography types – consistently across formulas
  - Hawaii doesn't have the spatial patterns for fuel type seen in other states – EVs in rural and flex fuel vehicles in urban areas
  - Only zip code data was available so some spatial detail on vehicles is unavailable in urban and mixed areas

Detail on Formulas

- Focus on Formula 1 and 5:
  - They produce the most notable differences from the flat rate RUC formula.
- Not all formulas have much effect.
  - Formula's 2 and 3 have comparatively small effects, because the share of the total fleet that is made up of alternative fuel vehicles remains relatively small in most states.
  - Formula 4 affects only 25% of vehicles – which are contributing less gas tax revenues under current policy – its impacts are noticeable, but far less so than formula 5.
- The next slides show some of the different ways we can look at formula effects.

Comparing Baseline and Formula 1

Baseline

Urban	Mixed	Rural
0.7%	-3.3%	-6.4%

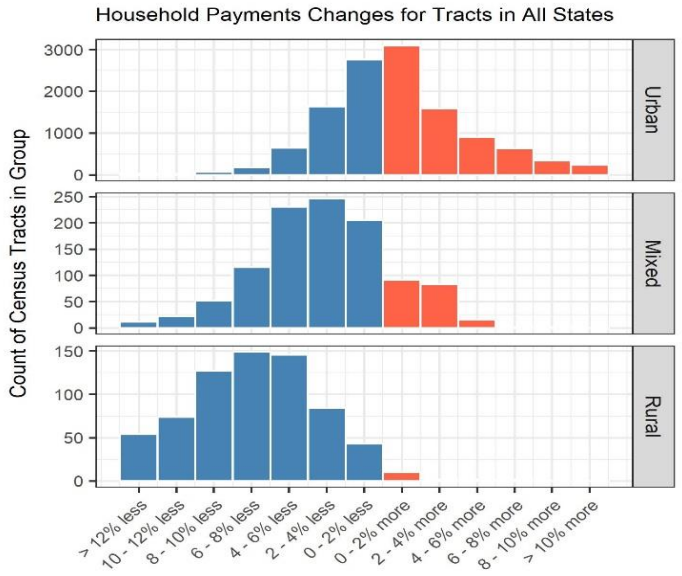
- Just like the Urban – Rural study, urban households pay a little more (approximately $5 per year) and rural households benefit
- This is because rural households pay more under the gas tax due to owning older, less fuel efficient vehicles on average

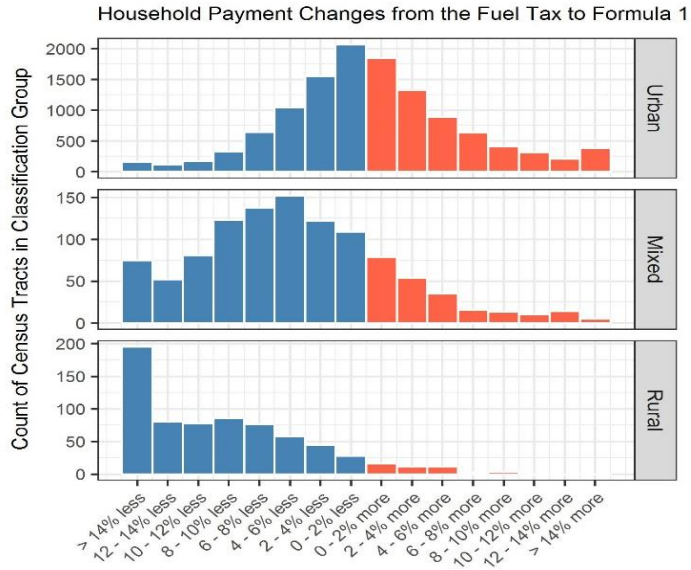
Formula 1

Urban	Mixed	Rural
1.0%	-4.9%	-9.4%

- Rural households save nearly 10% under a RUC compared to just over 6% under the gas tax
- Larger states like CA dominate 7-state averages:
  - Urban households travel as much or more than rural households capturing a greater tax share as revenue base shrinks
- Rural and mixed households have higher vehicle ownership

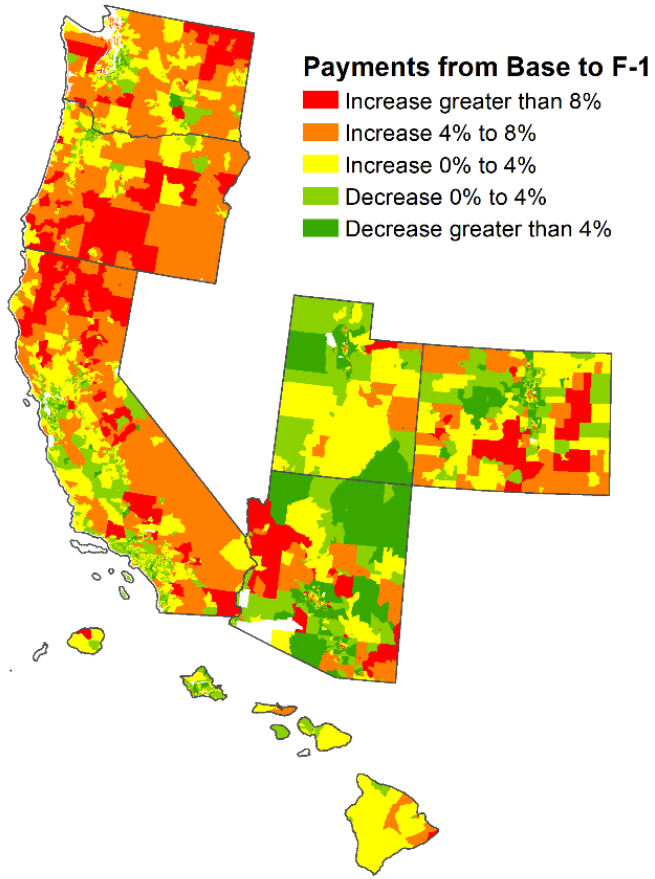
Distribution of Changes Among Locations



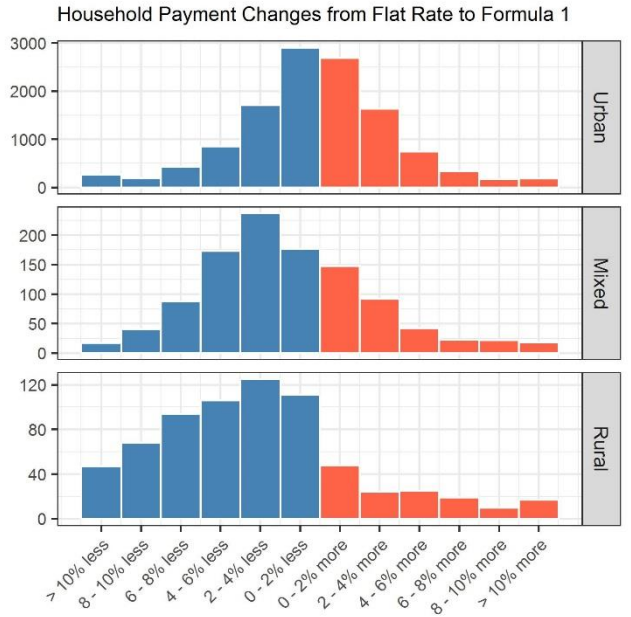


- Formula 1 expands the distribution of impacts across census tracts for all three geographic classes.
- Many rural tracts are estimated to have the average household decline by more than 14%.
- The number of mixed and urban tracts with 14+ percent increases or savings increases under the mileage allowance.

Spatial Pattern of Changes



- Areas with significant decreases represent primarily areas with VMT significantly below statewide averages
- Increases correspondingly are areas with high VMT



Findings by state – Base RUC v. Formula 1

Percent Change in Payments: Basic RUC

State	Urban	Mixed	Rural
Arizona	0.8%	-2.0%	-7.7%
California	0.3%	-2.6%	-6.7%
Colorado	1.5%	-4.5%	-7.3%
Hawaii	0.9%	-2.0%	-5.8%
Oregon	1.3%	-3.7%	-5.8%
Utah	0.8%	-4.4%	-7.4%
Washington	1.1%	-3.9%	-5.3%
Average	**0.7%**	**-3.3%**	**-6.4%**

Percent Change in Payments: Formula 1

State	Urban	Mixed	Rural
Arizona	0.5%	0.2%	-6.9%
California	0.5%	-4.6%	-11.0%
Colorado	1.3%	-2.6%	-7.9%
Hawaii	1.5%	-3.8%	-7.8%
Oregon	2.4%	-7.4%	-10.4%
Utah	0.7%	-2.0%	-7.6%
Washington	1.9%	-6.7%	-10.1%
Average	**1.0%**	**-4.9%**	**-9.4%**

Comparing Baseline and Formula 5

Baseline

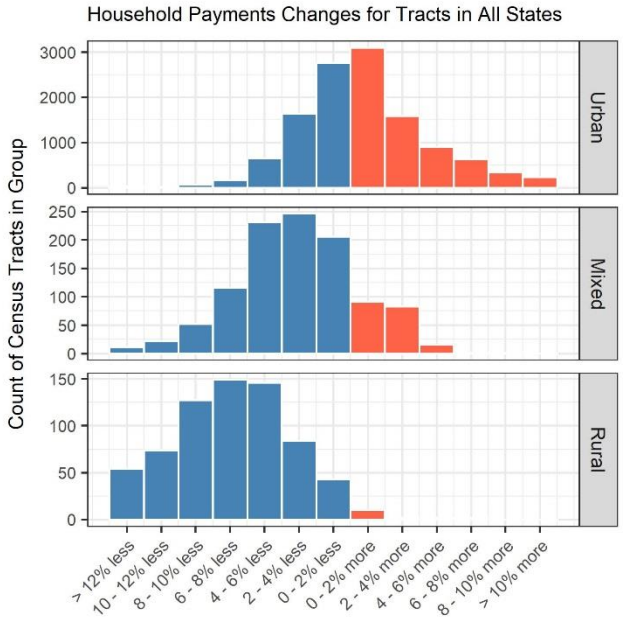
Urban	Mixed	Rural
0.7%	-3.3%	-6.4%

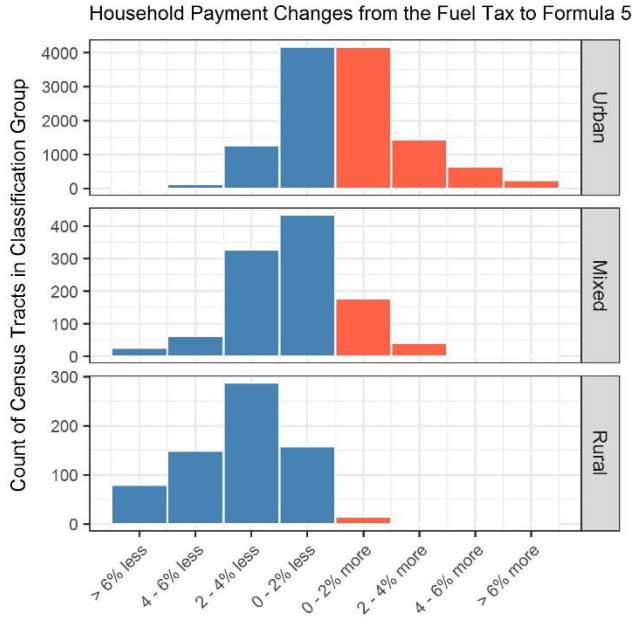
Formula 5

Urban	Mixed	Rural
0.3%	-1.5%	-3.1%

- High efficiency vehicles pay 20% less and low efficiency vehicles pay 20% more than the base RUC rate
- Because efficiency thresholds adjust annually relative to the fleet, future revenue won't be eroded by tech changes
- Rural households still save $15 per year on average and rural households with efficient vehicles are better off

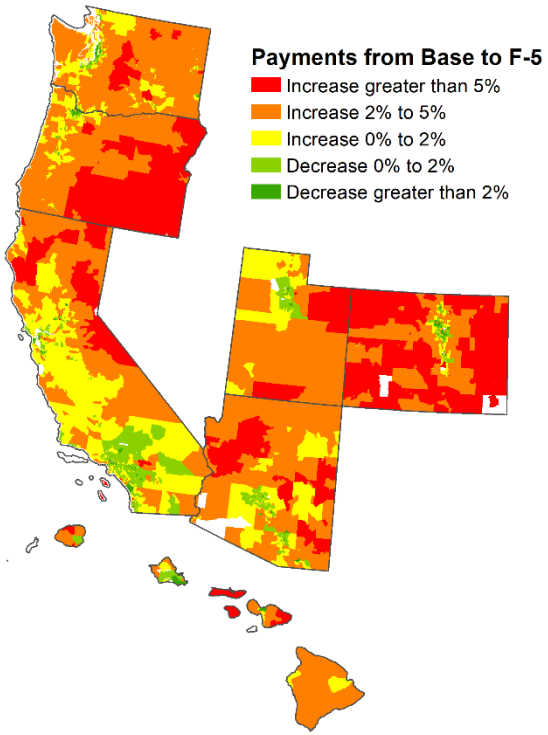
Distribution of Changes among Locations



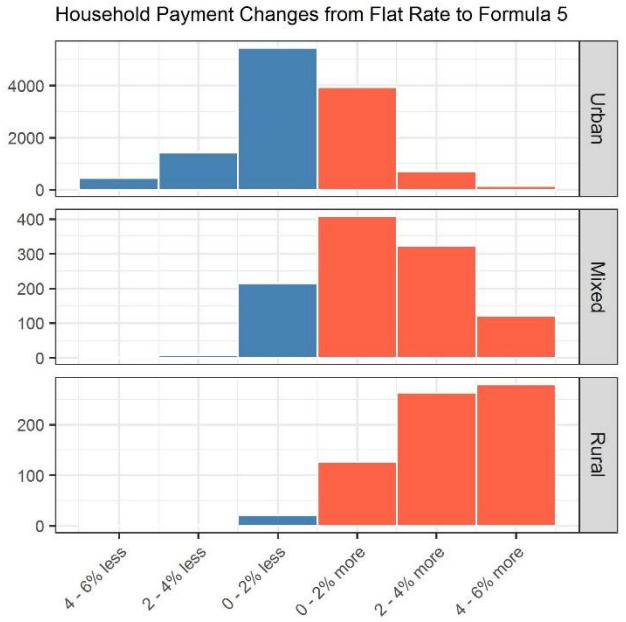


- Formula 5 does not spread the distribution of payments as much as a simple mileage allowance
- Very few tracts have households paying more than or less than 6% compared to the base RUC rate
- The number of rural and mixed tracts paying declines relative to the base RUC rate

Spatial Pattern of Changes



- Areas that see increases have below average fuel economy for their states.



State by State Variation – Base & Formula 5

Percent Change in Payments: Basic RUC

Arizona	0.8%	-2.0%	-7.7%
California	0.3%	-2.6%	-6.7%
Colorado	1.5%	-4.5%	-7.3%
Hawaii	0.9%	-2.0%	-5.8%
Oregon	1.3%	-3.7%	-5.8%
Utah	0.8%	-4.4%	-7.4%
Washington	1.1%	-3.9%	-5.3%
Average	**0.7%**	**-3.3%**	**-6.4%**

Percent Change in Payments
Formula 5 - Fuel Efficiency

State	Urban	Mixed	Rural
Arizona	0.5%	-1.3%	-4.5%
California	0.2%	-1.5%	-3.9%
Colorado	0.5%	-1.4%	-2.5%
Hawaii	0.2%	-0.4%	-1.8%
Oregon	0.5%	-1.5%	-2.4%
Utah	0.4%	-2.1%	-3.7%
Washington	0.5%	-1.7%	-2.4%
Average	**0.3%**	**-1.5%**	**-3.1%**

Formula Impacts by Fuel Type

Formula Impacts by Fuel Type (Basic RUC)

State	Gasoline	Hybrid	Flex fuel	Other Fossil	Electric
Arizona	$ (0.09)	$ 28.28	$ (6.61)	$ 56.60	$ 62.69
California	$ (1.55)	$ 51.41	$ (1.76)	$ 64.82	$ 102.60
Colorado	$ (0.34)	$ 47.53	$ (5.44)	$ 26.48	$ 95.17
Hawaii	$ (1.09)	$ 30.06	$ 4.75	$ 36.76	$ 59.17
Oregon	$ (0.18)	$ 72.04	$ (34.96)	$ (46.24)	$ 160.08
Utah	$ 0.38	$ 44.31	$ (16.60)	$ 61.21	$ 108.45
Washington	$ (1.39)	$ 101.60	$ (37.79)	$ 205.45	$ 227.04

- Impact of a RUC on gas-powered vehicles are much smaller than for other fuel types.
- Utah is the only state where the estimated sign for gasoline is positive
  - Reduced costs accrue to flex fuel vehicles (which tend to have worse fuel efficiency)
- Hybrid and electric vehicles see the greatest increases(as expected).
- Flex fuel and other fossil fuel impacts vary by state
  - Each state treats these fuel types slightly differently under current policy.
- Penetration levels of these fuel types affect the magnitude of impacts.
- Flex fuel vehicle composition varies by state, depending on model mix (passenger vehicles v. light trucks).

Formula Impacts by Fuel Type (Formula 1)

State	Gasoline	Hybrid	Flex fuel	Other Fossil	Electric
Arizona	$ (0.13)	$ 28.48	$ (6.16)	$ 56.93	$ 63.81
California	$ (1.57)	$ 52.08	$ (2.04)	$ 64.74	$ 103.76
Colorado	$ (0.35)	$ 48.29	$ (5.40)	$ 25.64	$ 97.17
Hawaii	$ (1.09)	$ 30.15	$ 4.86	$ 36.52	$ 59.31
Oregon	$ (0.20)	$ 73.71	$ (35.47)	$ (47.19)	$ 165.50
Utah	$ 0.34	$ 44.46	$ (16.27)	$ 61.65	$ 108.65
Washington	$ (1.43)	$ 104.45	$ (38.75)	$ 203.57	$ 232.68

- Formula 1 shows almost no difference from the basic RUC in terms of impact by fuel type.
- The greatest change in the table is an average increase of $5 for electric vehicles in Oregon and Washington.
- Spatial patterns within the small number of non-gasoline vehicles operating in states are not strong enough to cause a difference in impacts.

Formula Impacts by Fuel Type (Formula 5)

State	Gasoline	Hybrid	Flex fuel	Other Fossil	Electric
Arizona	$ (0.16)	$ 16.36	$ (2.56)	$ 58.55	$ 49.99
California	$ (1.21)	$ 33.25	$ 7.65	$ 63.78	$ 83.56
Colorado	$ (0.79)	$ 32.57	$ 0.56	$ 37.44	$ 76.40
Hawaii	$ (1.10)	$ 19.70	$ 7.56	$ 43.93	$ 47.44
Oregon	$ (0.21)	$ 42.51	$ (18.61)	$ (33.82)	$ 126.08
Utah	$ (0.06)	$ 24.76	$ (6.56)	$ 48.87	$ 87.01
Washington	$ (1.12)	$ 58.67	$ (14.81)	$ 174.96	$ 183.66

- The lower rate for higher fuel efficiency vehicles and higher rates for lower fuel efficiency vehicles in Formula 5 typically leads to more moderate impacts for every fuel type
- Hybrid and electric vehicles still contribute significantly more than under current gas tax.
- Gas vehicle savings remain relatively small on average.

Formula Impacts by Fuel Type (Formula 2)

State	Gasoline	Hybrid	Flex fuel	Other Fossil	Electric
Arizona	$ 0.49	$ 21.57	$ (12.32)	$ 50.30	$ 56.01
California	$ (1.09)	$ 39.61	$ (13.62)	$ 53.23	$ 91.21
Colorado	$ 0.64	$ 38.13	$ (14.40)	$ 17.32	$ 85.66
Hawaii	$ (0.69)	$ 24.12	$ (0.33)	$ 30.97	$ 53.17
Oregon	$ 1.01	$ 56.04	$ (49.66)	$ (61.30)	$ 143.25
Utah	$ 1.51	$ 33.26	$ (27.36)	$ 50.45	$ 97.19
Washington	$ 0.10	$ 76.78	$ (62.48)	$ 180.56	$ 202.46

- Formula 2 provides electric vehicles 2,000 miles of free travel while all other alternative fuel vehicles (including hybrids) receive 1,000 miles free.
- 2,000 free miles is a slightly lower benefit that the 20% rate discount provided by Formula 5, with EVs paying a few dollars more.
- Many states see gas vehicles pay a little more – but unnoticeable, and flex fuel and other fossil fuel vehicles are some of the greatest beneficiaries – primarily due to current relatively low fuel economy.

Sustainable Revenue Rates

Sustainable Revenue Increase

State	Overall
California	59.3%
Oregon	25.9%
Utah	91.2%

Percent Change: Basic RUC

State	Urban	Mixed	Rural
California	59.7%	55.1%	48.6%
Oregon	27.5%	21.3%	18.6%
Utah	92.7%	82.8%	77.0%

Percent Change: Formula 1

State	Urban	Mixed	Rural
California	60.1%	52.0%	41.8%
Oregon	29.0%	16.6%	12.9%
Utah	92.5%	87.4%	76.7%

- **All sustainable scenarios collect more revenue:**
  - **Increase that states provided differed**
- **Increases relative to the current gas tax.**
- **RUC shifts burden slightly to urban areas.**
- **Fuel efficiency parameters have slightly increased effect.**
- **Increases magnify the difference between geographic classes.**

Percent Change: Formula 5

State	Urban	Mixed	Rural
California	59.5%	56.9%	53.1%
Oregon	26.6%	24.1%	22.9%
Utah	91.9%	87.2%	84.2%

Financial Analysis Implications

Questions Answered (1)

- What parameters might be considered for inclusion in a RUC rate formula?
  - *We think these three types of parameters are among those most worth considering in a RUC rate formula: mileage, fuel type and fuel efficiency. Additionally, parameters related to time and location of travel might be used to address operational considerations or the costs of different facilities.*
- What is the effect of including variables other than miles traveled in a RUC rate formula on questions of geographic equity?
  - *Adding parameters to a RUC rate formula has the potential influence distributional effects relative to the current gas tax. Unconditional mileage allowances result in greater shifts, fuel type parameters have little effect, and fuel efficiency parameters change household the least from current policy.*
- Would the integration of tolls with road usage charges be acceptable to motorists and policy makers and technologically feasible?
  - *Acceptability is a much greater barrier than technical feasibility at this point. Depending on RUC systems put in place, technical implications become more difficult if flexible systems aren't anticipated from early in the implementation process.*

Questions Answered (2)

- Would it be appropriate and feasible to charge a different rate for heavier vehicles?
  - *Pavement damage from light duty vehicles is negligible. A commensurate RUC rate difference would not be noticeable. Other factors like fuel type and distance would capture utilization more effectively.*
- How can the desire to incentivize purchase of highly efficient vehicles, such as EVs or alternative-fuel vehicles, be balanced with the need to establish an equitable revenue stream?
  - *A fuel-efficiency parameter set relative to overall fleet characteristics (e.g., formulas 5 and 6) can avoid future revenue deterioration, reduce the differences between vehicle payments, and still set an explicit amount of policy support for high efficiency vehicles.*
- Are there other significant factors that should be considered in setting RUC rates?
  - *RUC rates should be as simple as possible to improve public understanding and acceptance as well as minimize administrative complexity. RUC parameters can have unintended consequences if interactions with household vehicle choices and travel patterns are not considered.*

Opportunities for Future Insight

Opportunities for further equity considerations:

- Financial implications for households along additional dimensions
    - Dataset includes attributes for summarizing by characteristics like income, resident age, vehicle age, environmental justice (low income and minority groups), and auto/mobility access
- Assess additional geographies such as legislative districts
    - Census tracts are easily aggregated for insights at other levels of detail
- Summarize additional information on current policy's distributional effects
    - Baseline data is created for comparison between policies but not reviewed or presented on its own – e.g., how does the gas tax relate to equity issues

Opportunities for Refinement of Analytic Foundations:

- Develop or estimate better data on flex fuel vehicle fuel choice
- Explore reasons for differences in flex fuel registrations across states
- Develop method to include light-duty commercial vehicle miles
    - Rental cars, service vehicles, taxis, fleet vehicles (NHTS 2017 questions)
- Add diesel vehicles to the analysis
- Keep analysis up to data using new NHTS and current registrations

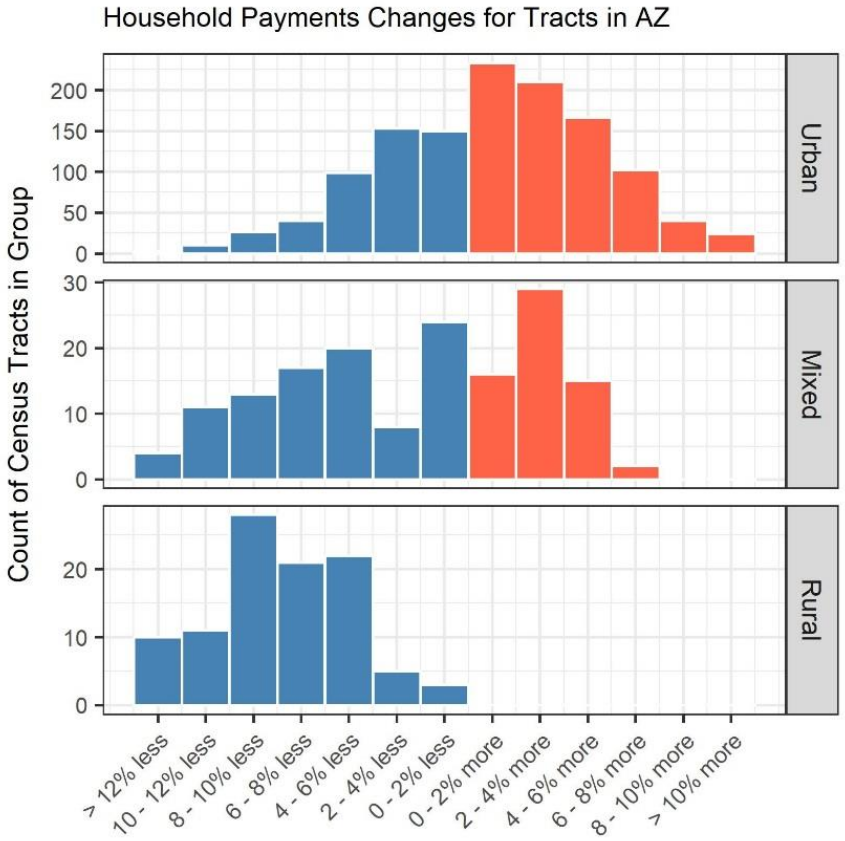
Further Extensions

- Methods for updating projects based on evolving registration data
  - *Web-based interface could address annual updates to socioeconomic and vehicle data*
- Prepare forecasts of financial implications
  - *Estimate development of the household vehicle fleet*
    - *Electrification is expected to grow rapidly in many of the RUC West states*
  - *Estimate evolution of household travel demand*
  - *Account for revenue deterioration under current policy and contrast with stable RUC-based alternatives over time*
  - *Utilize scenario analysis methods to consider different technology and travel futures*
- Extend financial analysis to include coordinated funding options:
  - *Include other revenue streams (such as registrations and licenses) and make comparisons to resource allocation (were funding flows)*
  - *Assess administrative costs for alternative parameter and technology configurations*

Questions?

Extra Slides

Arizona


Household Payments Changes for Tracts in AZ
Count of Census Tracts in Group
Urban
Mixed
Rural
> 12% less
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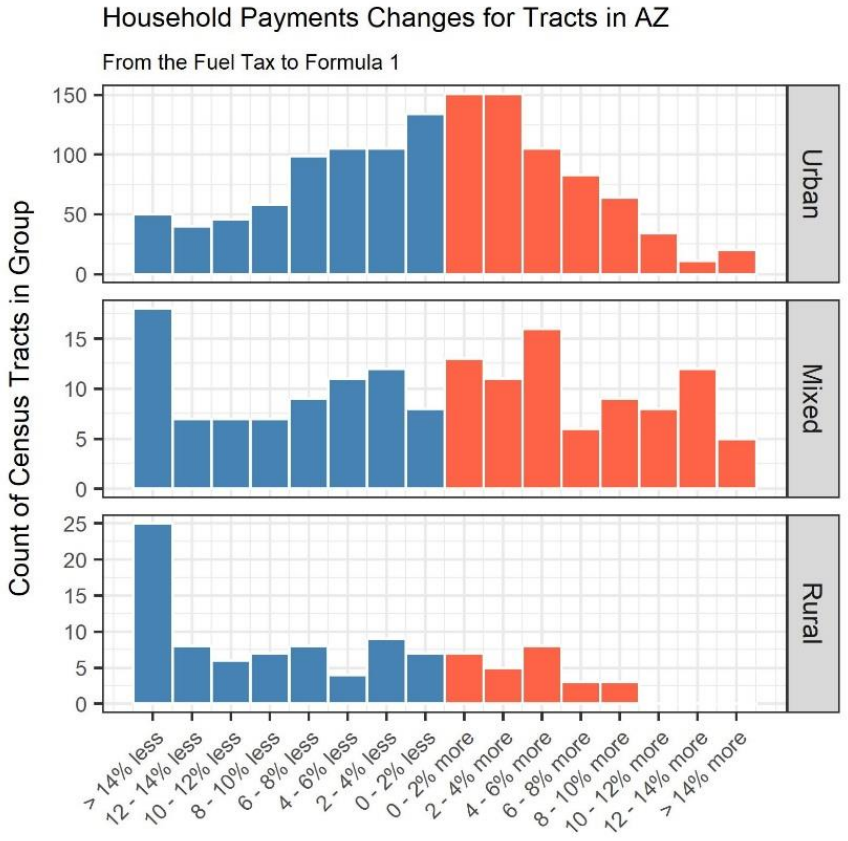
Household Payments Changes for Tracts in AZ
From the Fuel Tax to Formula 1
Count of Census Tracts in Group
Urban
Mixed
Rural
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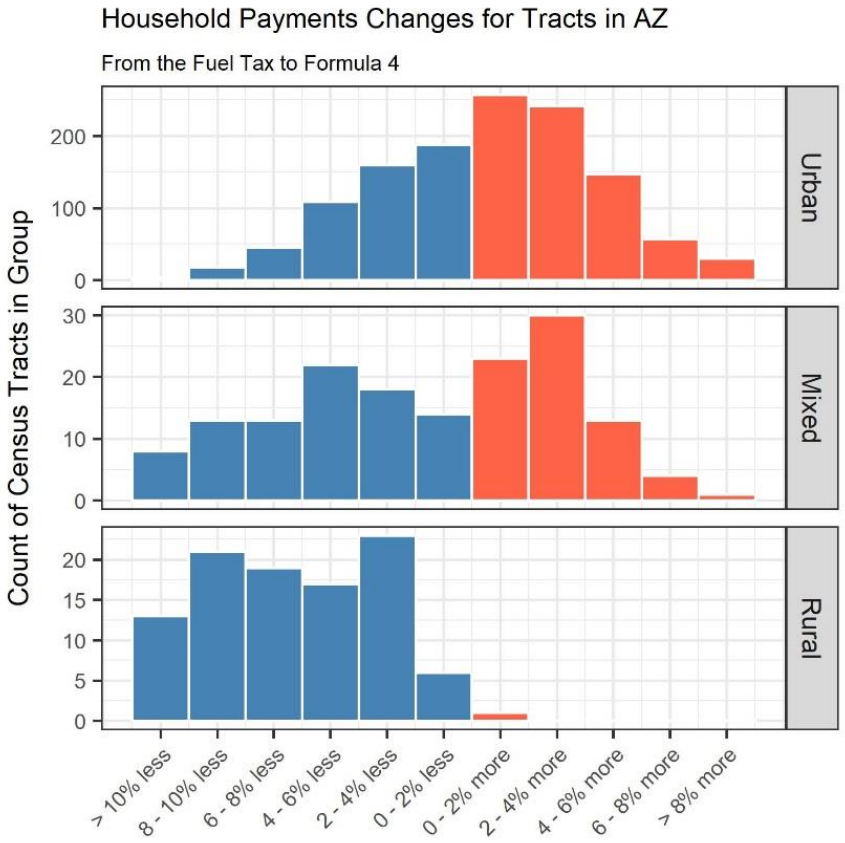
Arizona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From the Fuel Tax to Formula 4
Count of Census Tracts in Group
Urban
Mixed
Rural
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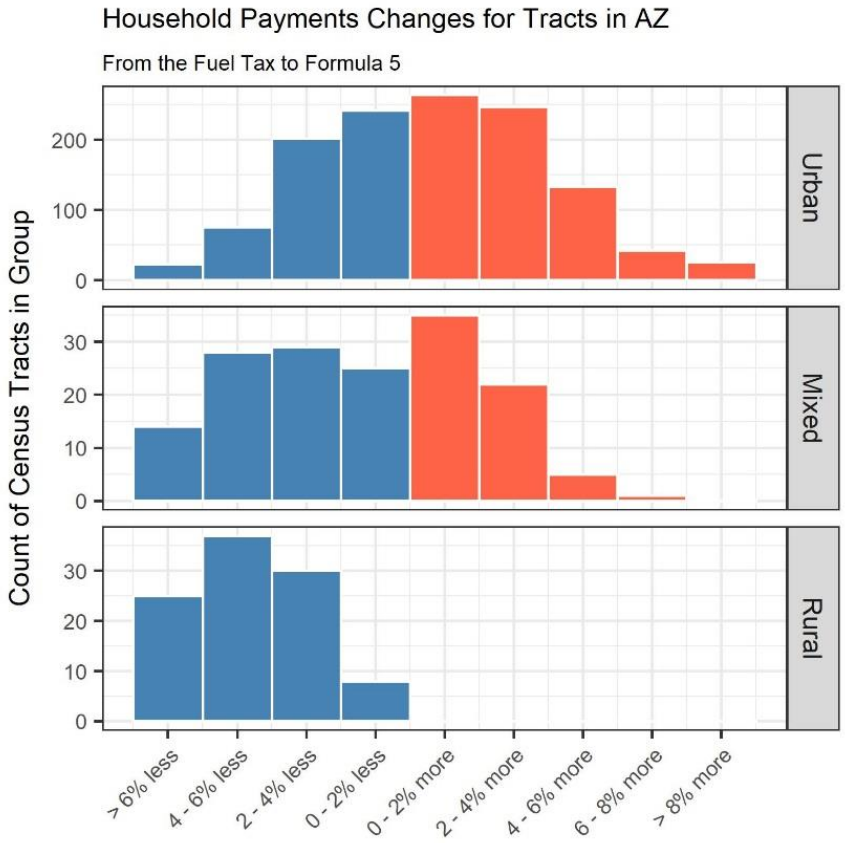
Household Payments Changes for Tracts in AZ
From the Fuel Tax to Formula 5
Count of Census Tracts in Group
Urban
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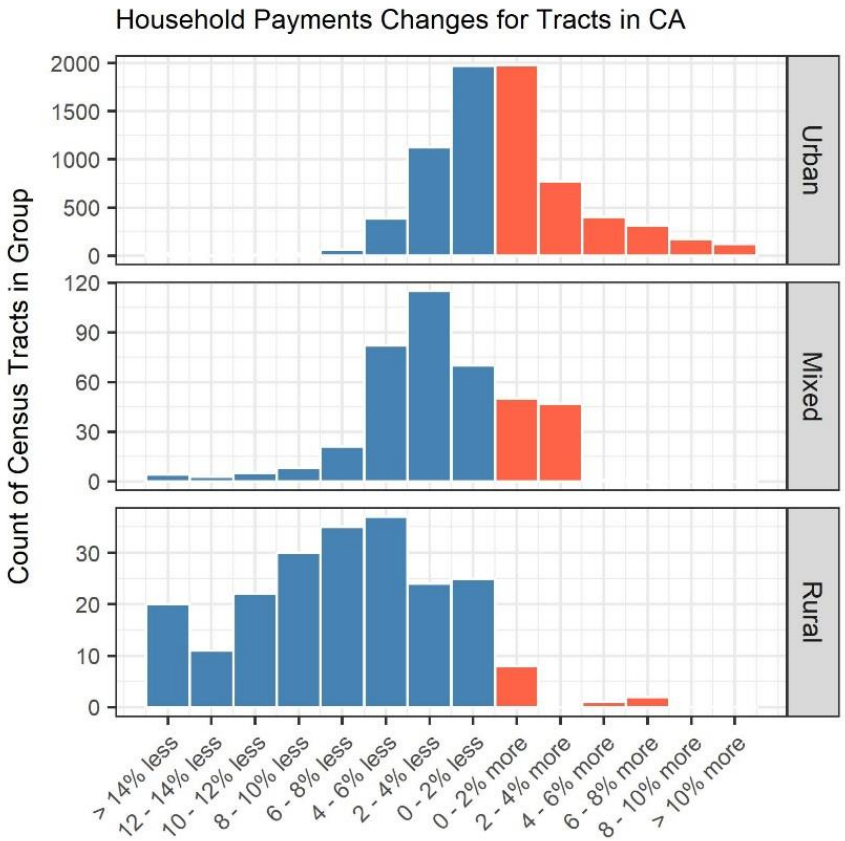
California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Count of Census Tracts in Group
Urban
Mixed
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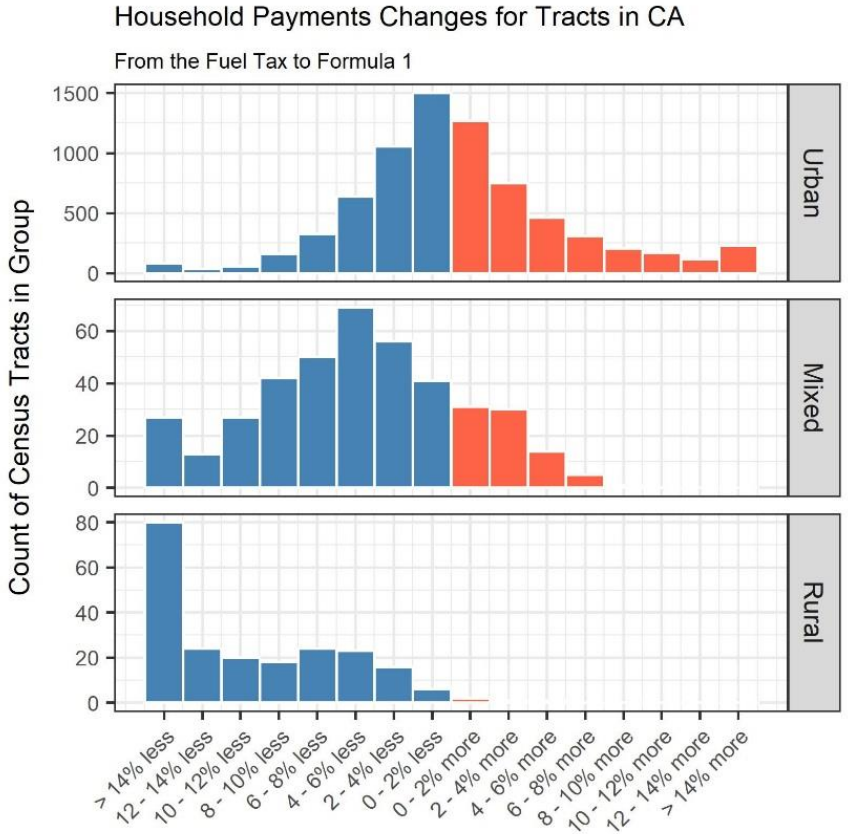
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From the Fuel Tax to Formula 1
Count of Census Tracts in Group
Urban
Mixed
Rural
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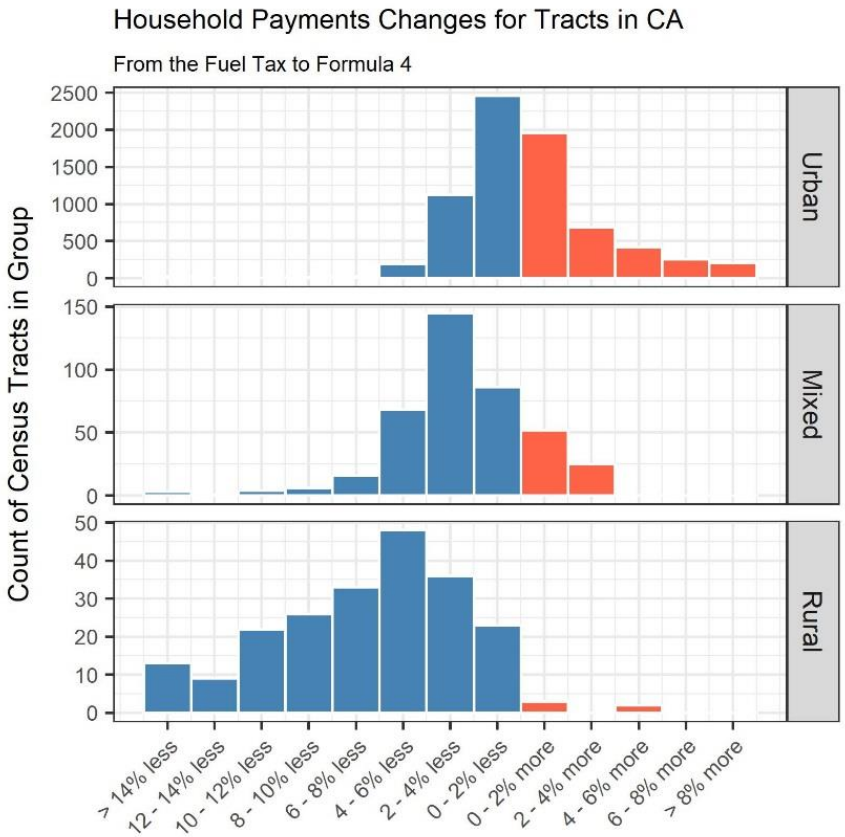
California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From the Fuel Tax to Formula 4
Count of Census Tracts in Group
Urban
Mixed
Rural
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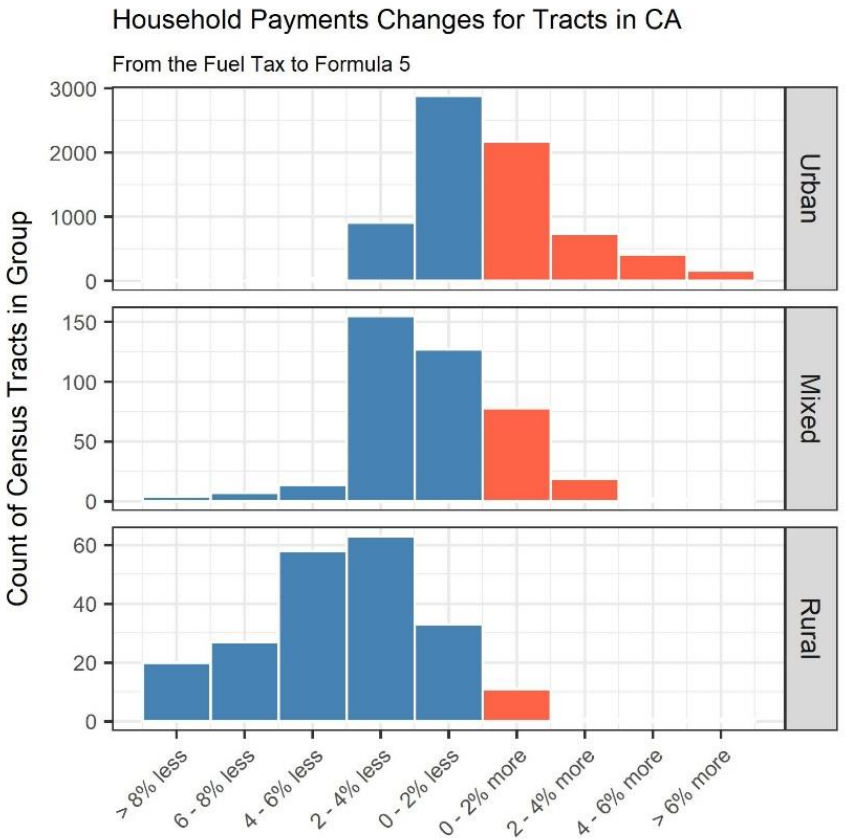
Household Payments Changes for Tracts in CA
From the Fuel Tax to Formula 5
Count of Census Tracts in Group
Urban
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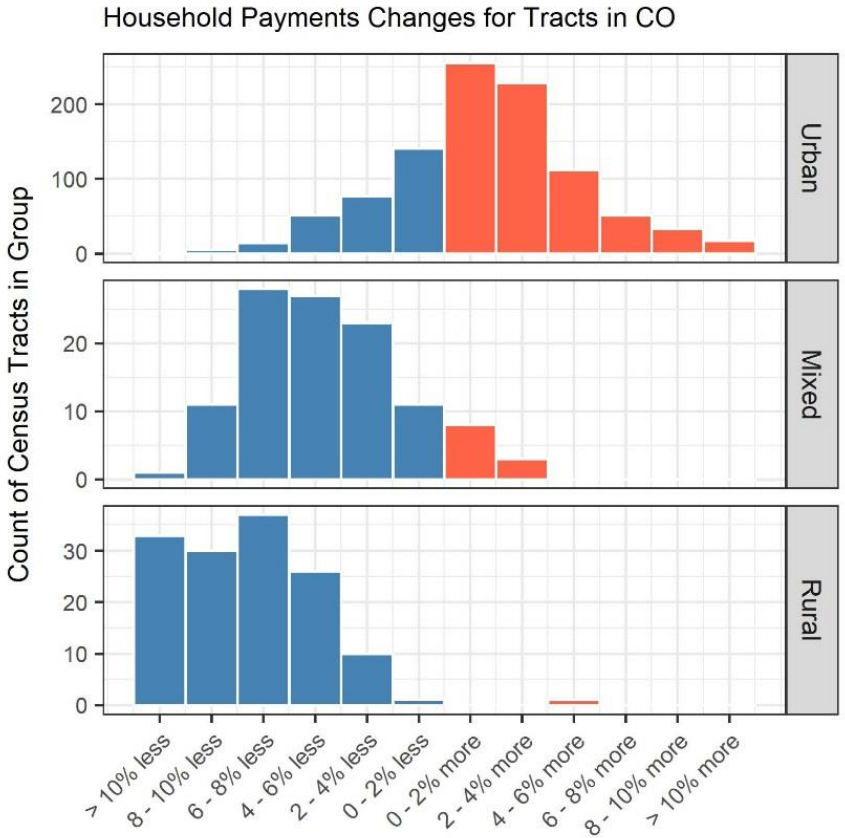
Colorado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Count of Census Tracts in Group
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Rural
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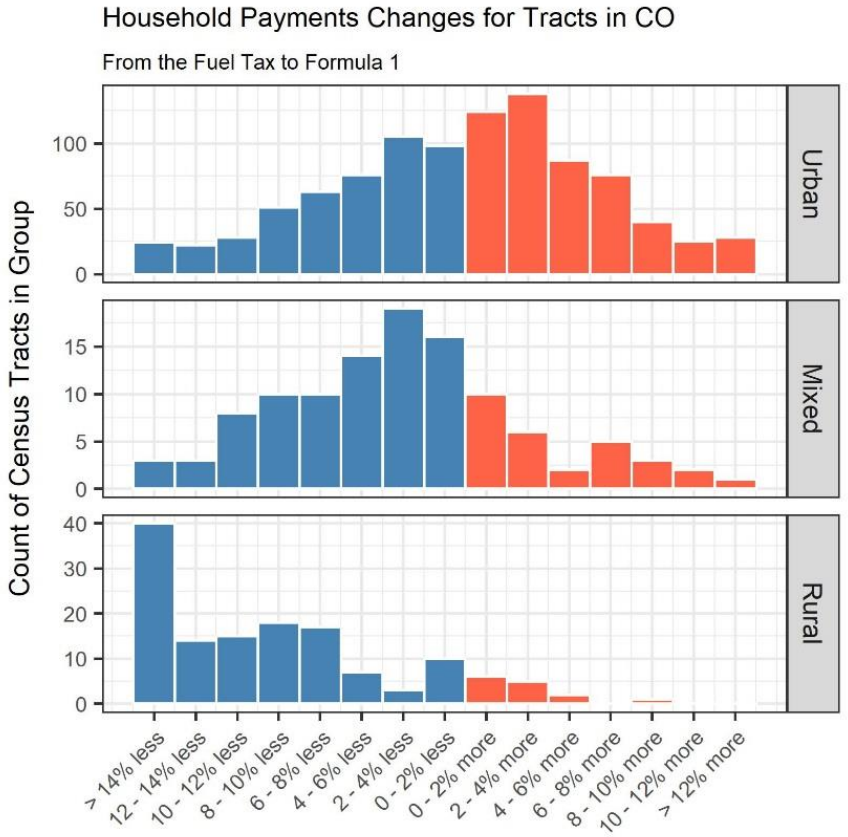
Household Payments Changes for Tracts in CO
From the Fuel Tax to Formula 1
Count of Census Tracts in Group
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Mixed
Rural
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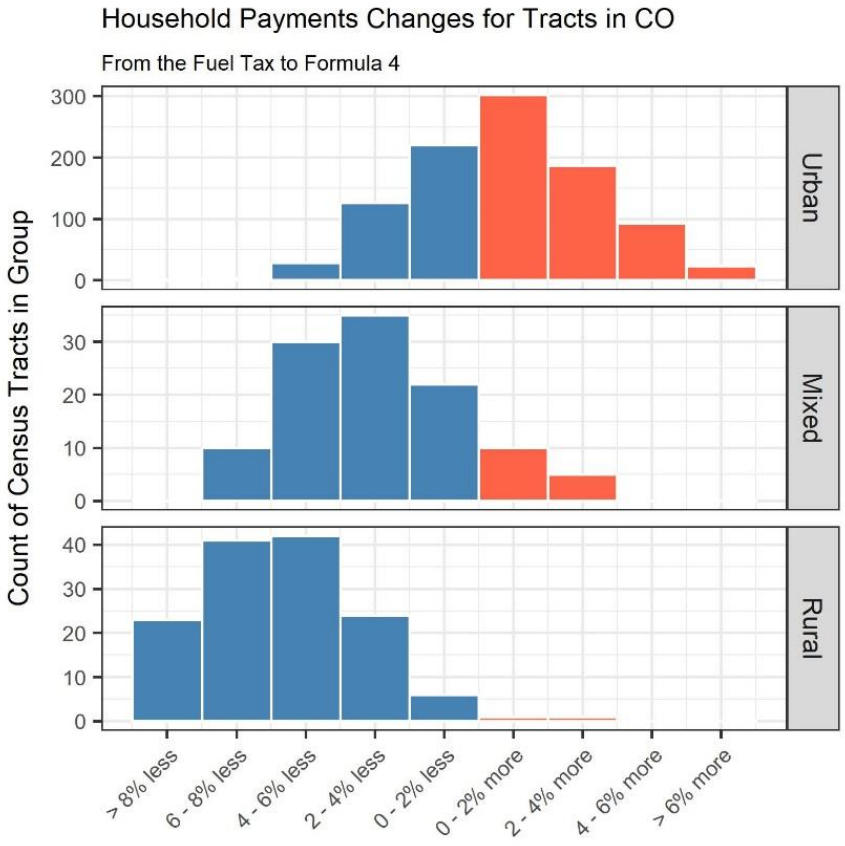
Colorado


Household Payments Changes for Tracts in CO
From the Fuel Tax to Formula 4
Count of Census Tracts in Group
Urban
Mixed
Rural
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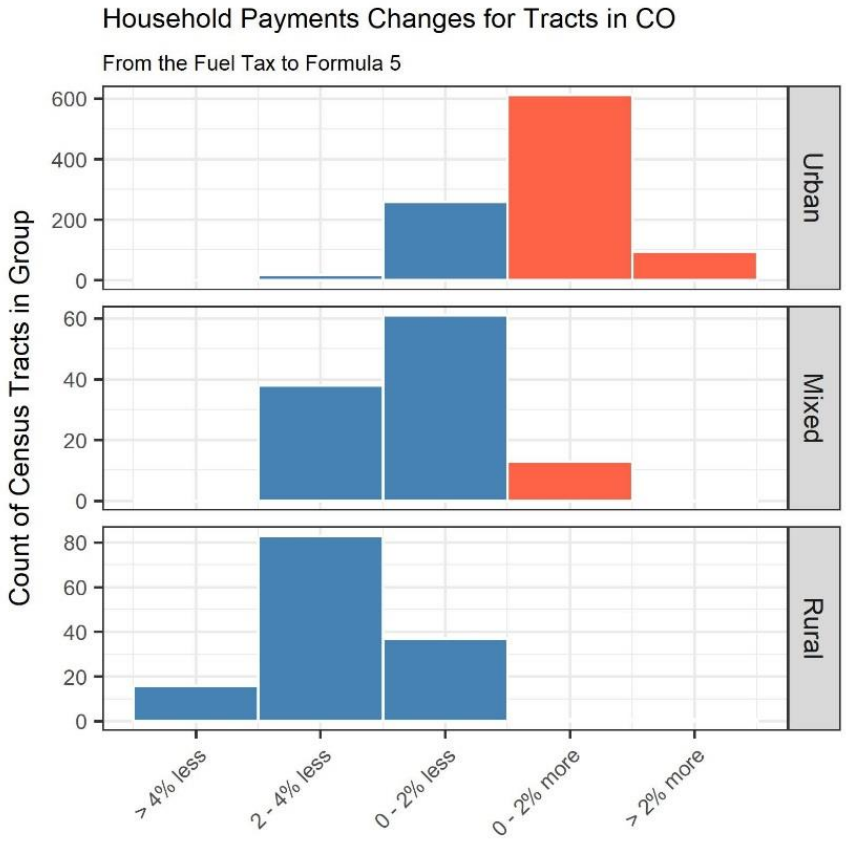
Household Payments Changes for Tracts in CO
From the Fuel Tax to Formula 5
Count of Census Tracts in Group
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Mixed
Rural
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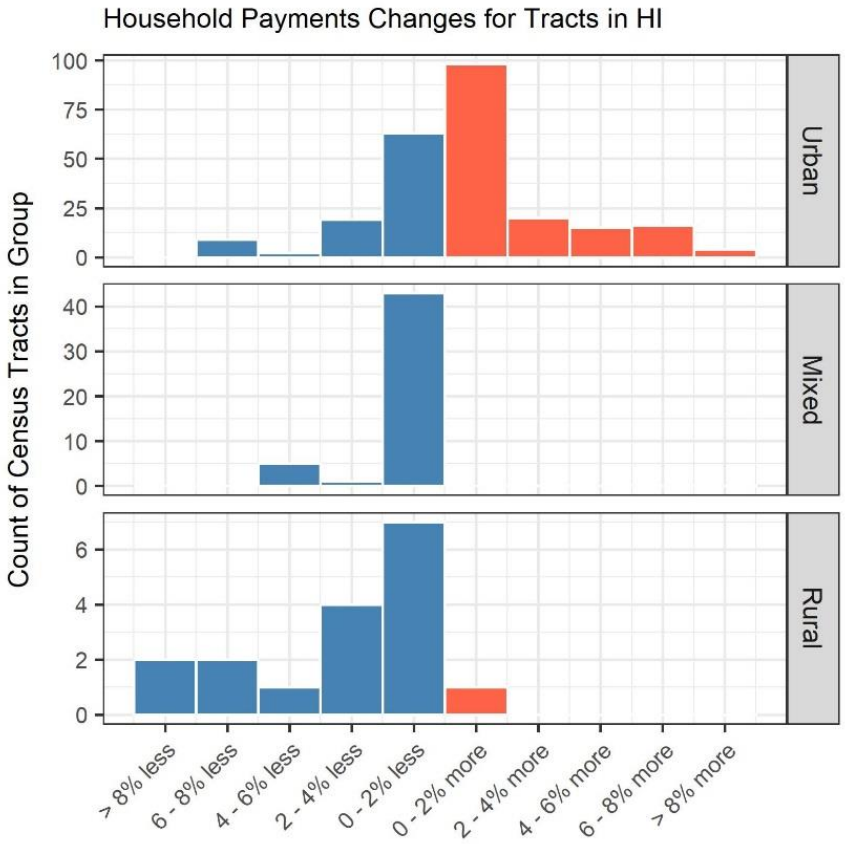
Hawaii


Household Payments Changes for Tracts in HI
Count of Census Tracts in Group
Urban
Mixed
Rural
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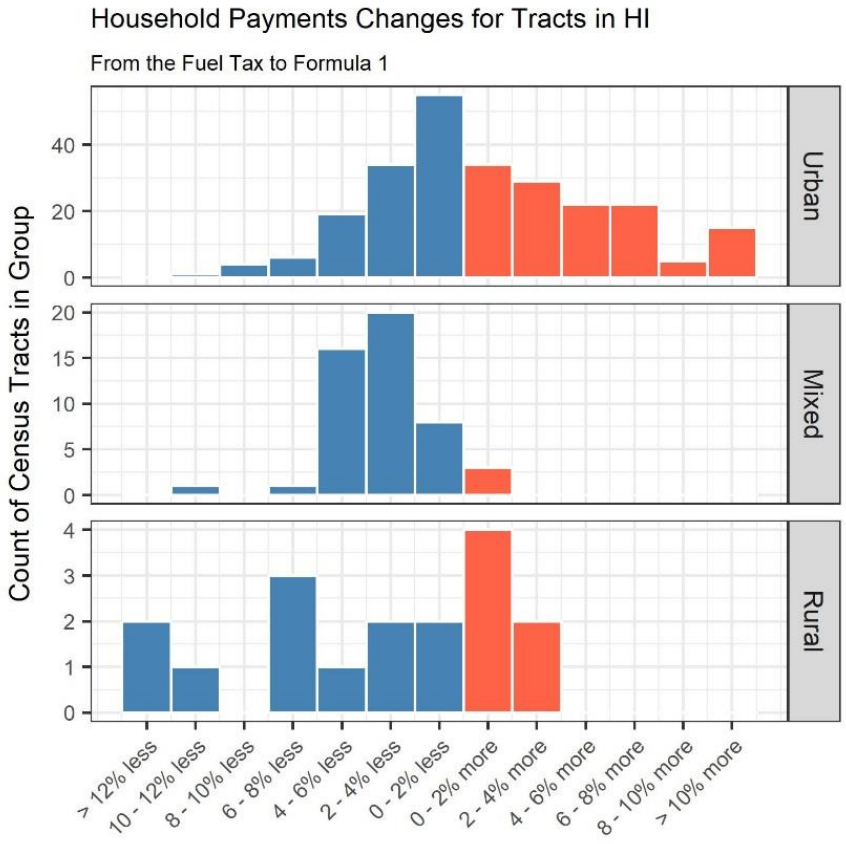
Household Payments Changes for Tracts in HI
From the Fuel Tax to Formula 1
Count of Census Tracts in Group
Urban
Mixed
Rural
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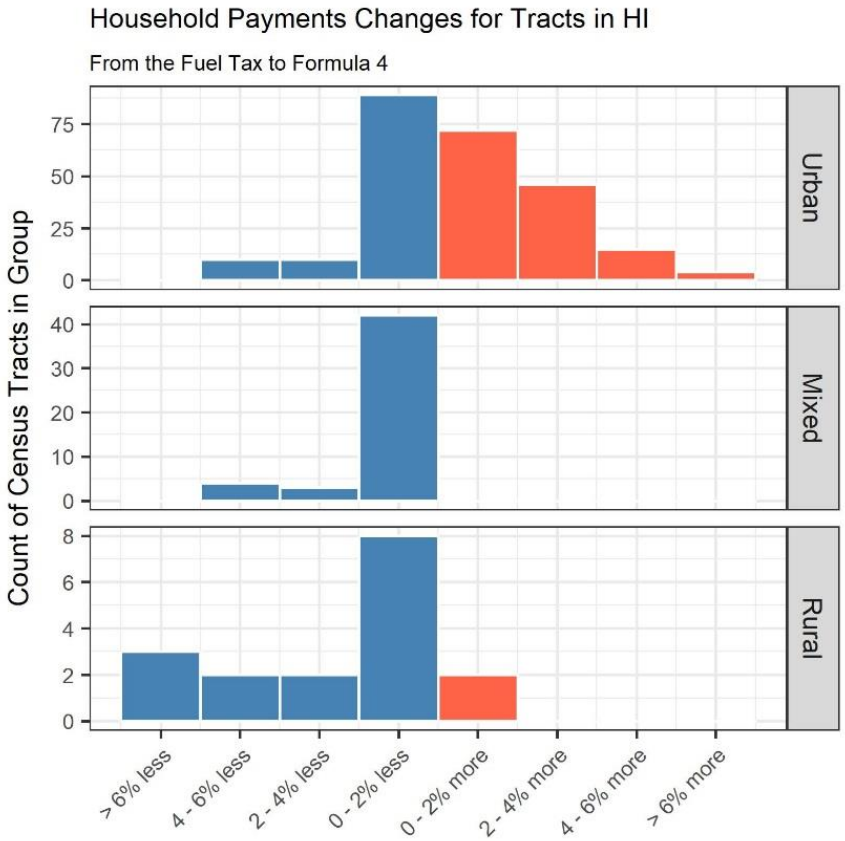
Hawaii


Household Payments Changes for Tracts in HI
From the Fuel Tax to Formula 4
Count of Census Tracts in Group
Urban
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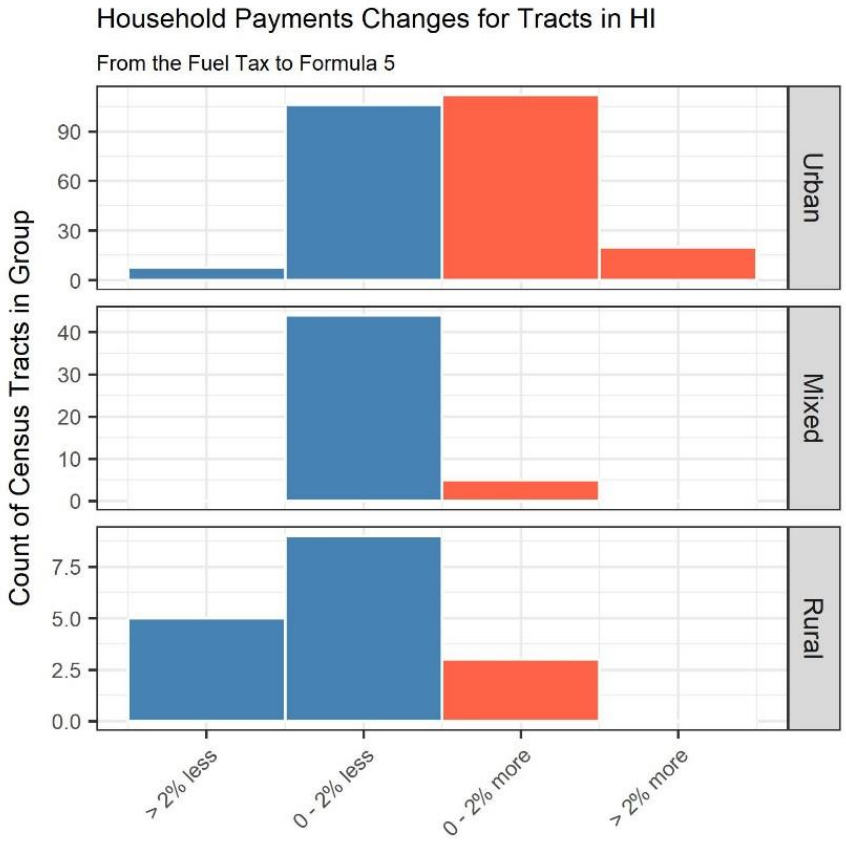
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From the Fuel Tax to Formula 5
Count of Census Tracts in Group
Urban
Mixed
Rural
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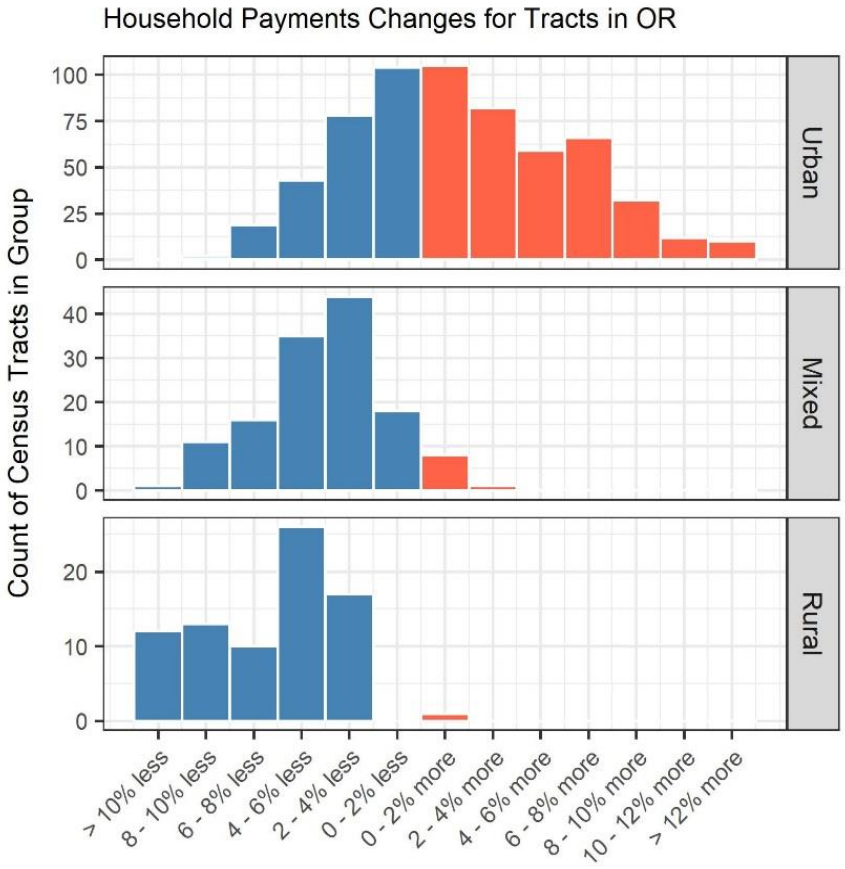
Oregon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Count of Census Tracts in Group
Urban
Mixed
Rural
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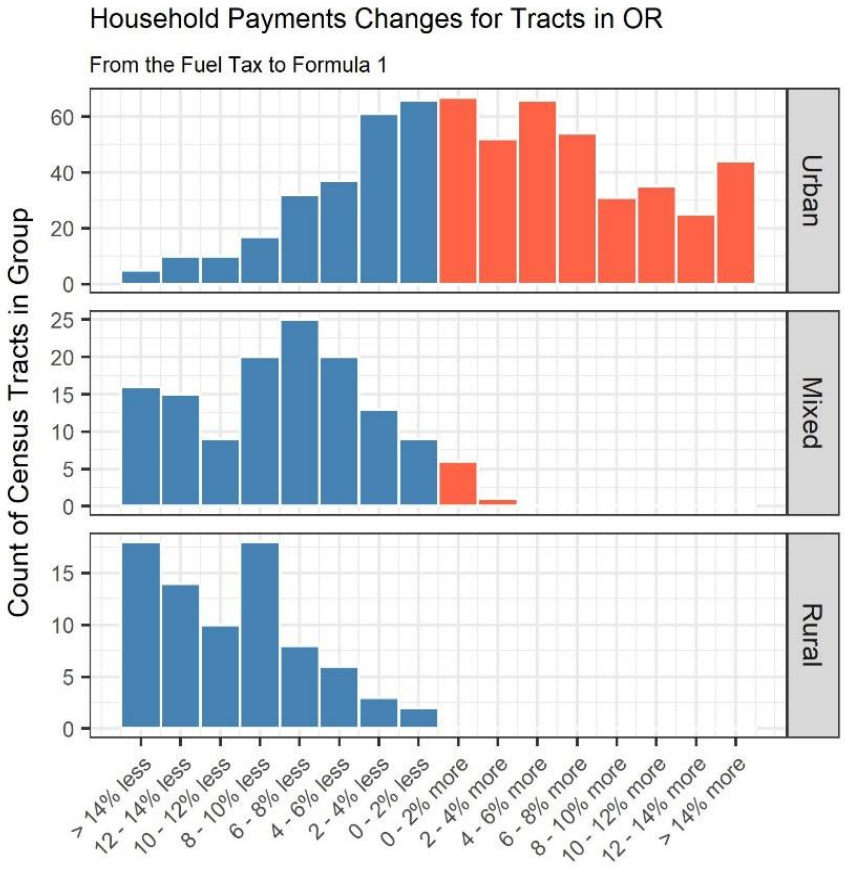
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From the Fuel Tax to Formula 1
Count of Census Tracts in Group
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Mixed
Rural
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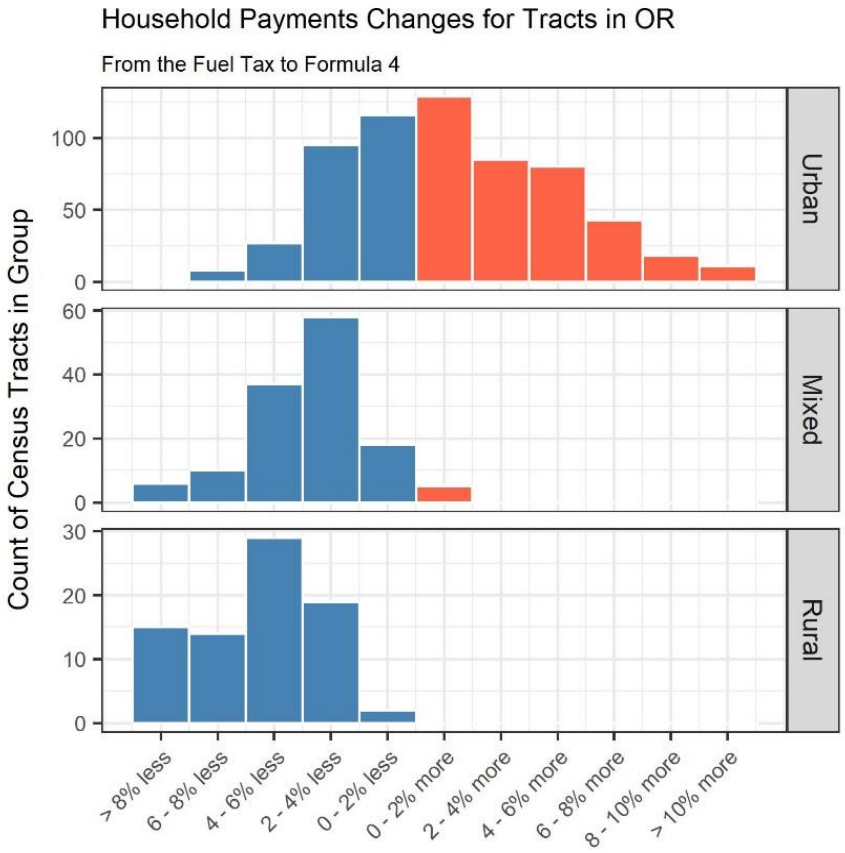
Oregon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From the Fuel Tax to Formula 4
Count of Census Tracts in Group
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Rural
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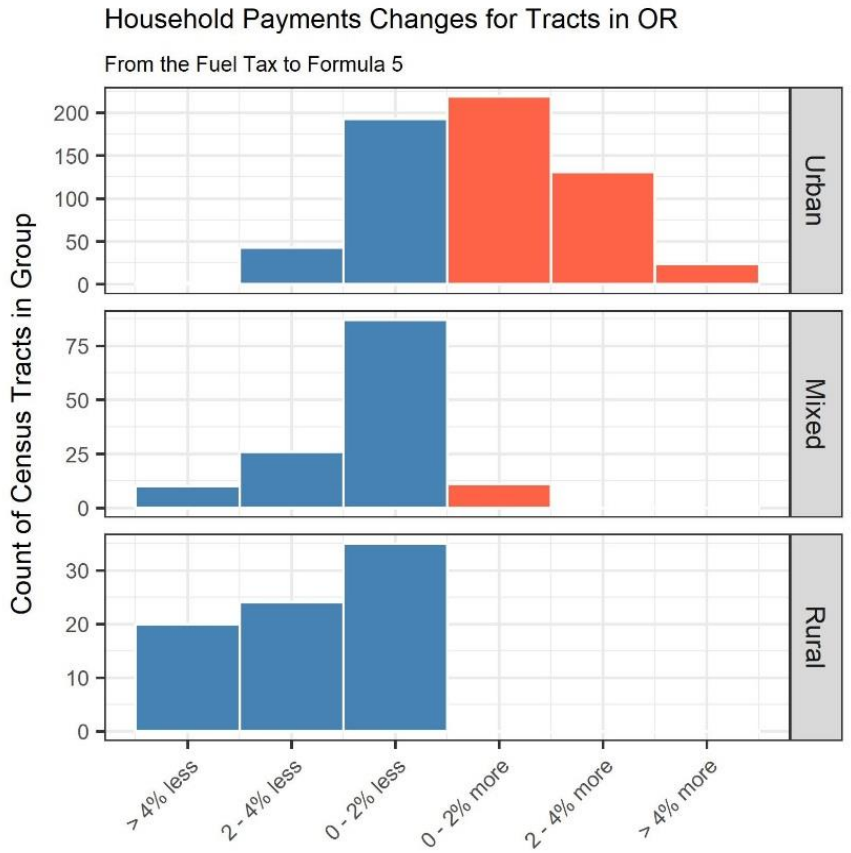
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From the Fuel Tax to Formula 5
Count of Census Tracts in Group
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Rural
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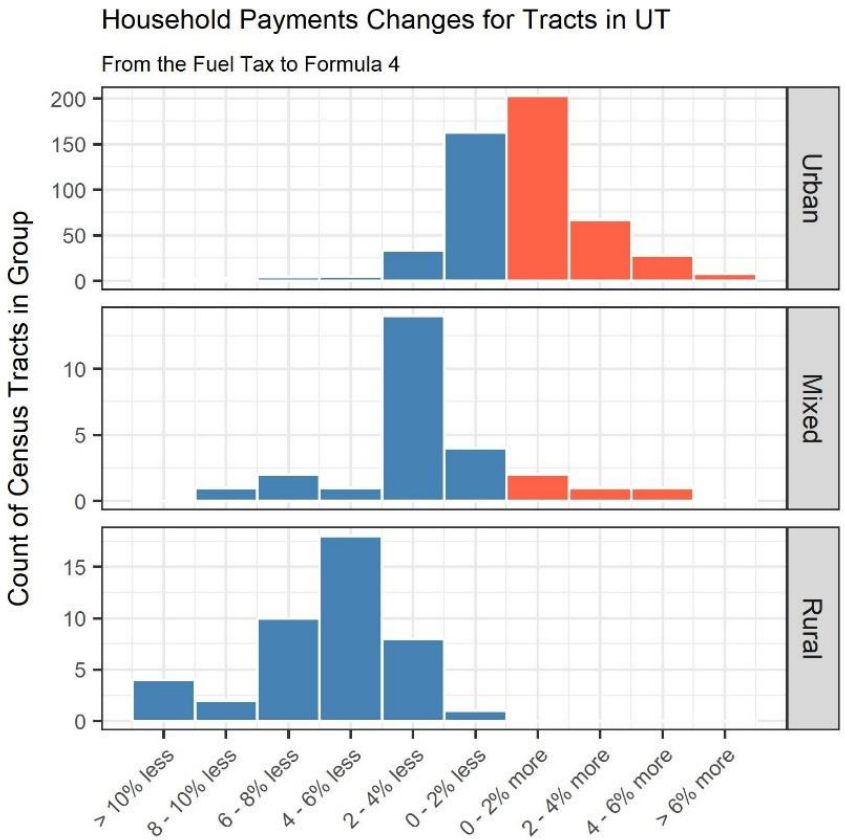
Utah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Count of Census Tracts in Group
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Mixed
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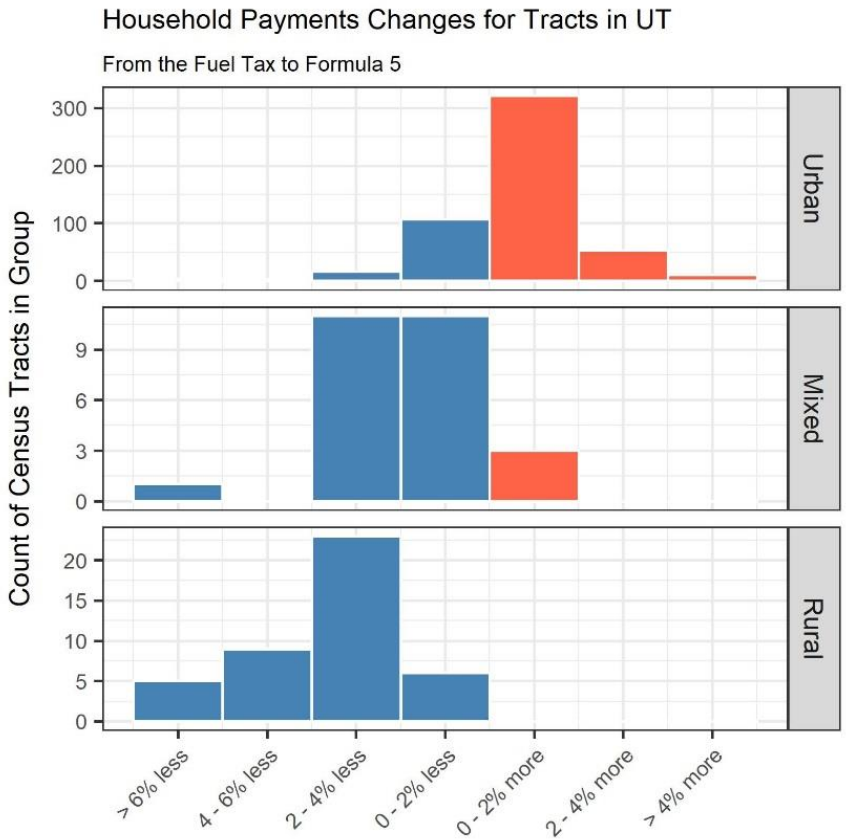
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From the Fuel Tax to Formula 5
Count of Census Tracts in Group
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Rural
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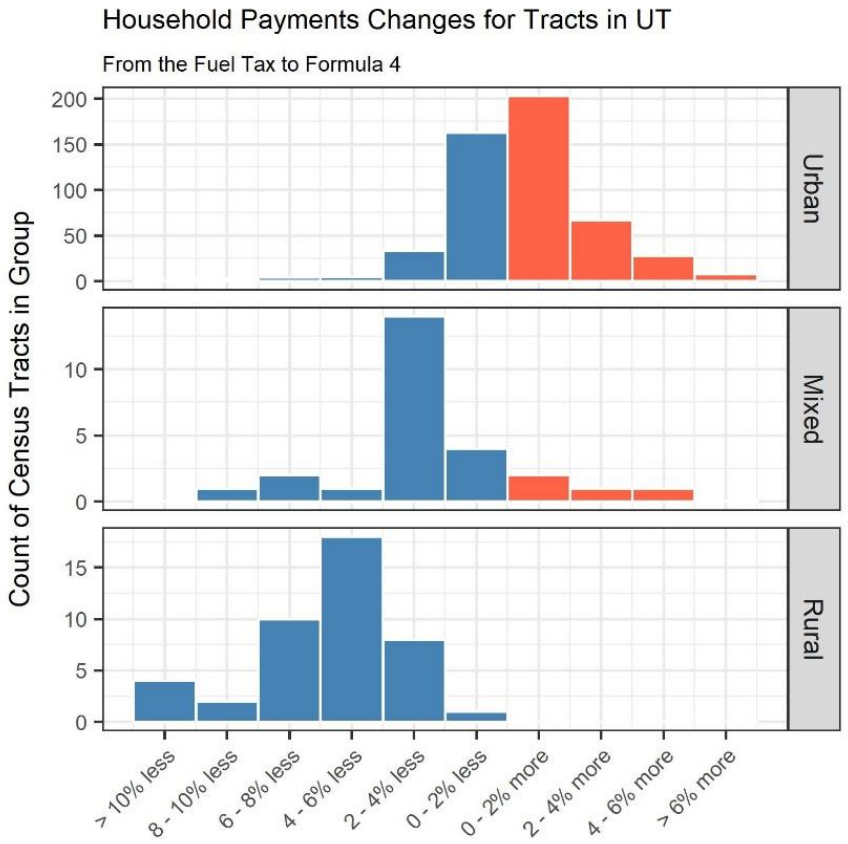
Utah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From the Fuel Tax to Formula 4
Count of Census Tracts in Group
Urban
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Rural
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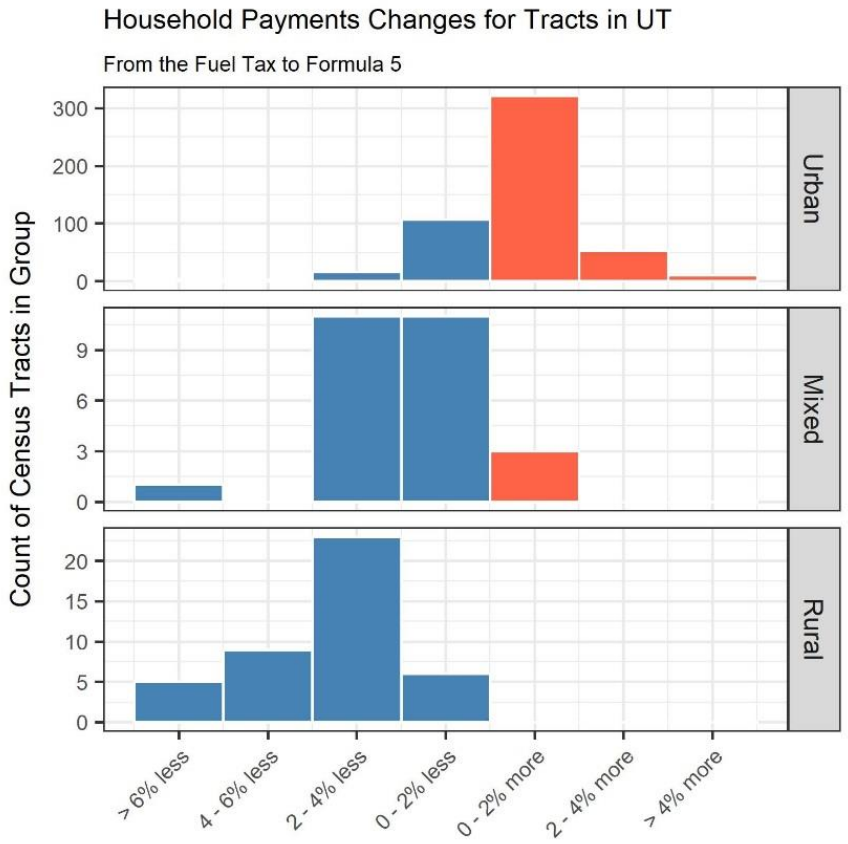
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From the Fuel Tax to Formula 5
Count of Census Tracts in Group
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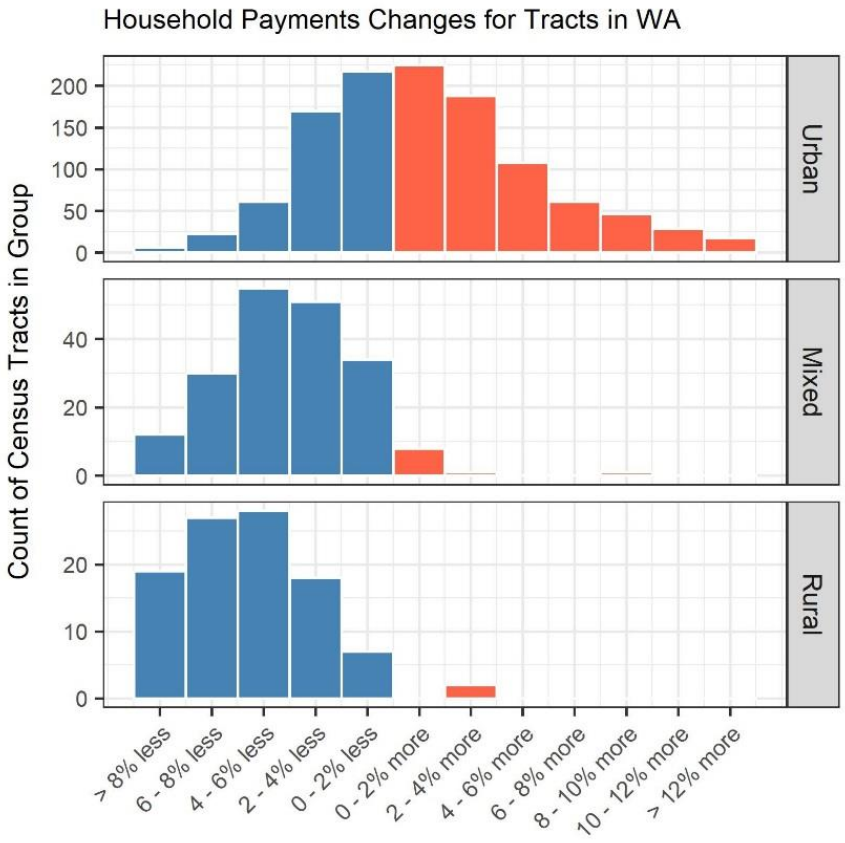
Washington


Household Payments Changes for Tracts in WA
Count of Census Tracts in Group
Urban
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Rural
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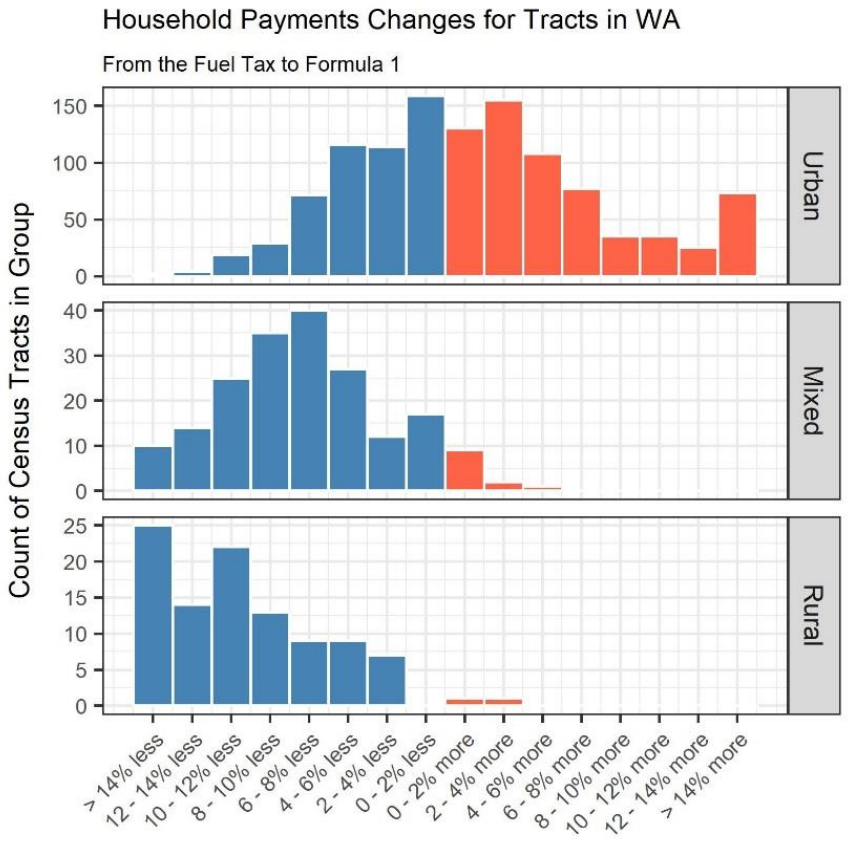
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From the Fuel Tax to Formula 1
Count of Census Tracts in Group
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Mixed
Rural
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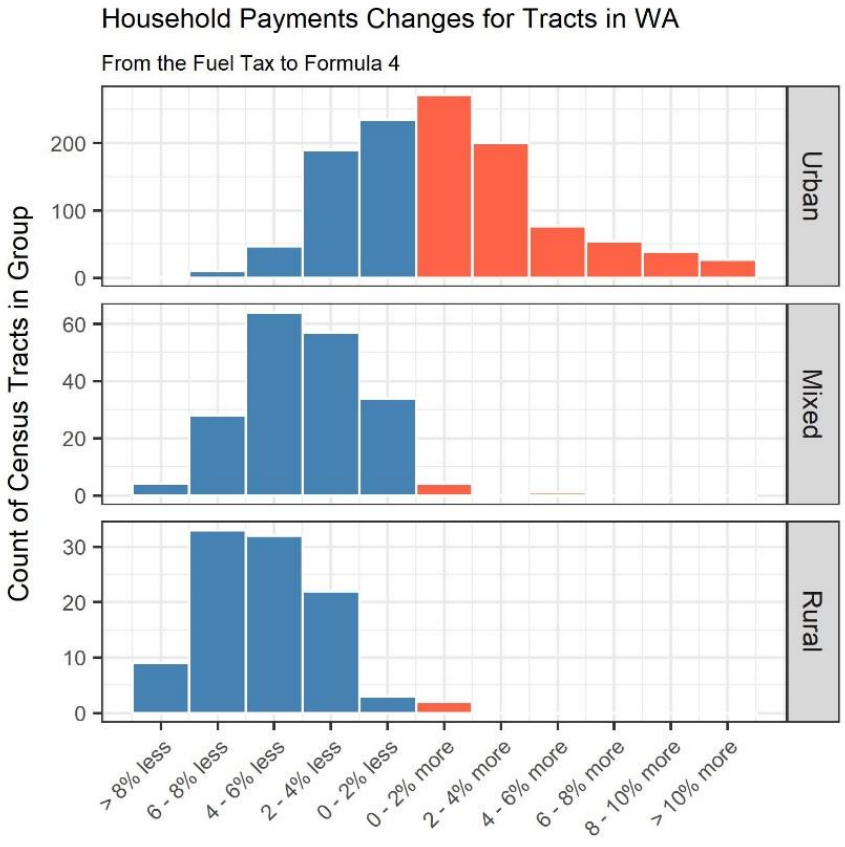
Washington


Household Payments Changes for Tracts in WA
From the Fuel Tax to Formula 4
Count of Census Tracts in Group
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Mixed
Rural
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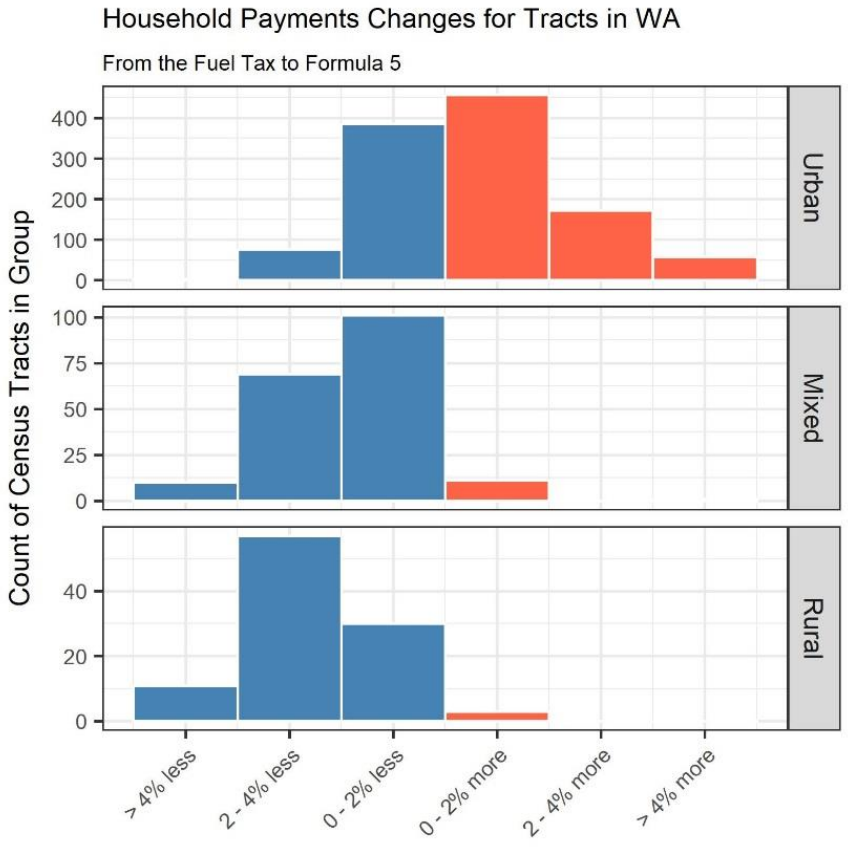
Household Payments Changes for Tracts in WA
From the Fuel Tax to Formula 5
Count of Census Tracts in Group
Urban
Mixed
Rural
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