

POLICY BRIEF DECEMBER 2022

THE ROAD TO EQUITY:

Concerns and Analysis of RUC Pricing Mechanisms

KEY REPORT FINDINGS

As states, regions, and cities aim to transition to a clean energy future, many search for new transportation strategies and funding mechanisms. Pricing mechanisms are decreasing due to the energy efficiency of modern cars and the growing uptake and adoption of electric vehicles. Planning and transportation agencies across the U.S. are looking to replace their gas tax revenue with other pricing mechanisms like road user charges (RUC). However, any cost can highly impact low-income commuters. Equity and tax progressivity considerations need to be a part of any road pricing conversation, to transform the way regions raise revenue for transportation and ensure equitable and progressive transportation funding during the phase-out of fossil fuels.

Shining a light on the just path forward.

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About Just Solutions Collective



Just Solutions Collective

[Just Solutions Collective](#) is a BIPOC-led organization working to broaden and deepen the understanding of equitable and effective policies and programs to support the priorities of environmental justice organizations to define, innovate, replicate, and scale their solutions to the climate crisis. We do this work by: identifying and coalescing leading community-created policy solutions; conducting requested, relevant, comprehensive, and accessible policy analysis and research; organizing peer learning, foundational educational programming, space for states to share and strategize; and providing financial support for expertise, ideation and participation.

Author

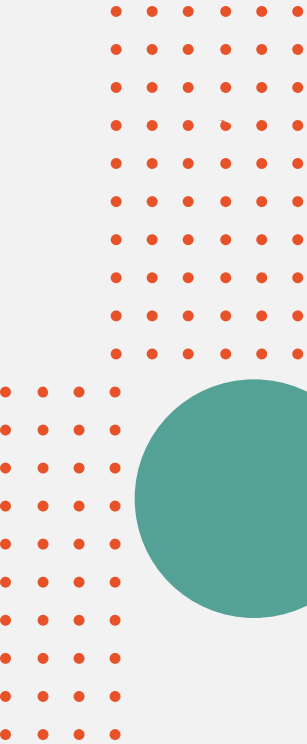
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POLICY BRIEF: Completed for community-based advocates, in partnership with state environmental justice organizations

Executive Summary

As states, regions, and cities aim to transition to a clean energy future, many search for new transportation strategies and funding mechanisms. Pricing mechanisms like gas tax revenues or the Highway Trust Fund revenues are decreasing due to the energy efficiency of modern cars and the growing uptake and adoption of electric vehicles. Planning and transportation agencies across the U.S. are looking to replace their gas tax revenue with other pricing mechanisms like road user charges (RUC). However, any cost can highly impact low-income commuters already dealing with a lack of affordable public transit and affordable housing that causes them to live further from cities and rely on cars to go longer distances. Many low-income families have no option but to drive to work. Furthermore, any reliance on regressive taxes, meaning those with lower incomes pay more, will add to their challenges to make ends meet. Equity and tax progressivity considerations need to be a part of any road pricing conversation, to transform the way regions raise revenue for transportation and ensure equitable and progressive transportation funding during the phase-out of fossil fuels.

If designed well with equity goals to guide road pricing studies, RUC can benefit low-income communities. For the long-term success of road pricing programs, policy, and state climate advocates recommend the following:

- Intentionally incorporate equity into any RUC studies, pilots, and programs.
- Work with CBO's and increase awareness of RUC with the general public.
- Revenue from road pricing should be invested back as reparations for communities impacted by highways and transportation inequities.
- A need for more cross-sectoral engagement between agencies and policy advocates around RUC and a need to activate an interstate network for policy and climate advocates.

Introduction

The following analysis aims to inform and better prepare community-based organizations (CBOs) and state advocates to participate more confidently in the conversations on road user charges and pricing mechanisms as they are discussed from state-to-state. If thoughtfully developed and implemented, these transportation funding mechanisms and strategies can also address climate, health, economic, and social equity in communities historically and disproportionately burdened by transportation inequities. Thoughtful equitable development will allow states to replicate and scale up transportation funding mechanisms to aid the transition to a clean transportation future that centers a path based on equity.

Background/Issue

As states, regions, and cities aim to transition to a clean energy future, many search for new transportation strategies and funding mechanisms. Pricing mechanisms like gas tax revenues or the Highway Trust Fund revenues are decreasing due to the energy efficiency of modern cars and the growing uptake and adoption of electric vehicles. Planning and transportation agencies across the U.S. must replace their gas tax revenue with other pricing mechanisms like road user charges (RUC). Road pricing describes the different ways of charging the use of a road. There are various types of road pricing, such as cordon pricing, distance-based charging, area pricing, managed lanes, flat-rate tolling, and full facility tolling¹.

Many states have begun researching and piloting RUC systems as the most likely long-term replacement for gas tax revenue. The federal government has supported these efforts via the Surface Transportation System Funding Alternatives (STSFA) grant program². However, as states rush to find a solution for a long-term replacement for gas tax revenue, major equity considerations should be considered.

Impacts on Low-Income and Frontline Communities

Historically, low-income communities and Black, Indigenous people of color (BIPOC) have borne the brunt of negative transportation planning. Such as the construction of highway systems that have divided communities, the negative impacts of high levels of exposure to traffic pollution and diesel emissions, or the disinvestments in the same communities that result in a lack of access to safe, reliable, and high-quality transportation options to get to work, school, and overall resources.

Low-income households routinely face economic challenges. A change in costs can highly impact low-income commuters who are already dealing with housing burdens that cause them to live further from cities and rely on cars to go longer distances. Data on the average annual household





expenditures in 2021 shows that housing accounted for the highest share (33 percent), followed by transportation (16 percent) and food (12 percent)³. Transportation expenditures increased by 11 percent in 2021. The largest increase in transportation was in public and another other transportation spending (+71 percent), followed by a 37 percent increase in gasoline, other fuels, and motor oil⁴. The data is even starker among low-income earners, despite U.S. government subsidies in transportation⁵. Studies show that “lower-income households generally pay a larger portion of their expenditure on transportation, and as people move up in income brackets, they pay a smaller portion on transportation”⁶. An inequitable contribution to transportation funding, and subsidies that do not benefit those who rely more on affordable and accessible transportation is why equity parameters and mobility justice frameworks are crucial when considering road pricing systems, as presented in the following two sections.

Equity Considerations for RUC:

TransForm’s [Pricing Roads, Advancing Equity](#) (2019) report and toolkit aims to help communities advance a more equitable and affordable transportation system. They propose that structural inequity in our transportation system may be partially remedied by effective, equitable road pricing. The report outlines what should be considered with road pricing: affordability, access to opportunity, access to technology, and community health.

- **Affordability:** Evaluate how road pricing will impact the budget of low-income households.
- **Access to Opportunity:** Ensure pricing strategies do not negatively affect communities' mobility and access to resources in their communities if drivers choose to avoid priced roads.
- **Access to Technology:** Ensure low-income households and BIPOC communities have access to technological devices that are convenient for them.
- **Community Health:** Invest funding into low-income and BIPOC communities for transit investment and bike and pedestrian infrastructure.

The report also lays out a roadmap of five primary steps to help ensure that road pricing studies improve the equitability of the transportation system for policymakers and equity advocates. The five steps include: 1) Identify who, what, and where, 2) Choose equity outcome and performance indicators, 3) Determine benefits and burdens, 4) Devise programs to advance transportation equity, and 5) Provide accountable feedback and evaluation⁷.

Mobility Equity Framework:

Greenlining’s [Sustaining Clean Mobility Equity Programs](#) (2021) report serves as a community-centered transportation planning and decision-making tool. This report uses Greenlining’s Six Standards for Equitable Investment and the Making Equity Real Framework to explore ways these programs may generate and sustain the funding needed to continue the operation of clean mobility equity programs. The report outlines the following equity recommendations on road pricing:

- Partner with stakeholders to identify an equitable fee structure and exemptions based on





income, geography, and other factors.

- Reform how the revenue is distributed by partnering with stakeholders to identify how to prioritize the revenue distribution for walking, biking, public transit, shared mobility, or other clean mobility programs as opposed to additional highway improvements and on a needs basis identified by the community.
- Create policies and programs to distribute revenue in a way that advances equity, sustainability, and climate goals

Models

As of 2022, 14 states and regional pilots (California, Delaware, Hawaii, Kansas, Minnesota, Missouri, New Hampshire, Ohio, Oregon, Texas, Utah, Washington, and Wyoming) have received federal grants to explore alternative funding mechanisms such as road usage charges⁸. The following illustrates how Oregon, Washington, and California have explored road usage charges as an alternative funding mechanism.

Oregon: Oregon enacted the first bill ([HB 3946](#)) to study alternative transportation funding sources other than tax fuel in 2001, they were also the first to adopt and implement a pilot fuel-tax user charge. [The Road User Fee Task Force \(RUFTF\)](#) was created to lead the policy development of creating sustainable revenue to fund the repair and maintenance of roadways. They established their first RUC program in 2015, [OReGO](#), which has been modified since. The permanent voluntary program is functioning with about 700 volunteer drivers and 2,100 vehicles enrolled to date⁹ and working to expand eligibility. The Oregon Department of Transportation's (ODOT) RUC program consists of four main objectives: evaluating compliance mechanisms; exploring interoperability; expanding the market via technology options, streamlining account management, developing new mileage reporting options, and sharing data with other public entities; and increasing public awareness¹⁰.

Washington: In 2012, Washington's Legislature enacted [HB 2190](#), which directed the Washington State Transportation Commission (WSTC) to create the [RUC Steering Committee](#) to provide direction and guidance on transitioning to an RUC system. In July 2018, WSTC initiated a [pilot project](#) to test an operational RUC program using a flat per-mile rate¹¹. About 5,000 drivers volunteered to be one of 2,000 drivers participating in the year-long Washington RUC Pilot Project. In 2019, [HB 1160](#) created the [2020 Road Usage Charge final report](#), which addressed topics such as privacy, rate-setting, and compatibility with tolling systems. It also required the state Department of Transportation to submit recommendations that considered the impacts of RUC on low-income households, vulnerable populations, and displaced communities. The report also recommends phasing in RUC over the next 10 to 25 years.

California: In 2014, the California State Legislature passed [SB 1077](#), establishing a road charge pilot study and a [Road Charge Technical Advisory Committee](#) (Road Charge TAC). In 2016, California's Road Charge Pilot Program was launched and lasted nine months. More than 5,000 vehicles



participating through six different reporting and recording methods ranging from manual to highly technical methods with optional location-based services¹². In 2017, the [California Road Charge Pilot Program Final Report](#) was published, the report was part of [Senate Bill \(SB\) 339 \(Wiener, Statutes of 2021\)](#). The findings from the pilot recommended further research on the impacts of RUC on disadvantaged communities. The Road Charge TAC was extended until January 2027 and directed to make recommendations about the RUC pilot by July 1, 2023, on the design of a pilot to test revenue collection, including the group of vehicles to participate in the pilot, and a final report is due to the legislature by Dec. 31, 2026¹³.

Analysis

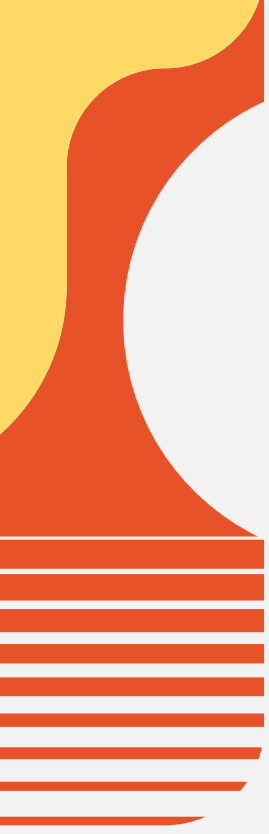
In the Fall of 2022, Just Solutions Collective spoke with state climate and environmental justice policy advocates about equity considerations of RUC and overall transportation funding mechanisms during the transition to clean energy. On October 2022, Just Solutions Collective hosted a roundtable discussion with over ten equity and transportation advocates and policy practitioners from Oregon, Washington, and California¹⁴. The roundtable provided a peer-sharing opportunity to better prepare states to participate more confidently in the conversations on road user charges and pricing mechanisms. The discussion was curated in collaboration with [Verde](#), an environmental justice organization from Oregon, incorporating topics such as an RUC landscape review, equity concerns, and opportunities for transportation funding. The following examines key concerns and takeaways from the roundtable discussion with state advocates and policy practitioners:

1. RUC is a new emerging topic, and there are still more questions than answers:

Many states and agencies throughout the U.S. are under pressure to maintain the quality and service of transportation networks and infrastructure as the nation phases away from fossil fuels in the fight against climate change. As people shift to energy-efficient vehicles, a replacement of the gas tax is needed. Although different states and advocacy networks are trying to find solutions and introduce conversations around RUC, most research is preliminary and still in the pilot stage, and if implemented, they are still in the first few years of development. Given the early stages of the different studies, pilots, and programs, advocates and planners find themselves with more questions than answers. There is still a lot to learn from the various pilot studies and programs that will continue to expand in the coming years.

2. Equity and mobility justice are not at the forefront of RUC conversations:

Equity is not at the forefront of RUC conversations, agencies and states' main priority is revenue, figuring out how people will pay for their use of roads. However, it is key to include equity and tax progressivity in this work's early development and planning. From a mobility justice standpoint, we know low-income people will be impacted the most as many have been displaced and live further from city centers, and many have no option but to drive. It is important



to consider equity in the process described previously by TransForm; considerations in RUC should address affordability, access to opportunity, access to technology, and community health. The [San Francisco Congestion Pricing Study](#) was shared to be an example of a model that incorporated equity within the study's conception; the COVID-19 pandemic shifted the study's timeline and, ultimately, its outcome.

Insufficient inclusion of CBOs in RUC conversations:

Community-based organizations and community groups have not been invited to be part of conversations, and yet given the many urgent needs of the communities they serve, they currently cannot engage in conversations on road pricing mechanisms that are more future-focused. There is a need for equity-focused policy groups to partner with CBOs to leverage justice-centered and equitable policy changes. It is key for equity-driven policy groups to think about what they can do to support CBOs' participation in working groups and conversations. Government-led task forces, steering committees, and agencies working on transportation also need to do their part in incorporating community and equity advocates into RUC conversations and compensate them for their time and expertise.

Challenges in aligning priorities on how the revenue will be spent:

Policy advocates find it challenging to align priorities with agencies and states in regard to where the revenue would be invested. What agencies raise revenue for and what they consider important, such as freeway projects, may be different from what communities actually need. Advocates believe revenue from road pricing should be invested back into communities that have borne the brunt of negative transportation planning. This revenue is a new funding source, and advocates and states should be intentional about where the investment is allocated. For example, investment can prioritize multi-mobile infrastructure, providing people with commuting options to relieve their dependency on cars and highways. It is important for states and governments to work with communities to identify priorities in infrastructure.

Lack of public awareness of RUC:

There is a need for more public awareness to ensure the average person can understand RUC. People need to be informed about RUC and its potential climate and equity benefits to be open to engaging in these conversations. This can be leveraged in partnership with CBOs and on-the-ground campaigns to engage community members. For example, Front and Centered did a survey with their members on different transportation funding mechanisms where they were asked what would make them feel ok about funding options. What scored highest was equitable investments in transit resources. Results from the survey proved that people want a clear link to equitable investments and ensure people are benefiting from the source of revenue.

Impacts of RUC for long-distance, rural and tribal commuters who rely on driving:

There are concerns about the impacts RUC will have in communities that have fewer public transit options and must drive more. It is key to have the ability to mitigate this when designing new funding mechanisms like road pricing tiered for rural and tribal communities.





Dependency on cars and driving for revenue:

There are concerns that just like the gas tax, our revenue for transportation infrastructure will be dependent on people driving more. It is important for agencies to be explicit about the distinction between revenue and demand management vs revenue for project expansion. This also highlights the need to shift priorities within the federal funding landscape to provide meaningful resources for public transit, and active transportation, overall centering people and movement.

A need to activate an interstate network:

It is important for advocates to have an alignment with other states on transportation and climate policy and share information and peer learning engagements so states can participate more confidently in these conversations with RUC as they happen. There is a strong interest and potential for state advocates along the west coast, California, Washington, and Oregon to build and connect with one another and keep each other informed. Government and transportation agencies should also be engaging in interstate conversations.

Conclusions/ Recommendations

If designed well with equity goals to guide road pricing studies, RUC can benefit low-income communities. For the long-term success of road pricing programs, policy, and state climate advocates recommend the following:

- Intentionally incorporate equity into any RUC studies, pilots, and programs.
- Work with CBOs and increase awareness of RUC with the general public.
- Revenue from road pricing should be invested back as reparations to communities impacted by highways and transportation inequities.
- A need for more cross-sectoral engagement between agencies and policy advocates around RUC and a need to activate an interstate network for policy and climate advocates.

If thoughtfully developed and implemented, these transportation funding mechanisms and strategies can also address climate, health, economic, and social equity in communities historically and disproportionately burdened by transportation inequities. Thoughtful equitable development will allow states to replicate and scale transportation funding mechanisms so that they can aid the transition to a clean transportation future that centers equity.





Sources:

¹[What you need to know on Road Pricing](#) ClimatePlan Factsheet, 2022.

²[Surface Transportation System Funding Alternatives Program](#), U.S. Department of Transportation Federal Highway Administration.

³[Consumer Expenditures 2021, U.S. Bureau of Labor Statistics](#)

⁴ Ibid

⁵[The High Cost of Transportation in the United States, ITDP, 2019](#)

⁶ Ibid

⁷[Pricing Roads, Advancing Equity Report, TransForm, 2019](#).

⁸[NCSL Road Usage Charges Summit Summary Report, 10/3/2022](#)

⁹[OReGO: Oregon's Road Usage Charge Program, Oregon.gov](#)

¹⁰[Road Usage Charge Fact Sheet: Oregon, National Conference of State Legislatures, 2021](#)

¹¹[Washington's RUC Pilot Program](#)

¹²[California's 2017 Road Charge Pilot, California Road Charge](#)

¹³[Road Usage Charge Fact Sheet: California](#)

¹⁴ Participants at the roundtable discussion included Verde, Front & Centered, The Greenlining Institute, PolicyLink, TransForm, UCLA Institute of Transportation Studies, Oregon Environmental Council, and Oregon Clean and Just Transportation Network members.

About the Author

Zully Juarez (she/her/hers) provides research and analysis of environmental justice policies to Just Solutions Collective. She works to identify, research, review, and analyze existing environmental policies, practices, procedures, and laws. Through her work, she produces reports, policy briefs, and analytical papers to inform members, partners, and decision-makers. Zully has over a decade of experience working on various environmental justice issues, specifically as it pertains to the health impacts of air pollution from the goods movement sector, urban sustainable mobility investments, and community economic development. She has experience working in the public, private, and non-profit sectors where her work incorporates the intersection of urban planning and public health to advance people-powered planning and policy solutions for equitable communities. Her past experience includes positions at East Yard Communities for Environmental Justice, USC Environmental Health Centers, LA County Department of Public Health, and the Institute of Transportation and Development Policy in Mexico City.

Zully was born and raised in Los Angeles, California with roots in Guatemala. She holds a Master of Urban & Regional Planning from the UCLA Luskin School of Public Affairs with a Certificate in Global Urbanization & Regional Development. She holds two Bachelor of Arts degrees in Gender & Women's Studies and Ethnic Studies from UC Berkeley. Zully was awarded the Robert & Patricia Switzer Environmental Fellowship for her leadership in environmental and social change.



Contributing Organizations

Lead Contributor: Just Solutions Collective would like to thank Vivian Satterfield, Director of Strategic Partnerships at Verde for her contribution and leadership to this work.

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