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Road Usage Charging (RUC)

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Road Usage Charging (RUC)

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TOPIC/ISSUE

KEY TAKEAWAYS

Direct transportation users fees are well studied and have been implemented both in the U.S. and worldwide.

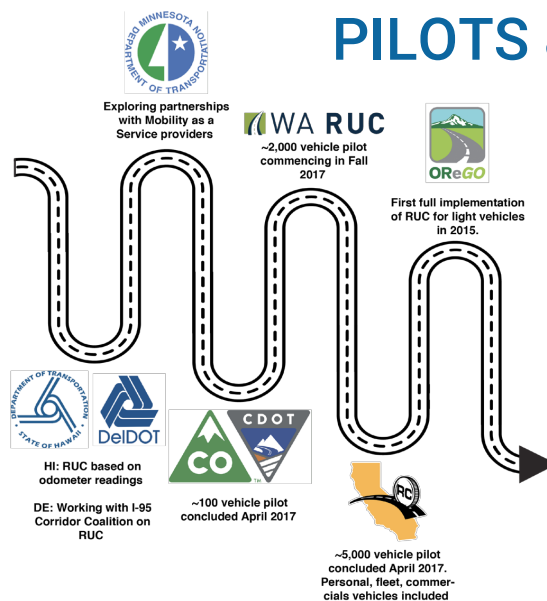
RUC, a form of direct user fees, is gaining momentum at the state and federal levels.

RUC is one of a few options to create sustainable infrastructure funding sources in a fast-changing transportation future.

Shared mobility provides a unique partnership opportunity for RUC provision.

Pricing transportation infrastructure, either to achieve a desired outcome or to raise revenue, is a concept dating back to early- and mid-20th century economics and transportation scholarship. Different approaches to pricing (e.g., area-wide pricing, vehicle miles traveled, express lanes, etc.) have been adopted in parts of Europe and Asia; some strategies cover all road users, some only passenger vehicles, and others only commercial and goods movement vehicles. Pricing, as a revenue source, has recently gained momentum in the U.S., driven by federal legislation (MAP-21; FAST Act) and state-run pilot programs (CADOT, ODOT, MNDOT, CODOT, WADOT). As local, state, and federal agencies seek to use pricing to create sustainable revenue sources, practitioners must consider current and future shared mobility modes and partnerships.

PILOTS & SHARED MOBILITY



Recent advancements in RUC by U.S. States

Based upon ongoing pilot monitoring, academic work on the topic, and other literature, we highlight topics of interest as the pilot programs produce data sets for analysis.

Pricing Structures

- Pilot programs and shared mobility offer unique opportunities to investigate the behavioral effects of dynamic and/or tiered pricing structures.
- Minnesota is seeking to study distance-based fees with shared mobility services.
- How should pricing be determined? Pricing structures will likely be different for personal, for-hire, and commercial travel/goods movement.
 - Differences can include: revenue vs. non-revenue service, occupancy, vehicle weight classes, etc.

“RUC offers promising opportunities for agencies to move beyond funding for roadway and public transit infrastructure and to use direct user fees to achieve positive societal outcomes.”

PILOTS & SHARED MOBILITY

User Interface & Experience

- States have examined different payment collection technology in pilot programs:
 - Pay at the pump, account managers (location enabled and disabled), time and/or mileage permits
- Payment and pricing structures can have notable impacts on a user's ability to pay, particularly for those who pay a higher percentage of income toward travel.
- Understanding public perceptions of RUC as a funding mechanism compared to the gas tax, before, during, and after the pilot will illuminate opportunities and barriers.
 - User perception of privacy protection appears to increase with system exposure.

Partnerships

- Account managers often serve as intermediaries (similar to the main payees of the fuel excise tax), which can reduce transaction costs related to collection.
 - However, the fuel excise tax is currently still cheaper to collect due to the small number of payers.
- Some states, like Minnesota, are investigating partnerships with shared mobility providers (e.g., Lyft, Uber) to serve as revenue collectors.
 - This structure could allow additional flexibility, if adapted in a similar fashion as to the account manager agreements.

MOVING FORWARD

RUC is in its infancy in the U.S., but it offers promising opportunities to move beyond traditional infrastructure funding to use direct user fees to achieve positive societal outcomes. By employing data-driven policy development, procedural and group equity can be maintained, sustainable revenue sources can be established, and pricing can be used as a mechanism to move the country toward a more efficient future.



Image courtesy of Linda Davidson/The Washington Post

Some of the key issues include:

- Institutional reform and legal barriers to RUC
 - California vehicle code 3.6.3 9400.8 prohibits assessing new charges for use of existing streets and roads.
 - In California, Proposition 26 requires a supermajority to pass new taxes or fees.
 - Other legal barriers include incorporating a new tax into future revenues and phasing out an existing tax.
- Governance reform and partnerships
 - Interstate, Federal-state, and State-regional jurisdictional issues should be resolved.
 - Partnerships with private information and shared mobility providers should be investigated to maximize efficiency and ensure optimal system control.
 - Public agencies need to develop resources to enable spatio-temporally dynamic RUC.
- Public participation and input is key for determining possible equity implications and for ensuring procedural equity.

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