Tab 7

Pay-As-You-Go Driving:
Possible Road User Charge Rate Structures for California

Presentation to the
California Transportation Commission's
Road User Charge Technical Advisory Committee

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MINETA TRANSPORTATION INSTITUTE

Study Motivation:

Assemble resources that will help state policymakers to identify appropriate RUC rate ***structures***.

Note: ***structure***, not the **price**

Study Methods:

Review of research on

- Rate setting in transportation and public utilities
- Behavioral economics

Develop a recommended process to evaluate rate structure options

Conduct sketch evaluations of different rate structure options

Finding 1

Transportation system users already pay for driving using a wide array of rate structures

Transportation (& utility) rates vary by:

Amount of travel

- Some vs. none
- Total amount consumed

Vehicle characteristics

- Emissions
- Weight
- Value

Trip characteristics:

- Time or location of travel
- Number of passengers

Household/driver characteristics

- Household income
- Special status (e.g., disability or veteran status)

Payment characteristics

- Time: pre-payment vs. at time of use
- Mode: cash vs. account
- Quantity-based discounts

Trip purpose

- Personal vs. commercial

Finding 2

The principle advantage of RUCs is not their ability to raise revenue, but rather their ability to variably allocate charges among various types of users and travel

Finding 3

Any RUC rate structure – even a flat one – will influence travel behavior and, in turn, California's ability to attain its economic, environmental, equity, and safety goals

Finding 4

Rate structures can be proactively designed to advance important state policy goals and/or improve administrative and political feasibility

Rate structures evaluated

Type	Goal (beyond revenue)
Flat rate: Per-mile charge across all vehicles	Maximum simplicity for drivers and tax collection officials
Block rate: Per-mile rate increases above a threshold of miles	Offer a base amount of low-cost travel, without the need to vary rates by vehicle type, owner, or location
Axle-weight rate: Rate varies by axle weight	Reduce cost to build and maintain the transportation system
Congestion rate: Surcharge added for miles traveled on congested facilities	Manage traffic congestion
Carbon rate: Rate varies by fuel efficiency	Encourage use of low- and no-emission vehicles
Equity rate: Rate varies by driver income	Provide low-cost options for low-income travelers

Recommendation 1

Consider multiple criteria when choosing a rate structure

Process to evaluate rate structure options

1. Determine the ***purpose(s) of the tax***
   - Generate a certain amount of revenue, reliably, over time
   - Improve transportation system performance
2. Assess implementation considerations like administrative and political feasibility
3. Assess equity's many dimensions

Recommendation 2

Avoid a flat-rate structure, which would be a step backward for many of California's most important policy goals

Recommendation 3

Look for RUC rate structures that account for the multiple costs imposed by travel

Recommendation 4

Conduct a new Highway Cost Allocation Study for California

Getting RUC Right: What Does the U.S. Public Think?

Results from a 2023 Survey

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Principal

Question: As a general principal, how should the federal government raise money to pay for streets, roads, and highways?

Responses:

- Taxes on driving and vehicles (for example, gas taxes, mileage fees, or annual vehicle fees) 52%
- The federal income and business taxes 48%

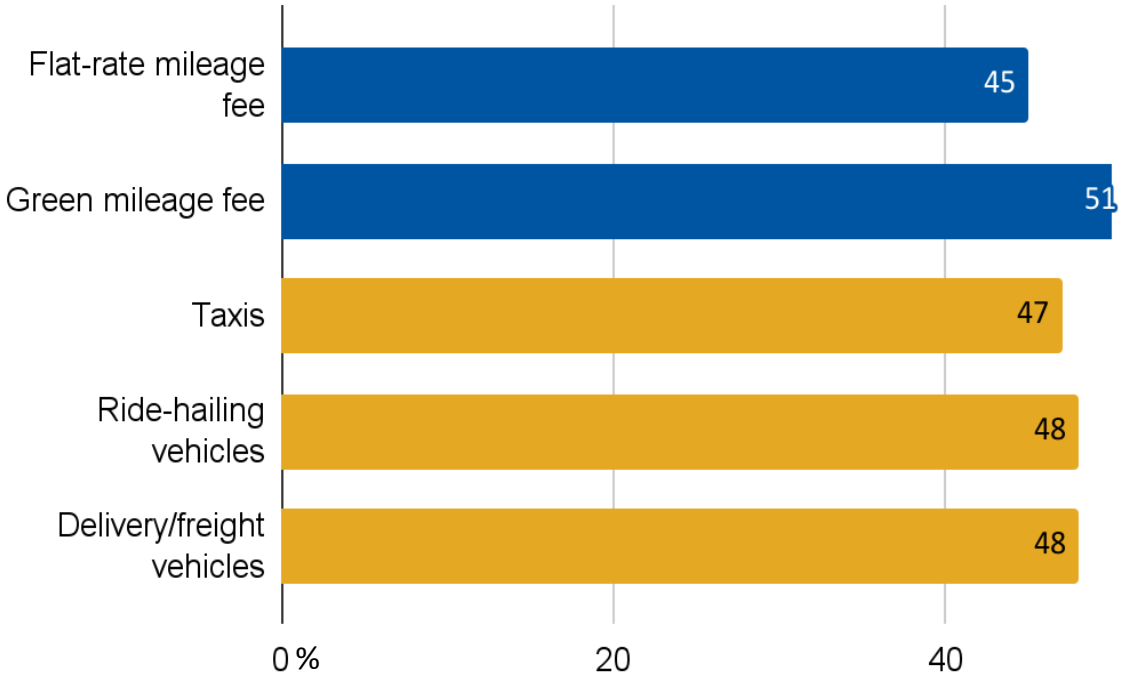
Preference for replacing the gas tax

Question: Which of the following options would you prefer as a replacement for the gas tax?

Responses:

- A mileage fee 52%
- An annual charge that is the same for everyone, no matter how much they drive 48%

Support for a mileage fee



Mileage fee to replace fed'l gas tax

- Flat: all vehicles pay 3¢ per mile
- Green: average rate of 3¢ per mile, but more polluting vehicles pay a higher rate and less polluting vehicles pay a lower rate

Business road-use fees

These would be assessed only on miles that different kinds of commercial vehicles drive on the job, and those vehicles would continue to pay the federal gas tax as well

Rate for EVs

Question: What rate per mile do you think electric vehicles should pay?

Responses: The same rate as gas/diesel vehicles: 49%

Half the rate set for gas/diesel vehicles: 35%

Nothing (EVs pay no fee): 16%

Rate for low-income drivers

Question: If Congress adopts a mileage fee, would you support or oppose charging a lower rate to low-income drivers?

Response: 63% support a lower rate for low-income drivers

Block rate options

Question: If Congress creates a federal mileage fee, which of the following possible fee structures would be fairer?

- The fee is the same for every mile the vehicle drives during the year
- The fee is lower for the first 5,000 miles the vehicle drives during the year, and higher for all additional miles driven that year

Response: Same for all miles: 52%

Block rate: 48%

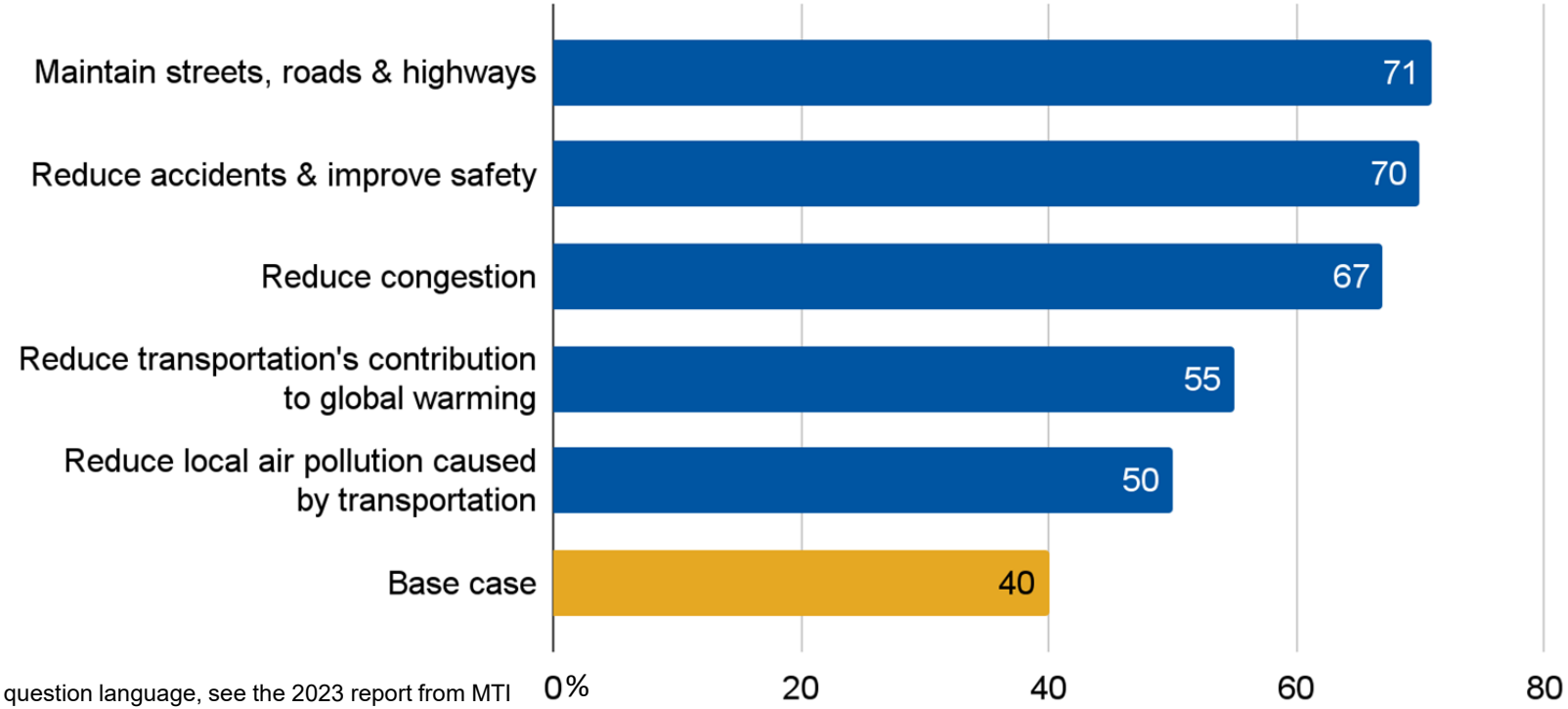
Preferred frequency to pay a mileage fee

Question: If Congress does create a federal mileage fee, how would you prefer to pay? Remember that the total amount you pay annually would be the same in each option.

Responses:

- Pay a bill that comes once a year: 25%
- Pay a bill that comes once a month: 30%
- Pay each time I purchase gas/diesel or charge an EV: 45%

Learning from gas-tax increase support



For exact question language, see the 2023 report from MTI

Key findings

1. In 2023, the “green” mileage fee had majority support (51%), and other options were slightly lower
2. Support for implementing a mileage fee on all travel rose from 2010 to 2023
3. Many respondents preferred rate options other than a flat-rate structure:
    - Low-income drivers pay a lower rate (63%)
    - EVs pay a lower rate than gas and diesel vehicles (51%)
    - A block-pricing rate structure (48%)

1. Three-quarters of people prefer paying in small installments instead of annually
2. Support is likely to vary according to the stated purpose for which the revenue will be used

Implications for policy & research

It is possible to increase support through program design choices. Key choices likely to influence support are:

1. The mileage fee rate structure
2. The stated purpose for how the revenue will be spent
3. Options for paying in small increments

BONUS: gas tax knowledge question

As best you remember, when did the U.S. Congress last raise the federal gas tax?

Less than a year ago	12%
1 to 3 years ago	19%
4 to 10 years ago	10%
11 to 15 years ago	4%
16 to 20 years ago	2%
More than 20 years ago [correct answer]	2%
Don’t know	52%

To learn more:

MTI reports documenting the 14-year survey series (‘23 results published soon)

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