



## MINNESOTA DISTANCE BASED FEE

### TECHNICAL ADVISORY COMMITTEE *VIRTUAL MEETING*

#### -AGENDA-

Date: April 23rd, 2021

Time: 11:00 am - 12:30 pm

Zoom Meeting hosted by the University of Minnesota

<https://umn.zoom.us/j/91721177798?pwd=UCsvZkdUQVZxd3VhVHRkeWdhZGZ4dz09>

Meeting ID: 917 2117 7798

Passcode: 9pS1ci

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|--|-------------------------|
| 1. Welcome   | Scott Peterson (5 min)  |
| 2. Host and Roundtable<br>Announcement                                 | Lee Munnich (2 min)     |
| 3. Overview and Updates  | Ken Buckeye (10 min)    |
| 4. Demonstration Project Status  | Markell Moffett (5 min) |
| 5. Focused Project Deliverables  | Mike Warren (10 min)    |
| a. Mock Audit and Rate Setting<br>Framework                            |                         |
| b. Demonstration Project<br>Report Overview                            |                         |
| 6. Review of Rural/Urban<br>and Administrative Costs<br>Survey Results | Meredith Benesh (5 Min) |
| 7. Privacy Memo and Discussion   | Frank Douma (20 min)    |
| 8. Discussion  | Scott Peterson (10 min) |
| 9. Adjourn   |                         |

#### Attachments:

1. Slides
2. Rural/Urban and Administrative Costs Survey Report
3. Privacy Memo
4. Rate Setting Framework



5. Minutes from March Meeting
6. [Recording](#) of April 14th, 2021 Senate Committee on Environment and Public Works hearing - "Long-term Solvency of the Highway Trust Fund: Lessons Learned from the Surface Transportation System Funding Alternatives Program and Other User-based Revenue Solutions, and How Funding Uncertainty Affects the Highway Programs"
7. Demonstration Project Report to be sent separately for review

**RUC is becoming necessary to replace the fuel tax**

Many carmakers are committed to phasing out ICE vehicles by 2030/2035

**US Federal Highway Trust Fund (Billions)**  
Source: US Congressional Budget Office



**Fuel tax revenues decline as fuel efficiency improves**



**Electric vehicles are rapidly gaining market share**



**Many OEMs offering many new EV models**



**The cost of RUC collection remains a concern for policymakers**

RUC offers the ability to maintain sustainable user-pay revenue, but at a cost

Fuel tax cost of collection often cited as ~1% of revenue (not including evasion), where as RUC collection cost estimates range from 5% to 50%

Cost of RUC collection in small programs is high, but that is expected

Bringing RUC collection <10% of revenue requires innovation and scale

 From Ed Regan to Everyone



**Three policies the public sector can adopt to reduce the cost of RUC collection**

- Nurture the RUC service provider market
- Leverage existing state services and systems
- Support lower-cost mileage reporting technologies

**Nurture the RUC Service Provider Market**

Service providers are account managers, private companies that collect RUC on behalf of the government

An “open market” allows competition among service providers to drive costs down

- An open market can begin with a single service provider that adheres to open, published standards (Utah), or with multiple providers (Oregon, New Zealand)
- The market can grow with the population of subject vehicles
- An open market requires a specialized procurement and an ongoing certification process

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**Support Lower-Cost Mileage Reporting Technologies**

Encourage combination of mileage reporting with other services such as:

- usage-based insurance
- remote emissions inspections
- fleet services

Mandate RUC data provision through vehicle telematics



## **Mileage Based User Fees**

### **THE Answer**

- The standard answer, popular among academics, consultants and some politicians,
  - Even Mayor Pete Buttigieg on the campaign trail
- Objectives:
  - Practical
    - Several technology options
    - Multi-state (and multi-national) issues
  - Privacy concerns
  - Equity
    - Urban-rural; income impacts
  - Cost-effective
    - Gas tax costs 1-2 percent to collect
- This presentation shows how to solve every problem
  - Other than politics

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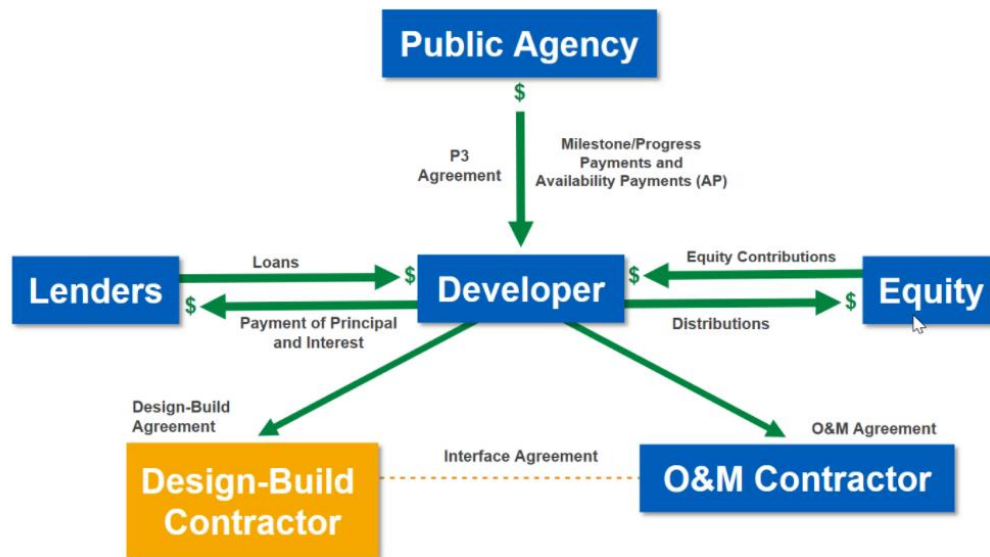
## **Is IFTA the “Magic Sauce?”**

### **Sounds mysterious**

- What is IFTA?
  - International Fuel Tax Association
  - IRP = International Registration Plan
- Purpose: Provide equitable allocation of motor fuel taxes across states (and provinces). IRP focus on registration fees.
- Every state in continental US a member – plus Canadian provinces
- Applies to all interstate trucks above 26,000 GVW
- Each quarter, each trucking firm reports
  - Miles driven by their fleet in each state and province
  - Fuel purchased in each state
- IFTA organization then calculates payments required to make system equitable

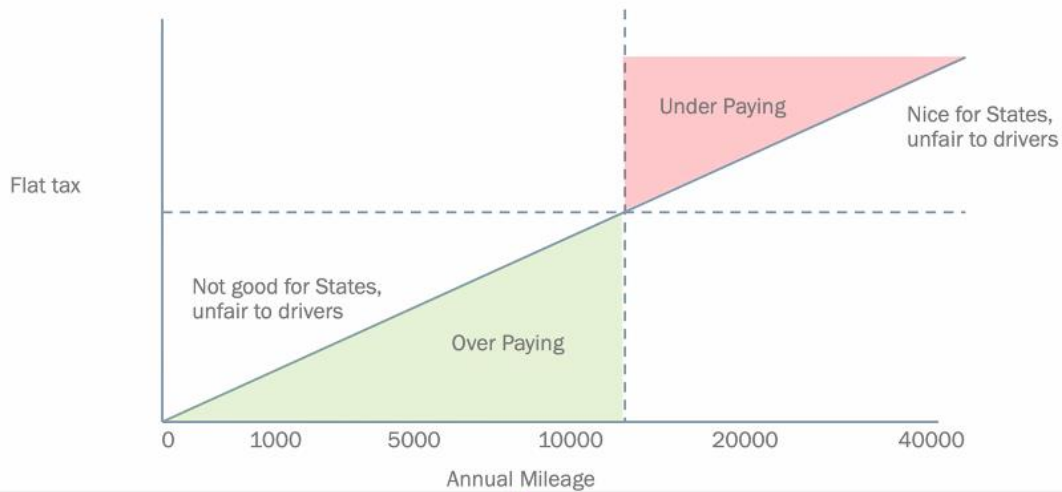


# Typical Availability Payment P3 Contractual Structure



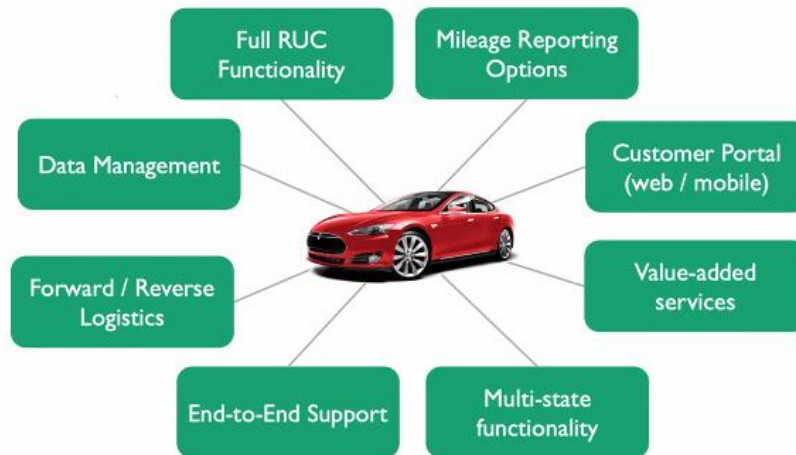
## Assumptions

2. A straight flax tax for EVs and Hybrids would work but it's not particularly fair and it is not tied to actual usage





## Components of an RUC/MBUF Ecosystem



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1. OBD II devices - king for another 10 years
2. Onboard Telematics – minimally now and getting more useful every year... indefinitely
3. Smart Roads (Onboard Units / Roadside Units / 5G...) – in development now, most likely usable 5 years out
4. Manual method – not very technical but needs to always be an option



From IBTTA Meetings to Everyone

Not all vehicles have onboard telematics  
 Very disparate system, many versions  
 Doesn't necessarily include location data  
 OEMs are not willing to offer data at a cheaper price  
 Multi-state functionality



## → Don't Need to Look Further than the Car Interior for Road Charging Data



Paul Salama, Clear Roads

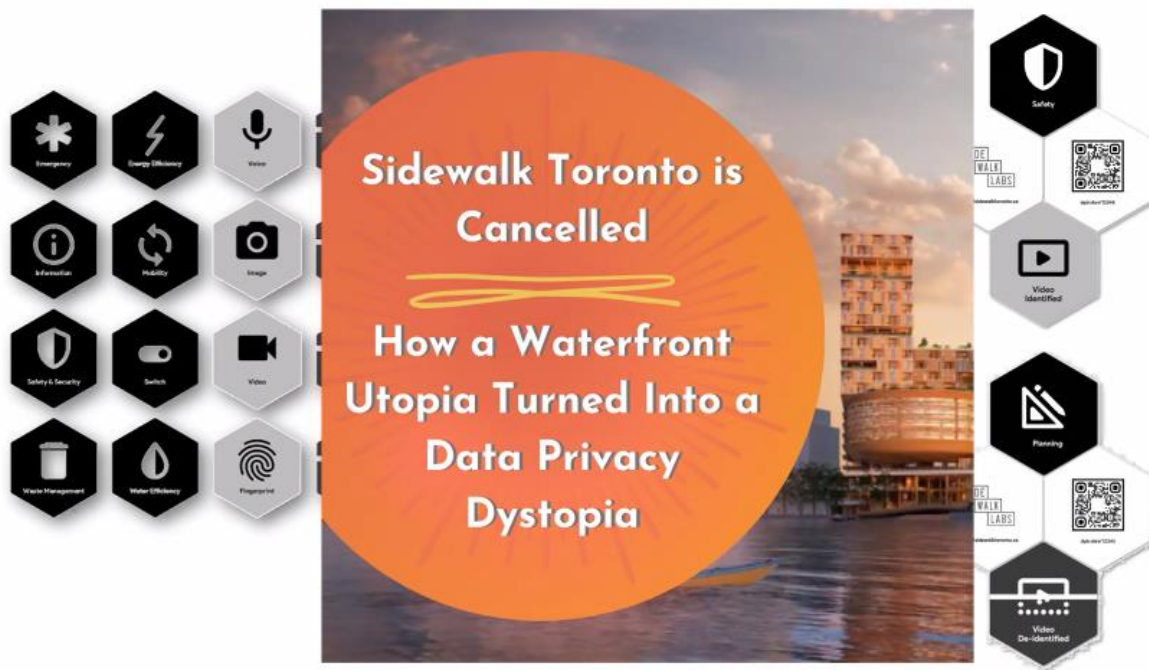
## → *Digital* Road Charge Programs Can Be Adjusted in *Multiple Dimensions, On-the-Fly*

- Fee/policy structure 🏗️ 🚗 ⌚ 37408 🗺️
- Charge amounts \$\$\$ 💵
- Geographies/boundaries ↶ | 🇺🇸 🌐
- Vehicle segments/participation 🚚 🚗 🚙

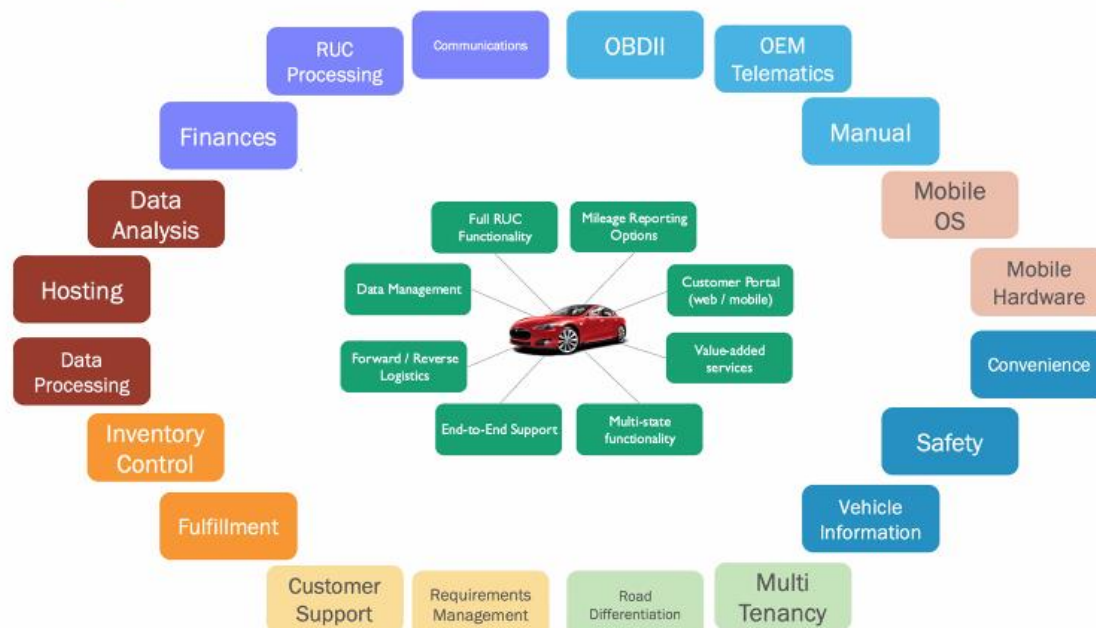
Clear Roads



# A Cautionary Tale of Privacy & Education

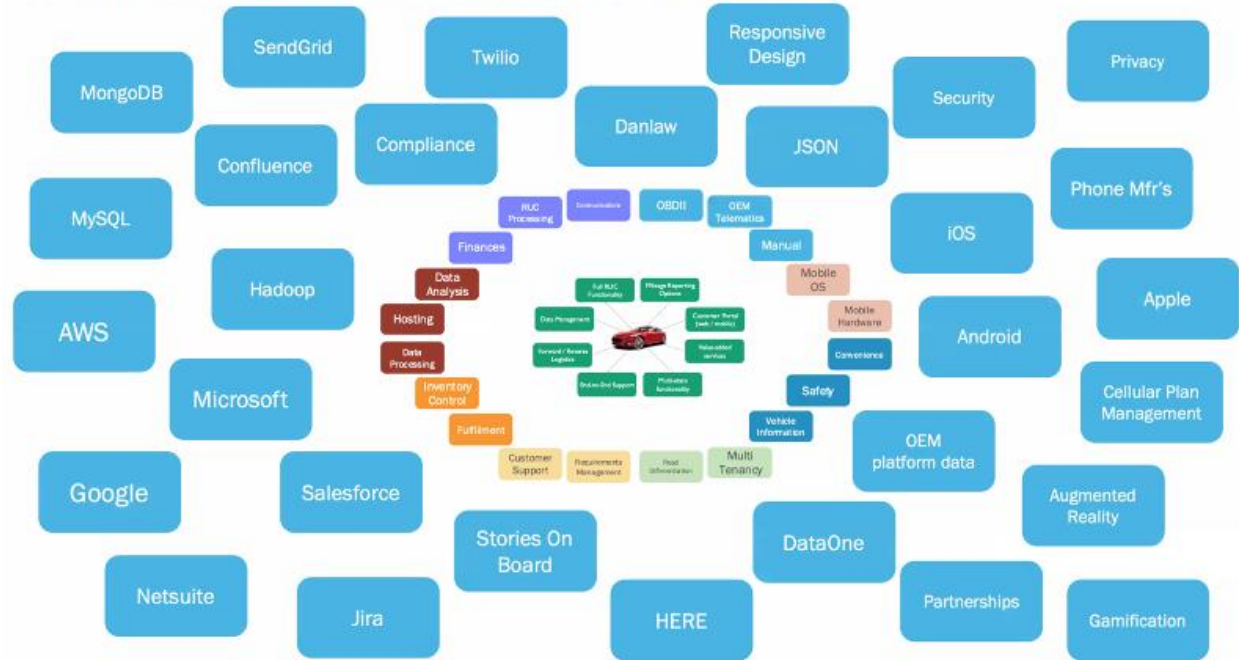


## Components of an RUC/MBUF Solution



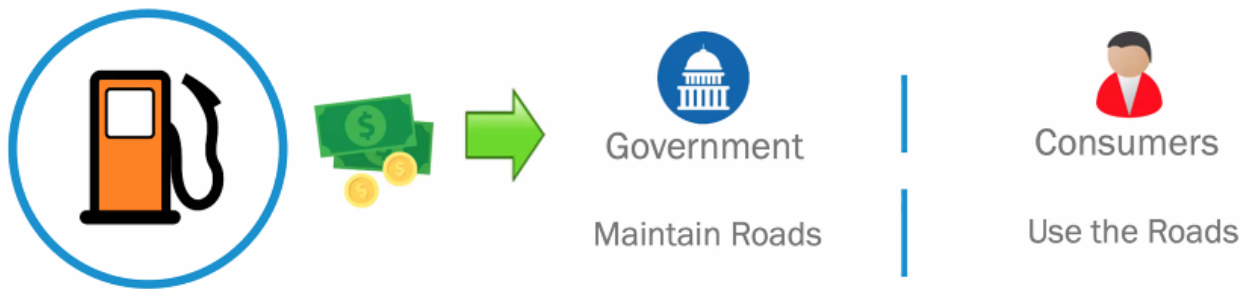


# Components of an RUC/MBUF Solution





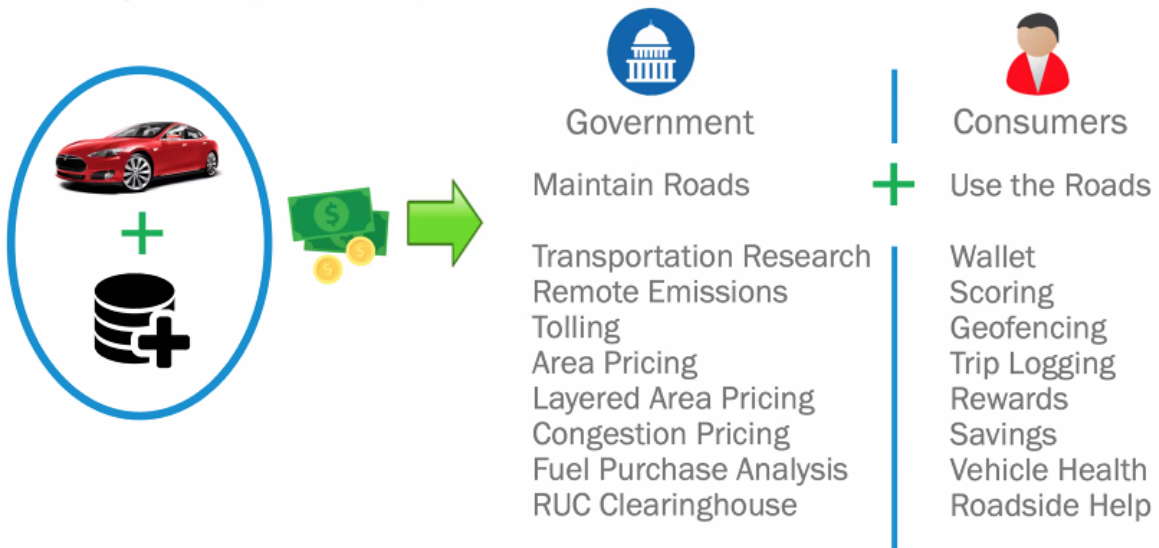
## Single Use vs Multi-Use: Fuel taxes



Simple. Elegant. Cost Effective.

Single Use. Inflexible. No Transparency. Not Future proof

## RUC ecosystems provides options and benefits



Multi-Use. Flexible. Transparent. Future proof.