



WASHINGTON STATE ROAD USAGE CHARGE ASSESSMENT

STEERING COMMITTEE MEETING

July 27, 2017



WELCOME & INTRODUCTIONS

Steering Committee Chair Joe Tortorelli, Washington State
Transportation Commission

MEETING OVERVIEW

Jeff Doyle, D'Artagnan Consulting

MEETING OVERVIEW

- Updates on 2017 activities: legislative, federal, other states, WA RUC
- Highlight two important milestones:
 - Selection of private firms to provide RUC services during the pilot
 - Results of Smartphone Innovation Challenge
- Public communications and recruitment activities
- Discussion of policy issues work plan

2017 UPDATES

Reema Griffith, Executive Director, Washington State Transportation Commission

2017 LEGISLATIVE SESSION UPDATE

WASHINGTON'S ROUND 2 STSFA GRANT PROPOSAL

Background:

- Federal FAST Act provided \$95 million over 5 years for the Surface Transportation System Funding Alternatives Program, administered by FHWA
- Washington's Pilot Project was fully funded for Stage 1 (Final Design & Set-up)
- Remaining funding request is for Stage 2 (12-month live pilot) and Stage 3 (evaluation and reporting)

Summary of Round 2 Proposal:

- Added: mileage permit (removed time permit)
- Added: development and utilization of a model Privacy Impact Assessment (PIA) for RUC
- Added: participation from Idaho drivers to expand the range of jurisdictions participating in the pilot (now includes: active RUC states, other countries, non-RUC states, and WA)
- Added: requirement to complete policy analysis for all 18 policy "parking lot" issues identified by the Steering Committee

UPDATE ON RUC IN OTHER STATES

Jeff Doyle, D'Artagnan Consulting

CALIFORNIA ROAD CHARGE PILOT PROGRAM

- 9-month pilot completed in March 2017
- 5,000+ vehicles testing 8 mileage reporting methods reported 35+ million miles
- 50+ heavy vehicles tested per-mile charge as a replacement for state diesel excise tax
- Survey results
 - At end of pilot, 85% of participants satisfied or very satisfied overall
 - The number “very satisfied” increased from 37% before the pilot to 61% after the pilot
 - At end of pilot, 73% believe a per-mile road charge is a fair way to pay for road use
- Next steps:
 - California Legislature passed a package of fuel tax and registration fee increases in April
 - California State Transportation Agency final report due to Legislature this year
 - California Transportation Commission road charge recommendations due this year
 - Caltrans will use federal grant for public engagement on transportation funding, organizational design of a road charge with other state agencies, and exploration of a pay-at-the-pump option for road charge

OReGo: OREGON'S OPERATIONAL RUC PROGRAM

- Two year operational anniversary on July 1, 2017; reported “*the system works*”
- 731 RUC-paying vehicles enrolled as of July 25, 2017
- OReGo provides choice of state account manager or commercial account manager, adding one commercial account manager and losing one since launch
- Majority of Oregonians in 2016 survey agreed a mileage-based system for road funding is fairer than fuel tax, registration fees or vehicle sales tax
- ODOT researching adding embedded telematics, cell phone imagery and data aggregation as reporting options
- 2017 Oregon Legislature enacted an “enhanced vehicle registration fee” that increases proportionately with MPG. However, EVs that opt to pay RUC are exempt from the fee.
- 2016 STSFA Round 1 funding allows OReGO *to expand* technology options, improve account management and bolster public outreach
- ODOT applied for 2017 STSFA Act grant to add congestion pricing element to OReGO per legislative directive

COLORADO DOT'S RUC PILOT PROJECT

Four month statewide pilot (December 2016 - April 2017)

- 100 participants, consisting of transportation leads, officials, media, general public
- Geographic (Urban/Rural) and vehicular (MPG) stratification
- Payments and associated revenues were simulated
- Three reporting Options: GPS enabled (OBDII), Odometer reporting, and non-GPS enabled mileage measurement (OBDII)

Goals of Pilot:

- Demonstrate an operational RUC
- Identify and evaluate issues
- Test the feasibility of various mileage-reporting options and
- Solicit feedback and ideas.

RUC WEST: REGIONAL SYSTEM DEFINITION AND PILOT PLANNING PROJECT

Develop Concept of Common Operations to include:

- Per-mile charge, variable by state, for light passenger vehicles.
- Open system architecture to foster competition in the RUC services market.
- Multiple methods of collection and account management
- Interoperability, the seamless transfer of information between disparate state systems.
- Accommodation of both illustrative and actual billing.
- Seek to foster administrative cost efficiencies and economies of scale for all parties.
- System design that would not preclude congestion pricing.
- Use of industry standards and best practices for system reliability and security.

Develop Communications and Outreach Plans/Toolkits for RUC West states by tier.

STATUS REPORT ON PILOT PROJECT PREPARATIONS

Jeff Doyle, D'Artagnan Consulting

STAGE 1: FINAL DESIGN & PILOT PROJECT SET-UP

Pilot Project Stage 1:

- Fully-funded (federal STSFA grant, in-kind, toll credits)
- Includes all work leading to launch of live pilot test

Work is organized around four major task areas:

1. Pilot Design & Set-up
2. Comprehensive Public Attitude Assessment
3. Public Communications & Participant Engagement
4. Policy Development, Oversight & Project Management

TASK 1: PILOT DESIGN & SET-UP

Completed and nearing completion:

- ✓ Technical documents (SRS, ICD, ConOps)
- ✓ Procurement of RUC Service Providers (i.e., account managers and technologies)*
- ✓ Smartphone Innovation Challenge*
- Constructing the multi-jurisdictional RUC clearinghouse function (Hub)*

To be completed by mid-November:

- Help desk and participant support
- Partnerships with DOL agents/subagents to provide in-person odometer verification
- Finalize the pilot evaluation plan

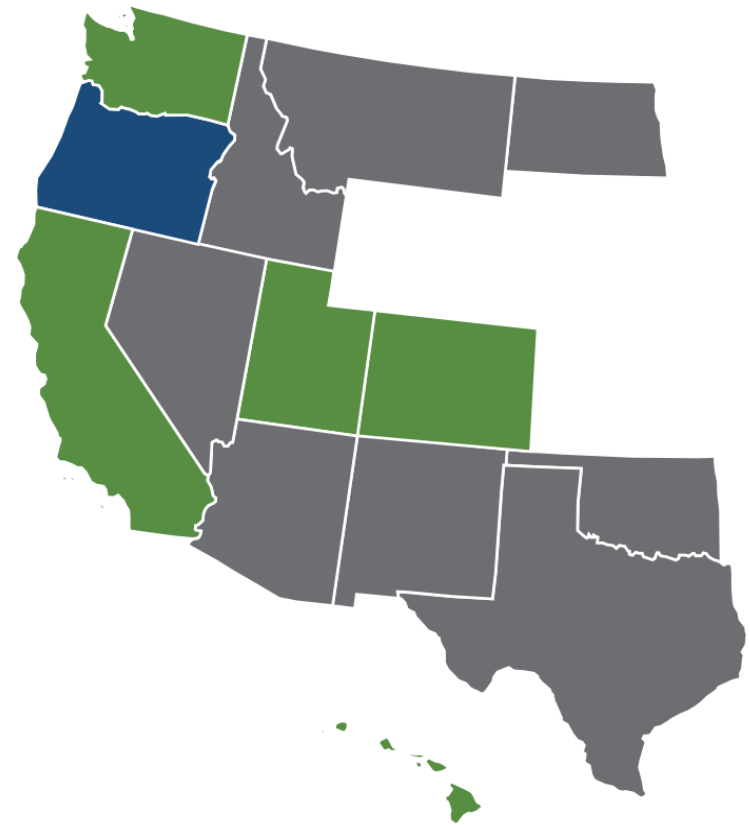
Scheduled for later:

- Organizational Design (potential roles for government, private sector in a future RUC system)

* = covered in more detail in later slides

RECONCILING RUC CHARGES AMONG MULTIPLE JURISDICTIONS

- Road usage charging is being looked at in several states across the country.
- 14 western states are involved in research, **testing**, or **legislatively enacted programs**.
- Leads to questions:
 - What happens when I drive out of state? Do I pay RUC to Washington if I am driving in Kansas?
 - How do people from other states pay to use Washington roads?



Source: RUC West

RECONCILING RUC CHARGES AMONG MULTIPLE JURISDICTIONS

Each jurisdiction could enter into bilateral agreements for reconciling funds:

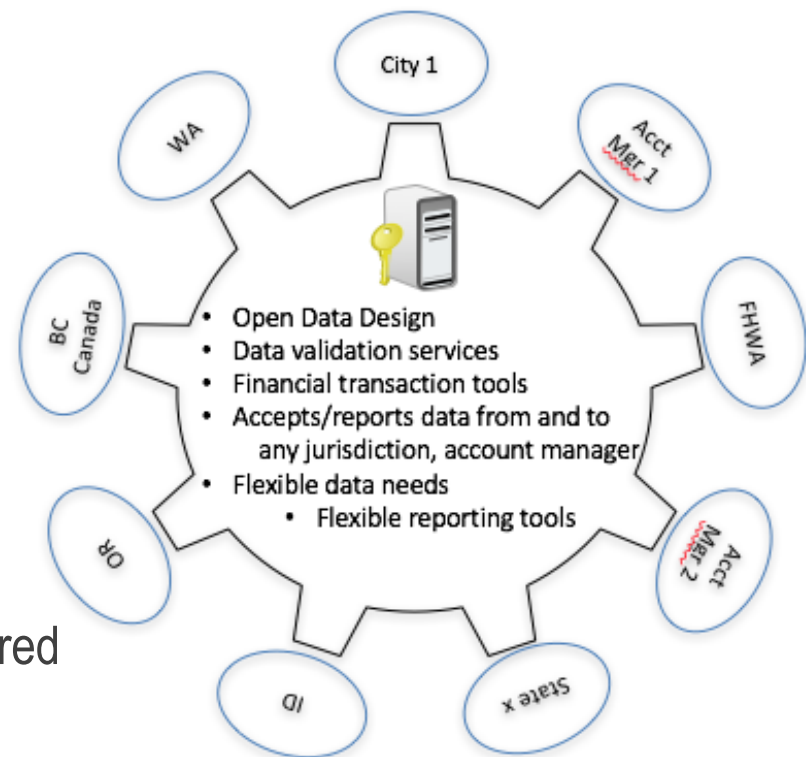
- 48 contiguous US states = 1,128 separate bilateral agreements
- 58 jurisdictions = 1,653

The RUC Hub:

- Central financial and data clearinghouse
- Each RUC jurisdiction only needs one agreement

Key features:

- Open Data Design
- Provides Data Validation Services, if desired
- Can service any jurisdiction or account manager



TASK 2: COMPREHENSIVE PUBLIC ATTITUDE ASSESSMENT

Completed:

- ✓ Baseline public attitude survey*
- ✓ Focus group sessions (in five regions of the state)*

Up next:

- Analyzing results from survey and focus groups, and synthesizing findings in a full report

Scheduled later:

- Baseline attitudes of pilot project participants, before beginning the 12-month live test

TASK 3: PROJECT COMMUNICATIONS & PARTICIPANT ENGAGEMENT

Completed:

- ✓ Basic PowerPoint presentation (general audiences, 10 minutes or less)
- ✓ WA RUC Project Style Guide
- ✓ Pilot Project Fact Sheet
- ✓ Media response protocols
- ✓ Draft Communications Plan*
- ✓ Draft Recruitment Plan*

In Progress:

- 1:1 Listening Sessions

Upcoming:

- Website changes to support recruiting phase
- New materials to support participant recruitment and enrollment (video, social media, etc.)

TASK 4: POLICY DEVELOPMENT, OVERSIGHT & PROJECT MANAGEMENT

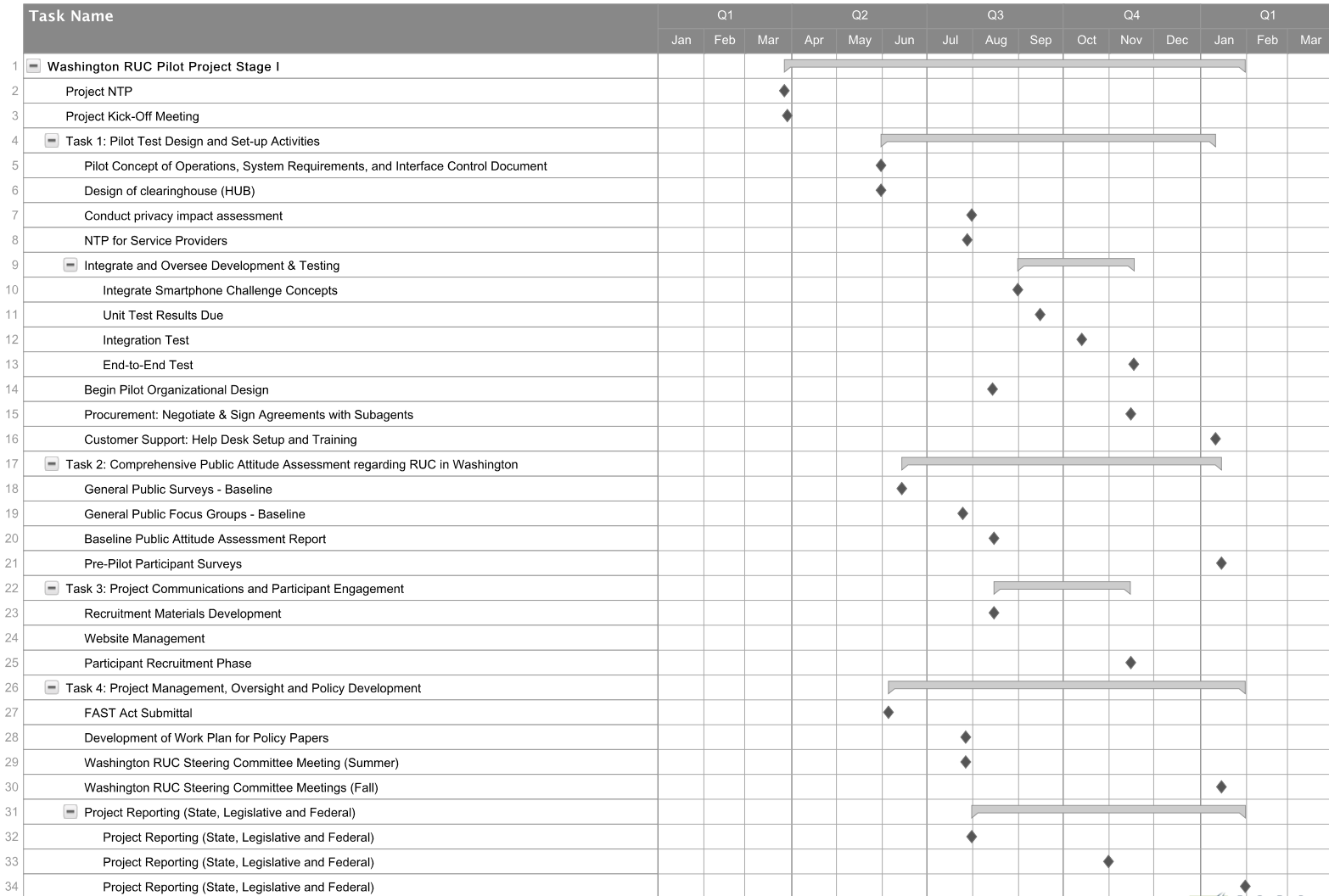
Ongoing:

- Refinements to Policy Issue Work Plan*
- Monthly project status reporting (WSTC)
- Quarterly project status and financial reports (FHWA)
- As-requested presentations (WSTC, Legislature)

Scheduled:

- Comprehensive policy issue analysis (federal funding pending)
- Steering Committee meeting: November 9, 2017

SCHEDULE & MAJOR MILESTONES



INTRODUCTION OF RUC SERVICE PROVIDERS

Roshini Durand, D'Artagnan Consulting

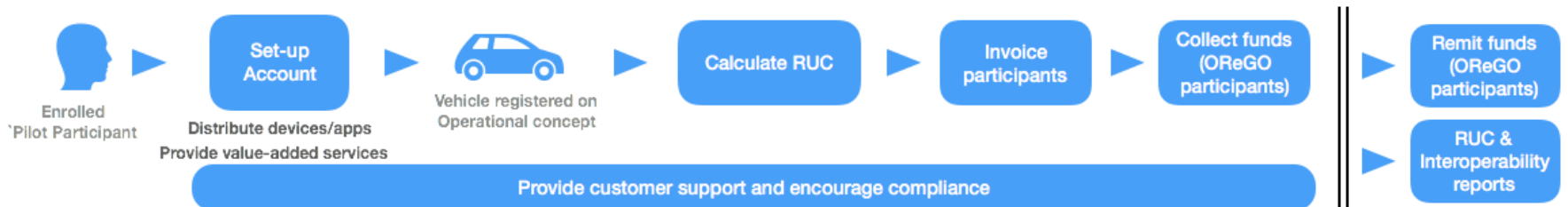
THE ROLE OF RUC SERVICE PROVIDERS IN THE WASHINGTON PILOT PROJECT

Provide end-to-end Account Management services

- Manage pilot participants accounts and provide on-going customer support
- Support and distribute mileage reporting technologies (devices or apps)
- Provide value-added services
- Calculate Road Usage Charges and provide RUC receipts/invoices
- Encourage compliance of pilot participants

Report to the RUC Administration

- Remit funds (for OReGO participants)
- Provide periodic RUC and interoperability reports



APPROACH TO RUC SERVICES

Five Operational Concepts

- Two manual concepts:
 - Mileage Permit and Odometer Charge
- Three automated concepts:
 - Automated Distance Charge (location)
 - Automated Distance Charge (no location)
 - Smartphone Location Application

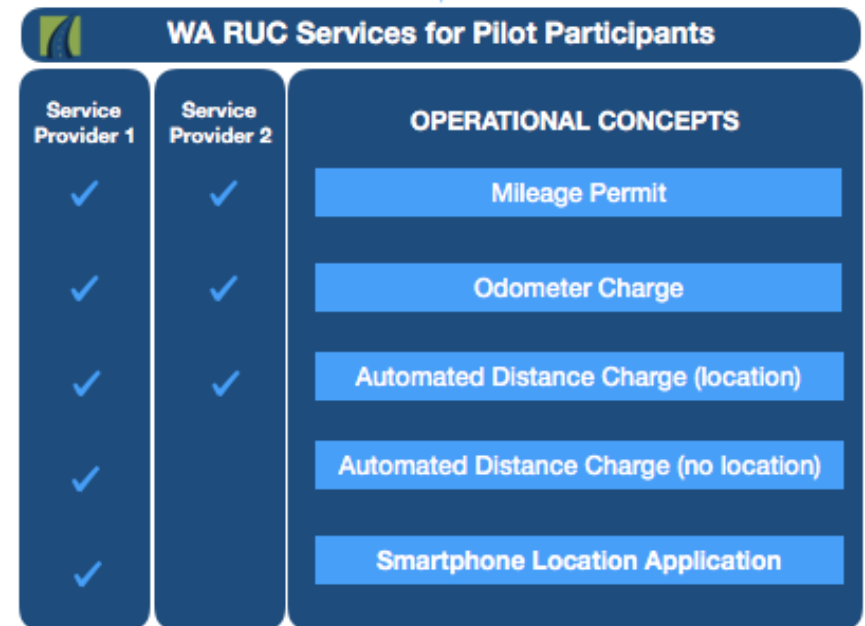
Two Service Providers

- One Service Provider to cover all five concepts
- A second Service Provider to cover three of the five concepts

Single-Sign-On participant enrollment system
Centralized WARUC pilot participant account with single-sign-on system.



*Participant enrollment
(Single Sign On System)*



RUC SERVICE PROVIDERS

Shortlisted Service Providers with RUC experience

- Azuga
- emovis
- Intelligent Mechatronics Systems (IMS)

The logo for azuga, featuring the word "azuga" in a lowercase, sans-serif font. The letter "u" is highlighted in a light blue color, and there is a registered trademark symbol (®) to the upper right of the "a".The logo for emovis, featuring a purple circular icon composed of concentric lines on the left, followed by the word "emovis" in a lowercase, sans-serif font.The logo for IMS, featuring a stylized red and blue circular icon on the left, followed by the letters "IMS" in a bold, italicized, red, sans-serif font.

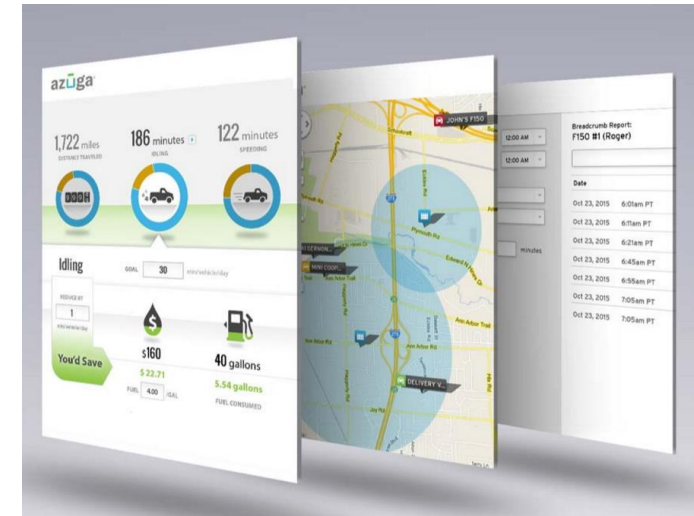
Key features across proposals

- Certifications from previous RUC pilot projects
- Coverage of all operational concepts
- Support reliable mileage reporting technology for automated concepts
- Use of mapping technology that differentiates between private and public road networks

SERVICE PROVIDER: AZUGA

Key features

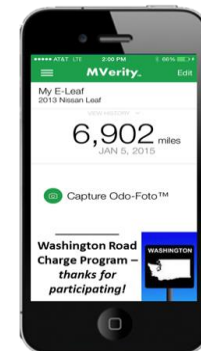
- Integrated Azuga RUC Platform
- Digital Wallet system
- 8 UBI oriented value-added apps for end-users
- Google maps or HERE maps



Technology providers

- Danlaw (Azuga) OBDII device
- Vehcon MVerity odometer capture app

azūga®



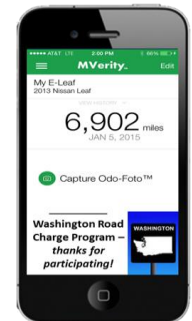
SERVICE PROVIDER: EMOVIS

Key features

- Modular open platform
- 24 UBI oriented value-added apps for end-users
- OpenStreetMap for public/private road differentiation

Technology providers

- Automatic OBDII device (with location)
- IMS OBDII device (no location)
- Vehcon MVerity odometer capture app



SERVICE PROVIDER: IMS

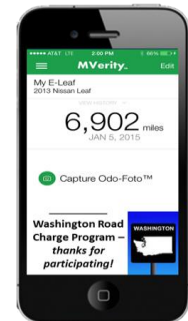
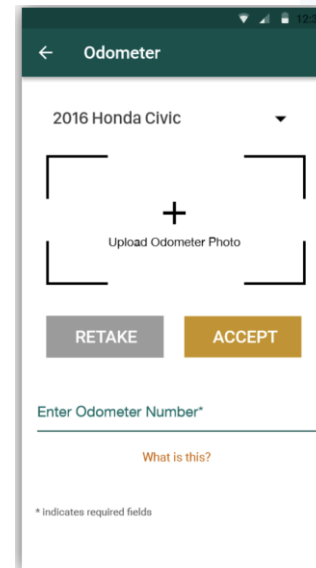
Key features

- Modular open platform
- 10 UBI oriented value-added apps for end-users
- OpenStreetMap or HERE map for public/private road differentiation



Technology providers

- IMS OBDII device
- IMS odometer capture app
- Vehcon MVerity odometer capture app



SMARTPHONE INNOVATION CHALLENGE

Jeff Doyle, D'Artagnan Consulting

SMARTPHONE CHALLENGE BACKGROUND

Why a crowd-sourced approach to providing a smartphone app for RUC?

- There's no strong business case for a private firm to develop an app that taxes drivers by the mile – at least not currently.
- Past efforts to use smartphones for active mileage recording have been disappointing.
- A crowd-sourced approach is more likely to give greater weight to consumers' needs and preferences than a traditional, government-issued "build to spec" solution.
- Codefests and "hackathons" are extremely cost-effective.



THE SMARTPHONE CHALLENGE: PROBLEM THAT MUST BE SOLVED

*Can IT engineers, software developers and designers create a prototype solution (software or device) for mileage reporting by **smartphone**?*

- Allows drivers to use their own smartphone to record and report mileage
- Allows drivers to decide whether or when to enable location-based services (GPS)

CoMotion (UW organization that matches private industry with public research) helped support four research teams:



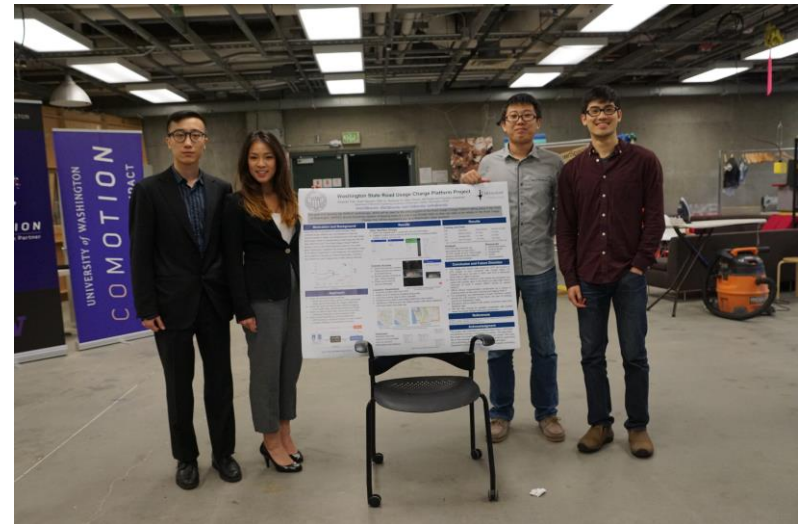
UW ELECTRICAL ENGINEERING DEPARTMENT TEAM

Developed a smartphone app for the Android operating system



Primary innovative contributions:

- Toggle on/off location-based (GPS) mileage recording, to ensure out-of-state miles are deducted from a drivers' RUC account
- *Border Proximity Detection*, where an audible sound reminds drivers to activate the out-of-state mileage deduction feature as the vehicle approaches a state border. Or, the driver can select "automatic" mode, where the app turns on out-of-state mileage deduction automatically when it detects a state border has been crossed.



UW INFORMATION SCHOOL (iSCHOOL) TEAM

WARUC

WASHINGTON ROAD USAGE CHARGE



Bringing our transportation budget up-to-speed with modern vehicles.

PROBLEM

Washington's transportation infrastructure budget is failing. Gas taxes make up 60% of the budget and, without continued increases, will fall behind due to many drivers switching to hybrid or electric vehicles.

Planning ahead, a more adaptable, usage-based, solution is needed.

APPROACH

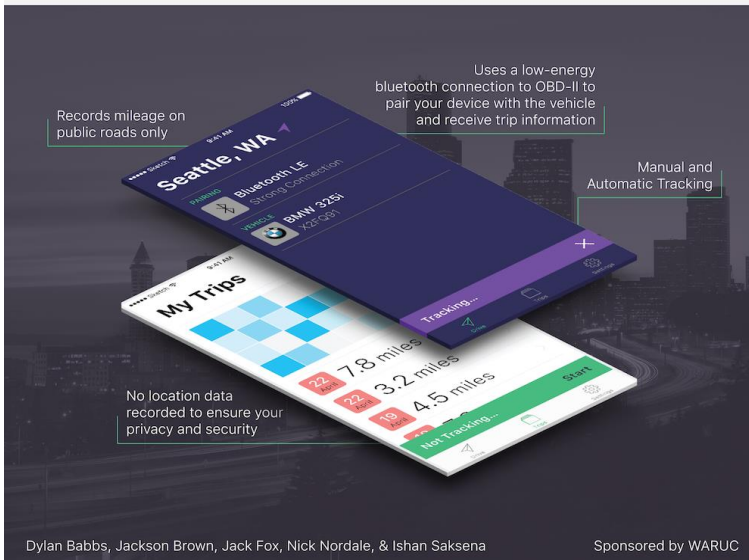
Utilizing modern Bluetooth and OBD-II technology, our application can unobtrusively track and record mileage information, with no privacy or security issues.

Optimized application to minimize impact on battery, cellular usage, and driving experience.

Developed an iOS app: *WARUC*, now available in Apple's App Store

Primary innovative contributions:

- Simple, "no-look" swipe on the smartphone screen to activate or deactivate mileage recording
- Full-functioning WARUC app available for download in Apple's App Store (free)

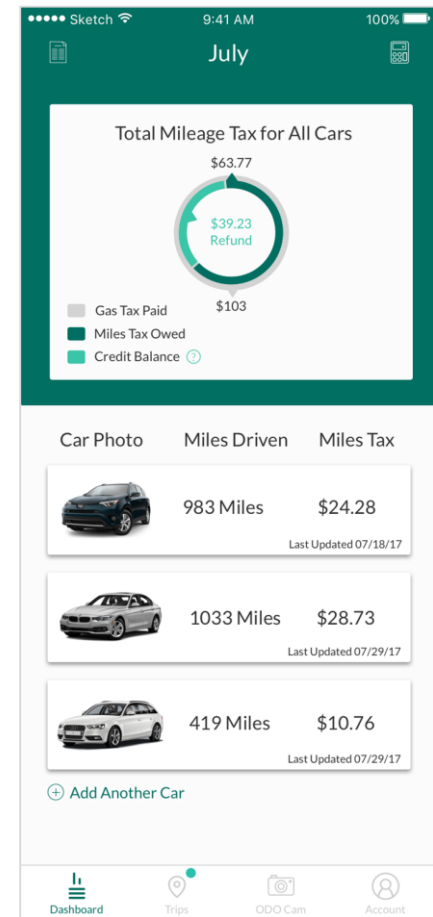
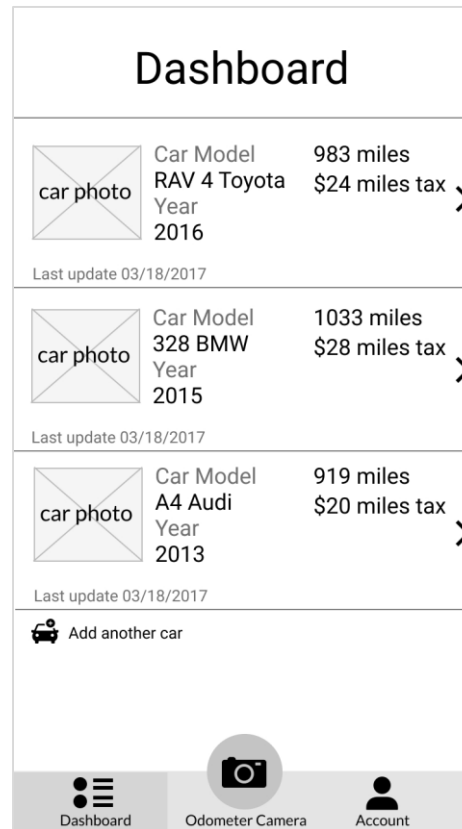


UW HUMAN CENTERED DESIGN ENGINEERING TEAM 1

Focused on smartphone app design that appeals to the average driver

Primary innovative contributions:

- Extensive driver surveys (102 responses) and in-person interviews (8 people) to identify preferences of the average driver
- Clever “explainer video” to help drivers learn the primary reason for RUC, and how the smartphone app is used



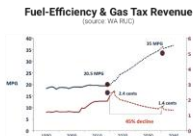
UW HUMAN CENTERED DESIGN ENGINEERING TEAM 2



A high-tech mileage reporting system for use with Washington State's upcoming Road Usage Charge

How can road infrastructure be funded in a more inclusive way?

Problem



Road Usage Charge
With an increase in *average fuel efficiency*, funding roads with a gasoline tax is *no longer sustainable*. Washington State has proposed a per-mile tax based on miles driven, called the Road Usage Charge.

Process



Participatory Design
We sat down with 8 drivers from all over Washington State over the span of workshops to understand and incorporate their perspectives into the design process.

Rapid Prototyping with User Values
Our participants' perspectives revealed a core set of values to be addressed in our designs. Our prototypes sought to effectively address the tensions between those values.

Prototype

Tongle pairs a smartphone app with an external device to ensure fair and convenient mileage recording. The external device, plugged into a car's OBD-II port, records and stores a car's trip data. The coupled app allows users to view, contest, and pay for their road usage.



1) Drive your car
Tongle requires a *convenient*, one-time setup for each car



2) Record Mileage
Tongle *accurately* and automatically records road usage



3) Control Privacy
Tongle protects user *privacy* by letting users enable GPS for specific trips



4) Pay for Trips
Tongle allows users to pay for their *fair* share of road usage from their phones



5) Store Data
Tongle allows users to *securely* access their account data from the cloud

Applied “Participatory Design” principles to balance individual preferences with revenue collection needs

HCDE Human Centered Design & Engineering
University of Washington

Primary innovative contributions:

- Three interactive workshops with 8 volunteers guided all design choices
- Drivers can choose to categorize their trips to self-analyze (and economize) their driving habits
- Drivers can quickly and easily “*Contest this Trip*” through a drop-down menu, requesting their RUC account manager to fix any incorrect mileage

Project by
Shin Young (Lucia) Choi
Molly Fallon
Michael Fernandes
Alex Gilbert

Sponsored by
Washington State Transportation Commission with support from:
• D'Artagnan Consulting
• The Mobility Innovation Center



BASELINE PUBLIC ATTITUDE ASSESSMENT: STATEWIDE SURVEY

Michelle Neiss, DHM Research

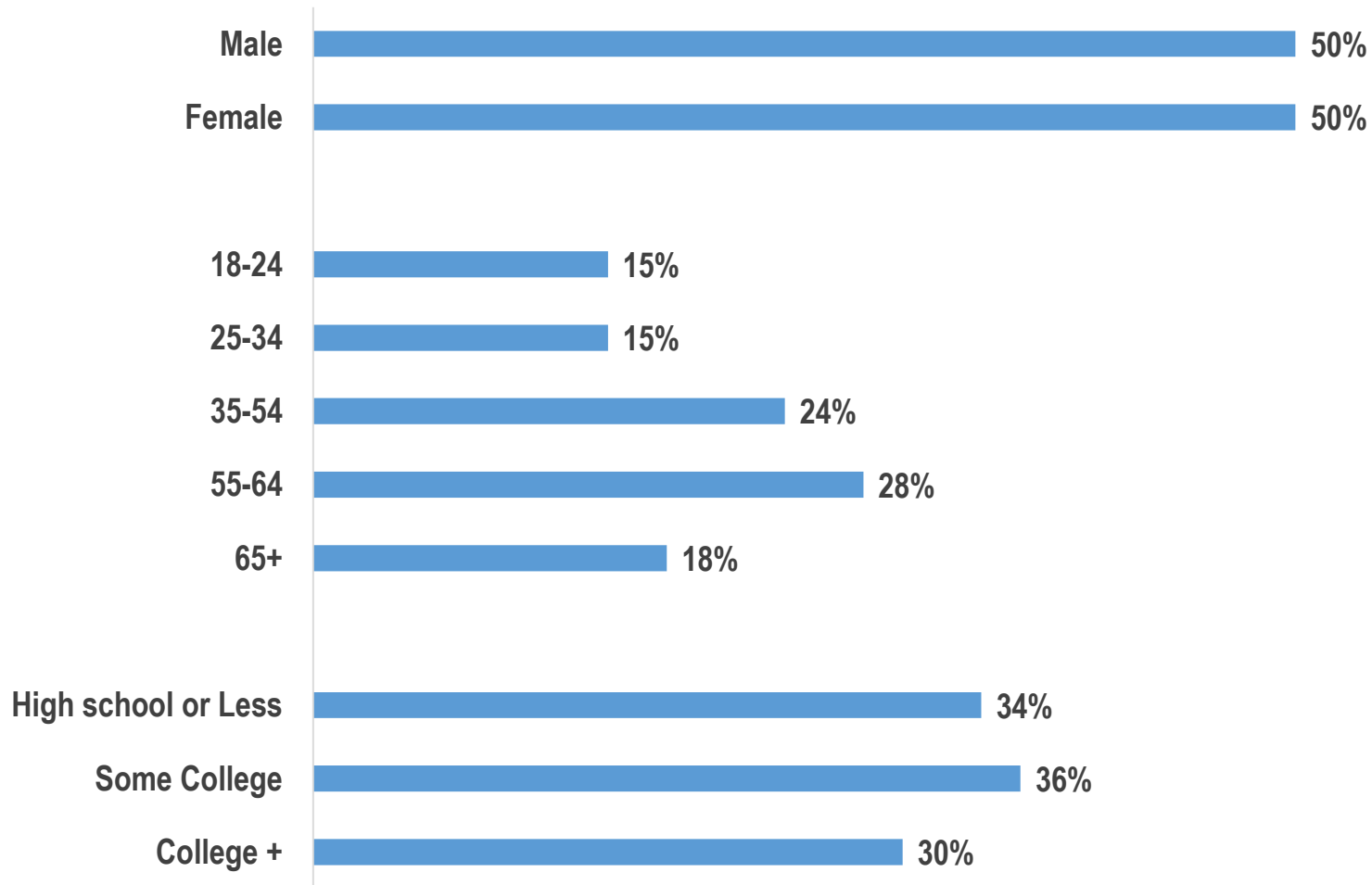
RESEARCH PURPOSE

- Assess public perceptions of transportation funding in the State of Washington, views of the gas tax, and familiarity with road usage charges (RUC).
- Results identified topics to explore in focus groups
- Results can be used to inform communications for the Washington Road Usage Charge Project and recruitment for RUC pilot testing.

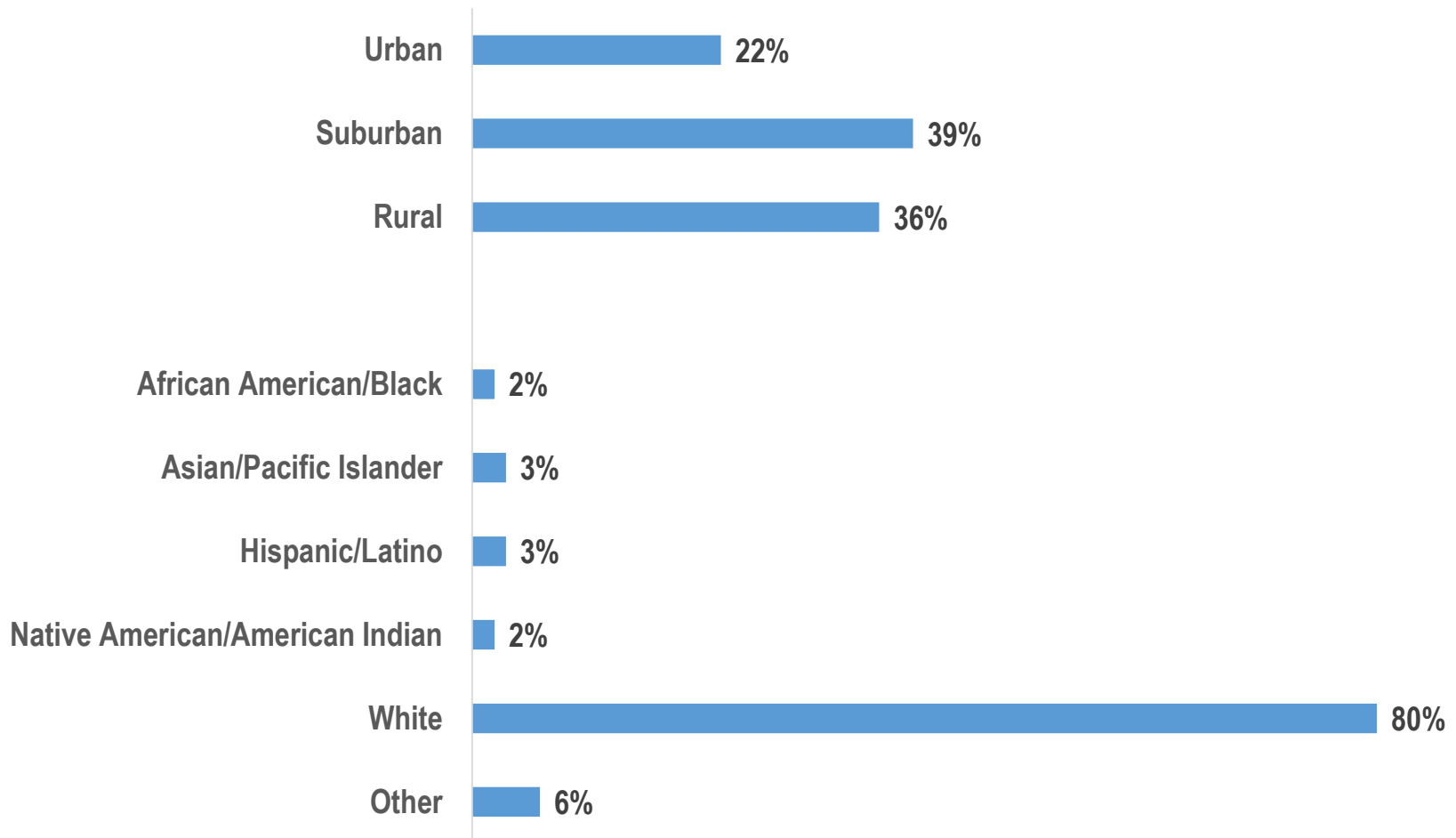
METHODOLOGY

- 602 Washington residents. Telephone survey; cell and landlines called
- June 1 – June 7, 2017
- Quotas and weighting by age, gender, education, and area of state ensure participants are representative of state population
- $\pm 4.0\%$ Margin of error

DEMOGRAPHICS



DEMOGRAPHICS



TRANSPORTATION ATTITUDES: Education and transportation are top priorities for Washington residents

17% **Transportation**

16% **Education**

9% **Reduce taxes**

5% **Healthcare**

5% **Homelessness**

5% **Political Issues/ Corruption**

TRANSPORTATION ATTITUDES: Transportation is a top issue across communities; urban communities also identify homelessness as an issue

Urban

22% Transportation

14% Homelessness

10% Reduce taxes

Suburban

21% Education

15% Transportation

11% Reduce taxes

Rural

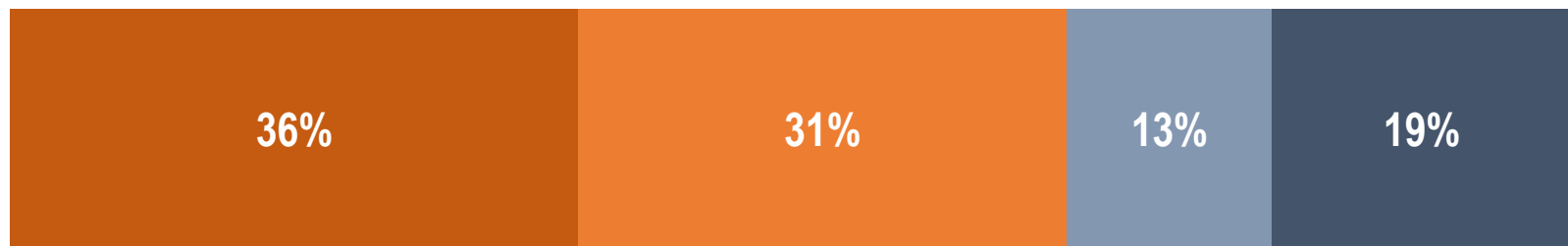
18% Education

15% Transportation

8% Reduce taxes

TRANSPORTATION ATTITUDES: Over six in ten report traffic congestion is a very big or moderate problem in their community

Is traffic congestion a problem?



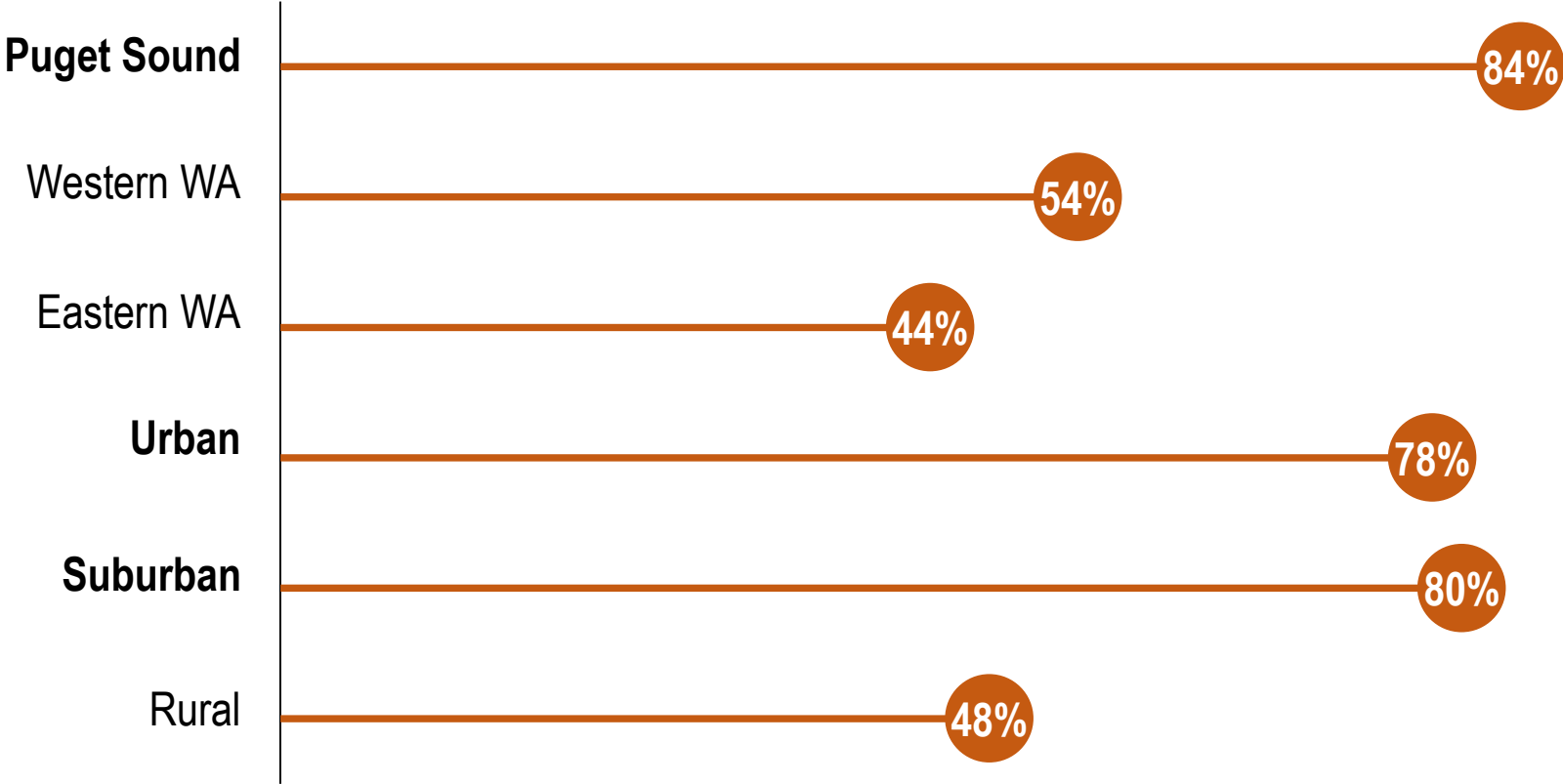
Very big problem



Not a problem

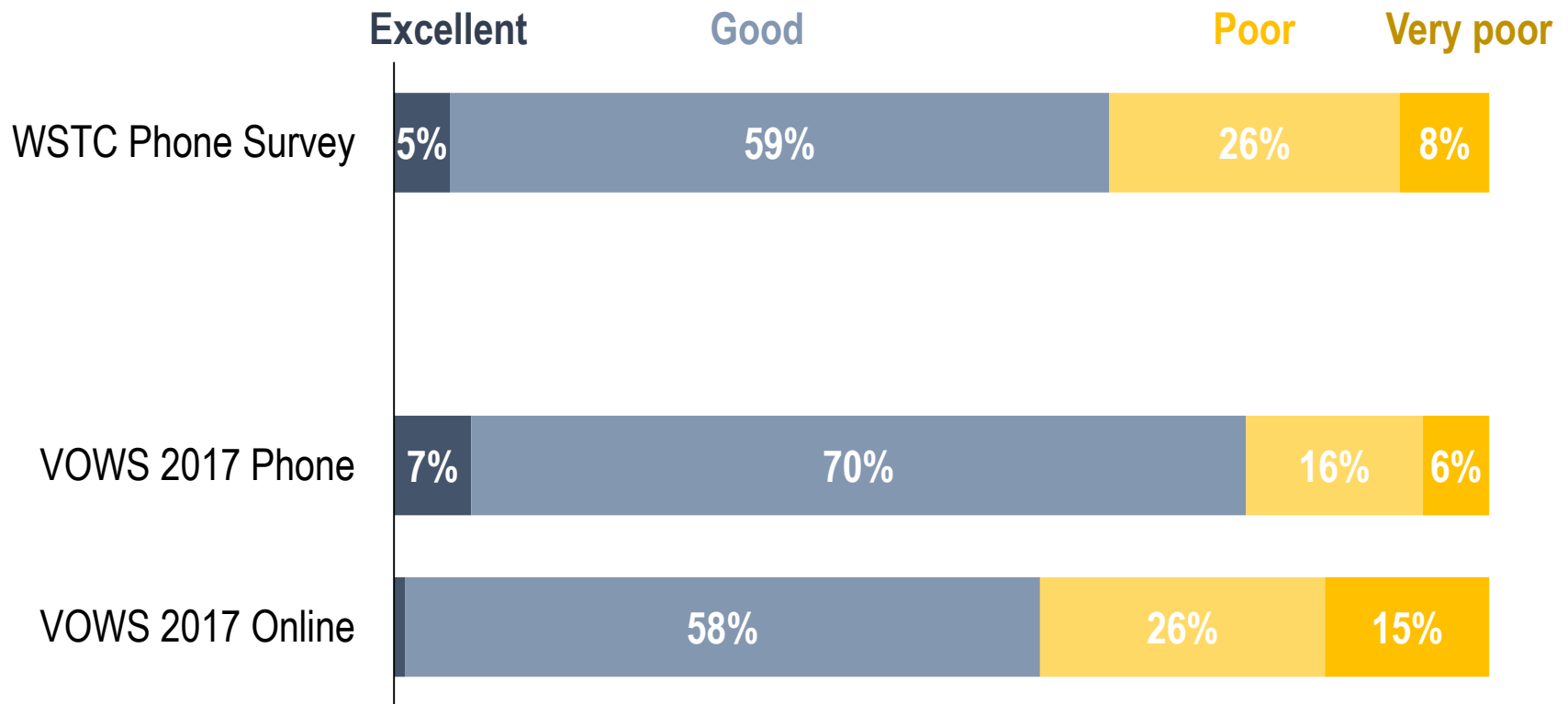
TRANSPORTATION ATTITUDES: More of those living in the Seattle region, or in urban and suburban areas, find congestion to be a problem

Congestion is a Very Big/Moderate Problem



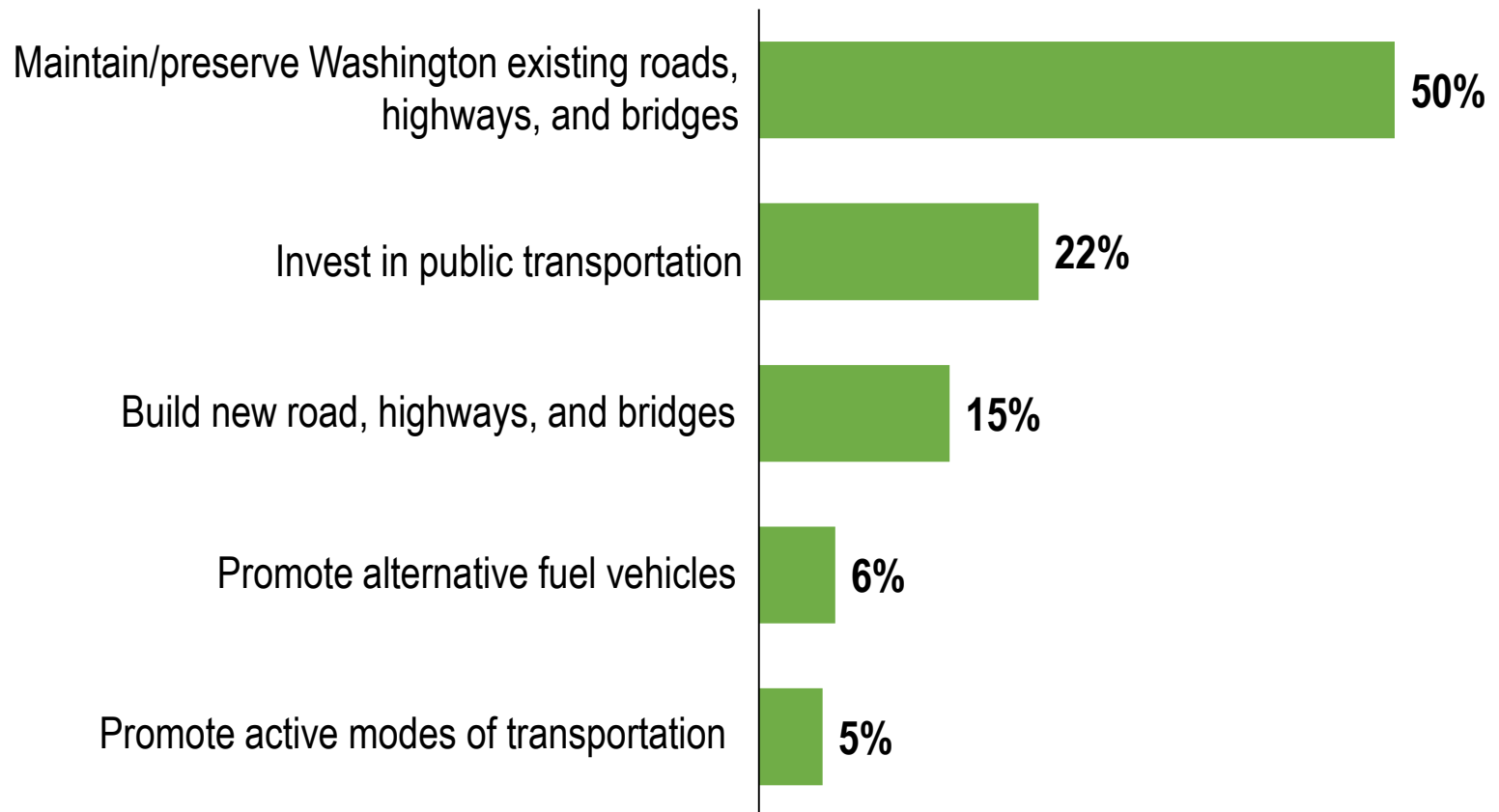
TRANSPORTATION ATTITUDES: Six in ten think Washington's state highways are excellent or good; ratings are consistent with VOWS findings

Quality of State Highways



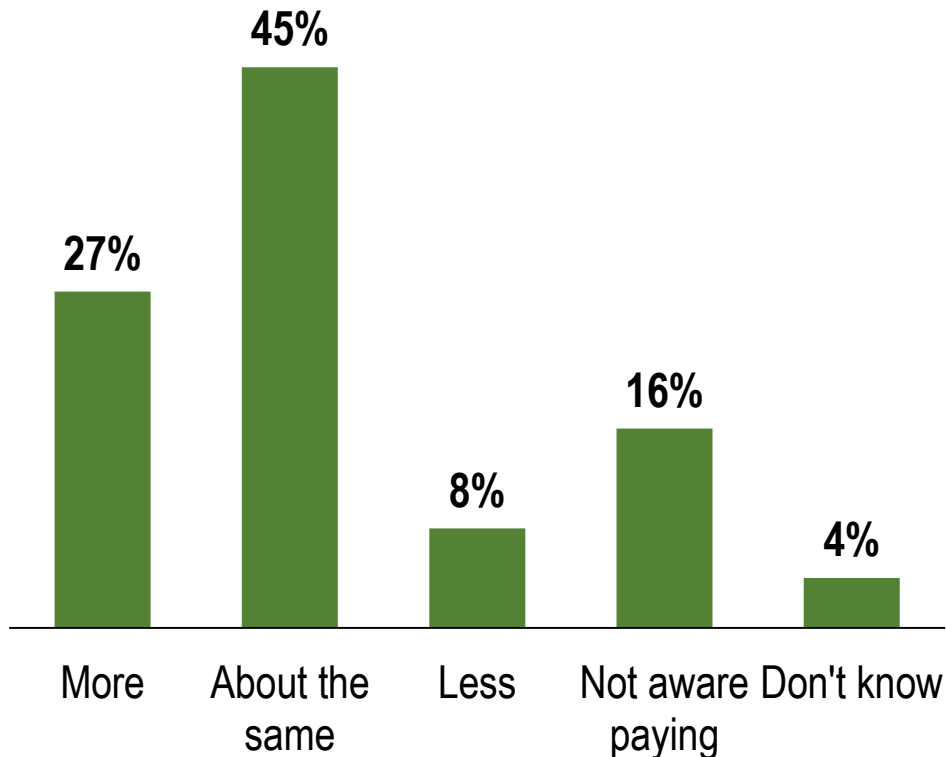
TRANSPORTATION FUNDING: Maintaining Washington's existing roads is the highest priority, followed by investing in public transportation

Top Transportation Priority

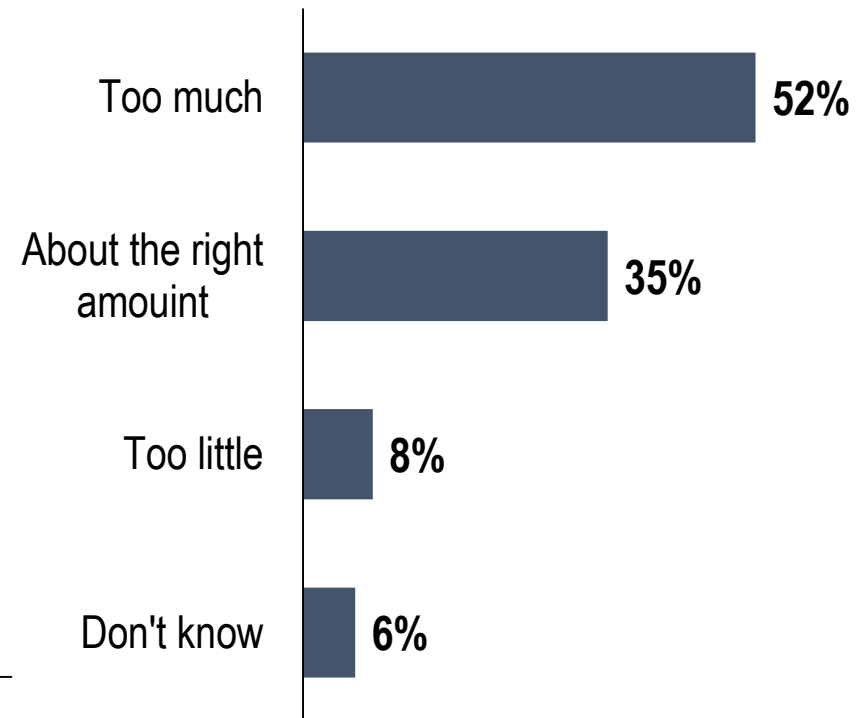


TRANSPORTATION FUNDING: Over four in ten say the current gas tax (about \$370 per year) is what they thought they were paying; about half say it is too much

How does the 49 cent gas tax compare to how much you thought you were paying?

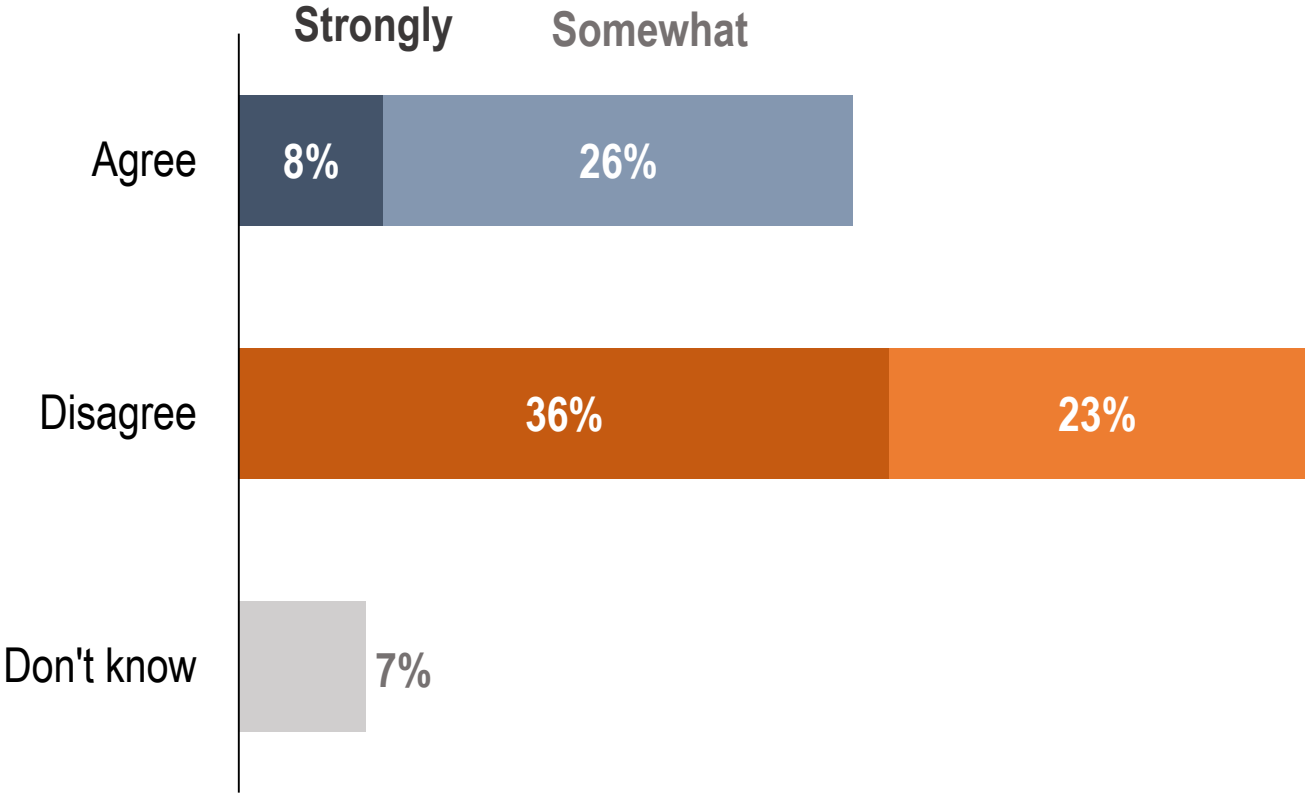


Opinion about amount of tax



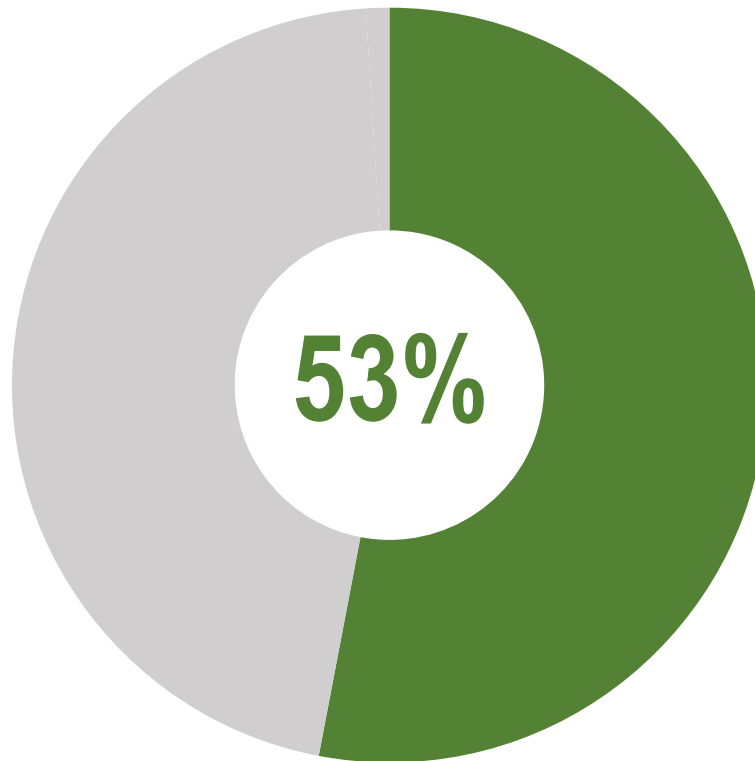
TRANSPORTATION FUNDING: A majority of residents disagree that government does a good job managing transportation spending in Washington

Government Manages Transportation Spending Well



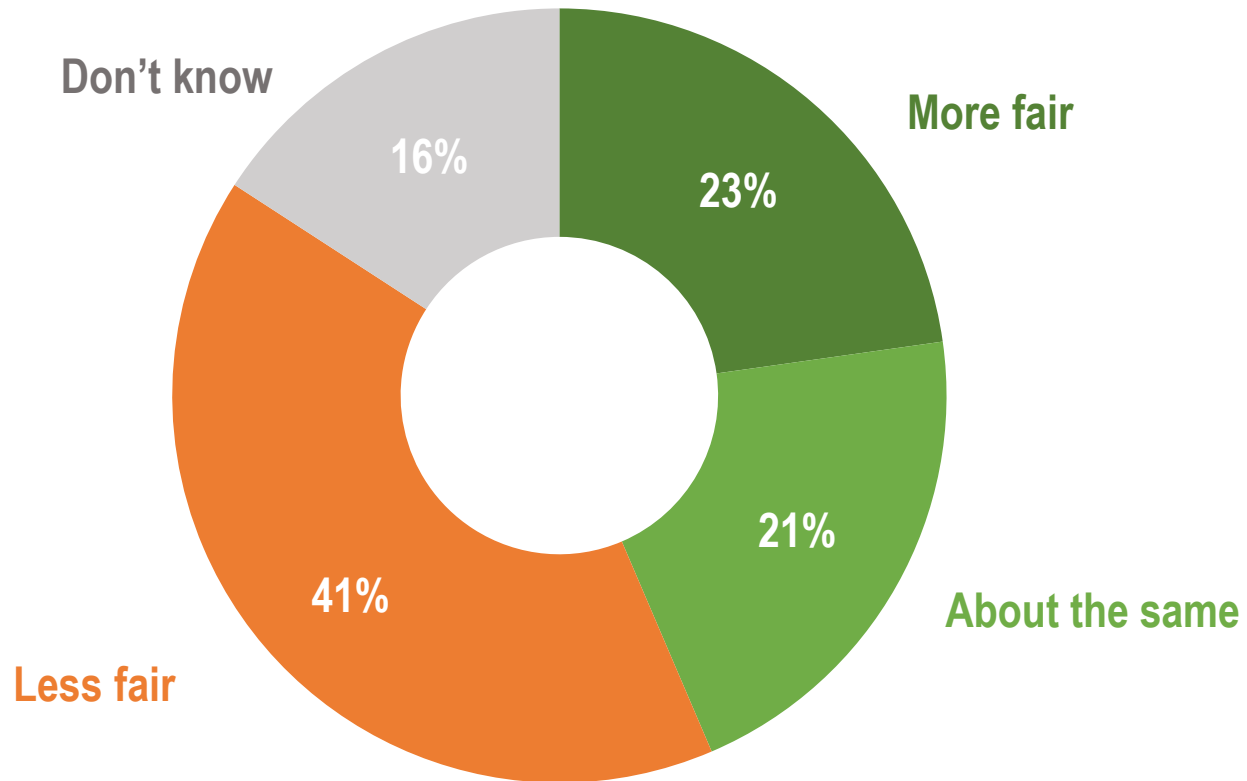
ROAD USAGE CHARGE: Half are familiar with the concept of a road usage charge (RUC)

Very/Somewhat Familiar with RUC

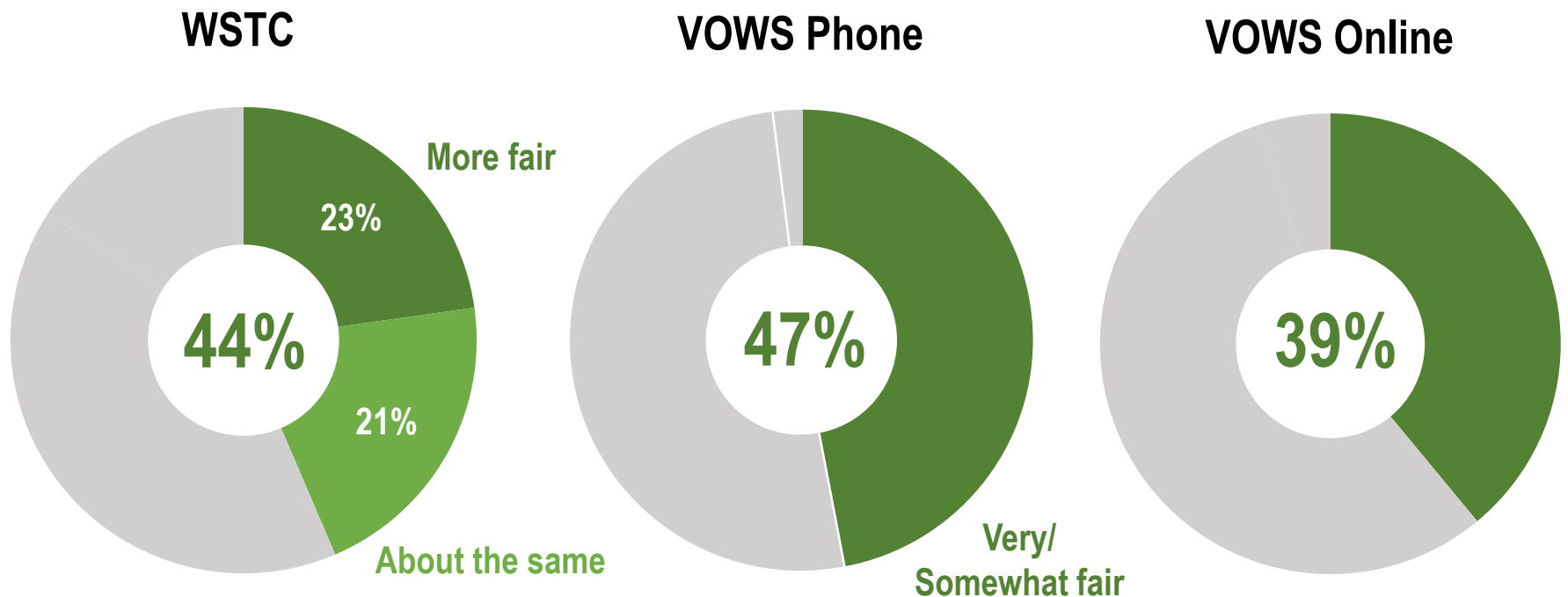


ROAD USAGE CHARGE: Four in ten Washington believe a road usage charge is less fair than the gas tax

How does the fairness of a RUC compare to the gas tax?

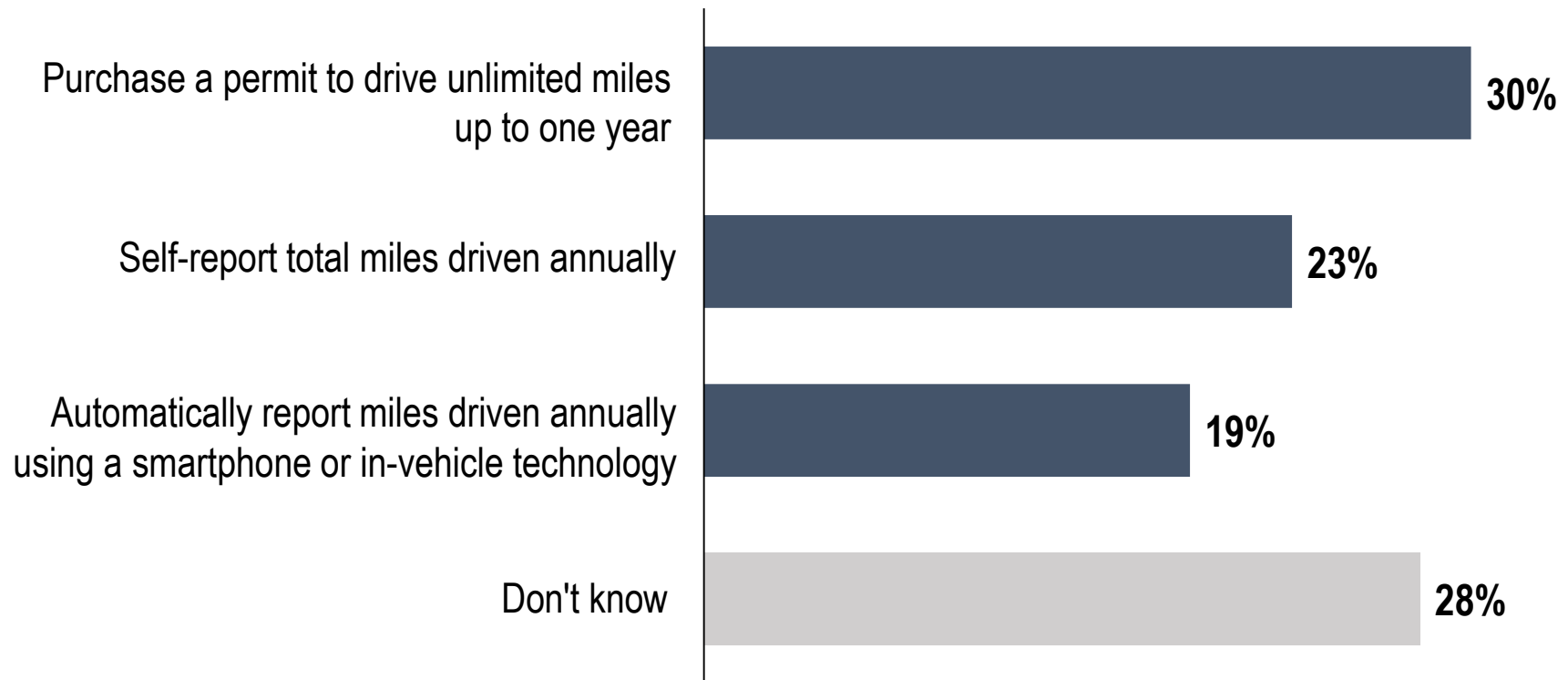


ROAD USAGE CHARGE: Beliefs about fairness of road usage charges are consistent with prior VOWS work



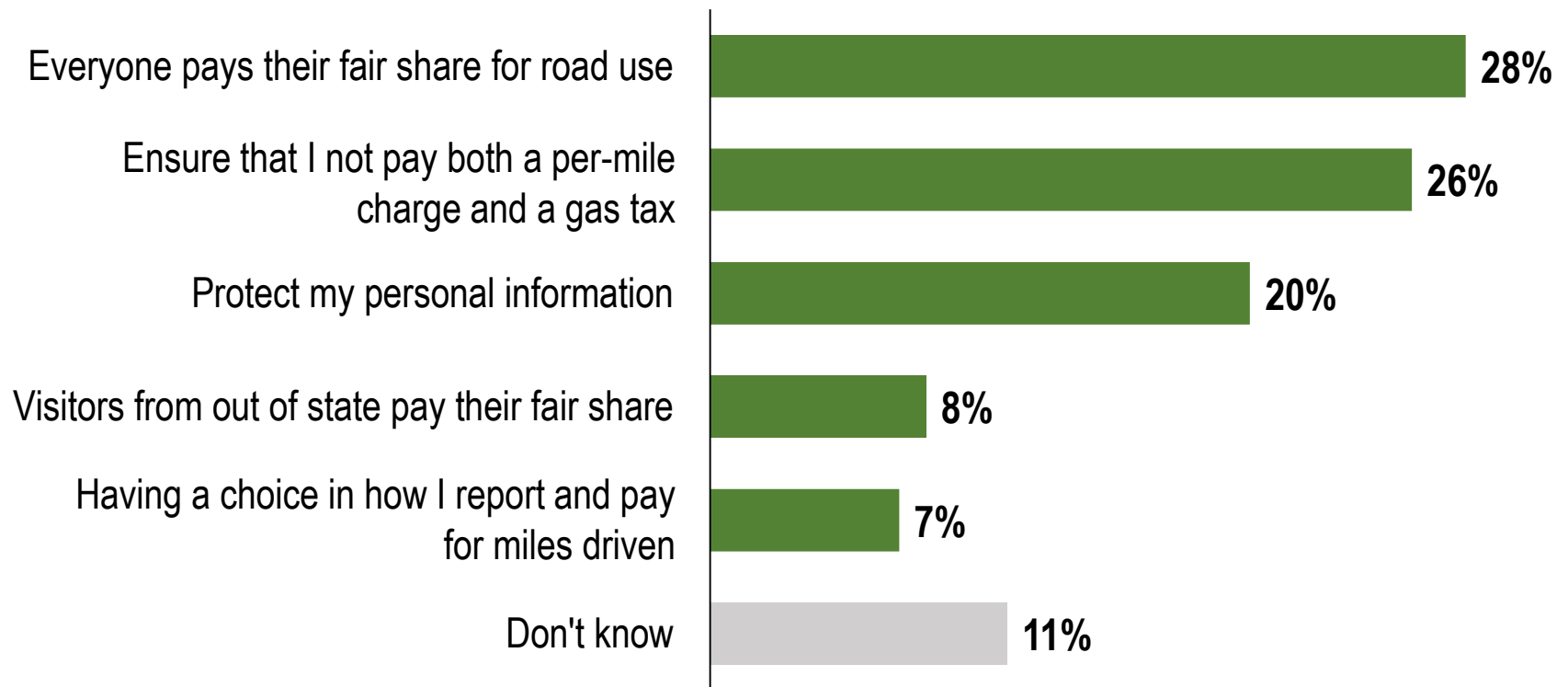
ROAD USAGE CHARGE: Three in ten prefer to purchase an unlimited miles permit; nearly as many (28%) are uncertain

Preferred Payment Options

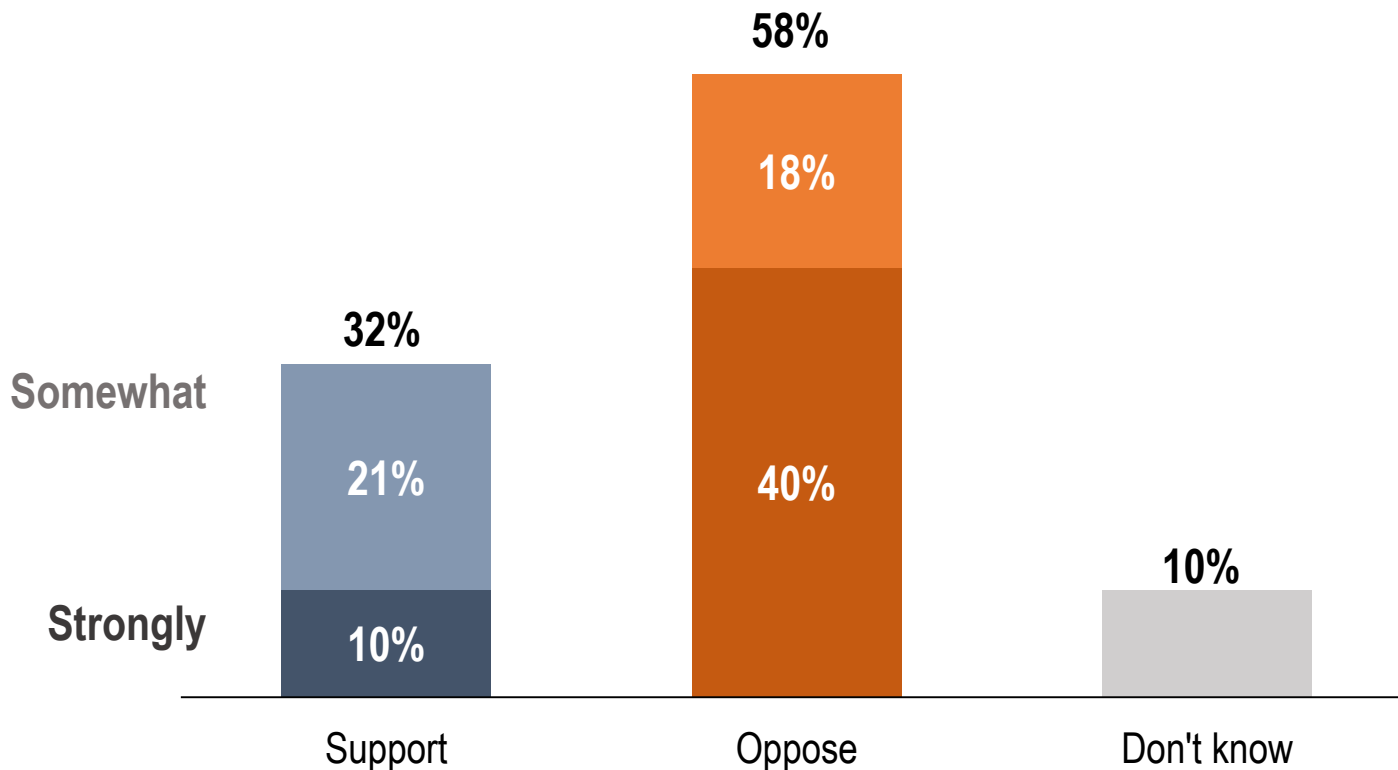


ROAD USAGE CHARGE: Residents are concerned about people paying their fair share and only paying one tax

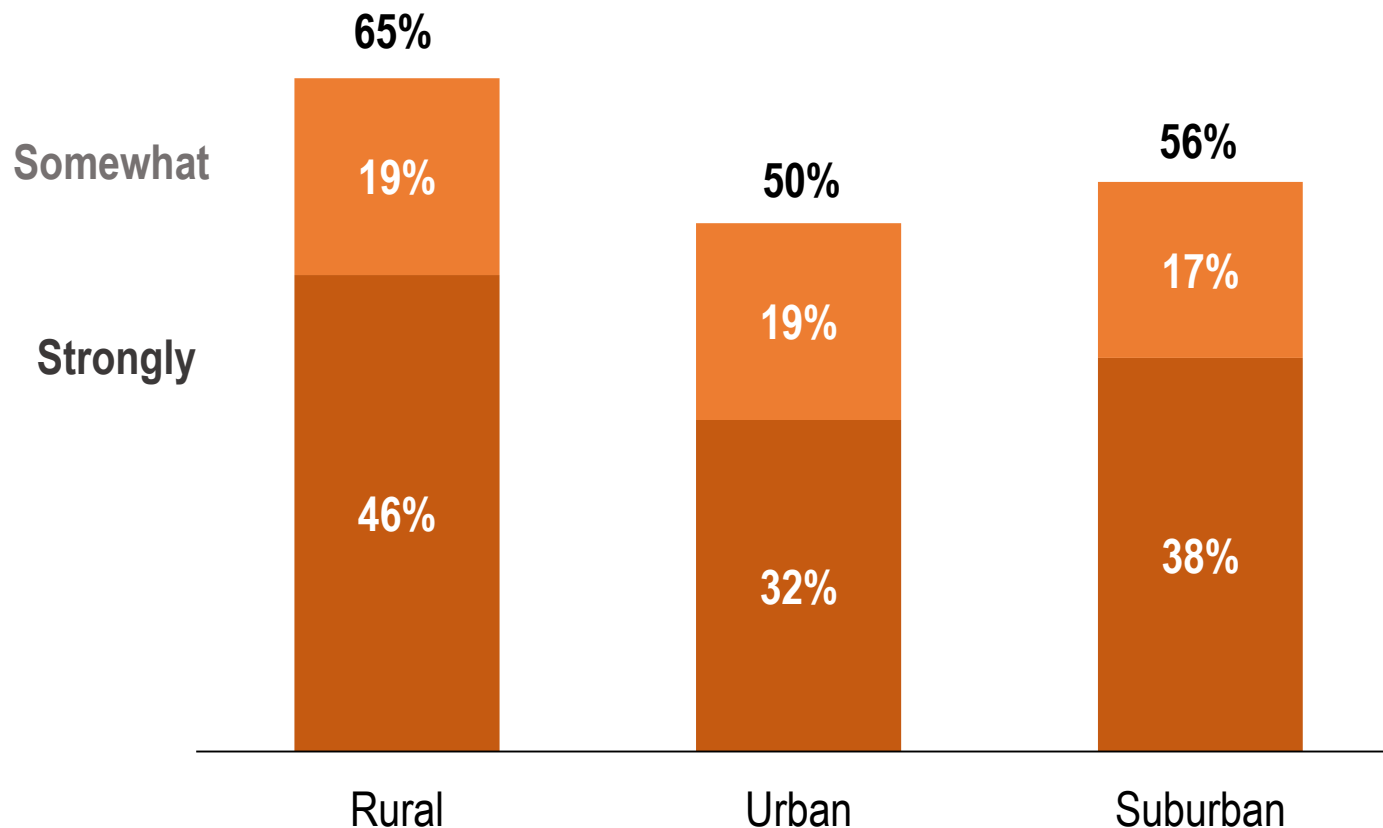
Most Important Issue



ROAD USAGE CHARGE: A majority oppose implementing a road usage charge in Washington to fund transportation

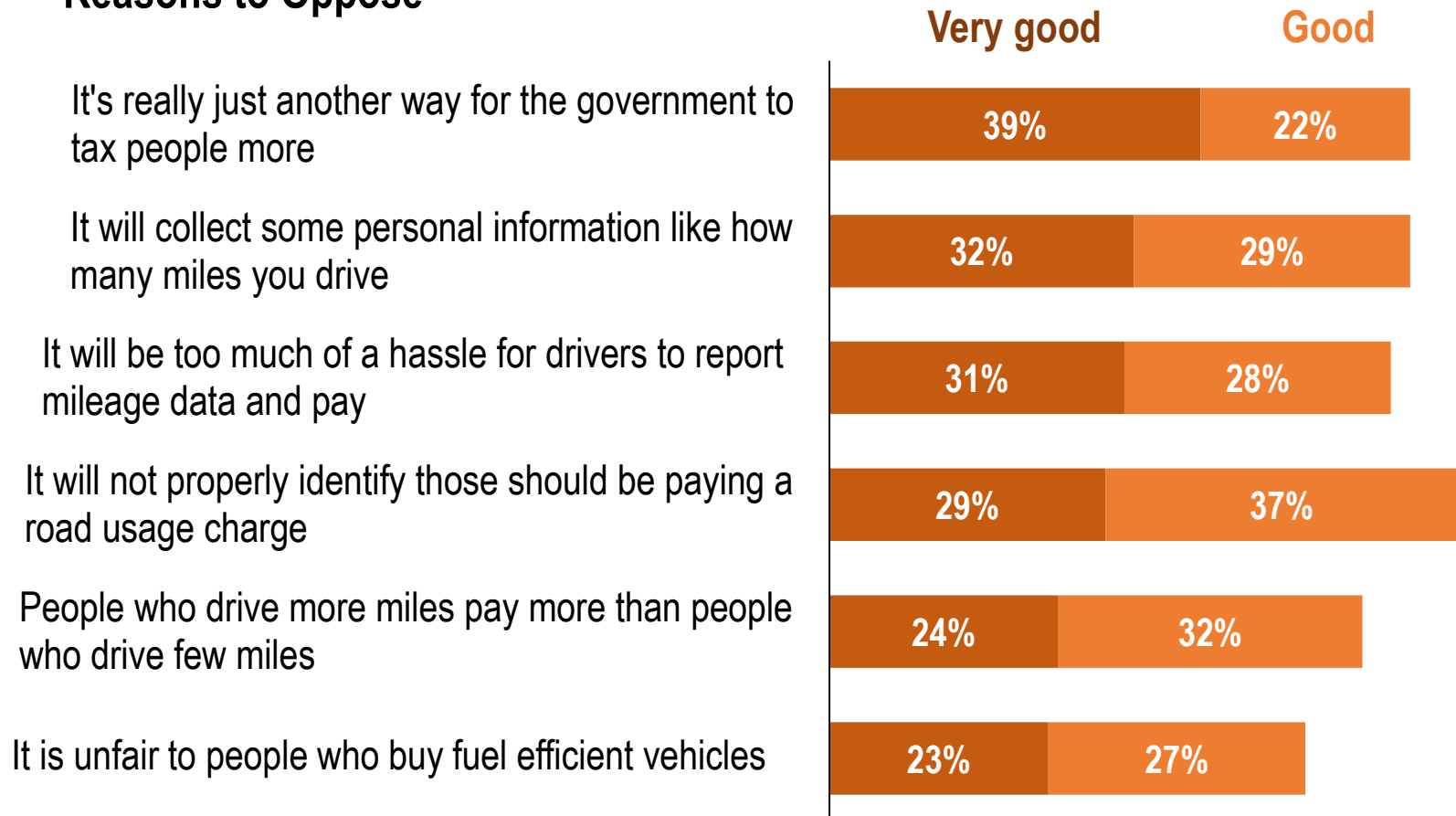


ROAD USAGE CHARGE: Opposition to a road usage charge program is higher in rural areas



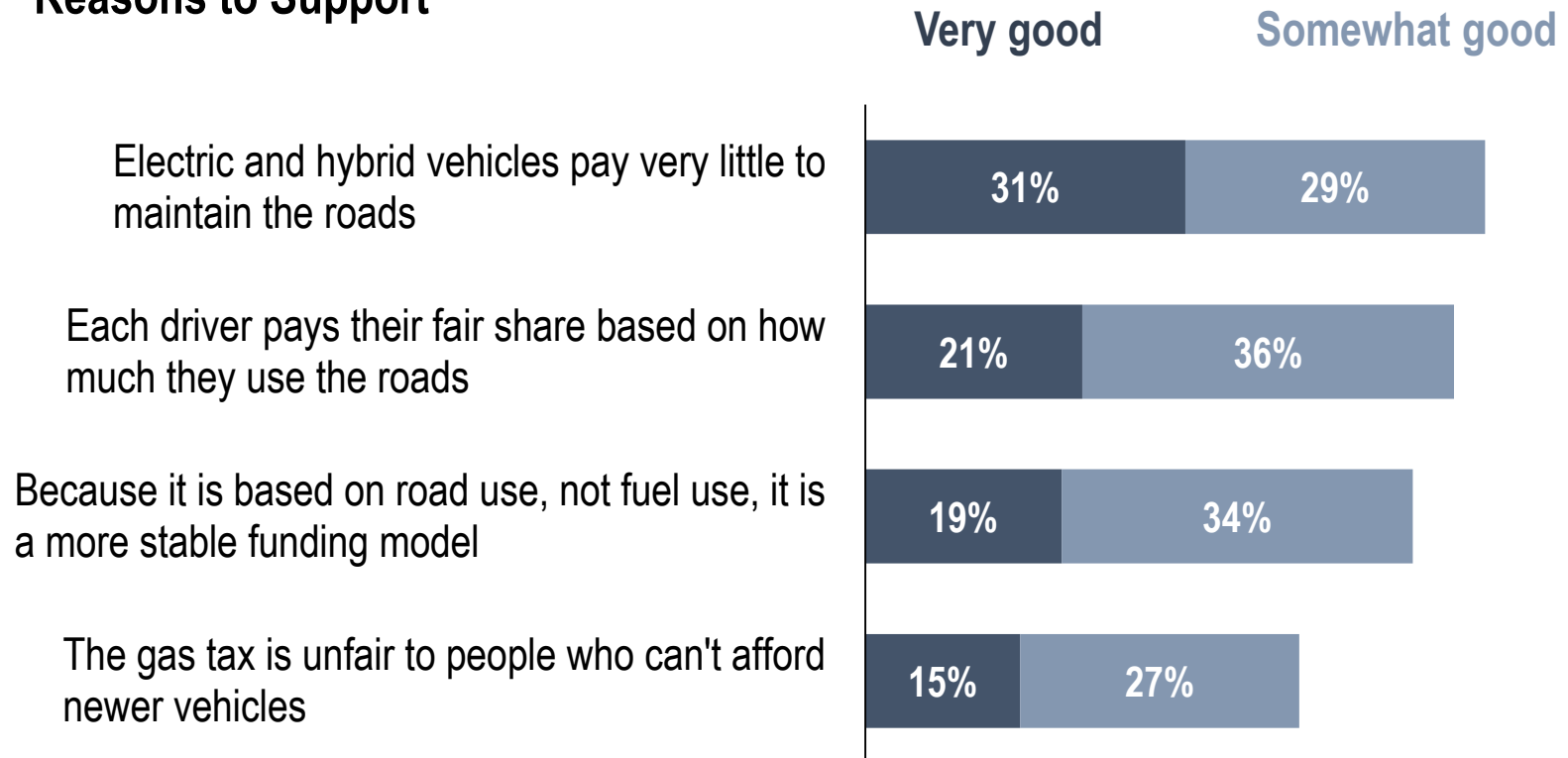
MESSAGING: Residents find opposing arguments to be good ones, particularly that a road usage charge is just another way for government to tax people

Reasons to Oppose



MESSAGING: Reasons to support a road usage charge are generally less convincing than reasons to oppose

Reasons to Support



KEY TAKEAWAYS

Transportation issues are on the minds of Washington residents

- Residents identify transportation as a top priority for government to address
- Traffic congestion is an issue they want resolved

This issue will require an on-going educational campaign

- About half of residents are familiar with the concept of road usage charging
- Residents are not familiar with how transportation is funded

Fairness may be a challenge in messaging

- What does fairness mean
- Which tax is more fair
- Who should pay

KEY TAKEAWAYS

Key themes to consider:

- A majority think state highways are in good or excellent condition and thus may not see a need for more funding.
 - Congestion relief may connect to residents' priorities more strongly
- Residents are skeptical about getting taxed twice
 - 61% think a road usage charge is just another way for Washington government to tax people
 - 59% disagree that the government does a good job managing transportation spending.
- Road use charge will need non-government messengers (government may not be the best messenger)

NEXT STEPS

- Focus groups will provide more in-depth research on how Washington residents are thinking about fairness when it comes to road usage charges.
- Emphasize outcomes (such as reduced congestion) that are important to Washingtonians over policy and technical details
- Effective messaging may build on the strongest argument for road usage charging (it is more fair because all drivers share equally in paying for roads).

BASELINE PUBLIC ATTITUDE ASSESSMENT: FOCUS GROUPS

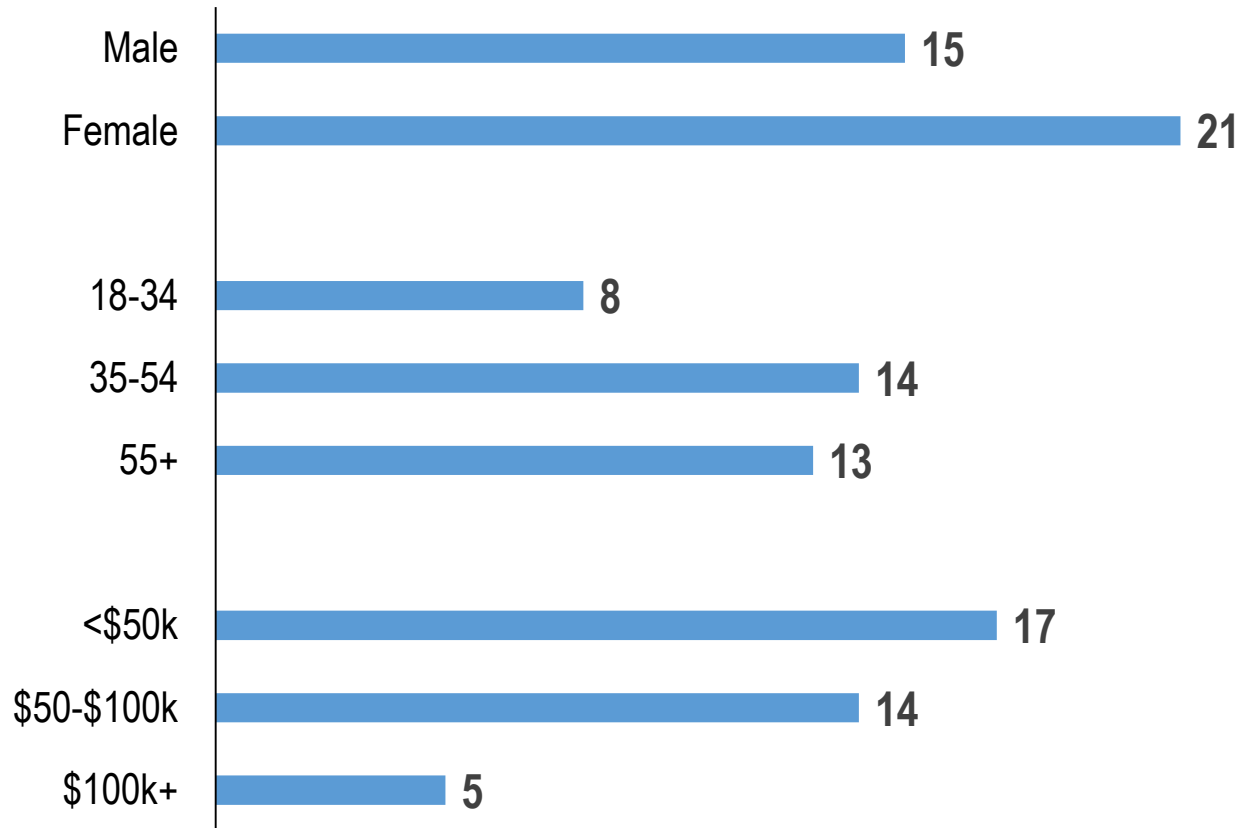
Shannon Crum, D'Artagnan Consulting

John Horvick, DHM Research

METHODOLOGY

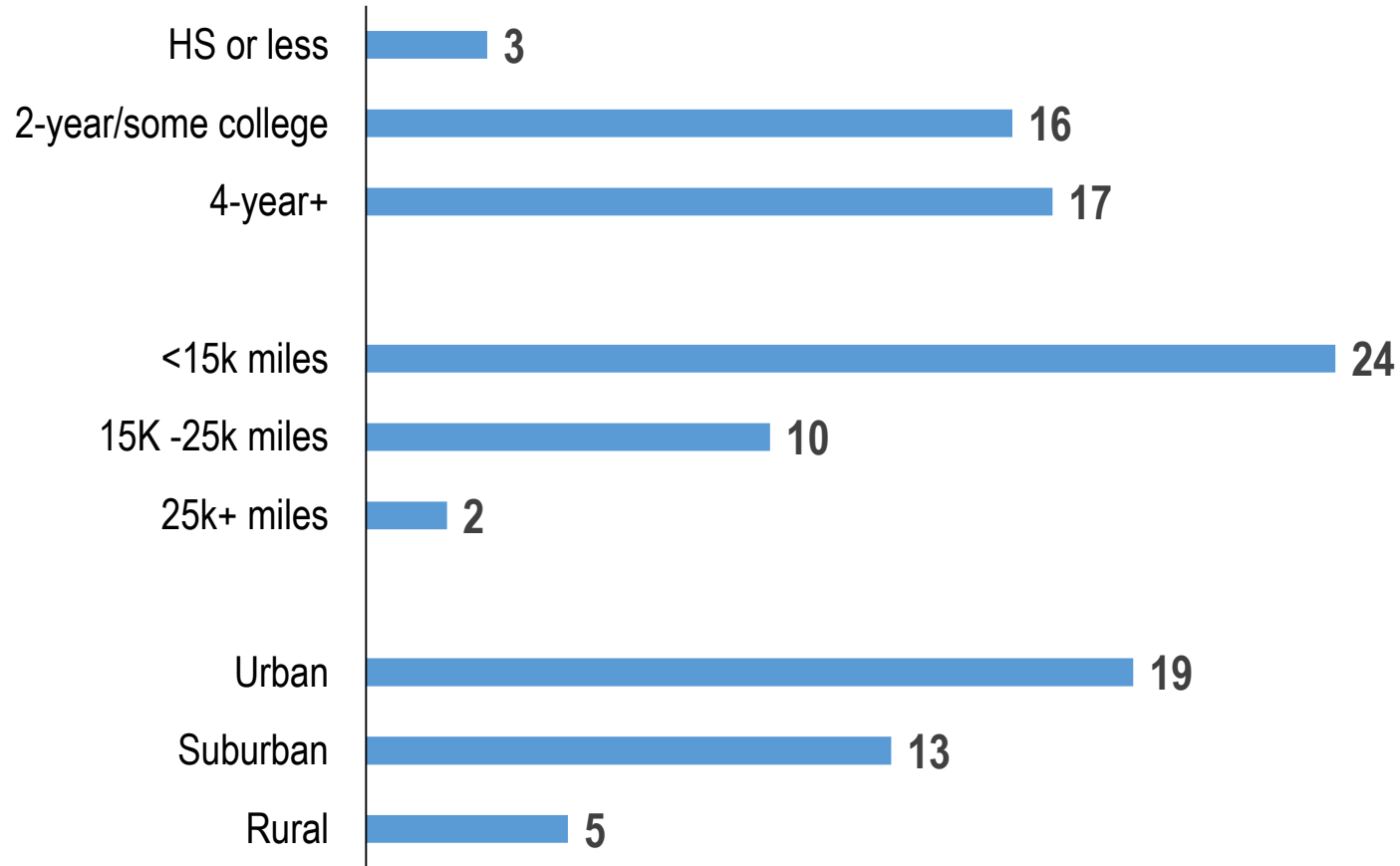
- Five focus groups conducted in July 2017
 - Tri-Cities
 - Spokane
 - Bellingham
 - Seattle
 - Vancouver
- 2-hour sessions
- Mix of written exercises and group discussions

PARTICIPANT DEMOGRAPHICS*



*not including Vancouver

PARTICIPANT DEMOGRAPHICS*



*not including Vancouver

FOCUS GROUP TOPICS

- Most important issues in Washington
- Most important transportation issues in Washington and local area
- Knowledge of transportation funding
- Values to guide transportation funding
- Road Usage Charging as a concept
- Interest in RUC pilot project

MOST IMPORTANT WASHINGTON STATE ISSUES

- **Transportation is among the most important issues in the state.**
 - About one-half listed it one of the issues that they would like leaders to address.
 - Issues included reducing congestion, road and infrastructure maintenance, and public transit.
- **However, a small minority (7 participants) identified transportation as the most important affecting their quality of life.**
 - Other important issues included education, housing, homelessness, taxes government spending.
 - Several participants from eastern Washington also mentioned feeling that their side of the state receives too little funding and has too little political influence.

MOST IMPORTANT TRANSPORTATION ISSUES

- **Congestion**
 - Especially in the Puget Sound region and along the I-5 corridor
 - New housing developments without adequate transportation planning and capacity
- **Road maintenance**
 - Pot holes, poor quality roads, snow removal and repairing winter damage
- **Bridge repair and safety**
 - Several references to Skagit River bridge collapse
- **Public transportation**
 - Intra-city connection in urban areas, and inter-city connections in rural areas

KNOWLEDGE OF TRANSPORTATION FUNDING

- **There is low awareness of how Washington transportation is funded.**
 - About one-half listed the gas tax as a funding source.
 - Many were only able to name “taxes” generally, but not a specific mechanism or level of government responsible.
- **Few knew Washington gas tax rate, or the proportion of funding that comes from the gas tax.**
- **Few knew how much they pay in gas taxes annually.**

KNOWLEDGE OF TRANSPORTATION FUNDING

- **Advantages of the gas tax:**
 - Based on use
 - Pay as you go
 - Easy to collect
 - Difficult to avoid
 - Incentive to drive less or use a more fuel efficient vehicle
- **Disadvantages of the gas tax:**
 - Lack of clarity about what drivers are paying
 - Unfair to drivers who cannot afford fuel efficient vehicles
 - Not paid by residents who do not drive/drive little but nonetheless benefit from the transportation system

TRANSPORTATION FUNDING GUIDING PRINCIPLES

- **Participants had a very difficult time separating principles for transportation funding from their desired outcomes.**
 - Reducing congestion
 - Improving maintenance
 - Prioritization of projects
 - Reducing overall spending
 - Transparency
- **Connecting road usage charging to specific transportation improvements is likely necessary for public acceptance of it.**

TRANSPORTATION FUNDING GUIDING PRINCIPLES

- **Core guiding principles**
 - Connect use and payment
 - Easy and low cost to administer
 - Predictable for drivers
 - Sufficient, but not excessive
- **Other guiding principles to consider**
 - Connect benefit (profit) and payment
 - Connect impact on road conditions to payment
 - Return funds to the communities where they were generated
 - Incentivize fuel efficient vehicles

CONCEPTIONS OF “FAIR”

“How would it improve the quality of life for all residents of Washington? Is it fair? Does it increase or decrease income inequality?” – Tri-Cities

“It needs to remain fair and not based on greed. Both sides of the state need to be treated fairly in terms of disbursement.” – Spokane

“Fair is a family being able to cross a bridge without it falling down. Fair is the owner of a semi-trailer getting home on time. Fair is the commuter being safe as they head home. Fair is options for everyone to enjoy the beautiful opportunities in the state. Fair is not making everything equal. Fair is safer, transparent and focused vision for transportation.” – Bellingham

“Find some way to make it fair and valuable so everyone is willing.” – Seattle

CONCEPTIONS OF “FAIR”

- **Participants held different conceptions of fairness when considering road funding**
 - Charge based on miles driven only vs. based on impact on roads
 - Treat all miles the same vs. charge less for miles driven that have a community benefit
 - Charge all motorists the same rate vs. charge motorists in part based on ability to pay
 - Charge all motorists the same rate vs. charge motorists based on whether they can “control” total miles driven
 - Spend funds based on the location generated vs. spend funds based on need
 - Charge should be neutral to behavior vs. charge should discourage behavior with negative social impacts (e.g., congestion or pollution)

INITIAL REACTIONS TO ROAD USAGE CHARGING

The Washington fuel tax is 49 cents per gallon and is the primary funding source for our roads. Motorists are switching to more fuel-efficient vehicles, which means the amount of fuel it takes to drive a mile is dropping. This is projected to cause a decrease in the funds available to repair and maintain our roads or build new roads.

The State of Washington has considered changes to the way transportation is funded in the state that reduces reliance on the gas tax. It is researching many ideas, one of which is a “road usage charge,” which is a system where all drivers pay to main roads based on the miles they drive, rather than how much gas their vehicle uses.

INITIAL REACTIONS TO ROAD USAGE CHARGING

- **Most frequent questions about RUC**
 - What is the cost per mile and how does it compare to the gas tax?
 - Will it replace or be an addition to the gas tax?
 - How will miles be tracked and reported?
 - How will protect against fraud?
- **Other questions**
 - When and how frequent is the payment schedule?
 - What happens when drivers do not pay their bill?
 - What is the cost of administering the system?
 - Will the per mile charge consistent for all vehicles and trip types?
 - Are out of state miles charged?
 - Are out of state drivers charged for using Washington roads?

MILEAGE TRACKING QUESTIONS

- **Purchase an annual permit**
 - Is there one flat rate for unlimited miles, or are there tiers?
 - If tiered, what are the penalties for exceeding limit?
- **Self-report total miles driven**
 - How will accuracy or odometer be validated?
 - How will miles be monitored to prevent fraud (e.g., photo of odometer)?
- **Automatically report miles driven using smartphone or in-vehicle technology**
 - How does this work when driving without smartphone or when smartphone is turned off?
 - Will this track time and location of miles driven?

INITIAL REACTIONS TO PILOT PROJECT

- **Participants were broadly positive about the pilot project and interested in volunteering.**
- **Participants generally estimated that it would take about one hour per month of their time.**
- **Participants expected to be able to choose their reporting method.**

GENERAL MILEAGE TRACKING QUESTIONS

- **How are out-of-state miles charged?**
- **How are out-of-state drivers charged for miles driven on Washington roads?**
- **Does the method apply to the person or the vehicle?**
- **How frequently are motorists billed?**
- **What happens if motorists do not pay their bill?**
- **How much will the system cost the state to operate?**

TRUSTED MESSENGERS ABOUT PILOT

- **Agencies and officials who provide legitimacy to the pilot**
 - Washington Department of Transportation, Department of Licensing
 - Local elected officials (e.g., state representative)
- **“Bipartisan” coalitions**
 - Democrats and Republicans
 - Environmental groups and business groups
 - Western interest groups and eastern interest groups
- **University researchers**
 - If from both sides of the state

ADVICE TO WASHINGTON LEADERS

“Please be honest and transparent with us about how and why you are spending our tax dollars. Quit shuffling money to other areas that we were told would be used for roads.”

– Tri-Cities

“It seems that you are on the right track by including volunteers in testing to make sure whatever option is ultimately chosen is implemented correctly. Charging truckers and other heavy users makes sense.”

– Spokane

ADVICE TO WASHINGTON LEADERS

“Very complicated new idea. Provide us with pros and cons. I’m concerned about wasting limited government funds. Important things need attention, so I want to know there is a real benefit and minimal drawbacks.” – Bellingham

“I really don’t like a new tax, but I would like to see the comparison of the current system we pay versus the mileage price I’d have to pay. Depending on how much more it is, would determine whether I’d be for it or against it.” -- Seattle

PARTICIPANT RECRUITMENT PLAN

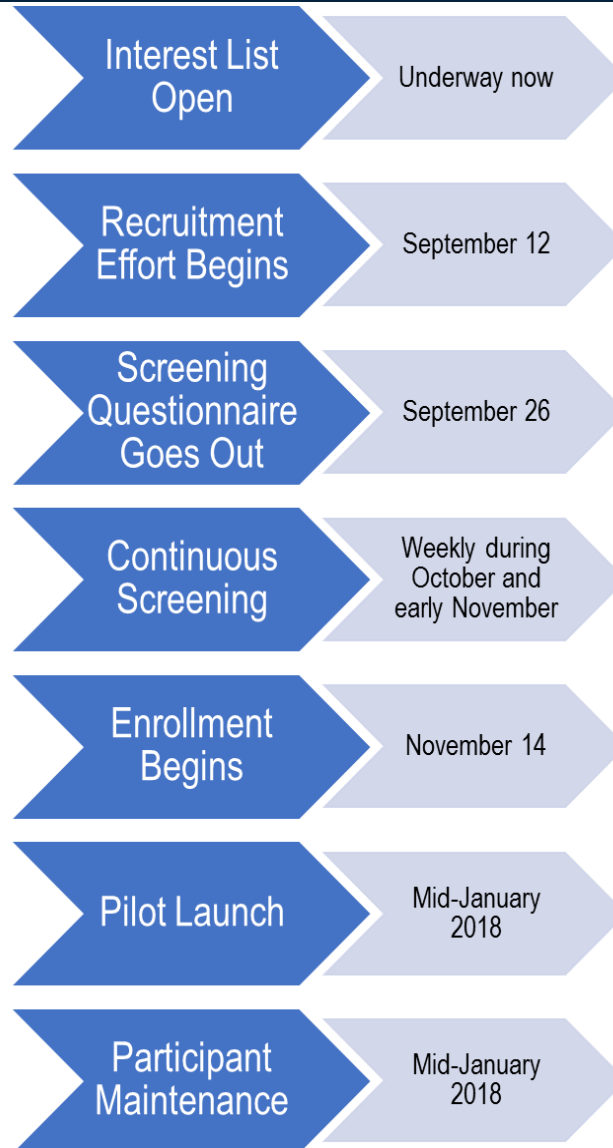
Alison Peters, EnviroIssues

HIGH-LEVEL RECRUITMENT GOALS

- Represent the geographic and socio-economic diversity of the entire state and region
- Provide equitable access for participants to sign up, enroll and complete the pilot, while remaining mindful of the overall budget and timeline for the pilot
- Identify, communicate and mitigate risks that could negatively impact the experience of pilot participants
- Continue to build a broad understanding of working expectations for recruitment among stakeholders, including the private sector and businesses, and other agencies and organizations

Source: Page 2

OVERALL TIMELINE



Source: Page 27

MIX OF VEHICLES

The pilot will feature at least 2,270 vehicles organized as follows:

- Up to 200 vehicles from Surrey, British Columbia
- Approximately 20 vehicles from Oregon
- Approximately 50 vehicles from Idaho
- At least 2,000 vehicles recruited from Washington



MANAGING RISKS

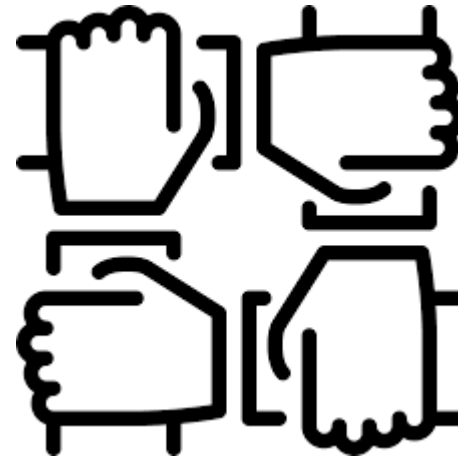
- Too many influencers try to sign up
- Not enough hard-to-reach groups enroll
- Interest list is low
- Opponents impact participation
- Concerns about privacy dominate
- Compliance; participants are not responsive
- Timelines slip



ASSETS

Everyone has a role in growing the Interest List

- Steering Committee
- Current interest list
- Print, radio and digital media
- RUC website
- Partner agencies
- External partner organizations



SIGN UPS, ENROLLMENT, DE-ENROLLMENT



SIGN UPS, ENROLLMENT, DE-ENROLLMENT

As of end of July 2017, there are:

- 920 records with email, first name, last name but no zip code
- 151 records with complete information

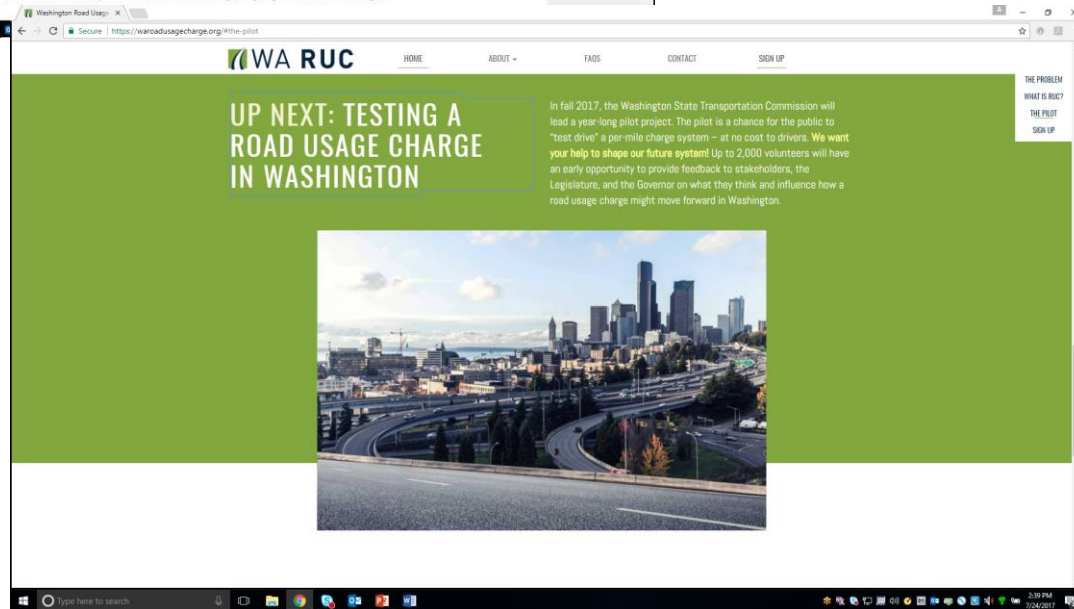
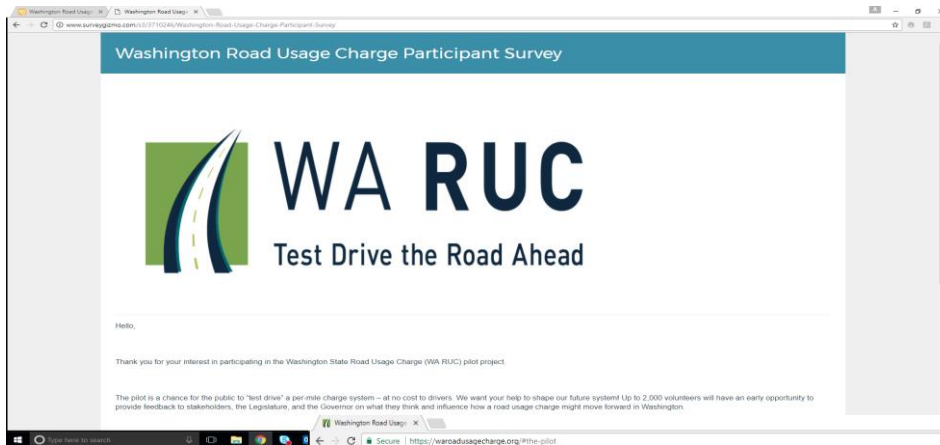
The goal is to swell the interest list upwards of 6,000 individuals

Remember: 2,270 vehicles need to be enrolled by the end of 2017

SIGN UPS, ENROLLMENT, DE-ENROLLMENT

Step	Schedule	To	Mail Chimp Campaign Topics
0.	Ongoing	Public	Join the pilot SUBJECT LINE: "Here's how to sign up!"
1.	September 26	Interest list	Screening Questionnaire SUBJECT LINE: "Let's get this started!"
2.	October 3, 10, 17, 24 and into November if necessary	Non-Responders	Reminder to complete Screening Questionnaire SUBJECT LINE: "Reminder: We haven't heard from you"
3.	October 3, 10, 17, 24 and into November if necessary	Internet list additions, rolling	Screening Questionnaire SUBJECT LINE: "Let's get this started!"
4.	November 14	Prospects	Enrollment Confirmation, Terms & Conditions SUBJECT LINE: "Confirmation Required"
5.	January 9	Participants	Get Started information SUBJECT LINE: "Your Get Started packet is on the way"
6.	Monthly or quarterly reporting due dates	Participants	Monthly reporting SUBJECT LINE: "Time to report"
7.	Two times mid-program and at conclusion	Participants	Thank you SUBJECT LINE: "Your incentive is ready!"

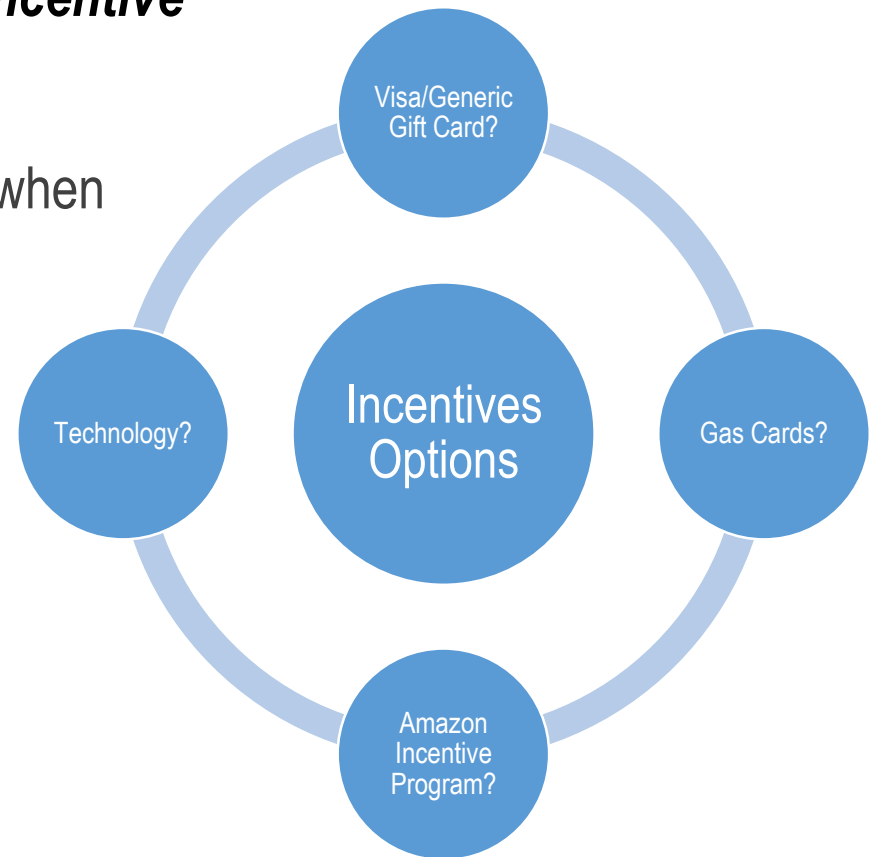
SIGN UPS, ENROLLMENT, DE-ENROLLMENT



INCENTIVES

There is a bounty of current research available that reports on incentive strategies. ***A strong incentive is simple, accountable, and automated.***

- Set clear expectations with participants when incentives are released and for what
- Ongoing distribution helps
- Utilize a mix of incentives
- Vary the incentive value and frequency
- Give participants a positive experience

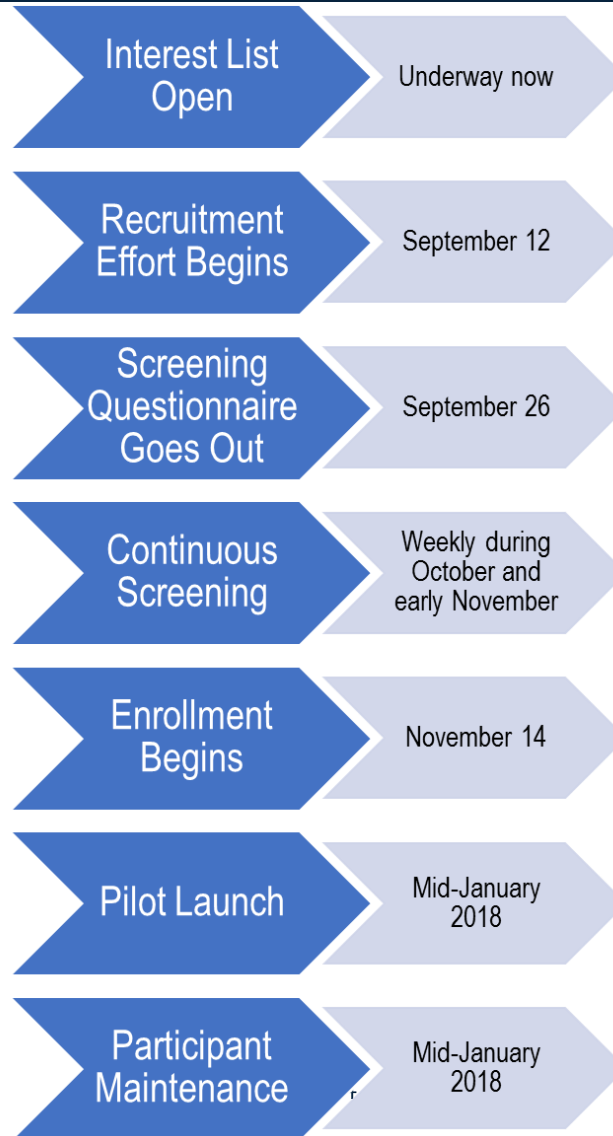


INCENTIVES

Activity Trigger	Proposed Cash / Card Incentive	Distribution Method
Qualified driver confirms enrollment, agrees to Terms and Conditions of pilot	\$10 gift card	Included in snail mail welcome packet, with letter, instructions, technical devices, any other written materials
Participant completes first reporting requirement	\$20 gift card	Electronic card delivery
Interim report is due	\$30 gift card	Electronic card delivery
Participant completes last reporting requirement	\$40 gift card	Electronic card delivery

- ✓ No fees
- ✓ Electronic delivery
- ✓ Positive user experience
- ✓ Frequency and amounts tied to specific asks

OVERALL TIMELINE



Source: Page 27

COMMUNICATIONS ACTIVITIES

Allegra Calder, BERK Consulting

Ara Swanson, Envirolssues

COMMUNICATIONS GOALS REMAIN THE SAME...



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Inform and educate the public.



Recruit participants into the pilot project from across the state.



Generate broad understanding for the pilot project.



Cultivate balanced and accurate media coverage.



Assess public opinion before and throughout the course of the pilot.

...AND THE STRATEGY IS MORE TARGETED

Targeted strategy

- Stakeholder analysis
- Shift to general public support – establish email, phone line
- Internal protocols for requests/inquiries

New/revised materials

- New fact sheet
- Revised PPT presentation
- Media prep packet – key messages, FAQs, media response protocol, additional resources
- Website updates focused on both general public and pilot participants

STRATEGIC COMMUNICATIONS TIMELINE

Initial Phase: May 2017 – August 2017

- Information gathering
- Focused engagement
- Message development and refinement
- Partnership building

Mid-Phase: September 2017 – October 2017

- Broad awareness building
- Participant recruitment

Pre-Launch Phase: November 2017 – January 2018

- Participant enrollment
- Pilot launch

INITIAL PHASE: NOW THROUGH AUGUST

Objectives

- Pivot from earlier general awareness to focused messaging and preparing for recruitment
- Understand key concerns and questions from targeted stakeholders and groups
- Develop and finalize strategic communications plan
- Develop and finalize participant recruitment plan
- Develop and finalize assets and collateral materials
- Proactively engage targeted media outlets

Tools, tactics, assets

- Informal 1:1s with selected organizations
- Media kit, including fact sheet, FAQ, messages, technical information about the pilot
- Website
- E-newsletter

MID-PHASE: SEPTEMBER THROUGH OCTOBER

Objectives

- Launch broad external communications to support active recruitment and awareness-building
- Receive balanced and comprehensive media coverage throughout the state
- Continue to engage and respond to media
- Leverage agency, partner and stakeholder support to share project information

Tools, tactics, assets

- Media kit
- Website
- Digital media and advertising campaign
- Partner toolkit: fact sheet, social media content, talking points/messages, newsletter content
- Printed materials: fact sheet, FAQ, presentation deck
- E-newsletters

PRE-LAUNCH PHASE: NOVEMBER THROUGH JANUARY

Objectives

- Transition from active recruitment to enrollment
- Promote launch of pilot in early 2018

Tools, tactics, assets

- Respond to media inquiries
- Website and print materials shift to focus on enrollment and future participation, general information
- E-newsletters

POLICY ISSUES WORK PLAN DISCUSSION

Travis Dunn, D'Artagnan Consulting

“TIER 1” POLICY ISSUES

Issues to study and address in conjunction with pilot preparation and launch

- How to operationalize the four RUC operational concepts
- Whether and how to charge out-of-state drivers
- Exemptions from road usage charges for demonstration
- Refunds
- Use of private sector account managers

“TIER 2” POLICY ISSUES

Issues to study and address based on information attained from the live pilot

- Driver reaction to the proposed RUC system
- Public understanding and acceptance of the proposed system
- State information technology needs
- Institutional roles in implementing any future RUC system

“TIER 3” POLICY ISSUES

Issues to study and address independent of the live pilot test

- Interoperability with *GoodToGo* toll system
- Legal issues (e.g., interstate commerce clause, tax vs. fee, etc.)
- Per-mile rate setting process and roles
- Motor fuel tax bond requirements
- Permanent exemptions
- Use or dedication of RUC revenue
- Rate setting basis for time-based permit
- Transition strategy - vehicles subject to paying RUC
- Interoperability with other states

PREVIEW OF UPCOMING ACTIVITIES

Jeff Doyle, D'Artagnan Consulting

UPCOMING PROJECT MILESTONES

Stage 1 Milestones (August – November 2017)

- Decision by FHWA on Round 2 STSFA Grant Funding (funds live pilot, evaluation and reporting)
- Website refresh
- Begin participant recruitment activities
- Provide active assistance to British Columbia and Idaho participants
- Testing of all devices, account services and customer interface/support
- Establish partnerships with DOL agents/subagents located near participants that choose in-person odometer validation method

PUBLIC COMMENT

Steering Committee Chair Joe Tortorelli, Washington State
Transportation Commission

THANK YOU

Consultant support provided by:

