



A-4

HELP DESK SUMMARY

 **WA RUC**



WASHINGTON ROAD USAGE CHARGE PILOT PROJECT

PHASE 1 AND 2 HELP DESK COMMUNICATIONS
SUMMARY

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EXECUTIVE SUMMARY

The WA RUC Pilot Project team met their recruitment goal of building an interest list with over 5,000 members. This helped ensure that the recruitment and enrollment phase prior to the test-driving phase was successful in terms of enrolling 2,000 drivers who were representative of the demographics of Washington state. While a majority of the communications received during these phases came from enrolled participants, a significant number of communications came from members of the general public (62% and 38% respectively) which shows that the people of Washington have a growing interest in many of the topics associated with road usage charging.

As shown in the table *Phase 2: Distribution of communication topics in relation to participant distribution in percent (pages 17 and 18)*, the number of trending topics brought forth to the help desk varied greatly by region. The East region of the state had the largest number of communication topics that exceeded the anticipated percentage based off the participant distribution. This could indicate that drivers in Eastern Washington were particularly engaged throughout the pilot project. Additionally, the Central and Puget Sound regions had the least number of trending topics amongst the regions (two and zero respectively). This could indicate that these regions were not as engaged with the help desk throughout the pilot project.

The table *Phase 2: Distribution of communication topics in relation to MRM distribution in percent (page 22)*, shows that participants using the odometer reading method contacted the help desk with the highest number of topics. Many of the topics regarded technical questions suited for service providers or logistical questions regarding a RUC. This could mean that these users had more questions or uncertainty about their MRM, indicating that a clearer explanation of this method needs to be shared with the public, in addition to more targeted information on a RUC policy.

In conclusion, there are several distinct demographic groups that had specific interests in certain communication topics. If a future RUC policy were to advance, special consideration is needed to ensure the needs of these groups are met. While age and income demographics were not analyzed in this report, those variables could be analyzed further to provide more information on how they impact the needs of drivers in the future.

WA RUC PILOT PROJECT COMMUNICATIONS SUMMARY

The Washington Road Usage Charge Pilot Project kicked off recruitment in August 2017. By the end of the test-driving phase of the pilot project in February 2019, the project team heard from over 1,200 members of the public and received nearly 2,000 communications via phone or email.

The following is a summary of the feedback received by the WA RUC help desk for each phase of the pilot project. During these periods, communications were received via email or phone. Communications address a range of topics and often discuss more than one topic; therefore, many communications may be categorized under multiple topics in the database.

Phase 1: Recruitment and Enrollment

The first phase of the pilot project involved recruiting members of the public to participate in the pilot project. The project team reached out to residents in every corner of Washington through a variety of media outlets. The project team also reached out to drivers in Idaho, Oregon, and Surrey, British Columbia who live near the border and frequently travel into Washington. In total, nearly 5,000 individuals showed interest in participating in the pilot project by signing up on the project's interest list via the WA RUC Pilot website.

Recruiting participants

The project team developed a communications and outreach strategy to ensure volunteers recruited for the test-driving phase of the pilot project would represent the geographic and socio-economic diversity of the state.

At a high-level, the goals for recruitment were:

- 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.
- Identify, communicate and mitigate risks that could negatively impact the experience of pilot participants.
- Build a broad understanding of working expectations for recruitment among stakeholders, including the private sector and businesses, and other agencies and organizations.

The project team developed press releases, display ads, e-newsletters, radio advertisements, and more to create a pool of interested individuals throughout Washington.

Recruiting participants into the pilot required that individuals move through a series of stages, from gaining awareness of the pilot (through one or more of the communications activities) to developing an interest and then ultimately to committing to participate. The recruitment effort moved people through those stages incrementally and converted them from “interested bystanders” in a large pool of potential participants to 2,000 enrolled drivers.

Active participant recruitment for the test-driving phase began in summer 2017. Individuals were invited to join the project interest list and share basic contact information, such as first name, last name, email, and zip code in addition to indicating if they were interested in participating in the test-driving phase. The pilot project team reached out to those who were interested in

participating in the pilot project and sent a screening questionnaire requesting more demographic information. This was done to ensure the ultimate participant pool was representative of Washington’s demographics. Screening continued into fall 2017, followed by the participant enrollment phase.

During this time, the project help desk information line was launched to supplement the project email inbox and guide participants through the recruitment process via phone.

Participant enrollment

Beginning in mid-November 2017, qualified drivers on the project interest list who completed the screening questionnaire were sent invitations to participate in the pilot project. The outreach team continued responding to emails and phone calls to assist interested individuals with enrollment through the beginning of 2018.

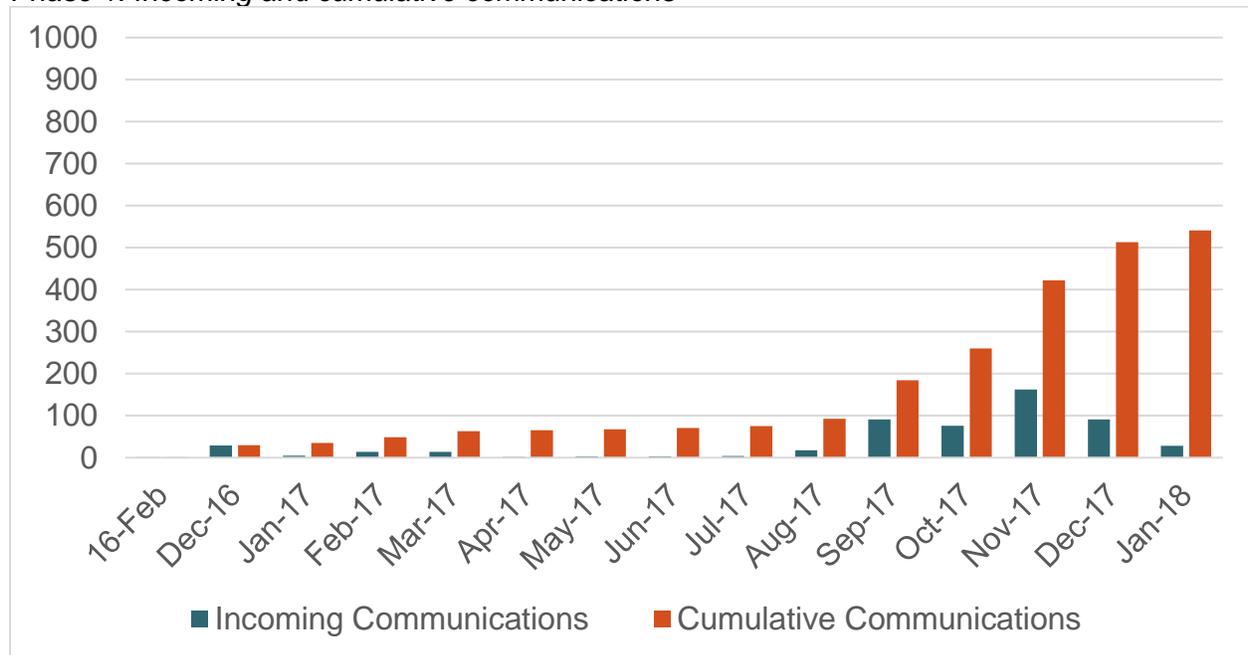
In February 2018, the test-driving phase began with over 2,000 participants enrolled. In August 2018, a second open-enrollment phase was offered to individuals who were still interested in participating. An additional 227 drivers were enrolled at this time.

Communication trends

The first email sent to the Washington State Transportation Commission (WSTC) regarding the pilot project was received in February 2016. The next influx of emails regarding the pilot project were received when the official project email address and the project interest list was launched in December 2016. From that point on, incoming communications to the project inbox or to the WSTC became more consistent.

The chart below shows incoming communications received each month and total cumulative communications received prior to the launch of the test-driving phase of the pilot project in February 2018. By the end of January 2018, the project team had received 541 communications via email or phone.

Phase 1: Incoming and cumulative communications



Communication topics

The table below shows the frequency at which several topics appeared throughout Phase 1 of the pilot project. The most frequent topic categories are defined in the next section.

Phase 1: Frequency of communication topics

Topic	Total
Enrollment inquiries	268
Policy, implementation	188
Other	75
General RUC inquiry	57
Vehicle weight	52
Out of state drivers	48
Driving out of state	29
Vehicle eligibility questions	28
Flaw	22
Privacy concerns	18
Invoice	10
Mileage reporting method	8
Surveys or incentives	3
DriveSync transfer	0
Emovis transfer	0
Service provider inquiry	0

Less

More



Table colors increase in intensity from yellow to red based on the frequency of occurrence.

Note that communications often reference more than one topic. As a result, the total frequency of all communication topics may not be equal to the total number of communications received for this period. During Phase 1 of the pilot project, limited service provider information was available for participants, which resulted in zero communications received for each of the service provider communication categories.

Summary of most frequent topics: Phase 1 (February 2016 to January 2018)

Below is a summary of most frequent topics discussed during Phase 1 of the pilot project with representative examples of the comments or questions received followed by a typical response from the help desk staff. The top six categories are discussed in the following section.

Enrollment inquiries

Enrollment inquiries were the most frequently received incoming communications during Phase 1 of the pilot project. The “enrollment inquiries” topic category captured all general enrollment questions or comments, such as requesting access to the participant demographic survey, inquiring about enrollment status, and participant stories that were shared with the pilot project team. Responses to these communications followed a generic template – such as a simple “thank you” or sharing a link that was lost in a previous email – therefore, a summary of these communications is not included.

Policy, implementation

Policy-related communications included comments regarding taxation policies (e.g., too many taxes or the current taxes being too high) and a road usage charge’s impact on equity and fairness. Implementation-related communications included questions on the logistics of switching to a road usage charge and how it would be enforced in a future policy.

Some of the more frequent policy and implementation comments or questions are listed below.

Excerpts for policy

- “We already have the second highest gas tax in the country. That should be enough.”
- “It would be an unfair punishment to me and others like me who have to travel.”
- “You are punishing families that cannot live close to Seattle or their work.”

Takeaways for policy

The goal of the project team’s help desk responses was to clarify how a road usage charge could be one way of addressing inequity with the gas tax. While the existing gas tax has some benefits, such as being a straightforward method of collecting revenues for roads and bridges, a road usage charge may end up being more equitable for drivers of all vehicle types.

Sample response

One of the key aims of testing a road usage charge would be to see if it can alleviate the inequity of the current gas tax system, which is unfair to those who cannot afford highly fuel-efficient vehicles. Currently, drivers of lower MPG cars carry a greater burden in paying for the costs of repairing our roads, since drivers of higher MPG cars purchase less gas and thus pay less in gas tax. A road usage charge would ensure that drivers pay only for the miles they drive, regardless of what kind of vehicle they drive.

Washington has raised its gas tax several times in the past decade to fund higher demand for road projects, yet gas tax revenues are still expected to decline as vehicles become more fuel-efficient. If the state were to continue raising the gas tax to meet funding needs, the gas tax would have to increase by 1.5 cents every year to keep revenues at today’s level, without addressing inflation or the needs of a growing population.

This would raise the gas tax to 73.3 cents per gallon by 2035 and 89.4 cents per gallon by 2043, with a smaller and smaller share of the population bearing the burden of the costs (WSTC 2016 Road Usage Charge Assessment – Phase 4 Final Report, 23-33). Compared to the gas tax, a road usage charge

could provide a more stable source of transportation funding and better support infrastructure development in our state.

Excerpts for implementation

- “How would it work when I fill up my tank? Will I have a card to show at the gas station that shows I am exempt, so I won't be paying twice?”
- “What is the amount of taxes that will be removed at the pump given this particular proposal?”
- “I understand the desire to try to make taxes easier or more straightforward, but I believe charging per mile isn't a good solution.”

Takeaways for implementation

A road usage charge pilot project is being implemented to help address a wide range of logistical questions like those mentioned above. The pilot project serves as an opportunity to test whether a road usage charge is a good fit for Washington. Results from the pilot project will help inform a future potential road usage charge policy and the WSTC and state legislature will work together to further refine the details of a RUC.

Sample response

We are currently testing a road usage charge as a potential replacement for the gas tax, not as an additional tax. If the road usage charge is to advance as a real program, it will need to be done via a gradual transition away from the gas tax. In Washington, our state fuel tax is 49.4 cents/gallon for either gasoline or diesel fuel. This would not mean that Washington drivers would be taxed twice; the transition would include a way for drivers to reconcile what they paid at the pump with what is owed to the driver or state. This transition would also allow the state time to explore how to incorporate out-of-state drivers into a future policy.

The current fuel tax system is a low-cost and efficient method of collecting taxes (less than 1 percent overhead). A road usage charge would be comparatively more expensive to collect. We wanted to learn more about this so we conducted a study and found that costs would decline as the number of vehicles paying road usage charges increases. At a large scale, the cost of collecting road usage charges can fall below 5 percent of revenues and could provide sustained funding for transportation in future years when fuel tax revenues decline (WSTC 2016 Road Usage Charge Assessment – Phase 4 Final Report, 18). This cost of collection is comparable to other utilities such as water and electricity, which also meter customers for their usage as the basis for payments.

Other

The project help desk team created a category called “other” to serve as a comprehensive catch-all for all communications that did not fit into the other communication categories. Generally, these communications included media requests, project list subscriptions, alternative methods for funding, and comments on the existing transportation budget. The individual topics were repeated infrequently, thus standardized response language was not developed for each one.

Out of state drivers

The project help desk received many comments and questions regarding how drivers from outside of Washington would use a road usage charge while driving on Washington roads.

Excerpts

- “If you get rid of the gas tax at the pump, how will you collect tax from visitors to our state?”

- “How does this effect those who live in, say, Idaho in areas like Post Falls, and work or go to school in Washington? My wife and I live in Post Falls. She works in Liberty Lake and I attend Spokane Falls, a community college.”
- “How about people coming to visit the state? Will they get lower gas prices and use the roadways for free?”

Takeaways for out of state drivers

The pilot project did not include a way to reconcile payments from out of state drivers who drive in Washington. However, the project team is exploring options for interoperability with other states that are considering road usage charges. Exact details will need to be refined before a potential RUC is implemented in Washington.

Sample response

We’re currently testing a road usage charge as one potential option for Washington state. For our pilot project, we’ve recruited drivers who live near the borders in Idaho, Oregon, and British Columbia, as well as Washington drivers who live near the other sides of those borders, to help understand the needs of those who frequently travel between states.

If the road usage charge is to advance as a real program, it will probably be done via a gradual transition away from the gas tax. This would not mean that Washington drivers would be taxed twice; the transition would include a way for drivers to reconcile what they paid at the pump with what is owed to the driver or state. This transition would also allow the state time to explore how to incorporate out-of-state drivers into a future policy.

We are also exploring options for interoperability between a potential Washington road usage charge and other states that are considering pay-per-mile systems. For instance, Oregon and California both have pilot programs as well for road usage charges, and we’re looking at ways that potential future road usage charge systems could interact.

General RUC inquiry

Many communications received by the project help desk did not fall into a specific communication category. This communication category was frequently discussed in both Phase 1 and Phase 2 of the pilot project. Typical responses to some of the most frequently received general RUC inquiries can be found in *Summary of most frequent topics: Phase 2 (February 2018 to January 2019)*.

Vehicle weight

Many members of the public provided comments on vehicle weights and their level of impact on roads.

Excerpts

- “I think heavier vehicles that cause more damage to the roads should be charged more, as opposed to a light-weight hybrid or electric car. I’m not sure a flat fee is the right way to go.”
- “In keeping with the interest of charging based on our individual impact on the roads, I would expect the mileage fee to increase with gross vehicle weight, for instance. What consideration has been given to this issue?”
- “I firmly believe that rate per mile must be based on how much the vehicle weighs. In this business, weight relates directly to the wear and tear on the driving surface.”

Takeaways for vehicle weight

The existing gas tax does not differentiate between vehicle weight. A future RUC policy offers more flexibility and could charge different rates depending on vehicle weight and type.

Sample response

The difference in impact on roadways between passenger vehicles under 10,000 pounds is miniscule at best. The real damage is done by vehicles over 10,000 pounds and those are typically the freight and commercial vehicles. Heavy vehicles passing through Washington, such as trucks, already report and pay for road usage through fuel taxes that are reconciled through the International Fuel Tax Agreement, a 58-jurisdiction compact among the 48 lower states and 10 Canadian provinces. Consequently, this pilot will focus on light, four-wheeled vehicles only.

If legislators decide to explore how a road usage charge could be implemented, the road usage charge also offers more potential flexibility than the gas tax. For example, it is possible that a future road usage charge policy could offer different rates depending weight, vehicle type, or other variables. This kind of flexibility is not present under today's gas tax structure. If the legislature decides to move forward with a road usage charge system after the pilot test, they will have to evaluate their options for setting rates.

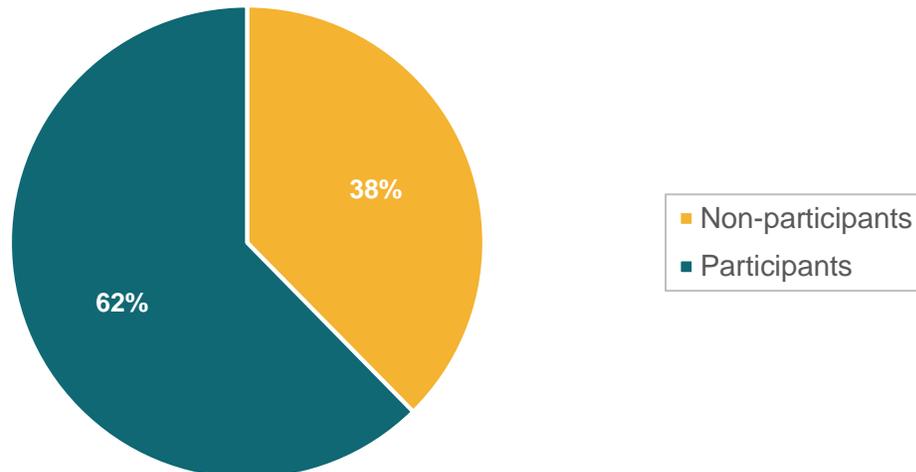
Phase 2: Live pilot test driving (February 2018 to January 2019)

Test-driving for the pilot project began in February 2018 and ended in January 2019. Approximately 2,000 drivers participated in the year-long pilot project. During this time, participants reported their mileage and provided feedback through focus groups, surveys and the project help desk. Collectively, the 2,000 test drivers reported over 15 million miles driven and shared feedback through over 1,300 written comments and phone calls.

Help desk by the numbers

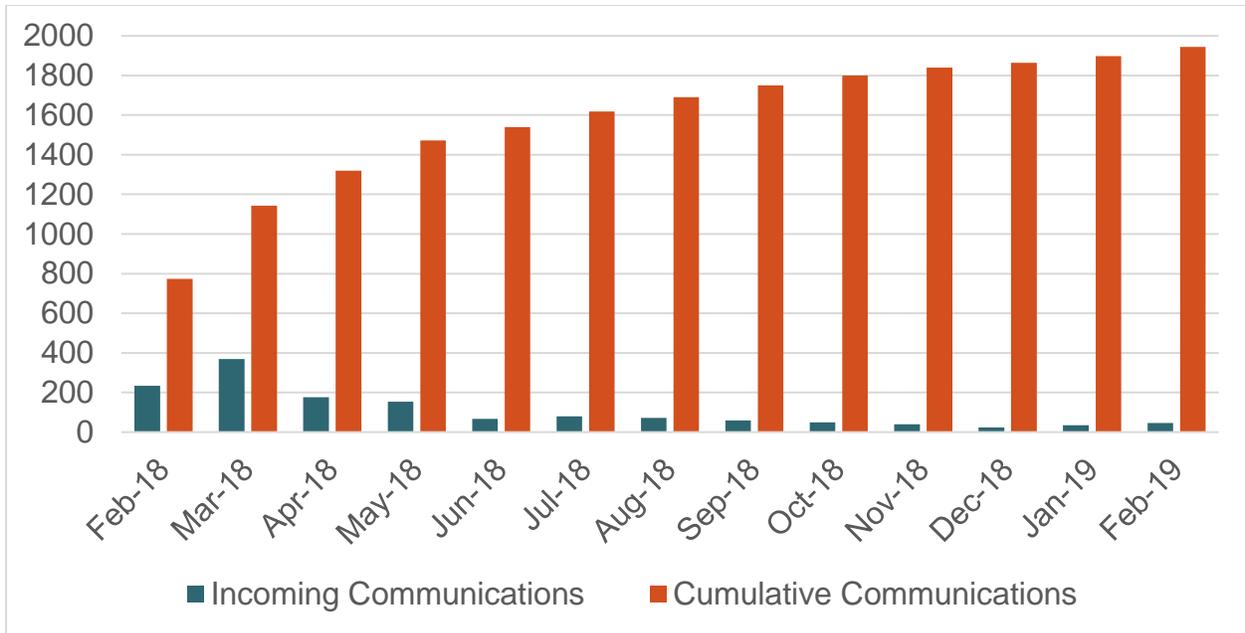
The help desk heard from a total of 741 unique individuals during the test-driving phase of the pilot project. Of the 741 individuals who contacted the help desk during Phase 2, 462 were pilot participants and 279 were members of the general public. Said another way, roughly 62% percent of all users who contacted the help desk during Phase 2 were participants in the pilot project.

Phase 2: Incoming communications by user type



On average, the project help desk received 113 communications monthly via email or phone during the test-driving phase of the pilot project. The number of communications received peaked in March 2018, with 369 communications recorded in the project database.

Phase 2: Incoming and cumulative communications



Communication topics

The table below shows the frequency at which several topics appeared throughout Phase 2 of the pilot project. The most frequent topic categories are defined in the next section.

Phase 2: Frequency of communication topics

Topic	Total
Mileage reporting method	220
DriveSync transfer	190
General RUC inquiry	183
Enrollment inquiries	153
Survey/Incentives	108
Other	103
Invoice	76
Policy/implementation	62
Service provider general inquiry (not transferred)	58
Driving out of state	50
Vehicle weight	47
Vehicle eligibility questions	35
Privacy concerns	34
Flaw	27
Out of state drivers	23
Emovis transfer	21



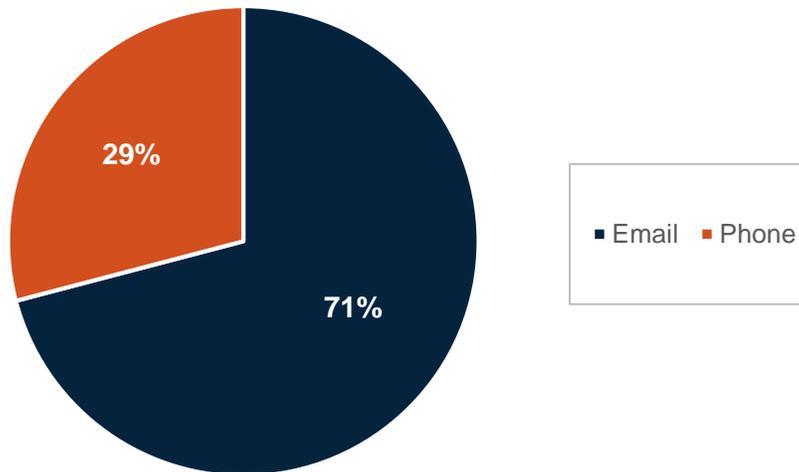
Table colors increase in intensity from yellow to red based on the frequency of occurrence.

Note that communications often reference more than one topic. As a result, the total frequency of all communication topics may not be equal to the total number of communications received for this period. During Phase 1 of the pilot project, limited service provider information was available for participants, which resulted in zero communications received for each of the service provider communication categories.

Communication trends by type

The project team could be reached through emails or phone calls to the help desk. 71% of communications received were emails to the project inbox (929 emails); the remaining 29% of communications were phone calls to the help desk (381 phone calls).

Communications received from all users by communication type

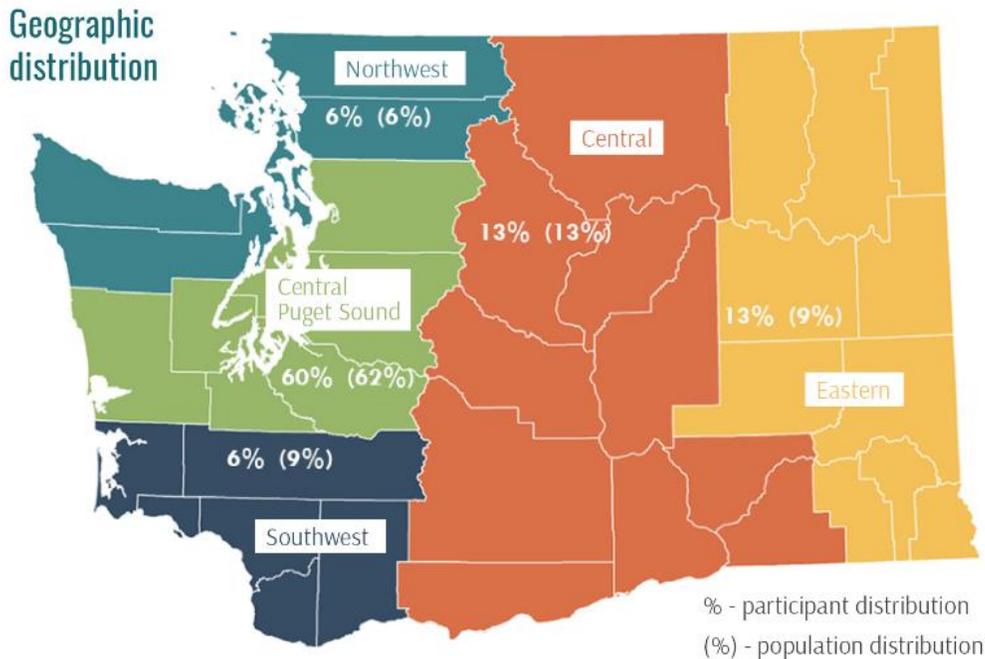


Communication trends by region

A point of interest for the pilot project is to determine if the number and type of communications received matched the regional distribution of pilot participants. For example, would 60% to 62% of all communications regarding each of the communication topics come from the Puget Sound region if 60% to 62% of the state’s population and the pilot project participants resided in the Puget Sound region? With simple regional location data available for enrolled participants, it is possible to complete some basic analysis on what topics were elevated by drivers in each region and whether there are any regional differences in the types of topics people care to use the help desk for.

The map below shows the geographic distribution of Washington’s population and the participant distribution for the pilot project.

Phase 2: Participant and population distribution for Washington



The following table shows the distribution of communications received from each of the geographic regions.

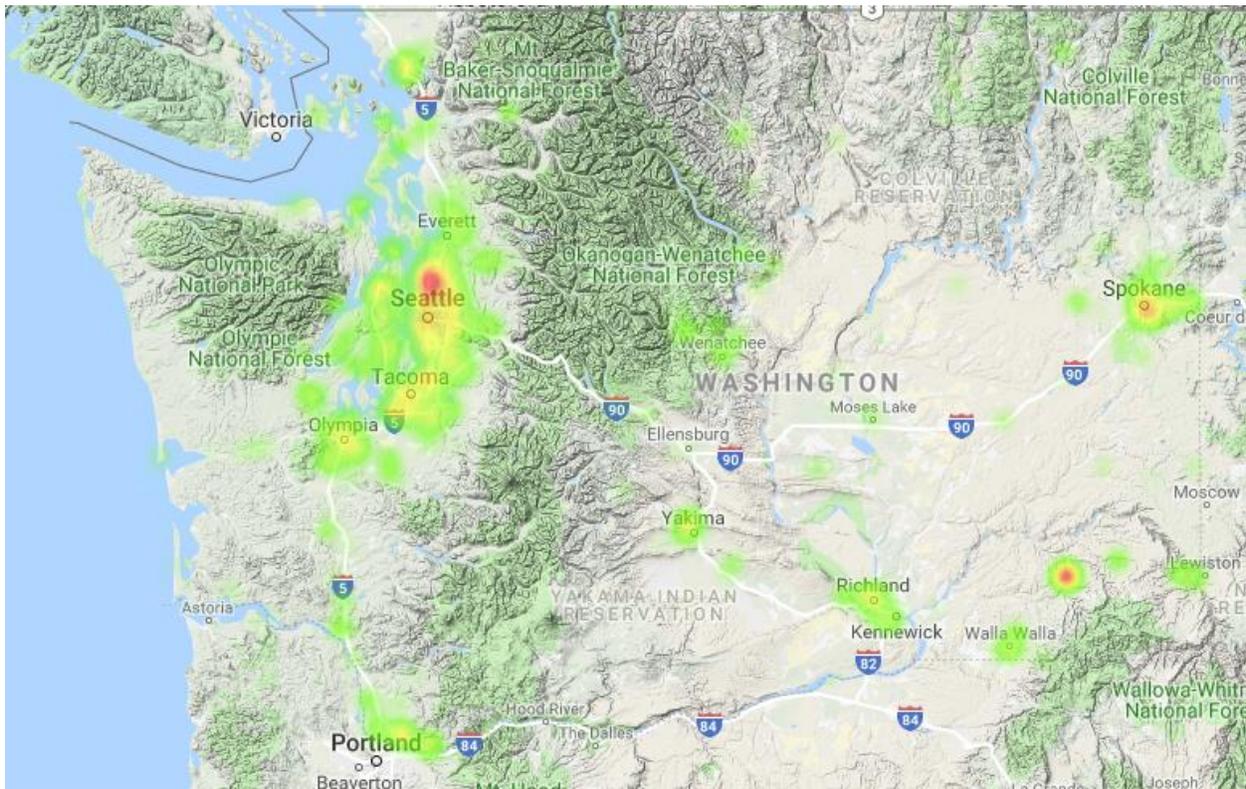
Phase 2: Population and participant distribution compared to cumulative communication distribution

Region	Population distribution	Participant distribution	Percentage of communications received
Central	13%	13%	11.2%
East	9%	13%	17.2%
Northwest	6%	6%	5.2%
Puget Sound	62%	60%	49.4%
Southwest	9%	6%	5.5%
Unknown	N/A	N/A	12.0%

The table shows that most of the communications received were from the Puget Sound region and the least number of communications received were from the Northwest and Southwest regions. The remainder of the data generally aligns with the participant pool and population distribution percentages in each region, indicating that the project team did not hear from a region more than anticipated.

Approximately 12% of communications received did not have an associated location. This could be due to several factors, such as incomplete profile data from the interest list or new members of the public contacting the project team after regional location data was no longer requested.

The image below is a heat map of communications received. Please note that location information was not available for all of the communications received, thus the map below is not comprehensive of all communications.



Communication topic trends by region - raw numbers

The following table indicates the frequency at which various topics were discussed within each region (if provided) in raw numbers. Table colors increase in intensity from yellow to red based on the frequency of occurrence within each region. Topics are in descending order based on total frequency (excluding “Other”).

Phase 2: Communication topic trends by region - raw numbers

Topic	Total frequency	Central	East	Northwest	Puget Sound	Southwest	Unknown
Mileage reporting method	225	19	58	9	113	7	19
DriveSync transfer	208	20	22	16	115	16	19
General RUC inquiry	179	21	36	4	60	7	51
Enrollment inquiries	158	10	22	13	96	8	9
Surveys or incentives	109	9	16	7	59	14	4
Invoice	84	14	31	0	24	7	8
Service provider inquiry	64	3	9	8	33	5	6
Policy or implementation	55	2	16	3	11	4	19
Vehicle weight	53	8	8	4	10	0	23
Driving out of state	49	6	11	0	14	2	16
Vehicle eligibility questions	36	4	10	4	9	3	6
Privacy concerns	33	1	2	0	16	0	14
Flaw	29	2	3	1	21	0	2
Emovis transfer	21	3	4	0	13	0	1
Out of state drivers	21	2	3	0	2	0	14
Other	102	17	18	4	46	4	13



Less

More

In raw numbers, the top five communication topics by region during Phase 2 were:

Central

- General RUC inquiry
- DriveSync transfer
- Mileage reporting methods
- Other
- Invoice

East

- Mileage reporting method
- General RUC inquiry
- Invoice
- Enrollment inquiries
- Other

Northwest

- DriveSync transfer
- Enrollment inquiries
- Mileage reporting method
- Service provider inquiry
- Surveys/incentives

Puget Sound

- DriveSync transfer
- Mileage reporting method
- Enrollment inquiries
- General RUC inquiry
- Surveys/incentives

Southwest

- DriveSync transfer
- Surveys/incentives
- Enrollment inquiries
- Mileage reporting method
- General RUC inquiry
- Invoice

Unknown location

- General RUC inquiry
- Vehicle weight
- DriveSync transfer
- Mileage reporting method
- Policy or implementation
- Driving out of state

The top five communication topics received from all regions (including communications not attached to a specific region) were:

- Mileage reporting method
- DriveSync transfer
- General RUC inquiry
- Enrollment inquiries
- Surveys/incentives

A summary of these topics can be found at the end of this report.

Communication topic trends by region - percentages

The following table shows the percentage of total communications received by drivers from each region. For example, 9.6% of DriveSync transfer communications came from drivers in the Central region because 20 out of the 208 related communications were associated with that region.

Additionally, the table shows a distribution analysis of the communications based on participant distribution and anticipated communications in percent. The anticipated percentage of communications received by each region is defined as a percentage range of one quartile below and above the actual participant distribution. For example, in the Central region, one quartile below the actual participant distribution of 13% is 9.75%. One quartile above that is 16.25%. The project team would expect that the frequency of communications received would fall into that range unless there were topics that were particularly interesting to a specific region.

Percentage values that are shown in green are within one-quartile of the participant distribution percentage. Values in red are beyond the upper quartile, indicating that the corresponding topic had a higher proportion of communications received. Percentage values in black are less than the specified quartile ranges.

Phase 2: Distribution of communication topics in relation to participant distribution in percent

	Central	East	Northwest	Puget Sound	Southwest
Participant distribution	13%	13%	6%	60%	6%
Anticipated percentage of communications	9.75% - 16.25%	9.75% - 16.25%	4.5% - 7.5%	45% - 75%	4.5% - 7.5%
Topic					
DriveSync transfer	9.6%	10.6%	7.7%	55.3%	7.7%
Driving out of state	12.2%	22.4%	0.0%	28.6%	4.1%
Emovis transfer	14.3%	19.0%	0.0%	61.9%	0.0%
Enrollment inquiries	6.3%	13.9%	8.2%	60.8%	5.1%
Flaw	6.9%	10.3%	3.4%	72.4%	0.0%
General RUC inquiry	11.7%	20.1%	2.2%	33.5%	3.9%
Invoice	16.7%	36.9%	0.0%	28.6%	8.3%
Mileage reporting method	8.4%	25.8%	4.0%	50.2%	3.1%
Out of state drivers	9.5%	14.3%	0.0%	9.5%	0.0%
Policy or implementation	3.6%	29.1%	5.5%	20.0%	7.3%
Privacy concerns	3.0%	6.1%	0.0%	48.5%	0.0%

Service provider inquiry	4.7%	14.1%	12.5%	51.6%	7.8%
Surveys or incentives	8.3%	14.7%	6.4%	54.1%	12.8%
Vehicle eligibility questions	11.1%	27.8%	11.1%	25.0%	8.3%
Vehicle weight	15.1%	15.1%	7.5%	18.9%	0.0%
Other	16.7%	17.6%	3.9%	45.1%	3.9%

**The anticipated percentage of communications received by the region is a range of one quartile above and below the participant distribution.*

According to the data above, the help desk received communications from the Puget Sound region on each of the topics at or below the anticipated frequencies based on the participant and population distribution. The percentage of communications received per topic did not exceed one-quartile of the anticipated percentage, which is approximately 75% of all total communications.

On the contrary, there were several communication topics in each of the other regions that exceeded the anticipated frequency. When accounting for participant distribution, the following communication categories emerged as having piqued a particular interest in each of the regions.

Central

- Invoice

East

- Invoice
- Policy/implementation
- Vehicle eligibility questions
- Mileage reporting method
- Driving out of state
- General RUC inquiry
- Emovis transfer

Northwest

- Service provider inquiry
- Vehicle eligibility questions
- Enrollment inquiries
- DriveSync transfer
- Vehicle weight

Southwest

- Surveys/incentives
- Invoice
- Vehicle eligibility questions
- Service provider inquiry
- DriveSync transfer

Findings

While many of these topics are general, there are some minor conclusions that can be drawn from this list of topics:

- For the East region, it is worth noting that both “policy/implementation” and “general RUC inquiry” were received at higher rates than anticipated. This could indicate that drivers residing in Eastern Washington may have more questions and comments on the policy and logistical aspects of a RUC or may need more targeted outreach to help explain the purpose of a RUC.
- Vehicle eligibility questions were also received at a higher than anticipated rate in the East, Northwest, and Southwest regions. If a RUC policy were to be implemented in Washington, the vehicle requirements will need to be clearer for drivers in these parts of the state.

Communication trends by mileage reporting method (MRM) - raw numbers

The following table indicates the correlation between the topics brought up by drivers (total) and the mileage reporting method used during the pilot project (if applicable). Table and map colors increase in intensity from yellow to red based on the frequency of occurrence.

Phase 2: Communication trends by mileage reporting method (MRM) - raw numbers

Topic	Mileage permit	Plug-in device	Plug-in device with GPS	Odometer reading	Smartphone app
DriveSync transfer	3	19	52	48	33
Driving out of state	0	3	9	10	3
Emovis transfer	0	0	1	16	0
Enrollment inquiries	4	15	45	40	9
Flaw	4	4	3	10	4
General RUC inquiry	5	13	32	40	7
Invoice	0	3	28	39	0
Mileage reporting method	1	28	47	76	15
Out of state drivers	0	0	3	3	0
Policy or implementation	1	0	10	14	2
Privacy concerns	1	2	3	4	2
Service provider inquiry	2	4	17	25	0
Surveys or incentives	1	23	37	32	10
Vehicle eligibility questions	0	2	12	8	1
Vehicle weight	0	9	9	1	0
Other	0	9	8	4	3

*Please note communications often reference more than one topic. As a result, totaling columns or rows will produce results that exceed the total number of communications received.



The top five communication topics by mileage reporting method during Phase 2 were:

- | | | |
|---|---|--|
| <p>Mileage permit</p> <ul style="list-style-type: none"> • General RUC inquiry • Enrollment inquiries • Flaw • DriveSync transfer • Service provider inquiry | <p>Plug-in device</p> <ul style="list-style-type: none"> • Mileage reporting method • Surveys or incentives • DriveSync transfer • Enrollment inquiries • General RUC inquiry | <p>Plug-in device (with GPS)</p> <ul style="list-style-type: none"> • DriveSync transfer • Mileage reporting method • Enrollment inquiries • General RUC inquiry • Invoice |
| <p>Odometer reading</p> <ul style="list-style-type: none"> • Mileage reporting method • DriveSync transfer • General RUC inquiry • Enrollment inquiries • Invoice | <p>Smartphone app</p> <ul style="list-style-type: none"> • DriveSync transfer • Mileage reporting method • Surveys or incentives • Enrollment inquiries • General RUC inquiry • Flaw | |

Communication topic trends by mileage reporting method (percentages)

All factors being equal, the pilot project team could assume that the percentage of communications received from each of the MRMs would be similar to the distribution of pilot project participants using the corresponding MRM.

For example, we could expect that one percent of all communications regarding each of the topics would come from participants using the mileage permit MRM since one percent of the pilot’s participants were enrolled using that MRM. The table below shows that the percentages are not exactly equal; some MRM users contacted the help desk at different rates than anticipated.

Phase 2: Distribution of participant MRM choice compared to cumulative communication distribution

MRM	Participant distribution	MRM source of communications received (in percent)
Mileage permit	1.0%	2.3%
Plug-in device	21.0%	14.3%
Plug-in device with GPS	34.0%	33.7%
Odometer reading	29.0%	39.4%
Smartphone app	15.0%	9.5%
N/A	N/A	0.7%

Communication trends by mileage reporting method (MRM) – percentages

The following table shows the percentage of communications received by topic correlated to the mileage reporting method chosen by the driver. Percentage values that are shown in green are within one-quartile of the participant distribution percentage. Values in red are beyond the upper quartile, indicating that the corresponding topic had a higher than anticipated percentage of communications received. Percentage values in black are less than the specified quartile ranges.

Phase 2: Distribution of communication topics in relation to MRM distribution in percent

	Mileage permit	Plug-in device	Plug-in device with GPS	Odometer reading	Smartphone app	N/A
Participant distribution	1%	21%	34%	29%	15%	
Anticipated percentage*	0.75% - 1.25%	15.75% - 26.25%	25.5% - 42.5%	21.75% - 36.25%	11.25% - 18.75%	
Topic						
DriveSync transfer	1.9%	12.3%	33.5%	31.0%	21.3%	0.0%
Driving out of state	0.0%	12.0%	36.0%	40.0%	12.0%	0.0%
Emovis transfer	0.0%	0.0%	5.9%	94.1%	0.0%	0.0%
Enrollment errors	3.5%	13.3%	39.8%	35.4%	8.0%	0.0%
Flaw	16.0%	16.0%	12.0%	40.0%	16.0%	0.0%
General RUC inquiry	5.1%	13.1%	32.3%	40.4%	7.1%	2.0%
Invoice	0.0%	4.3%	40.0%	55.7%	0.0%	0.0%
Mileage reporting method	0.6%	16.8%	28.1%	45.5%	9.0%	0.0%
Out of state drivers	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%
Policy or implementation	3.7%	0.0%	37.0%	51.9%	7.4%	0.0%
Privacy concerns	8.3%	16.7%	25.0%	33.3%	16.7%	0.0%
Service provider inquiry	4.2%	8.3%	35.4%	52.1%	0.0%	0.0%
Surveys or incentives	1.0%	22.3%	35.9%	31.1%	9.7%	0.0%
Vehicle eligibility questions	0.0%	8.3%	50.0%	33.3%	4.2%	4.2%
Vehicle weight	0.0%	39.1%	39.1%	4.3%	0.0%	17.4%
Other	0.0%	37.5%	33.3%	16.7%	12.5%	0.0%

*The anticipated percentage of communications received by MRM is a range of one-quartile above and below the participant distribution.

According to the data above, there were several communication topics from each of the MRM users that exceeded the anticipated frequency. When accounting for participant distribution, the following communication categories emerged as having piqued a particular interest in each of the MRM users.

Mileage permit

- Flaw
- Privacy concerns
- General RUC inquiry
- Service provider inquiry
- Policy or implementation
- Enrollment errors
- DriveSync transfer

Plug-in device

- Vehicle weight

Plug-in device with GPS

- Vehicle eligibility questions
- Out of state drivers

Odometer reading

- Emovis transfer
- Invoice
- Service provider inquiry
- Policy or implementation
- Out of state drivers
- Mileage reporting method
- General RUC inquiry
- Driving out of state
- Flaw

Smartphone app

- DriveSync transfer

Findings

Participants that used the odometer reading MRM had the highest number of topics in excess of the anticipated percentage. The table on page 21 (*Phase 2: Distribution of participant MRM choice compared to cumulative communication distribution*) also indicates that 39% of communications were received from these users, even though they only accounted for 29% of total participants. These users were particularly engaged throughout the project. One figure of note is the percentage of odometer-reading MRM users who were transferred to Emovis, a service provider. Only a small percentage of participants were enrolled with Emovis and many of them used the odometer reading MRM, which accounts for the high percentage shown in the table.

Participants using the plug-in device with GPS MRM also had many comments and questions on vehicle eligibility. Fifty percent of communications involving vehicle eligibility were from these users. The plug-in device with GPS was only compatible with vehicles with OBD-II ports. Many older vehicles did not qualify. Additionally, many participants contacted the help desk asking for assistance with installing the plug-in device at the beginning of the test-driving phase which resulted in a service provider transfer.

Summary of most frequent topics: Phase 2 (February 2018 to January 2019)

Below is a summary of most frequent topics discussed during Phase 2 of the pilot project with key examples provided of the comments or questions received and a response from the help desk staff.

Mileage reporting method

This communication category topic was used to identify communications involving any of the mileage reporting methods. This included general inquiries on each of the methods during recruitment and enrollment, in addition to any communications requesting more information or assistance with each method during the test-driving phase. If participants needed assistance with their MRM, they would be transferred to their service provider.

Excerpts regarding mileage reporting methods

- “I am undecided as to which Mileage Reporting Method to use.”
- “I’m having issues with reporting my mileage.”

Takeaways for mileage reporting methods

The help desk team shared information about each of the MRMs. Information was available on the project website and during the enrollment process for the test-driving phase. The help desk team also assisted potential participants with selecting an MRM based on their individual needs.

Sample response

Thank you for your patience as we’ve continued to refine the mileage reporting methods that we’re offering for the WA RUC Pilot Project. We have several different mileage reporting methods for you to choose from.

- Mileage permit: Pre-select miles based on how much you expect to drive in 3 months, and report mileage through your smartphone by submitting a photo of your odometer
- Odometer readings: Submit a photo of your odometer monthly or quarterly using your smartphone
- Plug-in device with GPS: Plug-in device automatically reports mileage and records miles driven out of state separately – works with all vehicles 1996 or newer
- Plug-in device without GPS: Plug-in device automatically reports mileage but does not record whether miles were driven in-state or out of state – works on all vehicles 1996 or newer
- MileMapper™ Smartphone App:

If you would like to discuss the different methods, please feel free to give our help desk a call at 1-833-927-4782. Our help desk is staffed Monday – Friday, 8 a.m. – 5 p.m.

Once you’ve selected your mileage reporting method and your service provider, you’ll be asked to log in again with your email address and the password you set up in step 1. If you’ve forgotten the password to the account you set up, you will have the opportunity to change it at that time. After that, you’ll be able to complete your registration by providing your vehicle information to your service provider.

For communications regarding issues with reporting mileage, see the next section.

DriveSync transfer

This communication category served as a comprehensive code for emails and phone calls that were transferred to DriveSync, one of the service providers for the pilot project. Typical comments and questions received included technical difficulties with reporting mileage, issues with accessing user accounts, or other technical issues that the project help desk team were unable to assist with. A generic response was sent to participants if their email was forwarded to DriveSync.

General RUC inquiries

Many communications received by the project help desk did not fall into a specific communication category. Below are excerpts and typical responses to some of the most frequently received general RUC inquiries.

Excerpts regarding driving on non-public roads

- “I go to Central Washington on most weekends. Some of my driving is on private road. How will you know to NOT charge someone for the mileage that is driven on private roads?”
- “Will federally-funded roads (such as roads under the control of the US Forest Service, or roads such as US-12 or US-395) be “chargeable” if one is using a GPS enabled option?”

Takeaways for driving on non-public roads

A RUC has the potential to be more flexible than the existing gas tax. Currently, there is no way to differentiate or reconcile miles driven or gas used on private or federally funded roads. A RUC can offer ways to differentiate or reconcile those miles to ensure that drivers are only charged for driving on roads that are state funded.

Sample response

There are several different types of roads in our state. There are state-owned roads, private roads, and federal roads. During this pilot project, we are testing the ability for drivers who choose a GPS-enabled reporting system to automatically deduct miles driven on private roads because those roads are maintained using private dollars.

The pilot is not testing the same function for federally managed roads, but any mechanism used for exempting or refunding a road usage charge on private roads could potentially be applied to federal roads as well. This kind of flexibility is not available with the current gas tax system. Under current law, drivers are not eligible for refunds of or exemptions from taxes paid on fuel consumed on federally owned roads such as USFS roads, or for fuel consumed on private roads or private lands in vehicles registered for highway use.

We hope that we hear from a diverse group of people during the pilot, including those who regularly travel on private or federal roads, to help shape any future policy choices like refunds and exemptions in a potential full implementation.

Excerpts regarding administrative and overhead costs

- “The 38 administrative functions required of RUC will send the state budget over the moon and negate revenue supposedly derived from RUC. Enforcement alone sounds very expensive and rather like some police state behavior.”
- “The implementation of any new idea will burden additional cost to (i) the elderly driver (ii) WDOT (hiring, training, maintaining, tracking/identifying/collecting from evaders, securing the system

from data breaches, not to mention new resource pension, healthcare), and cost to businesses that sell gas (loss of revenue, their cost of changing system, cost to clean up property.)”

Takeaways for administrative and overhead costs

The project team understands the concern for administrative overhead costs associated with implementing a RUC. A study was conducted by the WSTC in 2016 that found that the overhead costs with a RUC would be comparable to other metered costs, such as utilities.

Sample response

The current fuel tax system is a low-cost method of collecting taxes (less than 1 percent overhead), and that a road usage charge would be relatively more expensive to collect. We wanted to learn more about this, too, so we conducted a study and found that costs would decline as the number of vehicles paying road usage charges increases. This study also projects that by spending more in administrative costs we will receive higher revenues overall. At a large scale, the cost of collecting road usage charges may fall below 5 percent of revenues and could provide sustained funding for transportation in future years when fuel tax revenues decline (WSTC 2016 Road Usage Charge Assessment – Phase 4 Final Report, 18). This cost of collection is comparable to other utilities such as water and electricity, which also meter customers for their usage as the basis for payments.

Excerpts regarding fuel-efficient vehicles

- “Electric vehicle owners already pay an extra annual registration charge that’s supposed to equal the gas tax.”
- “The currently studied per-mile rate is a disincentive for the average WA vehicle owner to change to a more fuel-efficient vehicle, thus promoting the concept of consuming more non-renewable resources and adding to the already polluted air and general carbon footprint.”

Takeaways for fuel-efficient vehicle communications

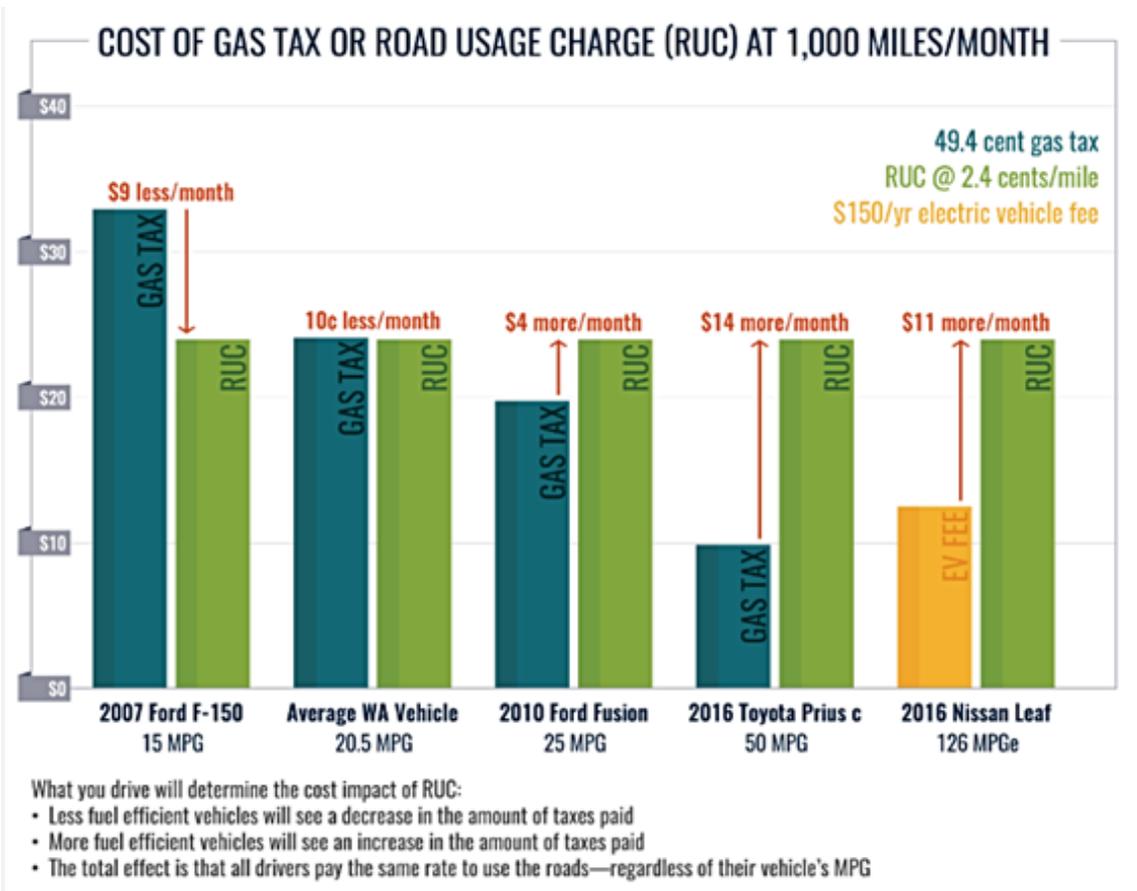
The pilot project is testing whether a RUC would be more equitable for drivers who do not drive fuel-efficient vehicles. Drivers with vehicles that are less fuel-efficient carry a higher burden on paying the gas tax, even though their impact to the roads is the same as electric vehicles. The WSTC Steering Committee will explore a RUC’s impact on electric vehicle adoption in their final report.

Sample response

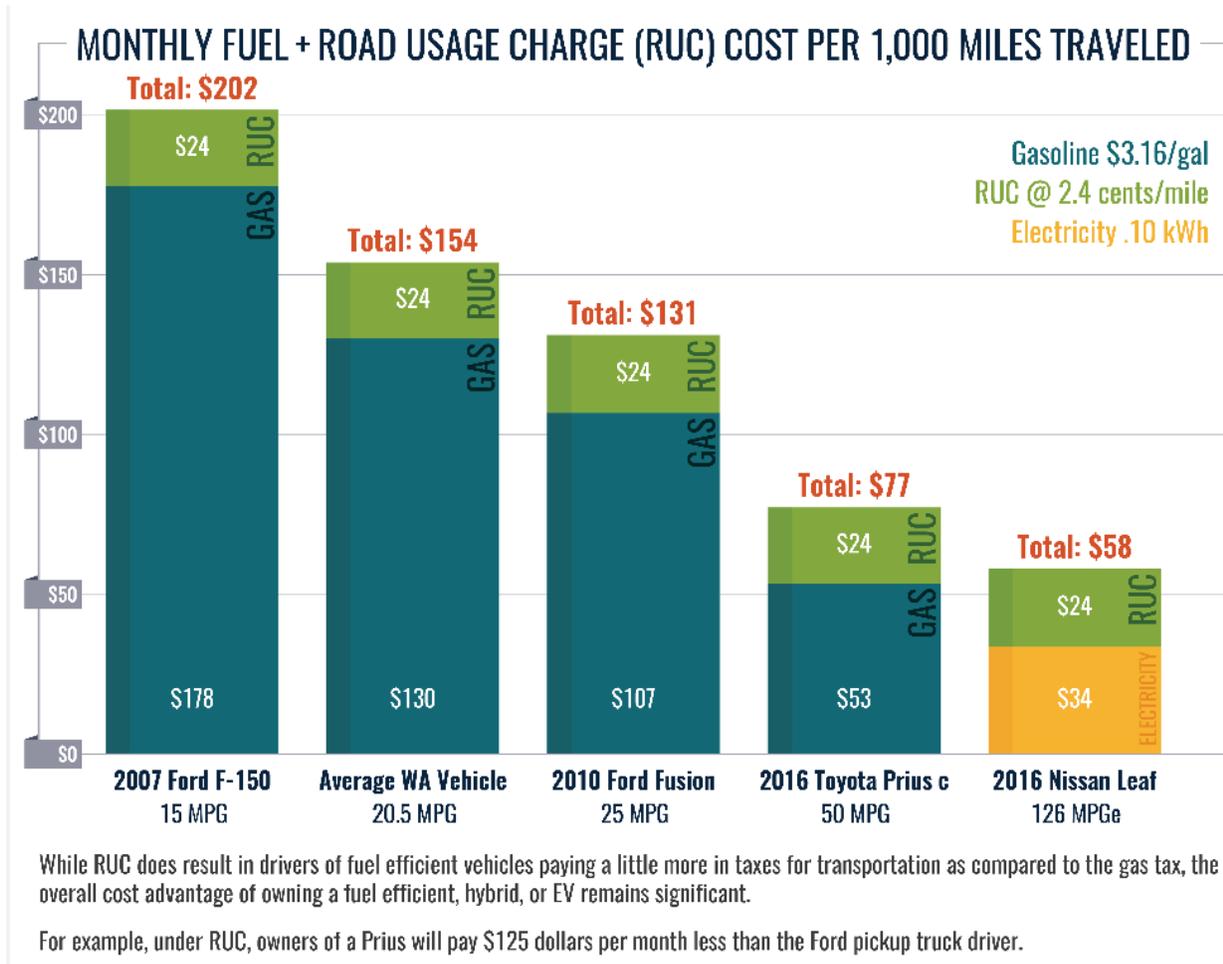
A key goal of exploring a road usage charge is to see if we can move towards a system where each driver will pay their fair share in using our public roads. Currently, drivers of lower MPG cars may carry a greater burden in paying for the costs of repairing our roads, since drivers of higher MPG cars purchase less gas, and thus pay less in gas tax. We are exploring whether a road usage charge could ensure that drivers pay only for the miles they drive, regardless of what kind of vehicle they drive.

As more fuel-efficient cars and electric vehicles drive our roads, the revenue acquired from the current gas tax decreases, which disproportionately places the upkeep of our state-maintained roads on drivers of gasoline-fueled vehicles. This potential road usage charge would be a replacement to the gas tax that aims to have all drivers pay their fair share in using our public roads.

Depending on the type of vehicle and how many miles you typically drive, some drivers may see a slight increase in the amount they pay in taxes (like drivers of high MPG or electric vehicles), while many drivers would likely see a small decrease in taxes paid. See the graph below for examples of how much drivers would pay depending on their vehicle type.



The chart below shows the costs of a RUC compared to the cost of the gas tax by car type. Note that when the fuel costs are added to the tax cost, fuel efficient cars still pay less compared to lower MPG vehicles. This is because the RUC would simply replace the gas tax portion of one's costs – not the per-gallon price we pay for the fuel we purchase, which is a majority of our fuel costs.



Enrollment inquiries

Enrollment inquiries continued to be a popular communication topic after the launch of the test-driving phase. A majority of these communications came from pilot participants confirming the status of their enrollment. During the test-driving phase, participants asked for assistance with completing their enrollment and for clarification on next steps for participating. The responses varied depending on which step the participant was in the enrollment process. Next steps after enrollment also depended on the MRM that was selected.

A second round of enrollment was launched in August 2018. Many of the communications received were from members of the original interest list confirming their eligibility to participate and inviting them to enroll.

Surveys/incentives

A majority of these communications included participants requesting new links to pilot project surveys or asking about the status of the various incentive gift cards that were sent out during the pilot. Help desk staff responded by resending the survey links or coordinating with the gift card vendor to resend the gift card codes. Delays in gift cards being sent out or gift card codes ending up in email spam folders resulted in a high percentage of these communications.