WA RUC

Appendix B-5: Detailed Approach and Findings from the MilesExempt Follow-on Experience

December 2023

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PREFACE

Forward Drive was a research, development, demonstration, and public engagement effort of the Washington State Transportation Commission. The project sought to advance understanding of and implementation pathways for per-mile road usage charging (RUC) as an alternative to motor fuel taxes and alternative fuel vehicle registration surcharges. The project aimed to address several key issues for RUC including principally equity, user experience, and cost of collection. As reported in Volume 1, the project unfolded in several stages. A series of appendices contain more detailed results. These appendices are organized as explained and illustrated below.

Appendix A. *Forward Drive* began with research spanning several activities including financial analysis, equity outreach and analysis, user experience research, and cost of collection reduction workshops (Appendices A-1 through A-4, respectively). The purpose of the research was to explore the financial, equity, user experience, and cost impacts of RUC under a variety of deployment scenarios. This research informed the design of experience-based simulations and pilots of various elements of a RUC program.

Appendix B. The research stage led directly to the design and development of simulations and pilots of RUC program elements spanning several areas to reflect the multiple objectives and research findings. The centerpiece of the simulation and pilot testing stage was an interactive simulation of RUC enrollment, reporting, and payment. As described in Volume 1, the simulation offered over 1,100 Washingtonians an opportunity to experience RUC in as little as a few minutes, followed by a survey about their preferences and opinions. The detailed results of the simulation survey and the measurements of the simulation itself are presented as separate reports (B-1 and B-2, respectively).
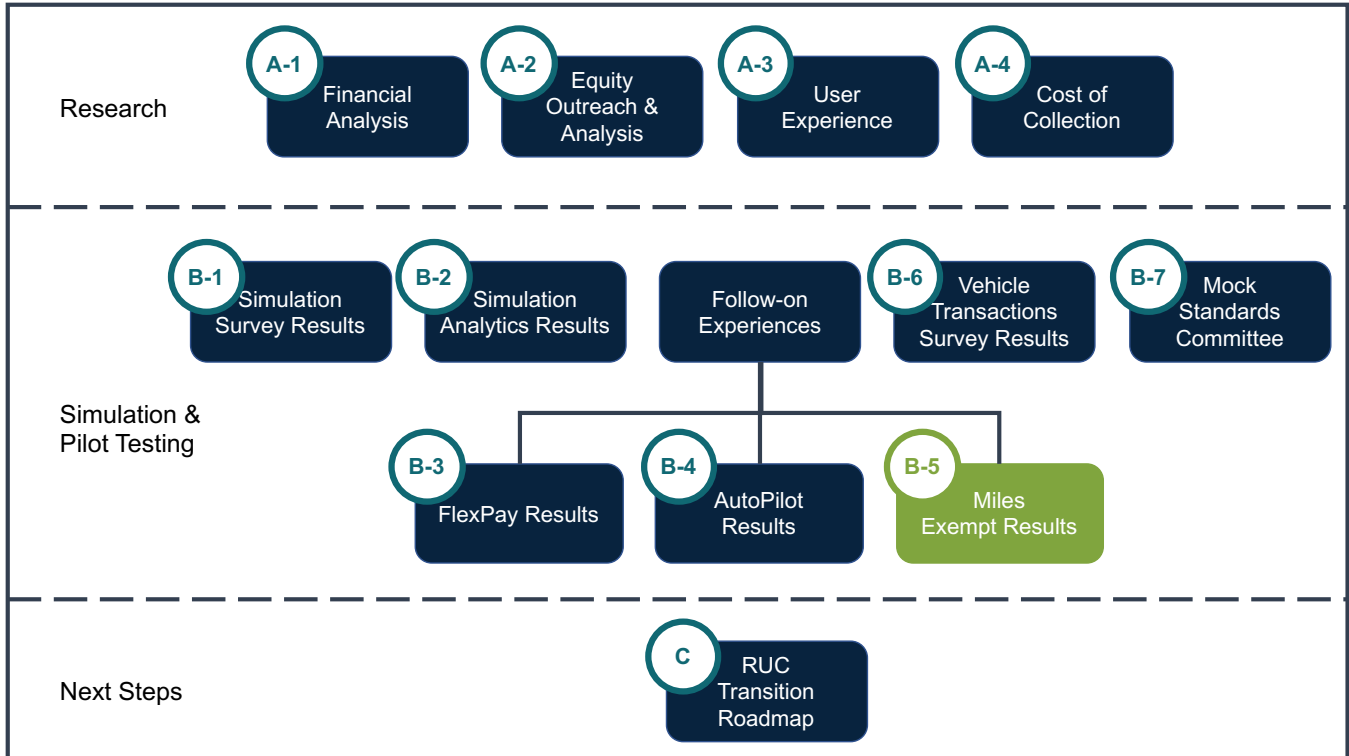
Within the simulation, participants could opt into one of three follow-on experiences, each designed to further test a specific feature of RUC of interest to Washington stakeholders and policymakers:

- FlexPay tested installment payments, allowing participants to pay their RUC over four payments instead of all at once (B-3).
- AutoPilot tested using native automaker telematics to report road usage as an alternative to self-reporting or other technology-based approaches to reporting (B-4).
- MilesExempt tested a self-reporting approach for claiming miles exempt from charges, such as off-road and out-of-state driving (B-5).

The simulation and pilot testing stage also included a statewide survey of Washingtonians' vehicle transactions designed to understand existing transactions and preferences and possibilities for how RUC reporting and payment could potentially be bundled with such transactions (B-6).

Lastly, the simulation and pilot testing stage included a mock standards committee of RUC experts from jurisdictions and industry. The committee simulated the process of creating standards for RUC to support cost reduction, enhanced user experiences, and multi-jurisdictional interoperability (B-7).

Appendix C. Appendix C details a transition roadmap for RUC in Washington drawing on the results of the research and simulation and pilot testing, as well as the updated recommendations regarding RUC implementation from the Commission to the Washington Legislature in 2022.

Research
- A-1 Financial Analysis
- A-2 Equity Outreach & Analysis
- A-3 User Experience
- A-4 Cost of Collection

Simulation & Pilot Testing
- B-1 Simulation Survey Results
- B-2 Simulation Analytics Results
- Follow-on Experiences
- B-6 Vehicle Transactions Survey Results
- B-7 Mock Standards Committee
- B-3 FlexPay Results
- B-4 AutoPilot Results
- B-5 Miles Exempt Results

Next Steps
- C RUC Transition Roadmap

Appendix B-5 covers detailed results from the MilesExempt follow-on experience, including methodology, survey results, and key findings.

1.0 INTRODUCTION

The MilesExempt follow-on experience explored options and customer experiences for claiming exemptions for miles driven by registered vehicles outside Washington and off public roads in Washington using a manual process. A manual mileage exemption process such as the one tested does not rely on GPS devices that report location information, nor does it require customers to accept a standard exemption. Instead, the process allows participants to track and self-report their exempt miles, along with evidence to substantiate their claims.

This report describes the objectives and key questions to address, and provides an overview of the approach followed in designing and conducting the MilesExempt follow-on experience. The report reviews the participant sample and characteristics of those who participated. Finally, the report summarizes the results and key takeaways from the experience.

2.0 OBJECTIVES

The objectives of the MilesExempt follow-on experience were to:

- Explore options for providing exemptions from road usage charging for miles driven out of state and on private roads;

- Develop, design, and test tools and procedures for self-reporting mileage exemption claims; and

- Assess the customer experience and the level of effort required for the state to operate and enforce a mileage exemption program.

This follow-on experience addresses all three of the overarching goals of the *Forward Drive* research project: equity, cost reduction, and user experience. The main questions that the experience was designed to investigate include:

- Is it feasible to offer exemptions without relying on either standard deductions or advanced technology?

- Are participants willing to and able to manually compile and submit data for claiming exemptions?

- How can a RUC administrating agency balance user needs such as ease of use, convenience, and privacy with state needs that include ensuring fairness, verification of claims, and managing operating costs?

3.0 APPROACH

Participation in the MilesExempt follow-on experience required participants to complete the following steps:

- Enroll and sign a participant agreement

- Provide detailed monthly trip records of out-of-state and private road travel

- Submit documentary evidence to demonstrate out-of-state or private road driving

- Complete an online survey questionnaire at the end of the experience

- Participate in a phone interview about their experience (only applicable for a subset of participants)

The MilesExempt follow-on experience process and timeline are illustrated in Figure 1.
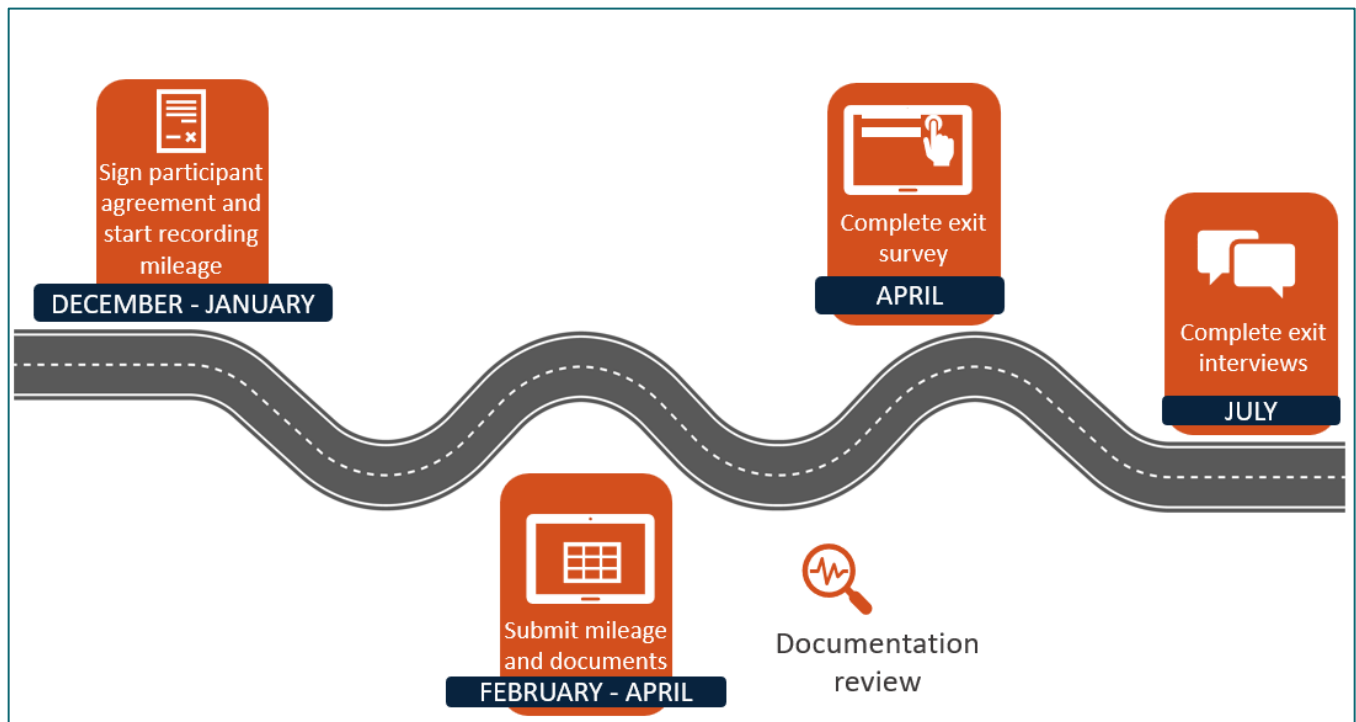
Figure 1: MilesExempt Experience Workflow (December 2022-July 2023)

3.1 Enrollment

As with the other follow-on experiences, given limitations on the use of statistically-valid panel of respondents from Ipsos, participants were invited only from among the organically recruited Simulation participant pool who expressed interest in the MilesExempt follow-on experience based on their choices in the simulation. Following their completion of the simulation they received email invitations to participate in MilesExempt, asking prospective participants to read and sign an agreement describing the policies governing the follow-on experience and to review instructions on how and when to submit their mileage exemption claims.

When recruiting organic participants for the simulation, Washington residents who live near borders and those who make frequent out-of-state trips were of particular interest, and social media advertisements were used to ensure they were aware of this follow-on opportunity. One hundred (100) participants were needed for the MilesExempt follow-on experience and 131 simulation participants expressed interest, all of whom received invitations to participate. In the end, 76 of the 131 who had expressed interest signed the agreement to participate.

3.2 Data Collection

After signing the agreement, participants received an email at the beginning of each month (February through April 2023) asking them to submit their mileage exemption claims and supporting evidence for the prior month. Each monthly period had a deadline for reporting, and email reminders were sent prior to the deadlines in an attempt to boost the participation rate.

Participants were required to make exemption claims on a "per trip" basis, with the participant offering details of the start and end locations, route taken, number of exempt miles, and documentation for each individual trip. For frequent or repeated claims, participants could define the trip once and indicate the number of times it was taken per reporting period. Custom tools were developed to help participants fulfill the study requirements. These tools included a mileage log template (in spreadsheet format) and an online uploading tool for submitting evidence to support their claims. These tools were made available to the participants during the enrollment process and again when prompting them for claim submittals. A help desk was also available to answer any questions from the participants.

Even if a participant did not drive on out-of-state or private roads during a reporting period, they were encouraged to respond by email indicating that they had no exempt miles to claim for that month. Similarly, if no evidence was available for certain trips with exempt mileage claims, participants were asked to state so in their response and indicate why.

3.3 Documentation Review

Materials submitted by the participants were reviewed using a two-step process: verification of all responses submitted, followed in some cases by checking.

- **Verification** involved a cursory review of the claim and evidence provided. Typically, trip entries were checked for completeness and to verify that each trip had a piece of evidence associated. This allowed for general metrics to be derived such as number and rate of responses falling into various categories including no response, mileage log only, evidence only, incomplete documentation, complete documentation, and no claimed mileage.

- **Checking** involved a detailed, thorough examination of a participant's information to ensure the mileage exemption information was reported correctly and to confirm that the reported amount of mileage exemption was accurate. This was done for five participants per month, for a total of fifteen occurrences. Participants whose claims were checked were not informed of the results.

3.4 Survey and Interviews

At the conclusion of the three-month experience, all participants enrolled (whether or not they had submitted a response) were asked to participate in a short online survey about their MilesExempt follow-on experience. In addition, five participants were selected to take part in a subsequent,

approximately hour-long phone interview focusing on the mileage exemption program and the specific claims they had submitted, providing an additional opportunity to collect their input and feedback.

3.5 Reward Distribution

Participants accrued $25 in rewards for submitting their first monthly report of exempted miles. They also accrued an additional $75 for completing the exit survey at the end of the experience. Finally, participants in the exit interviews earned an additional $50 in rewards.

4.0 DOCUMENTING EXEMPTION CLAIMS

At the core of MilesExempt was the need for participants to provide a supporting record and evidence of their out-of-state and private road mileage exemptions claims for each month.

At the beginning of each month, participants were asked to submit a mileage log and supporting documents either by email or through a secure website set up specifically for this purpose. While not mandatory, participants were encouraged to use these tools to help them meet the requirements, to facilitate the submission process, and to facilitate a more orderly review process. These tools consisted of the mileage log template and the evidence uploading platform described in this section.

4.1 Mileage Log Template

Participants received a sample mileage log worksheet that they could use to keep track of their mileage exemptions. Figure 2 shows what the templates looked like for occasional and regular trips, respectively. The mileage log template was made available as an Excel spreadsheet or a clickable PDF. The use of this mileage log template was recommended but not mandatory.

Other forms of mileage logs – paper, diary, account book, spreadsheets, CSV files, and PDF files, were all considered acceptable, as long as the required information was included.

The mileage log was required to indicate the vehicle license plate number along with the following information items for each trip with exempt miles claimed:

- Date of trip

- Trip description (e.g., commute, school, leisure, road trip, shopping)

- One-way or round trip

- Total trip mileage

- Out-of-state miles driven and type of supporting documentation

- Private road miles driven and type of supporting documentation

- Trip origin and destination

- Routes of travel

Participants who traveled on out-of-state or private roads on a regular basis didn't need to enter detailed information for each trip. Instead, they could record the regular trip once on their mileage log and indicate how often they took this trip.

WA RUC | **MilesExempt** — FOLLOW-ON EXPERIENCE   *Mileage Exemption Log:* **Occasional Trips**

Vehicle License Plate #: xxxxxxxxx

Date of Trip	Trip Departure Time	Description	One-way or Round-trip?	Total Trip Mileage	Out-of-WA state mileage	Supporting documents for occasional out-of-state travel	Private roads mileage	Supporting documents for occasional private road	From	To	Routes
7/1/2022	Afternoon	Deliver goods	Round-trip	30	26	none available			Vancouver, WA	Portland, OR	I-5
7/2/2022	Afternoon	Shop for gift	Round-trip	34	30	parking receipt			Vancouver, WA	Portland, OR	I-5
7/3/2022	Morning	Road trip	Round-trip	1,300	1,294	gas receipts; hotel receipts			Vancouver, WA	Sacramento, CA	I-5

(Examples)

WA RUC | **MilesExempt** — FOLLOW-ON EXPERIENCE   *Mileage Exemption Log:* **Regular Trips**

Vehicle License Plate : xxxxxxxxx

Trip Description	Reporting Month	Frequency (Trips per Month)	One-way or Round-trip?	Total Trip Mileage	Out-of-WA state mileage	Supporting documents for regular out-of-state travel	Private roads mileage	Supporting documents for regular private road travel	From	To	Routes
Commute to/from office	Jan-23	22	Round-trip	30	26	employment record			Vancouver, WA	Portland, OR	I-5

(Example)

Figure 2: Mileage Log Templates for Occasional Trips (Top) and Regular Trips (Bottom)

4.2 Examples of Evidence

One of the key elements of the experience is that all mileage exemption claims need to be supported by some form of evidence. Table 1 lists the types of evidence suggested for out-of-state mileage exemptions. This list is not exhaustive, and participants were encouraged to submit other types of evidence that could be considered.

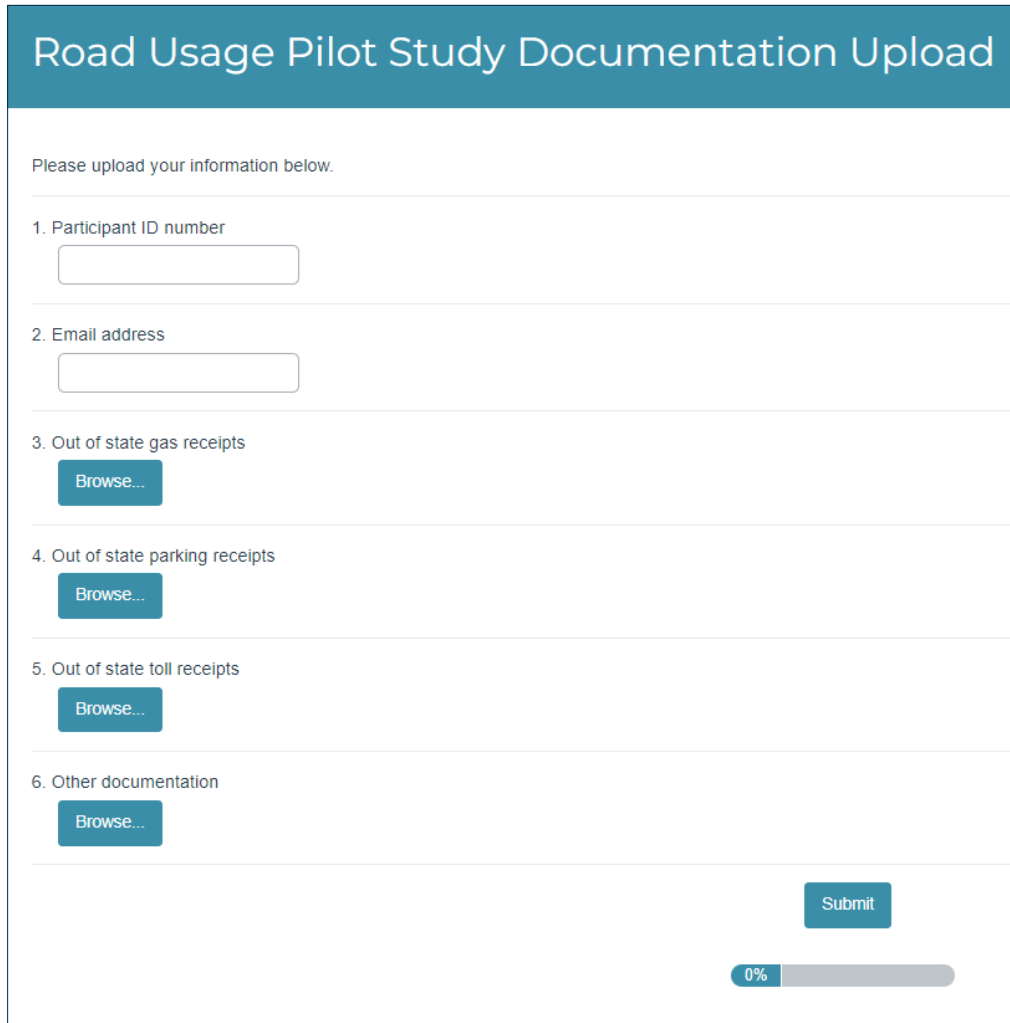### Table 1: Types of Evidence for Out-of-State Trips

OCCASIONAL TRIPS	REGULAR TRIPS
- Gas receipts - Electric vehicle charging receipts - Toll receipts - Parking fees - Oil, lube, car wash receipts - Repairs, parts receipts - Tires, supplies receipts - Lodging receipts	- Employment verification showing an out-of-state workplace location - Education verification showing an out-of-state study location - Medical verification showing an out-of-state health care location - Other verification documents for regular out-of-state travel

4.3 Evidence Uploading Tool

An online uploading tool was developed using the Alchemer software for participants to submit evidence in support of exemption claims. The tool appeared as a simple interactive website, and a link was provided to participants to access it.

Participants could create an electronic version by either scanning or taking photos of their evidence documents. They could combine all documents into a single file and upload them all at once or upload each document separately.

Figure 3 illustrates how the evidence uploading tool website appeared to participants.

Figure 3: Online Evidence Upload Tool

5.0 PARTICIPANT SAMPLE CHARACTERISTICS

Out of 131 who expressed interest during their participation in the RUC simulator and received invitations to the MilesExempt follow-on experience, a total of 76 participants enrolled by signing the agreement. This section presents some demographic and travel data associated with the participants.

Figure 4 illustrates the geographic distribution (place of residence) of the 76 MilesExempt participants. This distribution generally reflects the state's population density, with the highest share of participants residing in the five largest counties: Clark, King, Pierce, Snohomish, and Spokane. These counties also happen to represent a cross-section of populations in close proximity to the borders with Oregon, British Columbia, and Idaho where drivers are more likely to travel out of state on a regular basis.
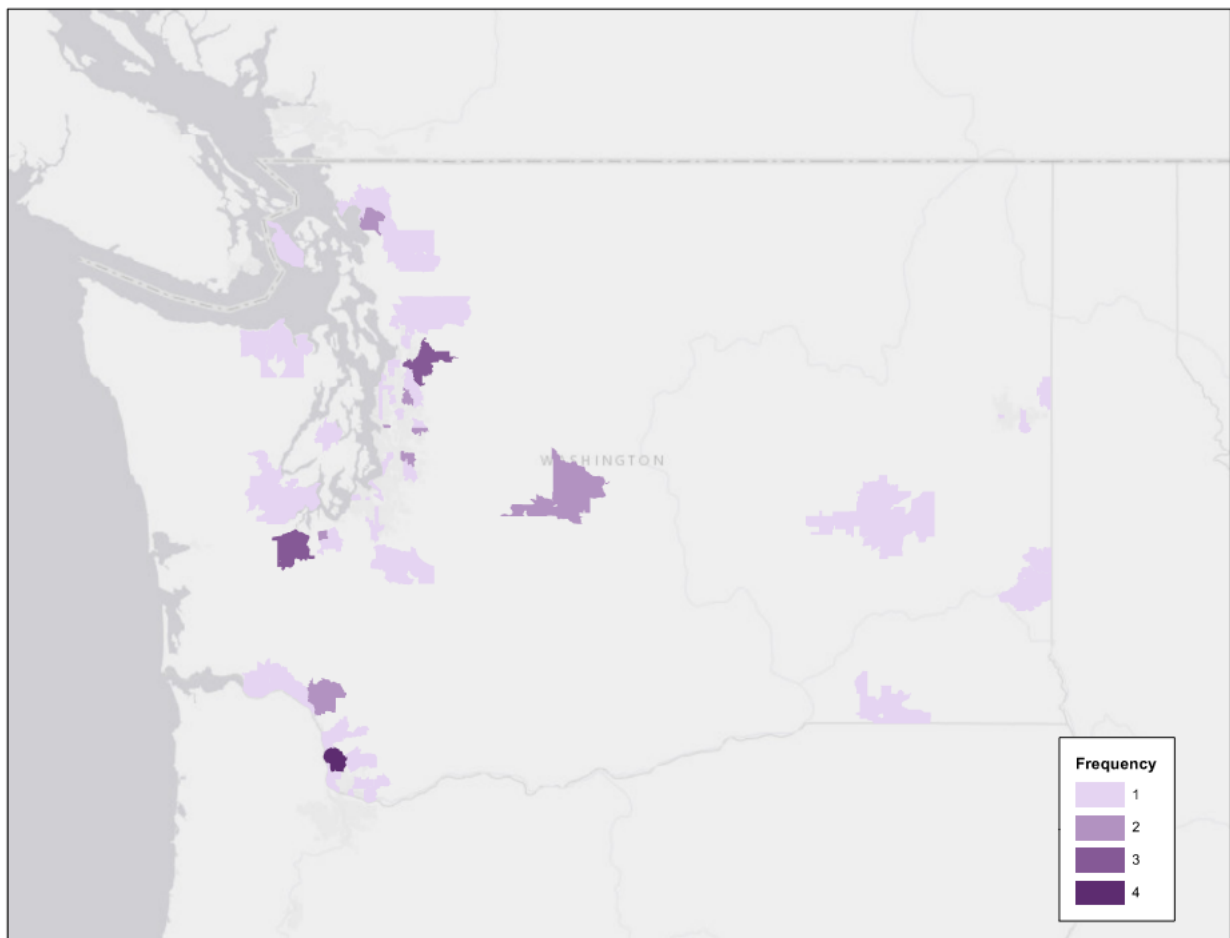
Figure 4: MilesExempt Participants' Places of Residence

Table 2 shows the distribution of household income among participants. Census data indicate that the median household income in the state is $82,400 (in 2021 dollars). The largest number of participants had a household income that fell between $75,000 and $99,999, with two-thirds of the participants reporting a household income over $75,000.

Table 2: Household Income of MilesExempt Participants

HOUSEHOLD INCOME	
$10,000 to $24,999 USD	4
$25,000 to $49,999 USD	7
$50,000 to $74,999 USD	10
$75,000 to $99,999 USD	18
$100,000 to $149,999 USD	17
$150,000 USD or more	16
Prefer not to answer	4

Table 3 shows the distribution of race/ethnicity among the participants. Participants were predominantly Caucasian or white (79%), consistent with the 77% of "white alone" reported for the state by the Census.

Table 3: Race/Ethnicity of MilesExempt Participants

RACE/ETHNICITY	
African American or Black	1
Asian or Pacific Islander	3
Asian or Pacific Islander, South Asian, Caucasian, or White, Two or more races	1
Caucasian or White	60
Caucasian or White, Other	1
Latino or Latina	1
Latino or Latina, Two or more races	1
Native American/Alaskan Native or First Nations, Caucasian or White, Two or more races	1
Prefer not to answer	2
South Asian	1
Two or more races	4

Table 4 shows that more than 70% of the participants were male.

Table 4: Gender of MilesExempt Participants

GENDER	
Female	19
Male	54
Prefer not to answer	1
Others	2

Table 5 shows the age distribution of the participants. More than 40% of the sample is over 59 years old.

Table 5: Age of MilesExempt Participants

AGE	
18 to 29	7
30 to 44	24
45 to 59	11
Over 59	33
Prefer not to answer	1

Table 6 summarizes travel data and compares MilesExempt participants with participants from a representative statewide sample of participants recruited by Ipsos for the RUC simulation. MilesExempt participants tend to drive more miles and therefore owe more in road usage charge than the overall state average.

In the statewide sample, the average number of exempt miles claimed was 435. This number was low because many of them claimed zero miles. By comparison, the average MilesExempt participant self-reported 2,222 exempt miles per year. MilesExempt participants claimed an average of 11% more exempt miles than the average claimed among participants in the statewide sample (2,378 versus 2,138 miles per year).

Table 6: Travel Data for MilesExempt Versus All Participants

AVERAGE	MILESEXEMPT	ALL PARTICIPANTS*
Annual mileage	10,928	7,576
Estimated gas tax paid	$164.60	$146.40
RUC owed	$49.50	$29.60
Estimated exempt miles	2,222	435
Estimated exempt miles (excl. 0)	2,378	2,138

* Refers to Ipsos participants from the main simulation

6.0 SURVEY AND INTERVIEW RESULTS

Among the 76 participants who enrolled in the MilesExempt follow-on experience, 47 (62%) took part in the online survey at the conclusion of the three-month period. Topline survey results are described here.

- A large majority of respondents (94%) found the MilesExempt process to be easy or very easy to understand.

- 27 respondents (57%) claimed some exempt mileage during their participation in MilesExempt.

- All 27 respondents who submitted claims used the mileage log template that was provided.

- Among the 27 respondents who submitted claims, most (89%) used the evidence uploading tool provided.

- Only 2 respondents (4%) reported using the helpdesk for assistance.

- 79% said they would claim exemptions for every eligible trip if MilesExempt was the only mechanism available.

- Among the 27 respondents who submitted claims, 70% found that collecting evidence was easy or very easy, and 89% found that submitting evidence was easy or very easy.

- Three-quarters of the respondents thought that the manual mileage exemption process was fair or very fair.

- Less than half (40%) thought that others will accurately and honestly report their exempt mileage.

- 79% indicated that they would opt-in to a manual reporting program like MilesExempt rather than taking a standard exemption.

Specific concerns that emerged from responses to the survey's open questions and interviews appear below.

- **Accuracy or honesty in self-reporting.** A majority (60%) of the survey respondents doubt that others would accurately and honestly report their exempt mileage. There is a perceived risk of fraud with such a system relying on self-reporting rather than some form of automated reporting.

- **Lack of evidence to support claims.** Some participants pointed out that evidence is not always available to support a claim. Examples given include short trips with no gas receipts or the use of electric cars charged at home.

- **Need options to easily submit claims by phone.** Some participants would have liked to be able to submit claims through a smartphone application, rather than via email.

- **Time-consuming, labor-intensive process.** The process of assembling and submitting claims and associated evidence was considered burdensome by some participants at times.

7.0 REVIEWING EXEMPTION CLAIMS SUBMITTED BY PARTICIPANTS

The 131 participants who expressed interest in MilesExempt represented 27% of the total number of organically recruited participants in the RUC simulation. Out of these 131 who expressed interest, 76 participants enrolled in the experience, and 54 interacted at least once during the experience by either submitting a mileage exemption claim or indicating that they had no exempted mileage to claim.

MilesExempt data collection ran from January through March 2023. Table 7 provides a high-level summary of the responses received by month across the three months of the experience.

Table 7: Overview of Responses by Month

STATISTICS	JANUARY		FEBRUARY		MARCH	
Total Enrolled	45		76		76	
No Response	14	31%	27	36%	31	41%
Total Responses	31	69%	49	64%	45	59%
Mileage log only	*6*	*13%*	*13*	*17%*	*7*	*9%*
Evidence only	*0*	*0%*	*1*	*1%*	*0*	*0%*
Incomplete documentation	*3*	*7%*	*5*	*7%*	*8*	*11%*
Complete documentation	*7*	*16%*	*10*	*13%*	*9*	*12%*
No Claimed Mileage	*15*	*33%*	*20*	*26%*	*21*	*28%*

In a typical month, about two-thirds of the participants provided a response. Among those with some exemptions to claim, about 40% submitted complete documentation. Additional results are summarized below.

- At the end of January, 45 individuals were enrolled and 69% responded in some way. At the end of February and March, with 76 participants enrolled, response rates were 64% and 59%, respectively.

- The share that did not respond increased from 31% in January to 36% in February to 41% in March.

- The share of participants who responded that they had no exempt mileage to claim was 33% in January, 26% in February and 28% in March.

- The number who made an actual claim for exempt miles amounted to 16 in January, 29 in February and 24 in March.

- Among those who did submit a claim, the share of respondents who provided complete documentation (mileage log and evidence) declined from 44% in January to 34% in February, then rebounded to 38% in March.

8.0 KEY TAKEAWAYS

This section summarizes the key takeaways from the MilesExempt follow-on experience based on the three months of operations and data collection, participant survey, and participant interviews.

1) Most users want to be able to claim exemptions

As expected, most customers regard having the option of claiming exemptions for out-of-state or private road travel as a necessary element of a RUC program. Most participants understand that RUC would support funding of public roadways in the state of Washington, and therefore it would be unfair to pay for using out-of-state or private roads. As the simulation surveys revealed (see Appendix B-1), the amount of exemptions the average customer will claim are small, and participants do not expect a single method of offering and administering exemption claims.

2) Most MilesExempt participants like the self-reporting, manual option to claim exemptions

The survey revealed that most participants found that the MilesExempt program was easy to understand. The supporting tools made available to the participants (mileage log, online uploading platform, and helpdesk) were helpful and allowed participants to generally comply with the requirements. Even if the program could and should be refined before implementing at a wider scale, there appear to be no fatal flaws associated with such a manual reporting option from a customer experience standpoint.

The experience showed that most participants were willing and able to manually compile and submit exemption claims with associated evidence. Some participants noted that they appreciated the flexibility offered in the type of evidence accepted and found it useful to receive reminders to submit their claims. Having the option to contacting a help desk was important, and participants appreciated the responses provided and timeliness. Some noted that "how-to" tutorial videos would have been a useful addition to consider in the future.

3) Many would like to have other options as well

Although the general opinion about MilesExempt was positive, many participants would like to see other options that could make the process easier. Some possible alternative options discussed include standard exemptions (without evidence required, similar to what the simulation offered) or automated claims using technology. Respondents offered suggestions for an annual standard exemption ranging from 200 miles to 3,000 miles, with an average around 700 miles. These various options are not mutually exclusive, and a program that offers multiple options would be appreciated by many users.

A system based on standard exemptions without any evidence might work well for some users and would certainly make the process easier both from the users' and from the state's perspectives. However, questions regarding the level of standard exemption and whether or not it should vary depending on certain parameters (such as place of residence) need further investigation.

Some users would like to have the option of using technology to track their exempted miles and submit their claims automatically. Examples of a technology-based approach include using devices that plug into the vehicle, sending vehicle location information, or using a phone app to record mileage. Data security and privacy concerns might prevent technology to be the only option available; however, for those willing to use that option, optional technology solutions should be offered and encouraged as a way to simplify the process for the users and facilitate the enforcement and administration functions for the state.

4) Participants like the flexibility in the type of evidence that can be used to support claims

Some participants noted that they appreciated the flexibility offered in the type of evidence that would be accepted. At the beginning of the experience, participants were given a list of documents that could be used as evidence. These included items like gas or retail receipts, proof of employment or academic enrollment, among others. But this list was not exhaustive, and participants were encouraged to come up with their own, alternative options to back up their claims. This led to some creative solutions from the participants such as providing proof of driving on private roads through redacted HOA covenants, invoices for their share of private road maintenance, annotated Google Maps timelines, and pictures taken during out-of-state road trips.

5) Most participants feel that some level of enforcement by the state is required in a self-reporting program

Participants generally agree that such a self-reporting program cannot rely solely on the honor system and requires some form of enforcement to ensure fairness. This relates to the perception shared by many participants that others would not always accurately and honestly report their exempt mileage.

Several participants pointed out that an auditing process similar to what the U.S. Internal Revenue Service (IRS) uses for taxes would be appropriate. Since the IRS cannot afford to scrutinize all tax returns, they screen the returns for potential anomalies in an effort to reduce the number of underpayments and increase tax revenue. A similar process could be implemented for exemption claims with a system of random selection combined with some factors increasing the chances of being selected for a spot-check. Factors that would increase the chances of being checked could include: a high number of deducted miles, a high share of deducted miles vs. total miles driven, a sudden increase in deduction claims compared to prior years, claiming too many deductions without valid evidence, or inconsistencies between claims and evidence provided. There could also be automatic corrective notices for obvious errors such as claiming more deductions than miles driven.

Throughout the MilesExempt follow-on, the need to control administrative costs for checking claims was top of mind. A cursory review (verification) of all claims and a more detailed, thorough examination (checking) was conducted for a sample of claims. The level of effort involved was assessed to help inform the cost implications. Verification time varies depending on what a participant submitted. For example, it only takes a few seconds to record someone that has no exemptions, but it takes 1-3 minutes per participant if they are claiming exempted mileage to perform the cursory check. The more detailed verification procedure (comparing the claimed mileage with the distance measured in Google Maps) took between 10 to 20 minutes to verify per participant.

The cost of a manual exemption program depends on the design features and the scale with which Washingtonians use it. Supposing on the high end that 10% of Washington's 7 million vehicles submitted manual exemption claims quarterly in a full-scale system, with 90% of claims checked and 10% verified, this would require approximately 70 full-time equivalent (FTE) staff. By contrast, if only 3% of Washington drivers submitted claims or if claims were only permitted annually, the number of FTEs required would reduce to around 20. By making standard exemptions more attractive (thereby reducing the number of participants claiming manual exemptions), standardizing and further automating the claims process, and considering the frequency with which claims will be accepted, costs can be managed while still offering participants a range of choices to benefit from exemptions.