

Scooter Share Pilot Program Report

June 30, 2023



King County

Contents

Executive Summary	3
Background.....	5
Department Overview.....	5
Historical Context.....	5
Community Context	5
King County’s Scooter Share Pilot Program	7
Industry Trends	10
Report Methodology.....	11
Report Requirements	11
A. Scooter Usage	11
B. Complaints and Incidents.....	14
C. Demographics and Equity	15
D. Connections to Transit	18
E. Public and Community Feedback.....	20
F. Program Costs	23
Regional Shared Mobility	25
Exploring Interlocal Agreements During the Pilot Program.....	25
Recommendation.....	25
Policy Alignment	27
Next Actions.....	27

Table of Figures

Figure 1 - North Highline Land Use Map.....	6
Figure 2 - White Center Bus Routes (June 2023)	7
Figure 3 - Scooter Operator Rates	9
Figure 4 - Scooter Use Stats January 1, 2021 to December 31, 2022	12
Figure 5 - Trips by Hour January 1, 2021 to December 31, 2022.....	12
Figure 6 - Trips by Weekday January 1, 2021 to December 31, 2022	12
Figure 7 - Trips by Date January 1, 2021 to December 31, 2022	13
Figure 8 - Deployment Heatmap January 1, 2021 to December 31, 2022	13
Figure 9 - Utilization Rate Comparison	14
Figure 10 - Complaints Received.....	15
Figure 11 - Summer 2022 Survey Demographics.....	17
Figure 12 - Summer 2022 Survey Responses.....	21
Figure 13 - Program Costs	23
Figure 14 - Regional Micromobility Program Benefits.....	26

Executive Summary

The King County Council, via Ordinance 18989 (October 2019) and amended by Ordinances 19137 (July 2020) and 19310 (July 2021)¹, required King County's Records and Licensing Services Division (RALS) of the Department of Executive Services to implement and manage an electric scooter share pilot program to bring new mobility options to the North Highline Urban Unincorporated Area. This pilot program was intended to help the County determine whether shared scooters can support the County's policy goals of (1) improving first/last mile connections to transit, (2) reducing private motor vehicle use and congestion, (3) promoting safe travel with this form of transportation, (4) improving pedestrian safety, accessibility, and convenience for people of all ages and abilities, (5) providing equitable transportation services, and (6) reducing air pollution, including climate pollution.

The Ordinance required RALS to consult and coordinate with other County agencies including, but not limited to, the Metro Transit Department, the Parks and Recreation Division of the Department of Natural Resources and Parks, the Department of Local Services, and Public Health – Seattle & King County (DPH). In addition, RALS consulted with the Department of Executive Services' Office of Risk Management and the King County Prosecuting Attorney's Office. Information was also gathered from local and out-of-state municipalities with previous or active scooter share programs, and local disability rights advocates. The information was used to develop criteria for a program contract that shared scooter operators must abide by in order to deploy scooters in the pilot area.

After developing the program contract and request for proposal (RFP), RALS solicited applications from shared scooter operators for two limited use permits. Two shared scooter operators applied and fulfilled the application's scoring criteria. Lime and Spin were issued permits in August and September 2020, respectively. The pilot period began when shared scooters first became available to the public for use, August 17, 2020, and ran through March 31, 2023. Fortunately, there were no collisions reported to the County, very few reported injuries, and very few complaints received.² However, the scooter utilization rate was less than one trip per scooter per day throughout the pilot, which is not enough to sustain a scooter share program in North Highline alone, as evidenced by Spin choosing to exit the pilot in August 2022.

This report describes factors contributing to low use and suggests a new, more sustainable service delivery model for providing shared devices to improve mobility. Based on lessons learned and feedback from the community and local agencies, this report recommends leveraging the County's experience providing local services on a regional basis, as is done for animal services, for-hire transportation services, and police/sheriff services, and applying a similar regional approach to shared mobility.

¹ Links to [Ordinance 18989](#), [Ordinance 19137](#), and [Ordinance 19310](#)

² King County's winter 2021 community survey included one response that a user had an incident on 16th Ave SW and the Summer 2022 survey included reports of four injuries, the most serious of which was a torn ACL/PCL in the knee. Three of the incidents mentioned cracks or potholes, one mentioned crosswalk paint is slippery when wet, and one mentioned the streetcar rail line. There are no streetcar rail lines in North Highline, so the incident must have occurred elsewhere. The surveys are anonymous, so RALS cannot contact the respondents for further detail or to confirm whether the other three incidents occurred within the County's pilot area or elsewhere. Neither the scooter share operators nor King County Department of Local Services Road Services Division received reports of injuries.

With the King County Council's approval to expand the scooter share pilot to interested jurisdictions, RALS presented the regional approach to cities within King County and to the County's two scooter share pilot operators. Under the proposed regional model, King County could contract with service providers to deliver micromobility services to cities through interlocal agreements and to areas of unincorporated King County. A regional approach has many benefits for users, operators, and partner jurisdictions, including consistent program rules across jurisdictional boundaries that would provide a uniform experience for users and operators, and a larger market to sustain the system. The regional micromobility concept piqued the interest of a few cities, though some expressed interest in shared bikes as well as or instead of scooters.

A micromobility program with bikes and scooters provides additional transportation options but is not a solution for all needs. For those who can use a bike or scooter, the choice to use them often involves other factors including road conditions, safe infrastructure, weather, daylight, distance to be traveled, and load. To help improve mobility options for more people and for when such factors are not conducive to micromobility solutions, this report recommends including car share along with bikes and scooters for a more inclusive and responsive regional mobility model.

Background

Department Overview

The Department of Executive Services (DES) provides both internal services to King County agencies and public services directly to King County residents. The divisions and offices that make up DES include the Business Resource Center, Finance and Business Operations Division, Office of Emergency Management, Facilities Management Division, Fleet Services Division, Inquest Program, King County International Airport-Boeing Field, Office of Risk Management Services, and the Records and Licensing Services Division (RALS). RALS is responsible for recording property and other documents, real estate excise tax payments, internal mail services, records management, regional animal services, licensing for vehicles and vessels, and regulating the for-hire transportation industry.

Shared scooters are a new line of business for King County and RALS, with RALS working to develop and foster the program. The elements of a scooter share program parallel RALS' existing for-hire transportation regulatory program in terms of public safety, consumer protection, and equity of shared mobility options. The County's for-hire transportation program regulates taxi, flat-rate for-hire, and transportation network company (TNC) drivers, vehicle owners, and companies in unincorporated King County and in 16 cities and the Port of Seattle, through interlocal agreements to provide for-hire transportation regulatory services.

Historical Context

Scooters are part of the growing new trend of micromobility, which generally includes personal or shared scooters and bikes that are human-powered or have electric motors. According to the North American Bikeshare Association (NABSA), 128 million trips were taken using shared micromobility in North America in 2021, 62.2 million of which used e-scooters.³ These trips occurred across the estimated 298 cities in North America that have a bike share only program (36 percent), e-scooter only program (31 percent), or a system with both bike share and e-scooters (33 percent). Across North America, the number of micromobility trips fell 47 percent in the early part of the COVID-19 pandemic but began rebounding in 2021. Both the number of shared micromobility systems and vehicles were higher by the end of 2021 than pre-pandemic numbers, up 2 percent and 20 percent respectively.

Many cities worldwide have launched scooter share programs in recent years, such as Dubai, Los Angeles, London, Milan, Prague, Santiago, and Seoul. Notably, King County is piloting its program in an unincorporated neighborhood where the population is not as dense and there are fewer transit options than the urban early-adopter jurisdictions. This scooter share pilot program is the first micromobility program launched by King County, though Seattle launched its own city-wide scooter share pilot program in September 2020, one month after the County's launch. Seattle transitioned its scooter share pilot to an ongoing program in spring of 2022, and integrated scooters into its existing bike share program.

Community Context

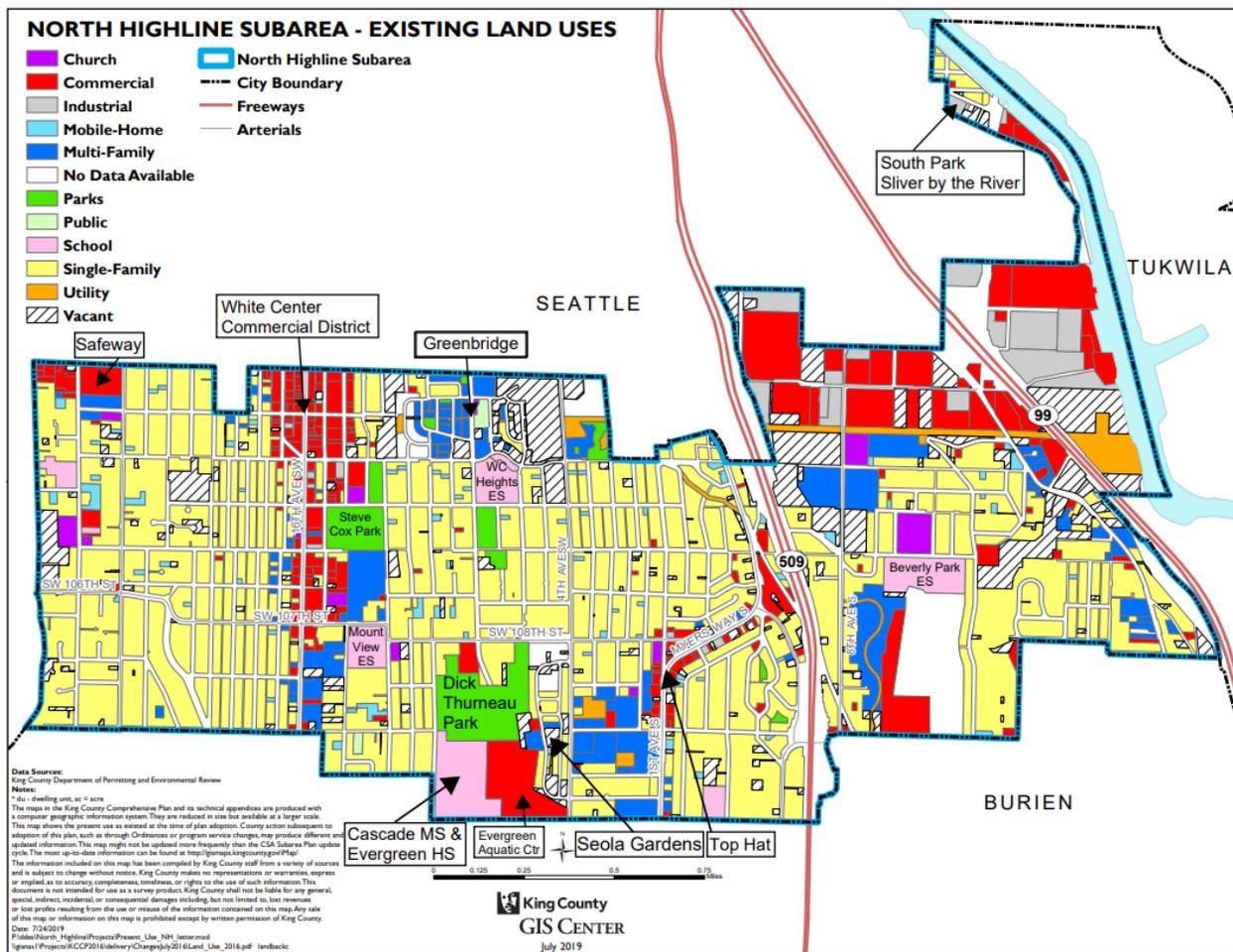
The North Highline Urban Unincorporated Area is commonly referred to as White Center, though it includes an area slightly larger than White Center. North Highline borders Seattle to the north and west,

³ NABSA 2021 Shared Micromobility State of the Industry Report, pages 1 and 10, <https://nabsa.net/2022/08/03/2021industryreport/> (accessed November 2022)

Burien to the south, and Tukwila to the east. A demographic analysis from King County’s North Highline Community Service Area Subarea Plan reports the majority of White Center’s 19,500 residents are BIPOC (Black, Indigenous, and People of Color), with 31 percent of residents born outside of the United States and 15 percent of residents with limited English proficiency.⁴ The plan shows the median household income in North Highline is 38 percent less than the median income for all of King County.

White Center’s commercial district consists of a few blocks from SW Roxbury St southward between 15th and 16th Ave SW. Nearby are two King County Housing Authority (KCHA) communities and some multi-family homes south of the commercial district. There are also multi-family homes in the eastern portion of North Highline between highways 509 and 99, though the scooter operators opted not to deploy in that area nor in the large portions of North Highline that are comprised of mostly single-family dwellings. Figure 1 is the King County Land Use map from July 2019.⁵

Figure 1 - North Highline Land Use Map



⁴ 2022 Update to 2016 Comprehensive Plan - King County Attachment C: North Highline Community Service Area Subarea Plan, <https://tinyurl.com/ys6kyhk6>, pages 21, 61, 71-72 (accessed November 2022)

⁵ King County Land Use map, <https://tinyurl.com/ybeow6vy> (accessed November 2022)

Outside of the White Center core, most homes in North Highline have a “car-dependent” walk score, meaning almost all errands require a car, and are “somewhat bikeable,” which is the lowest score for micromobility due to minimal biking infrastructure.⁶ Shared scooter users are not allowed to ride on sidewalks or on roads with speeds greater than 25 miles per hour. Only a limited portion of roads in North Highline have paved shoulders and several streets, including SW Roxbury St and most of 15th and 16th Avenues SW, have speed limits greater than 25 miles per hour.

The North Highline area is typically served by seven Metro Transit bus routes and one Sound Transit route.⁷ Two routes run north/south on the western side of North Highline, before turning east or west on SW Roxbury, which is the northern border of the area. Two routes run almost the same north/south route through the White Center commercial core during the pilot program until they were replaced by the Rapid Ride H line in late March 2023. Two routes run almost the same north/south route past the KCHA developments. One route runs only east/west along a few blocks of SW Roxbury Street. Rapid Ride C has one stop in the northwest corner of the area. The only east/west routes are all on SW Roxbury Street. Some of these routes were suspended during the pilot program due to the COVID-19 pandemic. Figure 2 shows the bus routes in White Center as of June 2023.

Figure 2 - White Center Bus Routes (June 2023)



King County’s Scooter Share Pilot Program

To develop the scooter share pilot program, RALS connected with local disability rights advocacy groups, reviewed materials from scooter programs in other jurisdictions, and engaged other County departments. Leveraging lessons from other jurisdictions and incorporating state and local laws, RALS prepared for the pilot program and assembled the King County Scooter Share Pilot Program Limited-Use Permit Application and Contract⁸ with support from the Office of Risk Management and the King County

⁶ Walk, transit, and bike scores are available by entering addresses into sites such as [walkscore.com](https://www.walkscore.com) and [redfin.com](https://www.redfin.com). A description of the scoring is available on Redfin: <https://www.redfin.com/how-walk-score-works>. Scores were reviewed for addresses throughout the North Highline area in November 2022.

⁷ King County Metro Transit: Southwest Area map, <https://tinyurl.com/mwz3aykk> (accessed November 2022)

⁸ King County Scooter Share Pilot Program Contract, <https://tinyurl.com/y973zuv2>

Prosecuting Attorney's Office. The contract details the program requirements, including the specific items listed in Ordinance 18989:

- Where and when scooters are allowed to operate and park
- Fleet size
- Time of operation
- Indemnification agreement
- Insurance coverage
- Distribution and maintenance of scooters
- Submitting feedback
- Multiple language options
- Operator reporting
- Scooter identification
- Education and outreach
- Options for persons who are unbanked or without a smartphone
- Compliance terms

RALS engaged many parties over the course of developing the pilot program including:

- King County Metro Transit
- King County Parks and Recreation Division (Parks)
- Public Health – Seattle & King County
- King County Sheriff's Office
- Department of Local Services
- Seattle Department of Transportation New Mobility Program
- City of Burien
- The National Federation of the Blind of WA
- Rooted in Rights of Disability Rights WA
- Abilitreck
- King County Housing Authority (KCHA)
- Highline School District
- White Center Community Development Association (WCCDA)

Applications from shared scooter operators were initially solicited in March 2020. Two operators applied, though neither application fulfilled the requirements. Applications were again solicited in May 2020 and the same two operators applied. Both applications met the requirements, and the operators were issued permits: Lime received a permit on August 17, 2020 and Spin received a permit on September 7, 2020. The permit allowed each operator to deploy up to 50 scooters per day.

To facilitate scooter share integration into the North Highline community, scooter information and feedback opportunities were available in multiple languages from both the County and the operators. Lime and Spin offer their apps and call center support in multiple languages as well as an "Access" program for anyone already enrolled in a city, state, or federal low-income program to use scooters at discounted rates. The Access program also provides ways for users without smartphones or credit cards to unlock scooters. Further details about how language accessibility and the Access programs support the County's Equity and Social Justice goals are described in the Report Requirements section of this report.

From the first scooter deployment in August 2020, RALS monitored fleet size and location, the number of trips, and other key data points. RALS also worked with the operators to discuss program progress and outreach activities. Ridership in the pilot area was lower than other jurisdictions for both operators, as shown in Figure 9. COVID-19 pandemic social distancing requirements stunted the operator's traditional in-person outreach methods for rider education and helmet giveaway events.

During the pandemic, the operators pivoted their rider safety and education training to a digital format. Both operators provided opportunities to earn credits for participating in the trainings, and Spin sent

helmets to participants upon training completion. Spin also partnered with KCHA for streamlined enrollment of their residents in the Spin Access program and for free helmet distribution.

In addition to partnering with the KCHA, Spin promoted the Access program, helmet giveaways, and safe riding/parking educational content to Neighborhood House, Partner in Employment, The Salvation Army Seattle White Center Community Center, White Center Chamber of Commerce, WCCDA, the White Center Library and WorkSource Seattle-King County. Spin also presented at a WorkSource Seattle-King County Employer Voice virtual event to introduce Spin hiring opportunities and to promote Spin Access.

Scooter utilization in North Highline was consistently lower than in other jurisdictions, as detailed in the Report Requirements section of this report. Although Seattle issued scooter share permits to Lime and Spin in September 2020 and July 2021 respectively, which provided scooter users the freedom to travel across jurisdictions rather than just within the limited size of the pilot area, rides originating in the North Highline area remained lower than anticipated. The COVID-19 pandemic, civil unrest, and wildfire smoke warnings with public health recommendations to limit outdoor activities may have indirectly contributed to the low usage. More directly related reasons were collected in King County scooter pilot surveys where responses attribute low ridership to the lack of safe riding conditions, such as bike-friendly infrastructure, and the cost of using shared scooters. King County’s North Highline Community Service Area Subarea Plan, which collected community feedback between July 2019 and April 2022, also highlighted community interest around improving bike-ability and prioritizing safe bicycling options.⁹ The Subarea Plan is part of the King County Comprehensive Plan and is used to create a community needs list, which will inform King County’s budget development.

For some users, the cost of rides can be mitigated with the Access program. RALS and Spin both worked with KCHA to spread awareness about Access. More information about Access usage is included in the Demographics and Equity section of this report. Figure 3 shows the cost of a common ride, based on the combined median trip duration of eight minutes and seven seconds for both operators, for users with and without the Access program:¹⁰

Figure 3 - Scooter Operator Rates

Lime Standard Cost	Lime Access Cost	Spin Standard Cost	Spin Access Cost
\$4.51	Five free 30-minute rides per day, 50% off thereafter	\$3.25	\$1.49

When Seattle ended its scooter share pilot and incorporated scooters into its micromobility program, Seattle conducted a new permitting process and Spin was not awarded a permit to operate in Seattle. In May 2022 Spin pulled scooters from the County’s pilot area telling RALS that ridership in North Highline alone, without Seattle, was not sufficient to sustain area operations and that they were experiencing

⁹ 2022 Update to 2016 Comprehensive Plan - King County Attachment C: North Highline Community Service Area Subarea Plan, <https://tinyurl.com/ys6kyhk6>, pages 53, 128, 150 (accessed November 2022)

¹⁰ Rates shown reflect the rates that were in effect May 2022. Operators could change rates during the pilot. The estimated cost of a trip, as identified in the above table, includes a \$0.22 per-trip fee for standard trips and an \$0.11 per-trip fee for Access trips established as part of the limited-use permit issued to each scooter share operator. For trips taken on a scooter provided by Spin, Spin absorbed the per-trip fee for both standard and Access fares, though the above table includes the fee.

staffing issues, but that they were attempting to find ways to remain in the area. In August 2022, however, Spin informed RALS they were withdrawing from the County’s scooter share pilot program.

Industry Trends

RALS participates in micromobility webinars and forums, and reviews micromobility news sources to keep abreast of activities in other jurisdictions and the evolution of the industry. Notably, in 2022, Seattle moved its scooter share pilot to a full program. Worldwide, industry news often focuses on safe riding, parking, the environmental impacts of micromobility versus other forms of transport, and multi-modal trip planning and payment integrations.

To address safety concerns, common actions taken by operators or local municipalities include holding helmet giveaways, encouraging users to take helmet selfies in-app for a ride discount, and lowering the maximum scooter speed.¹¹ Another safety feature in development is sidewalk riding detection, which may use computer vision, vibrations, and AI to detect when a rider is on a sidewalk and either sound an alarm or slow the scooter to a stop to deter riding on sidewalks where they are typically not allowed. Spin was early to add this feature, though the technology is still evolving to improve accuracy, which may broaden adoption.

Some transportation professionals posit that the larger solution to scooter safety is more abstract – that cars are actually more dangerous than scooters, but car crashes get less attention because cars are a normalized concept and dominate transportation design, whereas scooter crashes get more attention because scooters are the new transportation disruptors that people are less accustomed to.¹²

A common complaint about dockless shared scooters is that they create a nuisance or even hazardous sidewalk conditions due to irresponsible user parking or relocation of devices by other members of the public. Some jurisdictions are revisiting parking policies, such as requiring in-app parking pictures before ending a ride, creating parking zone incentives, or designating parking zones. Parking zones do not have to be a fixed structure requiring installation, but can be virtual stations with simple sidewalk or curb markings and geo-fenced zones in the apps, such as those implemented by Sound Transit and those used in Stockholm’s bike share system.¹³

Another approach to taming unruly parking, theft, and vandalism that some jurisdictions, including Portland, Oregon, are testing is a “lock-to” requirement where the operators attach a lock to each scooter. In this model, users must lock the scooter to a fixed object, such as a bike rack, when they end their ride. Lime told RALS in January 2023 that, of the 250 worldwide jurisdictions they serve, approximately 70 of the jurisdictions, or 28 percent, have some sort of mandatory parking requirement in at least part of the jurisdiction. Less than 10 of those 70 jurisdictions use a lock-to model.

¹¹ One of many articles on Paris scooter speed limits, “Paris asks scooter sharing services to restrict speed to 10 km/h”: <https://tinyurl.com/mr5pmeps> (accessed November 2022)

¹² International Transport Forum’s Safe Micromobility Report: <https://tinyurl.com/nheyp6zt>; article by a civil engineer “Those E-Scooters Might Not Be as Dangerous as You Think”: <https://tinyurl.com/5a9cpdv3>; Forbes article on car bias “Why Are Slow Rental E-Scooters Speed-Regulated In Cities But Fast Motor Cars Are Not?”: <https://tinyurl.com/2p823228> (all accessed November 2022)

¹³ Article “Stockholm Thinks It Can Have an Electric Bikeshare Program So Cheap It’s Practically Free”: <https://tinyurl.com/bdhcsx86> (accessed November 2022)

Shared scooter operators, among others, frequently tout scooters as a green alternative to cars. Others, however, assert that scooters are not as green as originally thought, pointing to the energy used to make, collect, charge, and deploy scooters, as well as their short life span. Mode replacement, or how the trip would have been taken if not on a scooter, is also a factor in calculating emissions. Micromobility user surveys throughout North America show that while 37 percent of micromobility trips replaced car trips, 37 percent replaced walking trips and 10 percent replaced transit trips.¹⁴ More research is underway to determine if the car trips replaced are longer distances than the walking trips replaced and, thus, a net improvement in emissions. One study of six cities, including Seattle, shows that shared e-scooters and e-bikes can reduce net carbon emissions.¹⁵

Report Methodology

Each operator provided the County access to their trip information dashboards. RALS contracted with a third-party data aggregator to combine data feeds from both operators into one data dashboard to monitor program performance. For data points that are not available through the dashboards, RALS contacted the relevant party to provide the information, such as the King County Sheriff's Office (KCSO) regarding safety incidents and operator staff regarding Access program usage.

The Public and Community Feedback section of this report details the three community surveys RALS conducted as part of the public and community feedback required by Ordinance 18989. The first survey was conducted in fall 2020, just after the start of the pilot period, to gauge how the community is responding to the presence of scooters. In Winter 2021, the second survey gauged community adoption and asked how the program may be improved. The third survey, conducted in Summer 2022, assessed whether opinions have changed.

RALS staff developed this report.

Report Requirements

This section is organized to align with the requirements of Ordinance 18989.

A. Scooter Usage

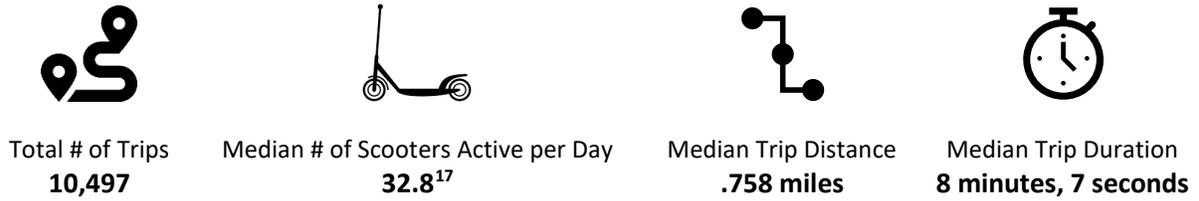
The following aggregated data points fulfill the scooter usage report requirements in Ordinance 18989. The data is for the period January 1, 2021 to December 31, 2022. Although the pilot began in August 2020 and ended March 31, 2023, the period of January 1, 2021 to December 31, 2022 is used for data points in this report. Many micromobility programs experience a spike in utilization after launching the program when the community is curious about the devices. Not including the early months of the pilot provides a better representation of long-term utilization. Also, due to seasonal weather affecting ridership, as shown in Figure 7, reviewing data for the full two years also provides an even spread of seasons.¹⁶ Figure 4 shows several data points of scooter use.

¹⁴ NABSA 2021 Shared Micromobility State of the Industry Report, page 5, <https://nabsa.net/2022/08/03/2021industryreport/> (accessed November 2022)

¹⁵ Fraunhofer Institute for Systems and Innovation Research's report "Do shared e-scooters and e-bikes reduce the emissions of urban transportation systems?": <https://tinyurl.com/3cu6bbyp>. Note the Fraunhofer study was commissioned by Lime, as noted in STREETS BLOG USA article "Research: Scooters Cut Car Travel and Emissions More Than Previously Thought": <https://tinyurl.com/59hxcv2x>. (both citations accessed November 2022)

¹⁶ The total number of trips taken during the pilot period was 12,709.

Figure 4 - Scooter Use Stats January 1, 2021 to December 31, 2022



As illustrated in Figures 5 and 6 below, scooters in the pilot area were most used in late afternoon through evening (3:00 PM to 8:00 PM) and least likely to be used in the early morning hours (1:00 AM to 8:00 AM). Scooter use was fairly even throughout the week, with Friday being the peak riding day.

Figure 5 - Trips by Hour January 1, 2021 to December 31, 2022

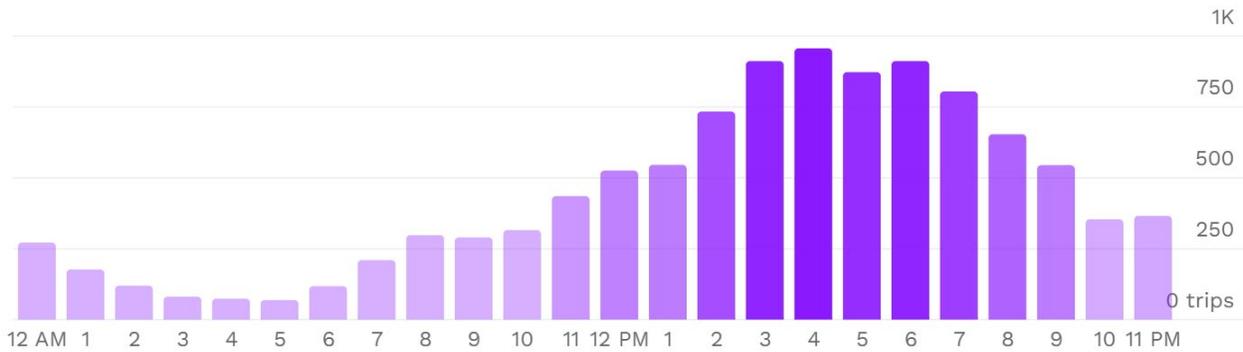
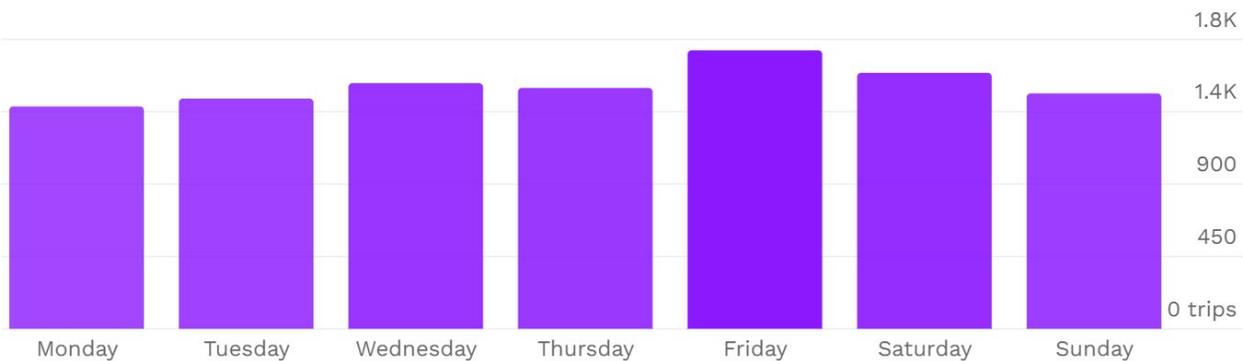


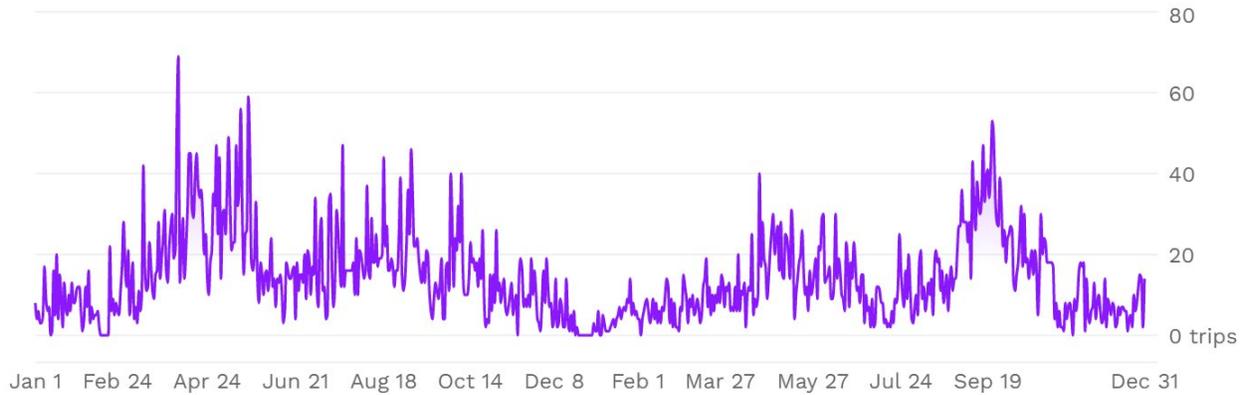
Figure 6 - Trips by Weekday January 1, 2021 to December 31, 2022



¹⁷ 32.8 is the median active scooters for January 1, 2021 to May 31, 2022, when both Lime and Spin scooters were available. The median available scooters from June 1, 2022 to December 31, 2022 decreased to 9.9, since only Lime scooters were available.

Consistent with data from other jurisdictions, scooter activity shows seasonal trends.¹⁸ Figure 7 shows more trips during spring and summer and a decline in trips during the winter months:

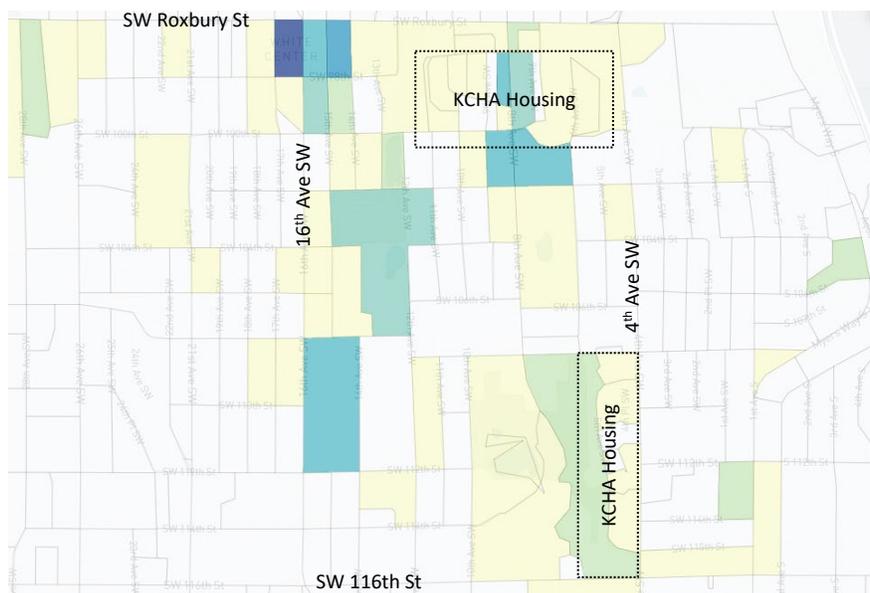
Figure 7 - Trips by Date January 1, 2021 to December 31, 2022



Each day there were typically 33 scooters available for use and up to two scooters that were unavailable for various reasons, such as low battery or maintenance.

The heatmap of scooter deployments in Figure 8 shows that scooters were typically deployed along bus routes, particularly SW Roxbury St, 8th Ave SW, 15th Ave SW, and 16th Ave SW and near businesses and places with higher housing density such as apartment buildings. They were not often available in the residential areas to the west and east of the White Center core.

Figure 8 - Deployment Heatmap January 1, 2021 to December 31, 2022



¹⁸ A few cities with open data sets that show the seasonal ridership trend similar to King County's Figure 7 are Seattle <https://tinyurl.com/yy92yn5c>, Portland <https://tinyurl.com/5n7bjkvv>, and Chicago <https://tinyurl.com/w56bvuan>.

The most common trip routes align with the same streets where they are deployed. It is unclear if these routes were popular because they are located where the need is or because they are where scooters have been deployed and are more readily available. RALS encouraged the operators to deploy scooters more broadly throughout the pilot area to test if access to scooters in the more residential portions of the pilot increased usage, but that effort did not significantly change deployment.

Scooter utilization is a measure of how often a scooter is used per day, per scooter deployed, and available for use. The utilization rate can be used to help analyze demand and determine optimal fleet deployment. Utilization is a key component to achieve business sustainability, though the “right” rate varies between operators and locations. In an article about infrastructure and regulation of micromobility, Zoba, a technology firm working with micromobility companies toward fleet optimization, says that “each bike or scooter in the fleet needs to be ridden about three times a day to get the business to pencil out.”¹⁹ Input from one North Highline operator was two trips per scooter per day in North Highline is what was needed for the pilot to be sustainable for them. Actual utilization in North Highline for both operators for the two-year period from January 1, 2021 to December 31, 2022 was 0.48 trips per scooter per day.

Looking at scooter share programs in other jurisdictions provides helpful context when considering the utilization rates and the trip distance for the County’s pilot.²⁰ Figure 9 shows the utilization rates of local programs and the North American Bike share & Scooter share Association’s (NABSA) 2021 North American survey for both small North American cities and all North America.

Figure 9 - Utilization Rate Comparison

Jurisdiction ²¹	2021 Utilization Rate	2021 Trip Distance (miles)
All North American Scooter Programs (NABSA)	1.9	1.3 (average)
Small Cities (<200K people) within all North American Scooter Programs (NABSA)	1.0	[Not available]
Seattle Scooter Share Pilot Program	1.4	1.3 (average)
Redmond Scooter Share Pilot Program	0.79	0.7 (median)
North Highline Scooter Share Pilot Program	0.37	0.7 (median)

B. Complaints and Incidents

In accordance with report requirements of Ordinance 18989 regarding complaints and incidents, the following information is provided based on reports received by RALS and information RALS received

¹⁹ GovTech article “Infrastructure, Regulation Stand Between Micromobility and Success,” <https://tinyurl.com/46jxvbm> (accessed January 2023)

²⁰ Ride Report, a data aggregator, hosts a Global Micromobility Index for the public to compare shared micromobility metrics from participating jurisdictions. The “TVD avg” column shows utilization. Looking at the “Vehicles avg” column is a simple way to locate a jurisdiction of similar size to North Highline to compare utilization. <https://public.ridereport.com/>

²¹ Seattle’s scooter share data is available at <https://tinyurl.com/2sxbbtfs> and NABSA’s data is on pages 10 and 12 of the report available at <https://nabsa.net/about/industry/>, (both sites accessed November 2022). The City of Redmond staff emailed their utilization and median trip distance to RALS staff, but the information is not available online to cite here.

from KCSO, DPH, and the operators. It should be noted that KCSO and DPH do not track scooter incidents as a distinct category, so there may have been incidents involving scooters that were not reported to RALS and that were not separately tracked by other agencies. Overall, the number of reported problems with shared scooters was low, as shown in Figure 10, and very few safety incidents were reported.²²

Figure 10 - Complaints Received

Complaint Recipient	Operator	Description	Resolution
RALS	Lime	Scooters deployed south of pilot area in Burien in October 2020	Lime discovered a geofencing issue and corrected the deployment map
RALS	Spin	Damaged scooter found in Sea-Tac in October 2020	Spin went to pick it up immediately
King County Parks	Lime and Spin	Notified operators several times to move scooters early in the pilot period	Operators improved deployments and retrievals
Lime	Lime	Three complaints of scooters found south of pilot area in Burien in fall 2020	Lime took several days on average to pick them up due to an issue in their tracking system routing the complaints to their Washington D.C. team rather than Seattle, Washington, which was corrected, as was the rider operating zone boundary
Lime	Lime	Three maintenance reports in fall 2020	Each scooter was immediately locked (unrentable) and retrieved within 24 hours
Spin	Spin	Seven parking relocation requests	Average response time of 98 minutes in 2021 and 79 minutes in 2022, within the required response time of two hours for non-hazard parking issues

Between the two operators, a total of 63 scooters were lost or destroyed due to either wear and tear or vandalism.

C. Demographics and Equity

Ordinance 18989 requires analysis of equity impacts of the scooter share pilot program. This analysis is essential to evaluating the success of the scooter share pilot. Transportation and mobility are pro-equity policy components in the County’s Equity and Social Justice Strategic Plan, which cites an effort to “create broader and more meaningful access to transportation through improved engagement with communities and provide translations into many languages.”²³

²² See footnote 2 in the Executive Summary section for details on safety incidents.

²³ King County Equity and Social Justice Strategic Plan 2016-2022, page 45, <https://tinyurl.com/rltu6lg> (accessed May 2023)

One determinant of equity listed in King County’s “Fair and Just” Ordinance 16948 is “transportation that provides everyone with safe, efficient, affordable, convenient and reliable mobility options including public transit, walking, carpooling and biking.”²⁴ Through the efforts described below, RALS strived to create a scooter share program with no gaps to access for any person in the community.

According to King County demographic maps,²⁵ the most common languages other than English in the pilot area are Spanish and Vietnamese. Demographic information from WCCDA²⁶ and Metro²⁷ also show Spanish and Vietnamese as the top non-English languages spoken in the area.

The scooter share program contract requires scooter use information and customer service to be available in multiple languages commonly spoken in the North Highline area. Between the two operators, scooter user interfaces were offered in more than 30 languages, including Spanish (Lime and Spin) and Vietnamese (Spin).

King County’s scooter share program website and online feedback forms are available in English, Spanish, and Vietnamese.²⁸ RALS provided a summary handout in these three languages to Parks, KCHA, and other entities to share with the community if their staff were approached for information. Additionally, King County’s 2021 and 2022 scooter pilot program surveys were available in all three languages. Seventy-four percent of respondents took the 2021 survey in English, 19 percent in Spanish, and 7 percent in Vietnamese. Ninety percent of respondents took the 2022 survey in English, 4 percent in Spanish, and 1 percent in Vietnamese.

For security and privacy, neither Lime nor Spin collect user demographic information. King County’s pilot surveys collected respondent demographics. The summer 2022 survey garnered about the same number of responses (205)²⁹ as the winter 2021 survey (208), but more of the Summer 2022 respondents (54 percent) had used shared scooters than respondents of the Winter 2021 survey (16 percent). The following charts in Figure 11 show the demographics of the summer 2022 survey respondents who have used shared scooters with comparison points noted from King County’s North Highline Community Service Area Subarea Plan (cited in the Community Context section of this report).

²⁴ King County Ordinance 16948, <https://tinyurl.com/uk3j4mk> ²⁵ King County Languages Spoken demographic maps based on the 2016–2020 American Community Survey 5 Year Average provided by the Census Bureau, PDFs and interactive Census viewer, <https://tinyurl.com/y3bfy5p8> (accessed October 2019)

²⁵ King County Languages Spoken demographic maps based on the 2016–2020 American Community Survey 5 Year Average provided by the Census Bureau, PDFs and interactive Census viewer, <https://tinyurl.com/y3bfy5p8> (accessed October 2019)

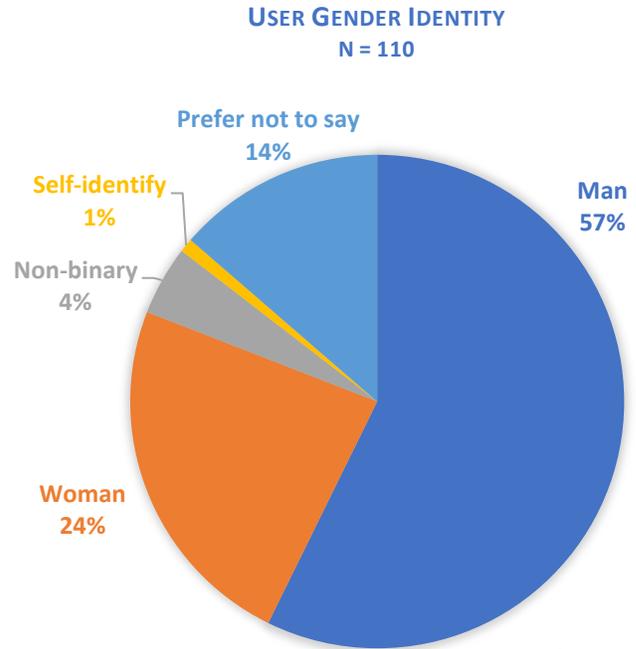
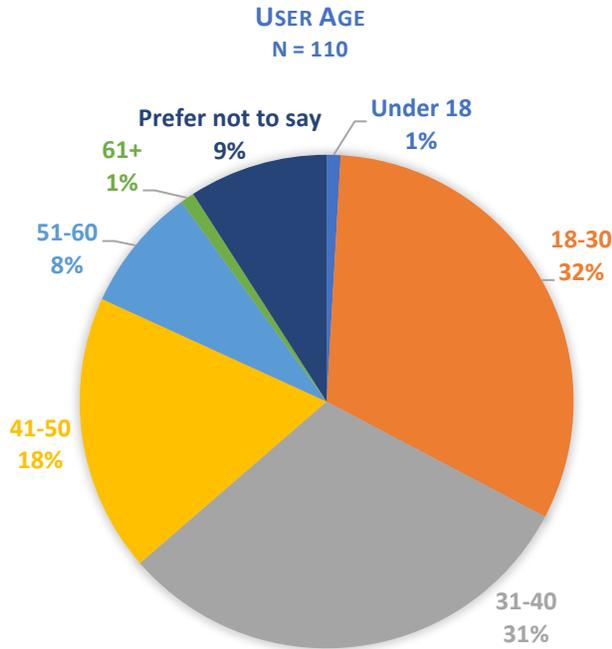
²⁶ WCCDA 2017 Community Survey Report, page 5, <https://tinyurl.com/y46n9uyr> (accessed October 2019)

²⁷ Metro conducted community engagement for the 2021 launch of RapidRide H Line that travels along Delridge in West Seattle, through White Center, and into Burien. Metro shared the full engagement report with RALS showing the language analysis by census tract. The full report is not available on a website, though engagement information that is available to the public (<https://tinyurl.com/35k2jz2r>) shows translation and interpretation in Spanish, Vietnamese, Somali, and Khmer (Cambodian), as was determined in the full report.

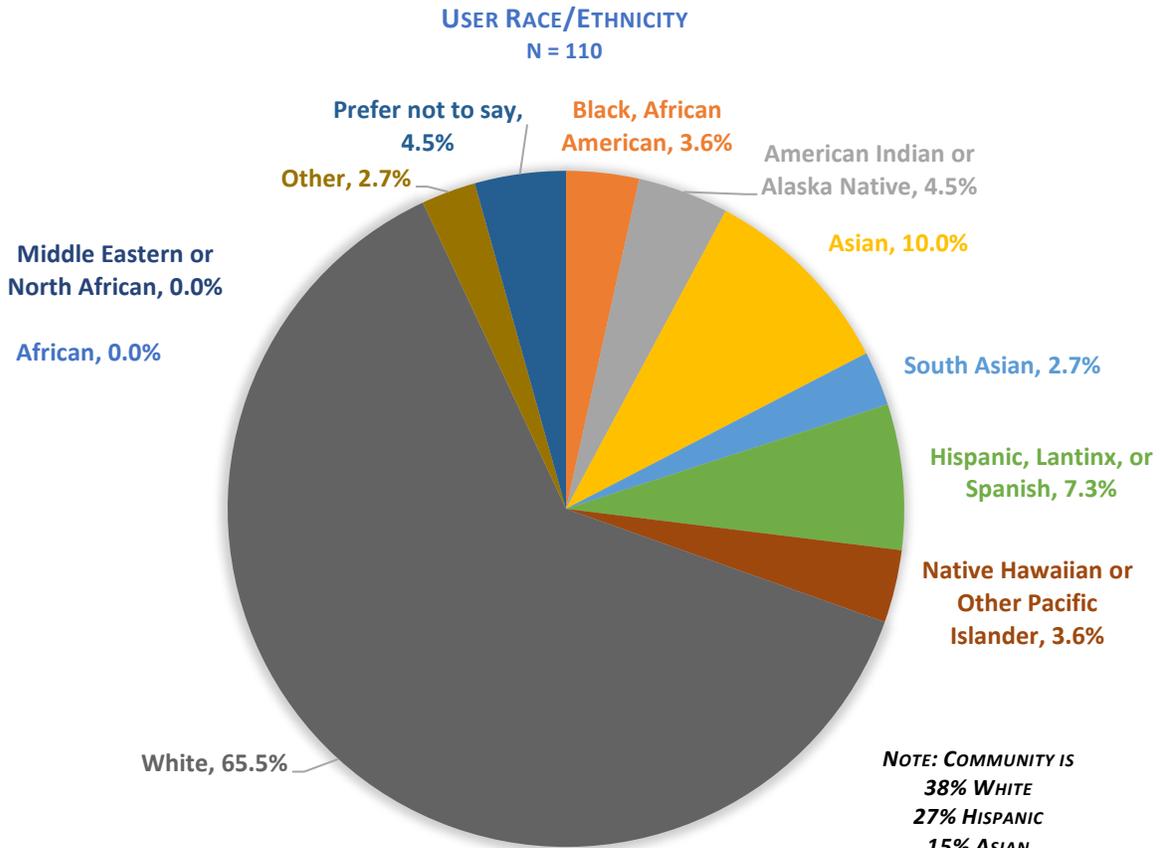
²⁸ The English website is: www.kingcounty.gov/scooters and links to the [Spanish](#) and [Vietnamese](#) versions are in the upper right corner (or under the introductory paragraph when viewing on a mobile device).

²⁹ 383 respondents started the survey, but 109 only answered the first question, so they are not included in the results. Also not included in the results are 69 respondents whose responses noted they were not familiar with White Center/North Highline and were completed after Lime pushed the survey to app users, so RALS suspects there was a flaw in Lime’s logic for who received the push notification. 383-109-69=205.

Figure 11 - Summer 2022 Survey Demographics



NOTE: COMMUNITY IS 50% MALE



**NOTE: COMMUNITY IS
38% WHITE
27% HISPANIC
15% ASIAN
10% AFRICAN AMERICAN
10% OTHER**

Summer 2022 survey respondents who used a scooter are more than 65 percent white, more frequently identified as male than other genders, and skewed a little younger than respondents who do not use scooters (note that Lime and Spin require users to be 18 years or older). Each of these demographics of scooter users from the survey are a higher proportion than the community as whole. The North American Bikeshare Association (NABSA) also reports overrepresentation of whites, males, and adults aged 18-44 in micromobility users in surveys throughout North America.³⁰ Keeping in mind these trends come from people who chose to respond to a survey, rather than all micromobility users, RALS recommends putting forth more effort to engage BIPOC communities, and people who identify with genders other than male, to see if micromobility can appeal to a broader portion of the community.

The pilot program contract also included a requirement for operators to have at least one method by which a user without a smartphone, bank account, or credit card can rent a scooter. Operators were required to explain how they meet the language and equitable access requirements in their applications.

Lime and Spin each offered significant discounts of 70 percent or more to anyone enrolled in a city, state, or federal low-income program through their Access programs. Users register for Access on the operator's website by uploading proof of enrollment in the low-income program. In addition to discounted rides, Access users can also unlock scooters via text message if they do not have a smartphone and can load funds onto their account either with a pre-paid debit card or with cash at select locations. Since the start of the pilot, Spin had 11 users register for Access who completed 69 rides and Lime had seven users register for Access who completed 950 rides.³¹

In addition to ensuring shared scooters are equitably available to whomever would like to use them, program requirements also strive to limit negative impacts to the community with several components regarding safety and parking. For example, to keep sidewalks clear and safe for use for pedestrians and people using wheelchairs or other mobility assistance devices, the program includes requirements to limit riding or improperly parking scooters on sidewalks, as well as methods to quickly remedy the situation if it does occur. Using geo-fencing technology, "No Parking Zones" were established to restrict users from ending a scooter ride within an 80-foot buffer area of all bus stops in the pilot area, to limit scooters from blocking transit users getting on and off buses.

D. Connections to Transit

Access to a shared scooter can play a key role in the first or last mile connection to transit. Ordinance 18989 requires this report to include whether scooter usage has impacted transit ridership. There are no major transit hubs in the North Highline area, but scooters were typically deployed along the bus routes in White Center, as described in the Scooter Usage section above.

Access to scooters at transit stops allows transit riders the option to take a scooter to their next destination after getting off a bus at a transit stop; alternatively, transit riders could also take a scooter from their origin in White Center to a transit stop to board a bus. The availability of scooters along these routes did not demonstrate a notable impact on transit ridership. However, this finding may not have the same implications as it would in non-pandemic conditions when fewer people are working from

³⁰ NABSA 2021 Shared Micromobility State of the Industry Report, page 7, <https://nabsa.net/2022/08/03/2021industryreport/> (accessed November 2022)

³¹ Lime states that North Highline Access users may be registered to Seattle, rather than North Highline.

home, more people are commuting to work, and when bus routes that were suspended during the pandemic return to service.

The “reserve” feature in the operator app is one way to incorporate scooters into a commute. A user can check the scooter app ahead of time, such as while they are on a bus, to see if there is a scooter near their connection and reserve that scooter to guarantee it will be available where and when they need it. However, this feature is not free, and the user must pay for the time the scooter is on reserve.

As an incentive to transit commuters, Spin offered users \$1 off their next ride when they park in specific areas near Metro bus stops (serving routes 131 and 120) referred to as “Preferred Parking Spots.” The assumption was scooters facilitate access to transit and destinations in White Center, such as shops and other businesses, near the bus stops. Spin reports that 24 percent of trips during their participation in the pilot ended in a Preferred Parking Spot.

From developing the program requirements to ongoing assessment of the pilot, RALS continuously collaborated with Metro to align the scooter program with larger transit goals, such as: envisioning all travel modes available in one app for route planning and payment, sharing Lime and Spin Access program information with ORCA LIFT customers, ensuring scooters do not block access to buses at stops, and mobility hubs. One example of integrated multi-modal trip planning is Transit, a smartphone app not affiliated to any one jurisdiction, entity, or travel mode. In Transit’s app, users can plan and connect to shared micromobility, public transit, and transportation network company options as part of their transportation journey in cities throughout the world.³²

In King County Metro’s long-range plan Metro Connects, Metro has committed to supporting non-motorized, multimodal access to the transit system. In addition to identifying future investments to provide more secure bicycle parking and improve pedestrian access, Metro has worked with Sound Transit on Sound Transit’s micromobility device parking pilot, which establishes 13 preferred parking zones near transit connections where customers can leave and find shared bikes or scooters while minimizing potential mode conflict (pedestrian circulation, bus zones).³³

Metro has also integrated micromobility providers within its Transit Go Tickets Rewards Program, which allows customers to earn rewards points for transit-oriented behavior such as purchasing and using a digital Transit Go ticket on the bus, light rail, ferry, or streetcar, and redeem those points for mobile transit tickets or credits to local micromobility services. Through Metro’s Bike and Scoot to Transit Pilot, micromobility users ending their trips at select transit hubs receive incentives such as free transit tickets and rewards points for future trips. This pilot encourages multimodal behavior by providing transit customers an opportunity to incorporate micromobility options into their trip planning and remove a potential financial barrier to micromobility options. As micromobility providers expand their service area in the region, Metro and Sound Transit will continue working with the jurisdictions that permit micromobility devices on providing transit customers opportunities to incorporate micromobility into their transit trips.

³² www.transitapp.com

³³ Sound Transit “Scooting and biking to transit are now more convenient than ever”, <https://tinyurl.com/3r74b764> (accessed January 2023)

To continue facilitating multimodal access to transit, Metro plans to develop a network of mobility hubs. Mobility hubs are dedicated spaces at major transit locations where transit customers can reliably complete their first or last mile trips on modes available in the area. This work builds on the existing expansion of managing access to major transit stops with on-demand bike lockers that provide more secure bike parking at transit centers, on-demand flexible services like Via and Ride Pingo, and ongoing collaboration with jurisdictions that permit bike share, scooter share, and car share services. Expansion of shared mobility in King County will allow transit customers more flexibility in how they can enter the transit network and reach their final destinations. A potential King County shared mobility program would provide Metro more options to include when planning for updating and retrofitting transit hubs to improve access to transit.

E. Public and Community Feedback

Ordinance 18989 required RALS to gather public feedback throughout the pilot period. RALS provided a variety of opportunities for feedback and engaged the Department of Local Services, WCCDA, KCHA, and Evergreen High School to spread awareness of these opportunities.

King County’s scooter share pilot program website is available in English, Spanish, and Vietnamese and includes a webform in all three languages for the public to submit feedback about the program. Only three webforms regarding the North Highline pilot were submitted during the pilot period, all in English:

- A suggestion the County should have done more community outreach ahead of the launch;
- An opinion that the scooters are like litter and are dangerous; and
- A message supporting a permanent, expanded scooter program.

RALS also received general feedback from both KCSO and Parks that none of the people they have seen riding scooters were wearing a helmet, although they did not often see the scooters in use. Both agencies suggested the lack of micromobility-friendly infrastructure (such as bike lanes, paved shoulders, or level road-to-shoulder transitions) in the North Highline area as a likely contributor to low usage, in addition to the cost of using the scooters.

During the first two months of the pilot period, the County hosted a community survey to gather input on how the scooter pilot will be received by the community. The survey was anonymous, provided in English,³⁴ promoted on Facebook and Twitter, and received 43 responses. Key points include:

- The demographics of the respondents were not representative of the community as a whole, with the majority of the respondents saying they are white³⁵ and all but one said English is their preferred language.³⁶
- 31 of 43 respondents said they would not ride a scooter and, while some cited safety and clutter issues, the majority cited general angst about the scooter program as their main concern.

³⁴ Identifying a survey platform that could accommodate multiple languages was delaying launching the survey, so RALS made the decision to launch the first survey in English only to prevent further delays that could have led to missing the opportunity to capture feedback at the beginning of the pilot. A new survey platform was identified shortly thereafter, in time for the second pilot survey.

³⁵ In response to the race/ethnicity question, 19 respondents selected “White,” 12 selected “Prefer not to say,” and the other 12 respondents represented a wide mix of other race/ethnicities.

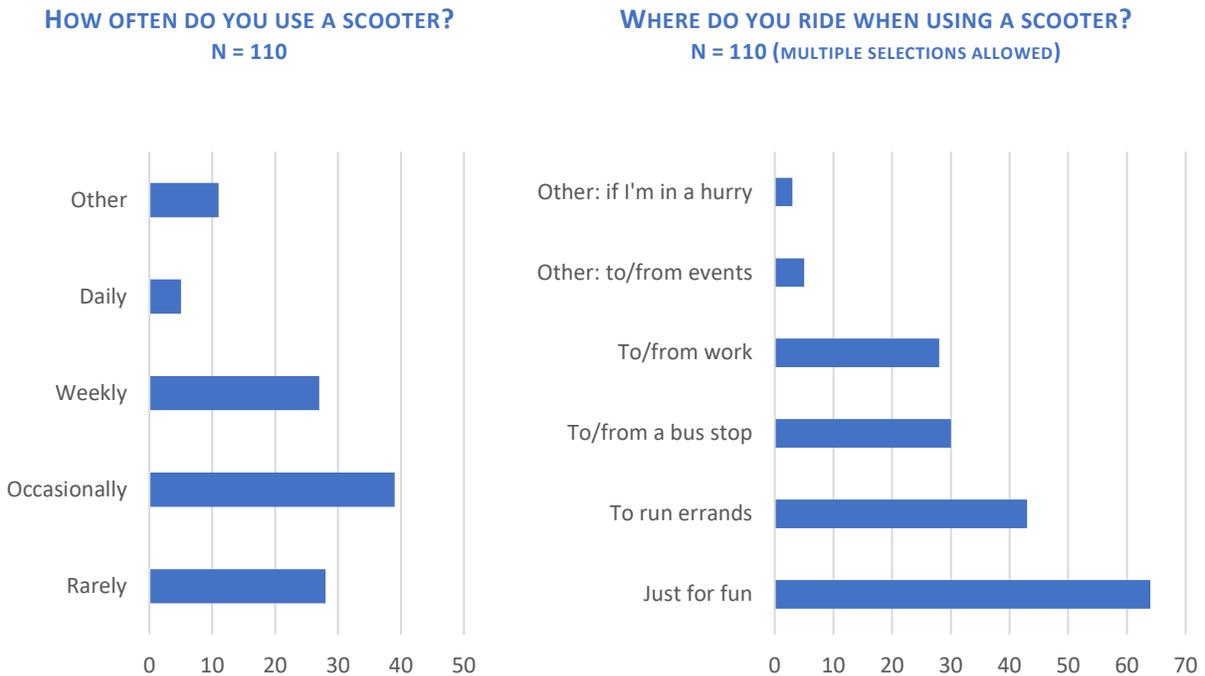
³⁶ For comparison, Metro Transit’s RapidRide H Line Public Engagement Report also describes the majority of their survey respondents in the greater White Center area were white/Caucasian English speakers, despite their online survey offering real-time translation into 101 languages.

- Of the 12 respondents who said they would use a shared scooter:
 - Most cited three key benefits of scooters: reducing environmental impacts, being able to get around without a car, and that they're fun.
 - In response to what kinds of trips they would use scooters for, only three said to/from a bus stop, none said to/from work, and the most common was to/from stores or restaurants and social activities.
 - The top responses for how these trips would be made without a scooter were personal car and walking, with bus and for-hire transportation cited a few times each.

RALS conducted a second community survey in winter 2021 to assess whether opinions had changed and asked how the program may be improved. The survey was anonymous, available in English, Spanish, and Vietnamese, and was promoted on Facebook, Twitter, and through the Lime and Spin apps. Of the 208 responses, 74 percent completed the survey in English, 19 percent in Spanish, and 7 percent in Vietnamese. More respondents identified as Hispanic and Asian for this survey than for the first survey, though not enough to align with the demographics of the community as a whole. Consistent with the first survey, a common sentiment emerged that the shared scooters are a safety and clutter nuisance.

Figure 12 includes several charts, each representing the responses to questions in the summer 2022 survey. Similar to the winter 2021 survey, in the summer 2022 survey the majority of survey respondents who have used a shared scooter in North Highline said they used scooters “rarely” or “occasionally,” though there was an increase in “weekly” responses. In the summer 2022 survey, the top responses to “Where do you ride when using a scooter?” were “Just for fun” and “To run errands,” which were also the top responses in the Winter 2021 survey. In the Summer 2022 survey, 80 percent of respondents indicated the availability of shared scooters has improved the way they get around, which is an increase from 60 percent over the Winter 2021 survey.

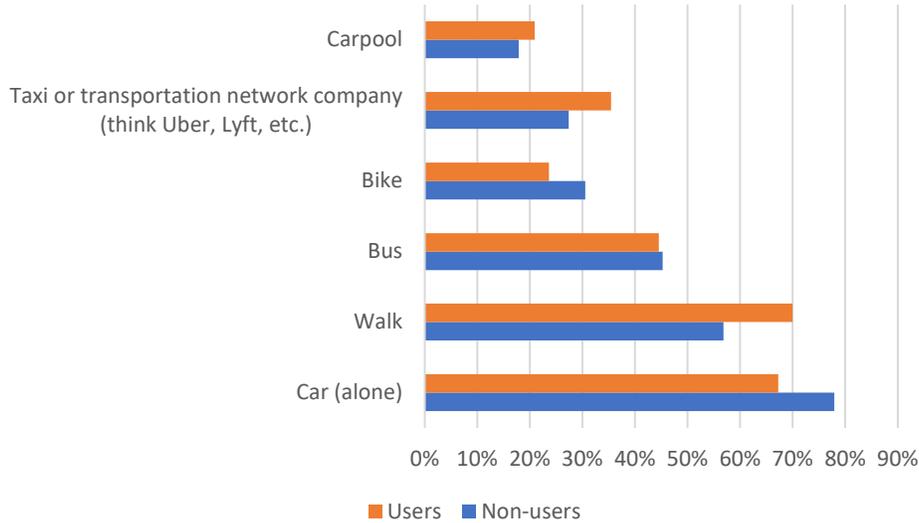
Figure 12 - Summer 2022 Survey Responses



Prior to the availability of shared scooters and the COVID-19 pandemic that brought many changes to daily routines, scooter users more often walked, used for-hire transportation, or carpooled than those who do not use scooters.

PRIOR TO THE COVID-19 PANDEMIC, HOW DID YOU GET AROUND?

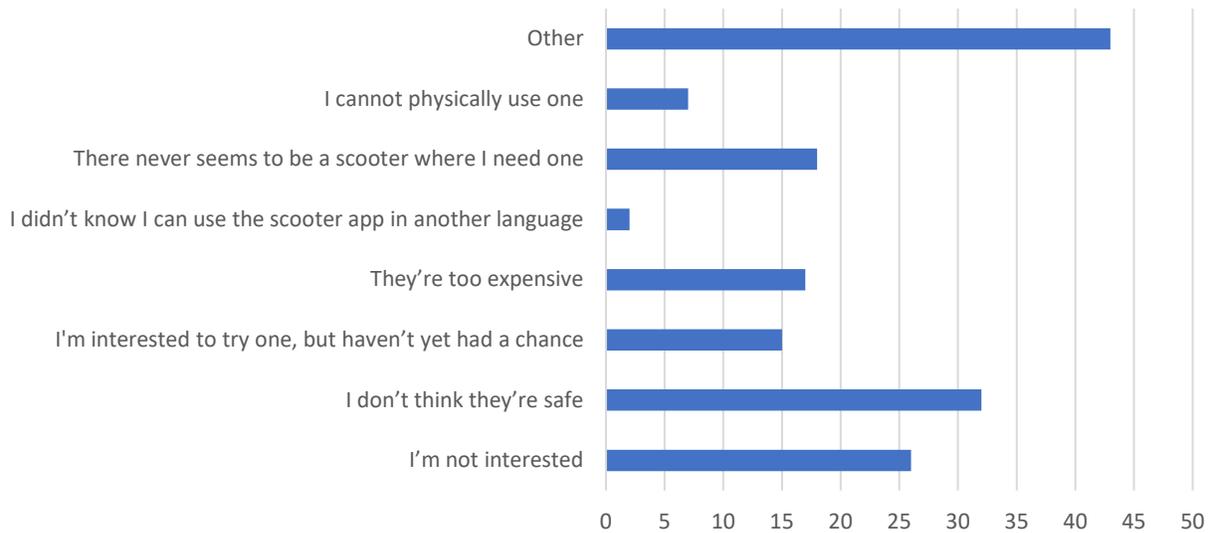
N = 95 (MULTIPLE SELECTIONS ALLOWED)



Of the summer 2022 survey respondents who said they had not ridden a scooter in North Highline, the top reason stated a concern about safety, as shown in the chart below. Among the “Other” responses, the most common reason provided was that the respondents have used shared scooters elsewhere, just not in North Highline, and second most common was that scooters are a nuisance.

WHY HAVEN'T YOU USED A SCOOTER?

N = 95 (MULTIPLE SELECTIONS ALLOWED)



In the summer 2022 survey, scooter users deemed scooters to be appropriately parked much more so than non-users.

<i>In general, are scooters parked responsibly (not blocking anything)?</i>	Users	Non-users
Usually	70%	37%
Sometimes they are blocking the sidewalk, an entry, or something else	17%	22%
They are often blocking a sidewalk, an entry, or something else	12%	39%

In both the winter 2021 and summer 2022 surveys, when asked if there is anything that could be changed that would increase use of shared scooters, better infrastructure (road quality, bike lanes, etc.) and cheaper/lower cost to use the scooters were common themes. In the summer 2022 survey, another common response involved availability, such as quantity, location, scooter condition, designated parking zones, and ease of use.

Overall, 63 percent of summer 2022 survey respondents thought the scooter program should continue, though riders were more than twice as likely to say so than non-riders (84 percent vs. 39 percent respectively). An additional 12 percent of respondents stated the program should potentially be continued if proper parking and safe riding can be improved and if vandalism and prices can be reduced.

F. Program Costs

Figure 13 shows the costs to the County related to the development, implementation, and administration of the scooter share pilot program through December 31, 2022.

Figure 13 - Program Costs

Item	Amount
Expenditures	
Staff time	\$155,660
King County decals for deployed scooters	\$ 426
Survey Monkey account	\$ 594
Legal notices and survey advertising	\$ 849
Data aggregator (2021 expense)	\$ 316
Translations	\$ 287
Total Expenditures (as of Dec. 31, 2022)	\$158,132
Revenue	
Application fees	\$ 1,000
Per-trip fees	\$ 2,352
Total Revenue (as of Dec. 31, 2022)	\$ 3,352
Net Costs	\$-154,780

Significant research and outreach were involved in establishing the County’s scooter share pilot program in North Highline. This included reviewing scooter share pilot programs and permanent scooter share programs locally and in other jurisdictions across the country. RALS reviewed local scooter share pilot

programs in the cities of Redmond, Tacoma, and Bothell to prepare the County's pilot. Seattle's scooter pilot planning timeline was similar to the County's, which created opportunities to discuss various program features to align where possible. RALS also reached out to programs in other major US metropolitan markets, including the cities of Portland (OR), San Francisco (CA), Oakland (CA), and Chicago (IL).

The County's North Highline scooter share pilot was small, based on geography and population, compared to all other jurisdictions reviewed. The time and work involved in planning and preparing for the North Highline scooter pilot, managing the Request for Proposal (RFP), administering the contract, and launching readiness efforts all contributed to the initial upfront investment needed for a successful pilot to be executed. The smaller size and temporary nature of the pilot did not lower the County's costs in establishing the program. Preparing the RFP, drafting the Scooter Share Contract, establishing appropriate types and levels of insurance coverage, considering data reporting standards and internal capacity for large data file analysis, setting up a web page, and drafting and negotiating a contract for a data analysis provider all required significant effort concentrated at the beginning of the pilot program.

Outreach to local cities, reevaluating contracts and agreements to support expanding the pilot and working through the process to expand the program into a partner jurisdiction also required significant time and coordination, and these elements will require more time and focus if the program is extended. In addition to the challenges expected when initiating a pilot program, the pandemic, social unrest, and evolving local priorities resulted in shifting schedules and delays that were difficult to anticipate before and, in some cases, during the pilot.

Although not strictly required by Ordinance 18989, RALS had a goal for the pilot program to be cost neutral, meaning the cost of program administration is offset by pilot program revenue. With this in mind, various administrative fees were considered to offset pilot program costs. As the pandemic escalated in early 2020, scooter share operators closed operations in many markets around the world. Companies involved in aggressive expansion efforts were curtailing their efforts, reducing spending, and working to survive. As a result of the shifting environment, RALS established a relatively low barrier to entry by intentionally keeping initial upfront and one-time fees low to make applying for the pilot appealing to shared scooter operators who were scaling back. Instead, RALS opted for an on-going per-trip fee model. This approach shares some of the risk associated with the upfront cost and creates a scalable revenue model where revenue increases or decreases with the growth or decline of program participation. However, the low ridership during the pilot program did not generate enough revenue to cover the County's costs.

One item not initially required for the scooter share pilot program, which would be necessary if the County implements an ongoing shared scooter program, is an environmental review through the State Environmental Policy Act (SEPA). *See* RCW 43.21C.030; WAC 197-11-704. A SEPA review, conducted with the assistance of a SEPA administrator, will be completed prior to transmitting an ordinance to authorize an ongoing mobility program.

Although the fees collected from the operators did not fully cover the cost of the program, a broader program approach could increase the number of trips, and under the same per-trip fee model, lead to greater program cost recovery. Understanding that onboarding partner jurisdictions and program refinement will take some additional time, the investments already made in program development,

drafting contracts and RFP documents, and building a web page can be leveraged for the larger program without a commensurate cost impact, while also gaining the added trip activity.

Regional Shared Mobility

Exploring Interlocal Agreements During the Pilot Program

In July 2021, the King County Council enacted Ordinance 19310 amending the original scooter share pilot Ordinance to authorize King County to enter into interlocal agreements with local jurisdictions to participate in the pilot. King County discussed the concept of a regional micromobility program with several cities and presented the concept to local inter-jurisdictional transportation groups including the SeaShore Transportation Forum, the Eastside Transportation Partnership, and the South King County Area Transportation Board, as well as to the scooter share operators permitted by King County.

The City of Shoreline was particularly interested in the regional approach and seemed eager to participate in the County's pilot scooter program. Shoreline delayed deciding to participate in the County's pilot scooter program until it completed more planning and community outreach to include micromobility in a more comprehensive approach to their transportation and mobility planning. Recent follow up discussions (January 2023) with Shoreline indicate continued interest in a regional program; access to micromobility options is now part of Shoreline's updated Climate Action Plan.

Other cities indicated interest, but ultimately did not move forward. The time between when the discussions took place and the end of the pilot was not sufficient to warrant the level of effort it would have taken those cities to enact the code updates necessary to participate in the County's pilot. Additionally, the County's pilot was limited to scooters. Some cities were seeking an option to include bicycles. Relatedly, car share has also been discussed with some cities as a beneficial addition to a shared mobility program.

Recommendation

King County's approach to providing local services regionally has been successful for animal services (24 jurisdictions), police services (13 jurisdictions), and for-hire transportation regulatory services (18 jurisdictions). During the scooter share pilot program, RALS started designing certain aspects of a potential regional scooter share program, including agreements and coordinating onboarding between the County, partner jurisdictions, and the scooter share operators, in anticipation of expanding the pilot. Although the expansion of the pilot program did not occur, the collaborative work and preparation was helpful in working to understand the issues and needs of a potential regional program.

Based on the findings described in this report and experience gained over the past three years combined with the success of providing certain local services on a regional basis, RALS recommends that the County implement a regional shared mobility program that includes scooters, bikes, and cars where the County partners with local jurisdictions via interlocal agreements to create a more sustainable and equitable program that is responsive to community needs and interests. A regional model that includes larger, more densely populated areas with expanded micromobility infrastructure and transit options is anticipated to increase utilization, and thus fees collected, and could help support the availability of shared mobility devices in traditionally underserved communities. Ultimately, a regional model that increases access to alternative modes of transportation without restricting travelers to the geographic

boundaries of a local jurisdiction, improves the overall desirability and usability of the alternative modes of transportation.

A regional approach to shared mobility has many benefits for all parties involved, including, but not limited to the benefits shown in Figure 14.

Figure 14 - Regional Micromobility Program Benefits

Customers	Cities	Operators	County
Expanded ride areas	Lower administrative cost	Standardized rules	Increased ridership
Improved trip planning	Strength in numbers	Economy of scale	Improved cost recovery
Consistent rules	First/last mile options	Lower administrative cost	Regional cooperation/integration
Integration with transit	Increased convenience for residents	Integration with transit	Opportunities for unincorporated areas

Part of establishing a regional program would include updating local laws to align with a regional standard. Operating hours, speed limits, helmet requirements, and prohibited operations are examples of where greater standardization would help improve the community experience with micromobility.

In a regional model that is dependent on partnerships with multiple jurisdictions, codifying the maximum number of permits that can be issued to service providers or a maximum fleet size is not recommended. The number of permits issued would depend on a number of factors, including but not limited to the types of devices, the number of interested operators, geographic location, and the characteristics of each participating jurisdiction. The program administrator should take into consideration the need for a competitive operating environment balanced by the need for a reasonable expectation by the operator for a return on their investment and their need for profitability.

In addition to the factors noted above, fleet size, or the number of devices authorized to be deployed, may vary and depends on input from service providers, participating local jurisdictions, and the County program manager. There is no known formula or proven method to determine the optimal number of devices. Managing the number of devices is largely a business decision; too many devices can result in greater capital expense and wasteful oversaturation.³⁷ Conversely, too few devices can result in reduced reliability for customers who may establish a pattern of use or preference that depends on the device being available when and where they would like to use it, which negatively impacts consumer demand and long-term mode adoption. Balancing the supply and demand of shared bikes, scooters, and cars is an ongoing effort and can be made even more complex when considering the impacts of weather, seasonality, events, and other factors. Rather than restricting the number of devices allowed by law, the program administrator should establish a limit on the number of devices allowed as part of the permitting process and include provisions for operators to request an increase based on information that indicates there is unmet demand and thus an increase can be supported.

³⁷ Article “Ride Cannibalization — The Invisible Force Eating Operator Profits”: <https://tinyurl.com/2ektpxj4> (accessed November 2022)

This proposed regional shared mobility model would be the first of its kind in the United States, according to multiple scooter operators and a micromobility data aggregator.³⁸

Policy Alignment

A regional shared mobility program supports goals, objectives, and strategies in the County's multiple strategic plans:

- Equity and Social Justice Strategic (ESJ) Plan³⁹: The transportation and mobility pro-equity policy agenda focuses on testing new ways to provide rural mobility and partnering with local jurisdictions to create alternative transportation options as they plan their community's transit, bike, and walk plans, particularly focusing on those who may rely on public transit or don't have access to cars.
- Strategic Climate Action Plan (SCAP)⁴⁰: The plan includes strategies for communities that have experienced a disproportionate burden from air pollution to see reductions first by creating micromobility improvements that allow first/last mile trips to and from transit and to accelerate electric vehicle adoption that prioritizes equitable access to shared mobility solutions, which car share can support.
- Metro Strategic Plan for Public Transportation⁴¹: To improve access to integrated mobility options and address the climate crisis, Metro's strategies include partnering with local jurisdictions to develop plans that use emerging mobility modes, such as bike and scooter share, that are safe, equitable, and sustainable.

In addition to strategic plans within King County government, the Puget Sound Regional Council (PSRC) adopted a strategic plan related to transportation, including references to improving mobility regionally through different strategies. These strategies include improving access to, and integrating with, alternative mobility options that enhance the overall mobility experience.⁴²

Next Actions

Continuing and expanding a micromobility program aligns with King County's ESJ, SCAP, and Metro strategic plan goals. The low number of complaints and safety incidents during the pilot program is promising, though low ridership may mean that the program is not sustainable just within the pilot area with limited options to travel outside the boundaries of a small unincorporated area. Despite the low ridership during this pilot, as well as the infrastructure and cost challenges that are necessary to

³⁸ The greater Boston area has a regional bike share system, though it is a different model. BLUEbikes is jointly owned and administered by each participating municipality and each municipality has its own contract with the operator, Lyft, whereas King County's model would be for the County to administer the program on behalf of partner jurisdictions and the partner jurisdictions would not have separate contracts with the operators.

<https://www.boston.gov/bluebikes>

³⁹ King County Equity and Social Justice Strategic Plan 2016-2022, page 45, <https://tinyurl.com/r1tu6lg> (accessed May 2023)

⁴⁰ King County 2020 Strategic Climate Action Plan, pages 63, 331, 239, <https://tinyurl.com/56538ftx> (accessed May 2023)

⁴¹ King County Metro Strategic Plan for Public Transportation 2021-2031, pages 41-43, 55-57, 59, <https://tinyurl.com/52f24suj> (accessed May 2023)

⁴² Puget Sound Regional Council Regional Transportation Plan 2022-2050 (May 2022), pages 16-17, 44-45, <https://www.psrc.org/media/5934> (accessed May 2023)

address, micromobility and car share presents opportunities to achieve multiple County goals for equitable, climate conscious transportation options. Recognizing that new technology and cultural norms take time to evolve, the increasing number of micromobility systems worldwide indicate there is potential to surmount micromobility's learning curve and make shared scooters, bikes, and cars as accessible and common as privately owned cars are in transportation routines.

The Scooter Share Pilot Program did not experience significant consumer demand or achieve cost recovery in the North Highline Urban Unincorporated Area. As such, one might reasonably conclude that a scooter share program is not viable in the foreseeable future, at least not in the pilot area alone. That said, the experience of administering the pilot program produced knowledge and expertise among County staff and provided tremendous insight about shared mobility and related technology, programs, and systems. County agencies that participated in the pilot program also benefited from the experience. New opportunities have emerged that can be leveraged to establish a more successful and enduring shared mobility program.

King County, as a regional government and provider of certain local services on a regional basis, is uniquely positioned to champion a regional shared mobility program. To pursue a potential regional model, the County needs at least one early adopter that is willing to work with the County to help establish and refine the process, and work through the initial program development details. If successful, one or more early adopters would help lead the way for other jurisdictions to join the program. This approach allows other jurisdictions to observe the new model and join the growing regional program if and when they decide to embrace shared micromobility devices or other shared transportation solutions, and that the regional program is the best model for their community.

Optimal timing for starting a mobility program that includes micromobility services is early spring, when weather and daylight hours are more conducive to outdoor activities. Given the timing of this report, the need for further planning and policy work, including transmitting and adopting an ordinance to authorize the recommended regional mobility program, access to program services may not be available until spring 2024 or later.

To develop and administer a new shared mobility program, a SEPA review process will need to be completed first. Based on the SEPA review findings, then an ordinance that authorizes the program, makes certain code changes, and includes appropriation authority, if any, for the program can be transmitted.

As the program administrator, King County would establish contract relationships with service providers for bike share, scooter share, and car share services. The service providers would be selected through the method that best meets the program needs, potentially via RFP, application, or other agency procurement processes. Contracts with providers would include insurance and indemnity requirements, options for low income and unbanked customer participation, data reporting standards, fees, enforcement, and other general operating rules. In addition, contracts will include the process for expanding service and onboarding partner jurisdictions when and if local jurisdictions join the regional mobility program. Before service could begin, a permit for operating in the public right-of-way would be required.

Interlocal agreements (ILAs) are authorized under Washington's Interlocal Agreement Act, RCW 39.34, which provides broad authority for local governments to contract with each other for services, including

the provision of local services for jurisdictions that enter into an ILA for those local services. In addition to establishing roles and responsibilities for the contracting parties, the ILA would authorize King County to issue operating permits to service providers on behalf of the respective local government, for the services authorized by the local government.

As ILAs are executed, RALS would work with the Department of Local Services (DLS) to consider similar services in unincorporated areas that are geographically adjacent to the local government that has executed an ILA for mobility services. RALS recommends that service in unincorporated King County should be subject to authorization by DLS, limited to the services available in the adjacent local government, and further limited to unincorporated areas where service can be supported by the contract service providers.

For car share services in unincorporated King County, RALS would work with DLS, and DLS will seek community input to determine where and how best to pursue such services. The implementation of car share service in unincorporated areas is not dependent upon a geographically adjacent local government first implementing such service because car share services may be more targetable to precise locations, for example, near medium or higher density housing, community centers, or central business areas. This includes single car deployments, compared to scooter share and bike share deployments that frequently are deployed in groups of two or more and in geographically broad areas of potential demand. Car share is also not subject to the availability, or lack thereof, of infrastructure such as bike lanes and road shoulders, or lower speed roadways, that create safer opportunities for bikes and scooters to operate.

To offset the cost of the regional mobility program, RALS recommends a per-use fee model where each service provider is charged a fee each time a particular shared scooter, bike, or car is used. At the discretion of the service provider, such per-use fees may be charged and collected from customers for each use of the shared vehicle. It is also recommended that each fee type be established by ordinance and for the ordinance to authorize the agency responsible for implementing the regional mobility program to adjust the fees as needed to cover the cost of the program.