

**Board Report**

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**PLANNING AND PROGRAMMING COMMITTEE  
MAY 20, 2020****SUBJECT: MOBILITY ON DEMAND PILOT PROJECT****ACTION: RECEIVE AND FILE****RECOMMENDATION**

RECEIVE AND FILE Mobility on Demand Pilot Project report.

**ISSUE**

In January of this year, Metro's Board of Directors accepted a contract extension to Metro's contract with Via, which is the current contractor providing service for the Mobility on Demand program. At that time, a motion was approved requesting a report back on the costs and benefits of the service.

After the January contract extension, ridership on the service continued to grow rapidly through the month of February and the beginning of March. At the end of March and April, the Covid crisis resulted in decreased Via ridership, by about 50%. During the same period, Metro bus ridership dropped about 60% and Metro rail ridership dropped about 75%. Metro has since worked with Via to make adjustments the service to meet shifting transportation demand for essential destinations, as well as use of available service capacity to serve related travel needs.

**BACKGROUND**

In January of 2019, Metro, in partnership with Via (Nomad Transit) launched a first last mile, on-demand partnership that was funded by a Federal Transit Administration (FTA) Grant for Mobility on Demand (MOD). The first year of the MOD Pilot increased mobility and decreased travel times for thousands of riders. The project met all Key Performance Indicators (KPIs), exceeded several KPIs and spent only 80% of the contracted budget amount. The Contract was extended in January of 2020 for six months, with an option to extend for an additional six months until January of 2021. To capture additional travel demand within the approved budget, the contract extension also expanded the service hours from 6AM-8PM on weekdays to 6AM-12AM on weekdays and 8AM-10PM on weekends, to be implemented in phases. In March of 2020, the outbreak of Covid-19 decreased ridership in the MOD Pilot, though MOD ridership decreased less than traditional Metro services and transit services world-wide.

## **DISCUSSION**

### Covid Response Service

Staff worked with Via to make three temporary emergency adjustments, which began in late March, just after the Safer-at-Home orders were announced. Via 1) suspended shared rides in support of social distancing; 2) began offering point-to-point services to accommodate essential trips beyond existing transit station destinations; and 3) added new essential destinations beyond zone boundaries.

These changes were implemented swiftly due to the flexibility of the contract and the private sector partner, and now allow essential trips to be made safely, predictably, affordably, and flexibly by folks without access to private options or frequent transit. Via communicated these updates to riders through emails and mobile push notifications, and Metro published an article to The Source.

The discontinuation of shared rides is an industry standard for compliance with social distancing orders. Drivers were instructed to follow all guidance issued by the Centers for Disease Control and wipe down all vehicle surfaces before driving, and as often as possible during shifts. Drivers and riders are both required to wear masks. Feedback from riders has confirmed that drivers are wearing face masks, adhering to cleaning protocols, and being cognizant and courteous about the situation.

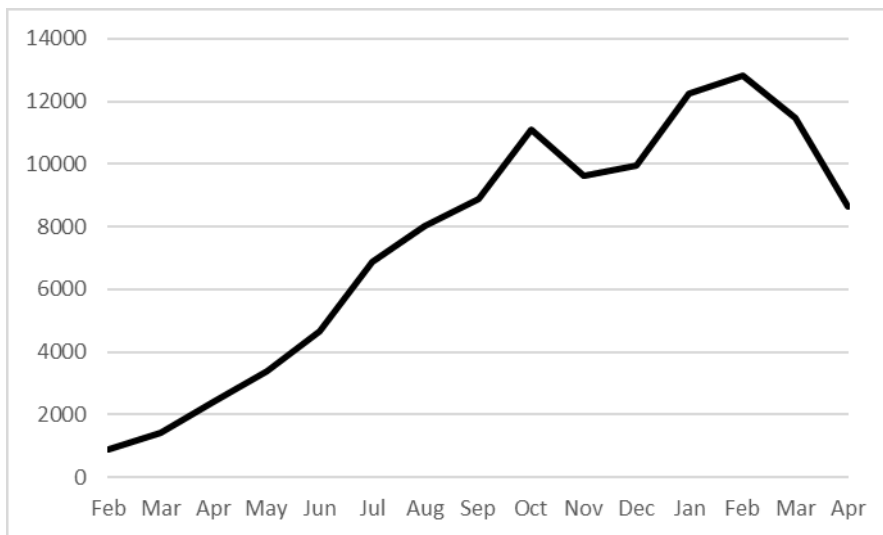
In addition, in late April, Via began a small-scale emergency food delivery service in response to the Covid-19 crisis, in partnership with two local organizations: First Five LA and Para Los Ninos. First Five LA is a state-funded early childhood education agency for the County, and Para Los Ninos is one of the partner non-profits they work with. In partnership with these organizations, Via is delivering food bank donations and household essentials to families with young children who are unable to go to the store safely and cannot afford to order traditional home delivery groceries. The service is operating within the original Mobility on Demand budget, utilizing the excess supply of drivers created by the drop in ridership. The first deliveries were made in the First Five "Metro LA" region which surrounds the intersection of the 10 and 110 freeways. Para Los Ninos is continuing to identify families who need meal deliveries with the potential to scale up deliveries to meet the identified demand. Metro, Via, and First Five LA will continue to work with additional non-profits to assess the need for this service in the First 5 LA Best Start regions across the County, which include areas in the Antelope Valley, South Los Angeles, East Los Angeles, and the San Fernando Valley.

### Ridership Trends

Ridership dipped during the winter holidays but was rising again afterwards. Ridership on MOD continued to grow up until Safer-at-Home orders were put in place, when ridership dropped by about 50% per week, significantly less than traditional Metro service ridership which decreased by about 60% and 75% for bus and rail respectively.

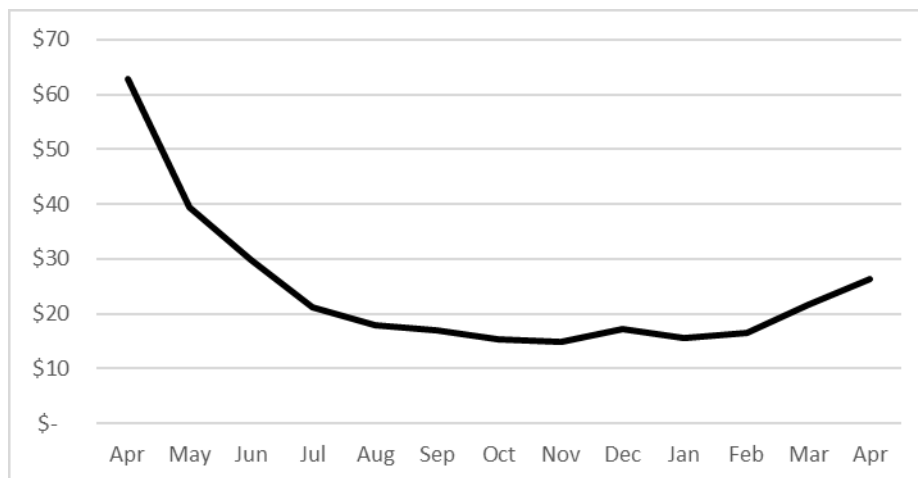
### *Rides per Month*

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Following this trend, the subsidy per ride is inversely related to the ridership and decreased steadily until ridership fell with shelter in place orders.

*Subsidy per Ride by Month*



Evening service began in late March, and weekend service began in early April. These services started after Safer-at-Home orders were put in place. It is too early to draw conclusions regarding evening and weekend ridership, but staff will track it to assess service efficacy and adjust hours as needed.

In addition, project researchers at UCLA, University of Oregon and the Eno Center for Transportation have released draft research findings, a summary of which is included in Attachment A.

Costs

Drivers who use their personal vehicles are paid up to \$21 per hour depending on if they earn a bonus for completing their shift. If they are renting a WAV vehicle to provide service to people who use mobility devices, they are paid up to \$35 to cover the cost of the rental and their hourly rate. Because of the legal ambiguity that currently surrounds independent contractor requirements, drivers are remaining independent contractors at this time, until such matters are resolved. If the service is shifted to an employee driver model, staff estimates that it would increase subsidy rates by two to six dollars per ride, depending on the efficiency of the system. Metro staff costs are minimal. The Board approved a six-month contract extension for up to \$ \$2,747,293, but the contract will only invoice approximately \$1,400,000 by the end of the six-month term. These savings are due to the decreased ridership from Covid-19 and the continuation of the independent contractor model. The Board also approved an optional extension of the project into January for up to \$2,747,293 and current projections show that approximately \$2,000,000 of that will be invoiced for the second six months. Staff is submitting much of these invoiced expenses for reimbursement from the CARES Act federal funding and from FEMA emergency relief funding.

HIGH CAPACITY FIXED ROUTE SERVICES	
Highest Performing Bus (754)	\$1.26*
Highest 20% of Metro Bus	\$2.80*
Light Rail	\$3.54*
Average Bus	\$4.16*
Heavy Rail	\$5.41*

FIRST LAST MILE / FLEXIBLE / LOW CAPACITY SERVICES	
Bike Share	\$8*
Lowest 20% of Metro Bus	\$9.50*
Park & Ride	\$12
MOD	~\$17
Lowest Performing Bus (607)	\$21*
Access Services	\$39

\*Does not include capital costs

Metro staff time costs were approximately \$115,000 over the course of the last year, or about \$10,000 per month. In the months preceding the Covid crisis, this resulted in a cost per ride of about \$.80 per ride, which would bring the fully loaded cost per ride to approximately \$18. This is inclusive of all capital costs, whereas most other compared subsidies do not.

SUMMARY COSTS
\$2.5 Million total contract costs so far
\$240,000 per month (current invoicing)
\$17 per ride (pre-covid subsidy)
CONTRACT COST ALLOCATION

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Operations	66%
Admin Overhead*	21%
Insurance	13%

\*The administrative costs cited are made up of the consultants cost for data and web hosting, co-working space for administrative staff, administrative staff time, on-going project management, and marketing.

Benefits

The benefits to the MOD service are many. It can be difficult to quantify them or to compare them to traditional transit services, however, key benefit calculations and qualitative analysis is described below.

Each MOD ride

- 20 minutes of saved time for a bus rider (33.4% of rides)
- 15 minutes of saved time for a walker (10.6% of rides)
- \$39 of saved Access Services costs (7.7% of rides)
- An avoided SOV trip (22.5% of rides)
- An avoided TNC trip (17.3% of rides)
- A new transit ride (6.7% of rides)

Project Total so far (115K rides)

- 46,000 SOV or TNC trips avoided
- 12,000 hours saved for bus riders
- 3,000 hours saved by walkers and wheelchair riders
- 7,000 new rides to transit
- \$170,000 potential saved Access Service costs
- Tens of thousands more residents with access to high quality transit

Covid Crisis Benefits

- Reliable, socially distanced transportation
- Invaluable flexibility in unprecedented times
- Applying for CARES and FEMA reimbursement
- Hundreds of meals to be delivered to vulnerable families

*Flexibility*

The Covid crisis has brought unprecedented need to the communities Metro serves. Many individuals and families are unable to travel to the store because they are ill or would risk exposing vulnerable family members to the virus. Metro partnered with First 5 LA and their partner organizations to deliver food and diaper donations those in our communities who are most in need. This pilot food delivery service is currently delivering about 20 grocery deliveries per week and has potential to scale up to around 500 deliveries per week. The pilot was developed, designed and implemented in about three weeks, highlights the benefits of the flexibility inherent in both the on-demand service and the private partnership model.

### *Access Services Cost Savings*

Access Services has been an integral partner in the project and their targeted marketing has significantly increased the use of WAV rides in the MOD pilot, which made up about 1% of total rides. While MOD rides cost around \$17, these rides may otherwise have been made with Access Services, which costs an average of \$39 per ride and must be requested a day in advance. MOD WAV rides may be requested in real time. Shifting Access Services rides to MOD rides reduces costs per ride significantly, and more importantly, allows Access customers to request their rides without an advance reservation. The demand responsive nature of MOD allows much more flexibility to Access customers than they have had in the past. This day-of, on-demand service has the potential to attract many more Access Services riders if the pilot continues to operate in the future.

### *Equity*

MOD service has been operational in low income areas and priced as a free transfer to or from Metro services. Riders do not need a bank account or a cell phone to access the service. In El Monte specifically, riders were likely to be low income (\$50K median income), likely to be non-white (87% non-white), but likely to have a car available for the trip (63% with car access). In the Compton area, there was not sufficient survey response to understand the riders as specifically, but those who did answer the survey reported even lower households earnings.

### *Safety*

On demand service can reduce wait times and increase predictability when fixed route service runs less frequently, thus providing a safer and more comfortable customer experience with less potential exposure to overcrowding at stops, stations, and on vehicles.

### *Service Quality and Customer Experience*

MOD service is both on-demand and variable to accommodate scattered origins and destinations. The result is reduced walk time, reduced travel time, accommodation of additional geographies, and more predictable wait times.

### *Rider Retention*

In the context of falling transit ridership, MOD can bring transit service closer to more residents and offer significantly enhanced customer experience which may be necessary to enforce social distancing measures and to make patrons feel safe and comfortable riding Metro services. As Metro rebuilds its ridership, MOD can play an important role in filling in service gaps and providing flexibility in times of uncertainty.

## **DETERMINATION OF SAFETY IMPACT**

The MOD pilot project will not have any adverse safety impacts on Metro employees or patrons. It may have a positive safety benefit by reducing providing social distancing options for transit users and providing essential trips and essential deliveries to patrons in a time of need.

## **FINANCIAL IMPACT**

### Impact to Budget

There is no impact to the budget as funds are already programed for this use and the program is

costing less money than was budgeted.

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

Staff's recommendation supports the following goals from Metro's Strategic Plan:

*Goal 1: Provide high-quality mobility options that enable people to spend less time traveling.*

The project increases access to Metro fixed route services with a platform that provides excellent customer experience and shortens travel times for riders who must transfer.

*Goal 2: Deliver outstanding trip experiences for all users of the transportation system.*

The project provides seamless journeys and expands access to on-demand transportation to riders who use wheelchairs, do not have smart phones, or do not have the financial means to use private services.

### **Equity Platform Framework**

The project is addressing inequity in new mobility options by providing access to people who would not otherwise be able to afford on-demand rideshare platforms like Uber and Lyft. The project allows people without smartphones or bank account, and people who use wheelchairs to experience the benefits of on-demand mobility and seamless access to Metro fixed route offerings. MOD is offered in low income areas to encourage use by low income riders and will be marketed in this way as well.

## **ALTERNATIVES CONSIDERED**

The Board may choose not to receive and file the report. That is not recommended.

## **NEXT STEPS**

Metro staff will continue to analyze Via service during the Covid crisis and is planning to exercise the option to extend the current contract, which expires at the end of July, for an additional six months. The service will continue to operate and provide transportation for essential workers and for essential trips. Metro staff is continuing to analyze the service and ridership levels and make adjustments as needed in order to ensure that the service continues to meet the needs of patrons during this unpredictable time. Staff will also explore options for continued or similar services beyond the Via contract extension.

## **ATTACHMENTS**

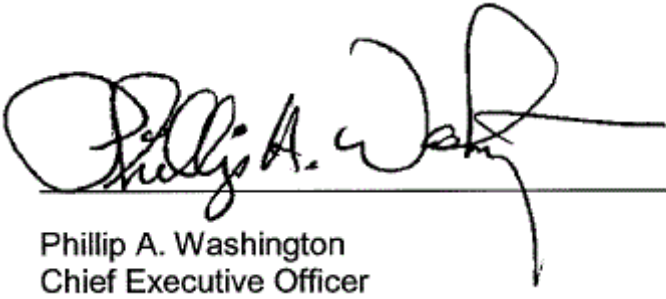
Attachment A - Summary of Research Findings

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**ATTACHMENT A – SUMMARY OF RESEARCH FINDINGS**

Metro’s research partners at the Eno Center for Transportation, UCLA and University of Oregon have analyzed data from the first year of service and found the following results.

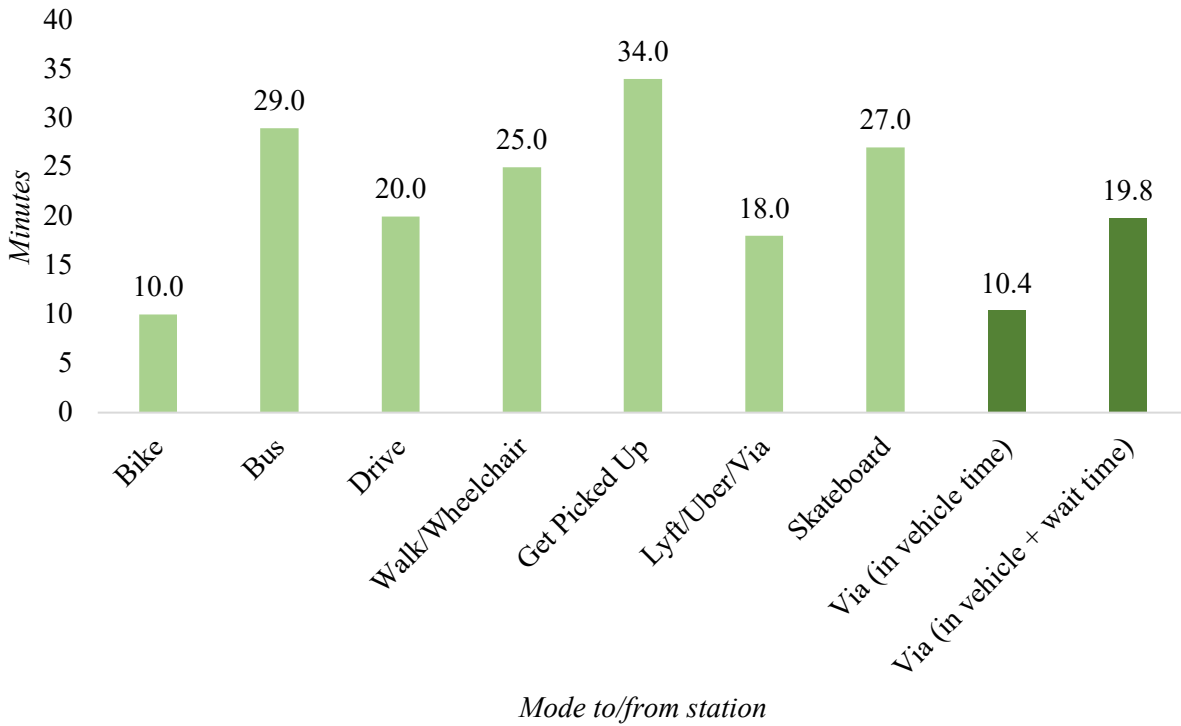
Before the service began, Metro conducted an in-person intercept administered in the three service zones in January 2019. These results were compared with a Via survey administered online between November 2019 and February 2020. The researchers note that the Via rider survey had a much smaller sample size than the other two surveys, so it likely contains more error.

Compared to intercepted Metro riders, a higher share of Via survey respondents traveled to Metro stations on Lyft or Uber, were dropped off or picked up, or did not use transit at all.

*(Previous) First Last Mile Mode*

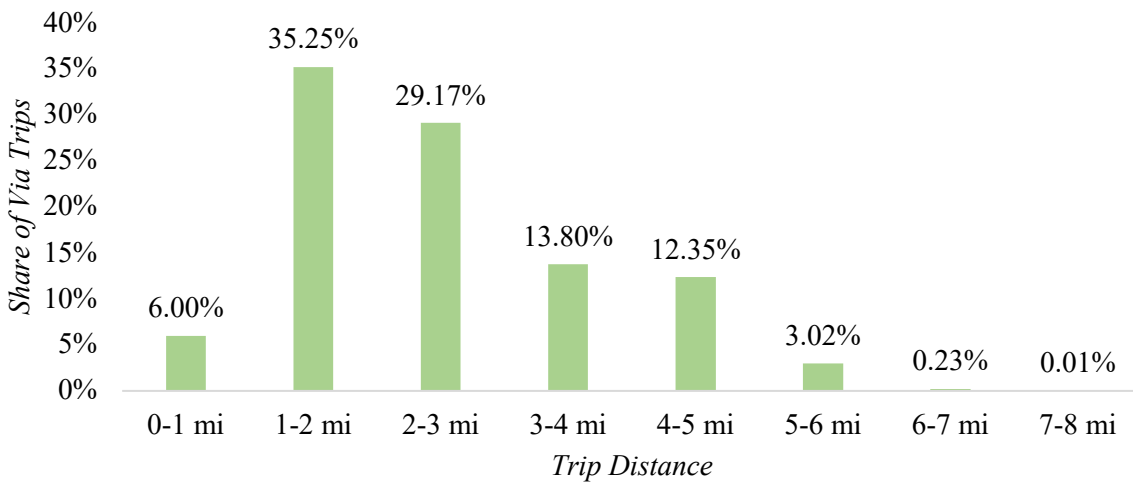
	<b>Via</b>	<b>Metro Intercept</b>
Drive	16.8%	17.5%
Dropped off/picked up	5.7%	0.9%
Lyft/Uber	17.3%	3.2%
Bus	33.4%	59.0%
Bike	2.7%	1.9%
Skateboard	0.5%	0.5%
Walk/wheelchair	10.6%	17.0%
Other	6.2%	0.0%
Did not use station	6.7%	0.0%
Total	100.0%	100.0%

*First Last Mile Travel Times*



### Length of Via Trips

According to the survey respondents, using Via created significant time savings especially when compared to getting picked up, riding the bus, walking or skateboarding.



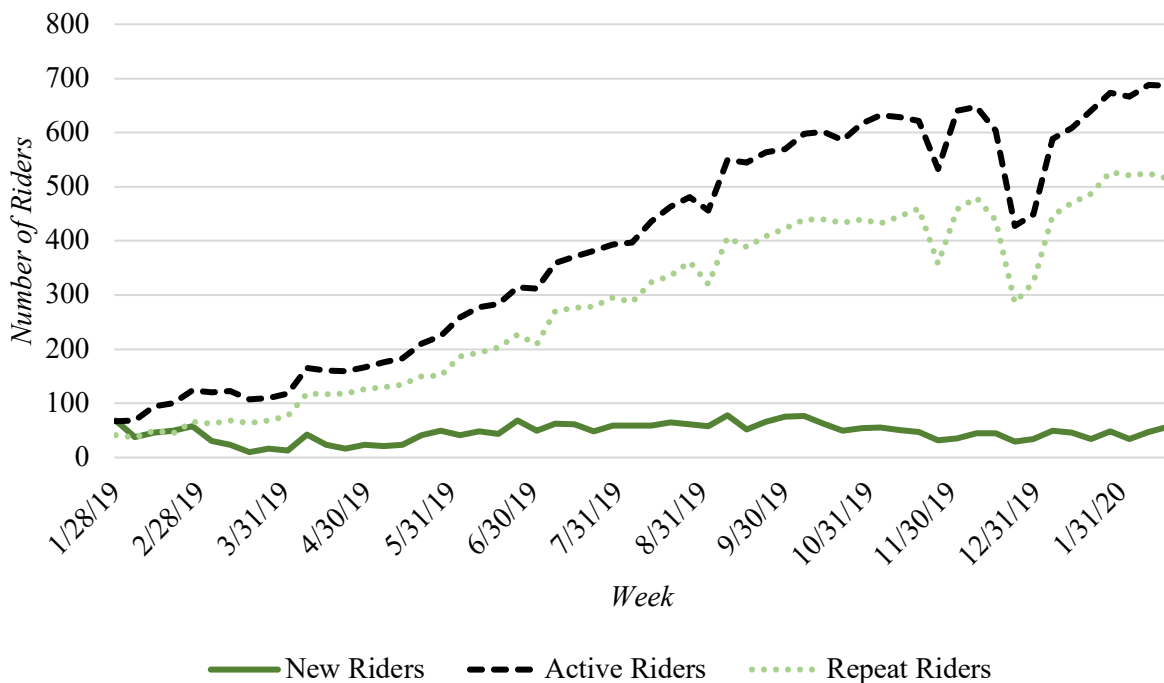
### Share of Riders by Trip Request Frequency

	<b>Number of riders</b>	<b>Percentage of riders</b>
Once	1,772	40.3%
Less than once per month <sup>1</sup>	1,415	32.2%
1-3 times per month <sup>1</sup>	658	15.0%
1+ trip per week <sup>1</sup>	553	12.6%
<b>Total</b>	<b>4,398</b>	<b>100.0%</b>

<sup>1</sup>Excludes those who took only one trip between January 2019 to February 2020.

Between January 2019 and February 2020, 4,398 unique users used the Via MOD pilot program. Sixty percent of these riders requested Via at least twice. While some riders were avid users, most were occasional. Forty percent of riders requested Via only once, while another third (32.2%) of riders requested Via less than once per month. Just 12.6% of riders requested Via once a week or more. The number of new riders was steady, with about 46 new riders signing up for Via each week.

### Rider Trends Over Time



### Rider Characteristics on Via compared with pre-pilot intercept survey

	<b>Via User</b>	<b>Intercept Survey</b>
Race/Ethnicity		
Native American	0.9%	0.9%
Asian/Pacific Islander	21.9%	9.3%
Black	6.4%	15.3%

Latino	26.8%	39.0%
White	29.2%	18.0%
Other	8.2%	4.7%
Two or more races	6.6%	12.8%
Technology & Banking Access		
Smartphone	94.7%	71.0%
Cellphone	4.9%	24.7%
Neither	0.4%	4.3%
Checking Account (yes)	94.0%	75.9%
Car available to make this trip (yes)	50.0%	47.6%
Gender		
Male	53.8%	53.1%
Female	43.5%	45.8%
Non-Binary	2.7%	1.1%
Age		
<18	0.4%	2.9%
18-24	17.0%	17.9%
25-34	36.8%	25.8%
35-49	28.0%	27.0%
50-64	14.1%	20.4%
65+	3.6%	6.0%
Income		
<\$5,000	5.6%	11.4%
\$5,000-9,999	2.4%	3.4%
\$10,000-14,999	7.1%	4.2%
\$15,000-19,999	4.4%	10.6%
\$20,000-24,999	8.6%	9.5%
\$25,000-34,999	8.0%	7.6%
\$35,000-49,999	10.7%	12.5%
\$50,000-99,999	28.1%	24.6%
\$100,000+	25.1%	16.3%
Disability (yes)	7.7%	4.4%

The researchers note that the Via rider survey had a much smaller sample size than the intercept surveys, so it likely contains more error. However compared to intercepted Metro riders, a higher share of Via survey respondents identified as white, were younger, had higher household incomes, and a larger share owned a smartphone. It is not known if this difference represents a true difference in users of the service, or a differential willingness to answer the Via survey. A higher share of Via survey respondents reported having a temporary or permanent disability compared to intercepted Metro users (7.7% vs 4.4%). **Error! Reference source not found.** shows the breakdown of disability types among Via respondents; of respondents who reported

a disability, about half ( $n=8$ ) previously rode the bus to the station (we note the small sample size here, and advise interpreting data about this subgroup with caution).