

# MARIN TRANSIT Connect Evaluation Report

DRAFT | July 2019

**Table of Contents**

- I. Program Background.....5
  - Overview of On-Demand Transportation.....5
  - Previous Efforts/Studies That Identified the Need.....7
  - On-Demand Partnerships Programs Observed.....9
  - Marin Transit Options Explored.....11
    - Guiding Principles for Deployment of On-Demand Services .....15
  - Selected Strategy.....16
    - Targeted Markets .....17
    - Operations & Funding.....18
- II. Program Overview .....20
  - App Functionality.....20
  - Service Characteristics .....21
  - Service Hours.....22
  - Ride Requests .....22
  - Fares.....23
  - Service Area.....23
  - Vehicles.....24
  - Service Levels .....25
  - Marketing and Outreach.....27
- III. Rider Survey Results .....29
  - Who’s Using Connect? .....29
  - Survey Results.....30
- IV. Data Analysis .....33
  - Systemwide Performance .....33
    - App Download Activity .....33
    - Accounts Created .....34
    - Requested Rides and Performed Rides.....35
    - Productivity .....39
    - Rider Retention.....40
    - Ridesharing .....41
    - Fare Media.....42



**DRAFT**

Trip Request and Ride Statistics .....43  
 Market Segmentation .....44  
 V. Findings .....53  
     Rider Profile .....53  
     Community Benefits.....53  
     Role in the Transit Network .....54  
 VI. Conclusions, Considerations, and Next Steps.....57

**Table of Figures**

Figure 1: Trip Booking Flow in the App .....21  
 Figure 2: Fare Structure .....23  
 Figure 3: Service Area Map .....24  
 Figure 4: Connect Vehicle Image.....25  
 Figure 5: Scheduled Driver Hours .....26  
 Figure 6: Trip Purpose of Connect User Survey Respondents .....30  
 Figure 7: Residence of Connect User Survey Respondents.....31  
 Figure 8: Connect Household Income Levels .....32  
 Figure 9: App Download Summary Chart.....34  
 Figure 10: Accounts and Rides Taken .....35  
 Figure 11: Ride Request Summary.....36  
 Figure 12: Average Daily Ridership.....37  
 Figure 13: Rides by Hour of the Day.....38  
 Figure 14: Average Trips per Rider by Month .....39  
 Figure 14: Productivity .....40  
 Figure 15: Rider Retention .....41  
 Figure 16: Ridesharing Percentages by Time of Day .....42  
 Figure 17: Fare Payment Distribution.....43  
 Figure 18: Monthly Ridership Segmented by Market .....48  
 Figure 19: Market Segmentation by Service Hour .....49  
 Figure 21: Active Employee Accounts.....50  
 Figure 22: Average Employee Trips .....51

**Table of Tables**

Table 1: Targeted Markets for Connect..... 18  
Table 2: Service Profile Summary.....22  
Table 3: Connect Ride Statistics .....44  
Table 4: Typologies and Performance Targets .....45  
Table 5: Productivity Targets for Similar District Programs .....46  
Table 6: Cost Effectiveness Targets for Similar District Programs .....47  
Table 7: Annual Performance Estimate.....52  
Table 8: January 2019-May 2019 Performance (Software Stabilization Period).....52

## I. Program Background

In May of 2018, Marin Transit partnered with a technology partner (Via) to offer the first fully accessible, on-demand transportation service in the County. The pilot project was the result of years of planning and outreach to address mobility gaps for a wide range of users including seniors, those with disabilities, and able-bodied commuters. This chapter summarizes the development of this pilot project to resolve some of the longstanding mobility challenges in Marin County.

### Overview of On-Demand Transportation

Public transportation offerings typically fit into one of two categories of service: fixed route and demand response. Fixed route services serve a series of pre-defined timepoints on a fixed schedule where demand response services curb-to-curb trips based on pre-scheduled trip requests. The most common form of demand response services provided by transit agencies are complementary paratransit services. These services are provided to those who are unable to use the fixed route network, often due to a lack of accessibility to get to or from the bus stop and the riders origin or destination. Under the American with Disabilities Act (ADA), paratransit services typically require riders to schedule their ride at least one day in advance so agencies can develop driver manifests to accommodate all requests for day-of operations.

On-demand transportation provide real-time, personalized mobility services to an individual based on a specific trip request. These services typically operate curb-to-curb and requests are made in real-time using a smartphone app. The most prevalent examples in the Bay area are Uber, Lyft, and, until February of 2019, Chariot<sup>1</sup>. Uber and Lyft allow riders to pick their origin and destination while Chariot predefines stops and routes that riders must go to access the service. Uber and Lyft also rely on individuals for their workforce (drivers) and vehicles whereas Chariot directly hires and trains their drivers and provides a specific vehicle to operate the service. Fare calculation and payment is done through the app and drivers do not typically take cash or credit cards.

Prior to the widespread use of smartphones, taxis provided on-demand transportation as described above. The request was typically made by calling a number or physically “hailing” a vehicle. Taxi providers use a designated vehicle for the service, as opposed to their personal vehicles, and can either be direct employees of company or operate individually as their own private company. Fares are calculated from a meter (based on time and distance) and payment is done onboard the vehicle using either cash or credit/debit card.

---

<sup>1</sup> Chariot operated a commuter shuttle service in select markets including San Francisco. Rides were requested through a smartphone app similar to other TNCs. Chariot was purchased by Ford Motor Company in 2016 and operations were terminated in February 1, 2019.

Compared to traditional fixed route and demand response (paratransit, dial-a-ride, etc.) public transportation, on-demand transportation has several differences. These include:

- **The ability for riders to book a same day, curb-to-curb ride.** Traditional demand response services that offer curb-to-curb service typically require advance reservations the day before. Advanced reservations allow the transit providers to develop “static” schedules for their drivers and vehicles so they can ensure supply and demand is balanced and transportation will be reliably provided.

While fixed route transit services offer riders a same day service without reservation, vehicles do not typically deviate from the route to provide the curb-to-curb pickup and drop-off.

- **Estimated pickup times are dynamic and not pre-set.** Traditional demand response services will provide a pickup window upon booking that gives the rider an expected time for the ride to occur. This window is typically 30 minutes wide and straddles the requested pick-up time. For example, if the rider requests a pick-up of 10:30 am, the rider would be instructed to be ready between 10:15 am and 10:45 am. On-demand services will give you an estimated pickup time only once the ride is booked. This estimate is provided through the smartphone app and updates as the vehicle gets closer to the pickup location. The app also provides additional feedback tools for the rider including the physical location of the vehicles, the driver name, vehicle type and customer service rating for the rider.
- **Automated fare payment.** App based on-demand services allow, and in some cases require, credit cards to be used for fare payment. The card is entered and associated with the rider when signing up for the service and payment is automatically deducted. Most public transit riders rely on cash to pay for their travel. Cash is generally inconvenient for riders, slows operations, and requires additional resources to process.

Over the year, the District has made progress in improving its transit services to achieve many of the benefits the on-demand services offered by the private sector. These include:

- **Investments in Demand Response Software.** The software upgrade approved in April of 2017 enhanced many features of the Marin Access operation for riders. The upgrades include;
  - Enhanced trip request tools. Riders now have access to an online passenger portal that will allow trips to be requested and managed from a PC or smartphone.
  - Enhanced Feedback Tools. Riders will be able to sign-up for phone, text, or email alerts on their upcoming trip to give them a better sense of when within the pickup window their trip will occur. Automated reminders can also be provided the day before or morning of travel.

- Electronic Purse. Riders on Marin Access services will soon be able to pay for their travel using a credit card associated with rider profile or if the rider has pre-paid value on their account. Riders will also be able to check the value of their account through the online passenger portal.
- **Real Time Transit Arrival Information.** Marin Transit first published real-time arrival information to its riders in 2011 for the community shuttle and Stagecoach routes. In 2016, real-time information was expanded to include all local Marin Transit fixed route services. This information is available online, within various apps, and through signage at select high ridership bus stop across the county.
- **Integrated Fare Payment Card – Clipper.** Marin Transit participates along with all other transit agencies in the Bay Area in the Clipper program. Clipper provides a fare payment card that automatically deducts fares and calculates transfer credits. Riders can put value on the card and associate the card with a credit card for autoloading.

While many enhancements have been made to improve the experience for riders, there continues to be a void in the ability for riders to reliably request a same day, curb-to-curb ride and have operations be nimble enough to reliably guarantee the ride. Perhaps more importantly, riders are unable to book the ride through a smartphone app and track the status of the ride in real-time.

### Previous Efforts/Studies That Identified the Need

Recognizing the aging population in Marin County, Marin Transit has a long history of planning and implementing innovative mobility options for seniors and those with disabilities. Under the umbrella “Marin Access”, the District provides: ADA paratransit; subsidized taxi rides; coordinated volunteer driver reimbursement programs; an integrated program eligibility, resource and referral center (“Travel Navigators”); and travel training assistance.

In 2008, Marin Transit in partnership with the County of Marin conducted a study of taxi service for social service transportation and public transit programs. Based on the recommendations of this study, Marin Transit purchased accessible vans and loaned these vehicles to the local taxi industry to use for service. These vehicles operated for approximately five years before the taxi market started to downsize and cut back on operating costs, including operating these vans. Since 2016, Marin County has been lacking accessible vehicles in general public taxi service.

Marin Transit recently increased its per ride subsidy rate on its subsidized taxi program (Catch-A-Ride) in January of 2017 to encourage service providers to operate accessible vehicles and accommodate non-transfer wheelchair trips on this service. Taxi providers were offered \$20.00 per trip incentive for wheelchair trips in an accessible vehicle and a \$6.00 incentive for ambulatory trips provided in an accessible vehicle. This change did encourage one provider to start operating accessible vehicles in the program, but the supply continues to be very limited.

While advancements have been made in senior and ADA mobility options, there continues to be a gap in the network for unplanned transportation options for those who cannot use traditional taxi and Transportation Network Company (TNC)-type services. The following is summary of previous planning efforts that identified and reinforced the demand for this type of service.

**2010 Senior Mobility Action & Implementation Plan.** The 2010 plan was the guiding framework for supporting senior mobility in Marin County and identified the need for “flexible transit services” for seniors who live too far from transit to walk.

**2013 Job Access Mobility Institute (JAMI) Summary Report.** Marin Transit participated in a countywide project that focused on improving access to employment opportunities for low-wage workers. One of the identified concepts is to develop transportation hubs served by high-frequency transit and connected to multi-modal transportation options.

**Marin Access 2016 Strategic Analysis and Recommendations.** This analysis provided guidance for developing new programs and improving current services for older adults and ADA consumers, and including more travel options. These include:

- Same-day rides, more direct service, and better time choices;
- More convenient short travel connections to local destinations and fixed route transit services;
- Safe and reliable service in the most challenging topography and roadway infrastructure in the county; and
- Options that provide new riders with attractive alternatives to driving.

Additionally, the study recognized that Marin Access riders are adopting technology and have expressed interest in the benefits technology has to offer for transportation. Advances in technology and increased rates of internet and smartphone use present the opportunity for more seamless experiences and new options for travel. As follow-up actions, the study suggested that staff develop and pilot a new transportation program with input from riders and contractors to address transportation gaps in convenience and coverage for seniors and persons with disabilities. The study also provided an example of working with outside transportation providers (for example, ride-hailing companies or employee shuttle programs) to support first and last mile connections where current services are not meeting these needs.

**Marin Transit 2016 and 2018 Short Range Transit Plan (S RTP).** The two most recent S RTPs recognize that mobility services are amid radical changes and that transit needs to respond to these changes and take advantage of benefits for congestion relief and transportation for highly transit-dependent populations. There are opportunities for public transit to be part of the solution alongside private and non-profit partners and the District should evaluate partnerships with the private sector to increase and expand mobility. The 2018 S RTP anticipated a partnership to support on-demand mobility within the plan’s first year.

## On-Demand Partnerships Programs Observed

Many transit and transportation peers have been experimenting with various forms of partnership and programs to support on-demand transportation services. The goals of these programs range from improving first/last mile connectivity to reducing costs associated with paratransit demands. The following is a summary of select programs with various approaches to solving specific on-demand mobility gaps.

**TAM Lyft Pilot:** The Transportation Authority of Marin (TAM), in partnership with Lyft and Whistlestop, initiated a subsidized voucher program in the fall of 2017, shortly after service on SMART commenced that summer. A \$5.00 promotional code is available in the Lyft app for Marin Lyft Line (shared-ride) trips to and from a SMART station after the rider pays an initial \$2 fare. Lyft Line rides are eligible for discount given that they are shared rides, though many rides are not necessarily shared despite being a Lyft Line ride. The rider is responsible for any remaining fare above \$7.00. Whistlestop is under contract to provide an accessible service option for riders with disabilities, and schedule rides for individuals without access to smartphones.

From March 2018 to March 2019, the program has averaged 39.7 passengers per day. The time of day split is relatively even, with 13.0 average passengers in the AM period (6:00 -10:00 am), 13.2 in the midday (10:00 am-4:00 pm) period, and 11.8 in the PM (4:00-10:00 pm) period. Average trip length/trip time is not able to be calculated by station, only by month. Average trip length is approximately 3.5 miles, and trip duration is about nine minutes and thirty seconds.

Many transit agencies across the nation have experimented with partnerships with TNCs or technology companies for the past few years. Below are some representative examples and their current status.

**LAVTA Go Dublin (2017-present):** The Livermore Amador Valley Transit Authority (LAVTA) launched Go-Dublin an on-demand real time mobility alternative in partnership with Lyft, Uber, and DeSoto Cab Company. The program was developed to replace underperforming fixed route service. Using a specific promocode in either the Lyft, Uber, or DeSoto Cab Company app, riders receive half of their shared-ride fare covered up to \$5.00 for rides that start and end in the city limits of Dublin. Customers who lack access to a smartphone and/or specifically want to pay cash can reserve rides by calling DeSoto Cab Company. The cab company operated wheelchair accessible vehicles.

A goal of the program is to determine if rideshare programs reduce congestion and parking issues in Dublin while help complementing the Wheels fixed route bus service and BART.

**AC Transit Flex (2017-current):** In 2017, the Alameda-Contra Costa Transit District (AC Transit) announced the launch of a year-long microtransit pilot program

known as AC Transit Flex, being tested as a replacement of an existing fixed route. The pilot offers an on-demand fully accessible service that serves at the existing bus stops as the reserved pick-up and drop-off sites along the designated routes. It operates using MobilityDR platform developed by DemandTrans Solutions.

To bypass waiting time at bus stops, AC Transit Flex offers riders to schedule their pick-up and desired drop-off locations, using a desktop computer, smartphone device or traditional telephone riders within two designated zones. Flex also offers AC Transit passengers to reserve an itinerary every weekday — for up to three months — as well as the option to reserve trips for family or traveling companions with a single transaction. While Flex service is designed with a reservation requirement of at least 30 minutes prior to an intended departure, it offers exceptions to the reservation requirement at two designated BART stations.

The cost to ride Flex is the same as any other AC Transit local service. Flex bus is outfitted with both a fare box and Clipper Card readers. Flex service continues today in Newark and Castro Valley.

**Pinellas County, Florida (2016-present):** In February 2016, Florida’s Pinellas Suncoast Transit Authority (PSTA) became the first agency in the nation to subsidize first/last mile Uber rides through its Direct Connect pilot. The roots of its Direct Connect pilot can be traced back to 2014, when voters rejected a transit referendum that would have added an extra penny in sales tax to expand the county’s bus service and build a 24-mile light rail system. Instead, Direct Connect offers rides to 24 direct locations with a \$5.00 subsidy towards an Uber, taxi or accessible ride. The program is ongoing.

**Centennial, Colorado (2016-2017):** The City of Centennial launched Go Centennial, a six-month pilot program that combined a multi-modal trip-planning mobile app and a fully-subsidized ridesharing service, in 2016. Go Centennial was the first multi-modal app of its kind to feature in-app booking with Lyft. The program sought to address first-last mile issues surrounding the Dry Creek light rail station in Centennial and achieve better performance than its existing dial-a-ride services.

Go Centennial was created the Centennial Innovation Team (i-team), funded by Bloomberg Philanthropies. The City’s i-team developed the Go Centennial pilot concept and led development of the implementation plan by securing private-public partnerships with Xerox, Lyft, Via and the Denver South Transportation Management Association. While the model proved to be cost-effective, ridership was lower than expected. The pilot ended in 2017.

**VTA Flex (2016):** In 2016, the Santa Clara Valley Transportation Authority (VTA) launched Flex, a six-month on-demand, shared ride service. The agency partnered with software company, RideCell, to provide the technology support of the app-based service. The pilot focused on solving first-last mile issues within the service area near VTA light rail stations to encourage ridership on the light-rail system.

Riders were able to assign pick-up and drop-off points anywhere within a six-square mile region in North San Jose. The pilot was not continued due to low ridership.

**KCATA Bridj (2016-2017):** In March 2016, Kansas City Area Transportation Authority (KCATA) began a pilot program to test how on-demand services could integrate into the suite of transportation options available in the Kansas City region. The partnership between Bridj, KCATA, and Ford was a public-private partnership between a major U.S. transit system, an automaker, and an urban technology company to enhance existing mass transit by providing greater mobility options. The pilot ended in early 2017 after a year of low ridership. Marketing was cited as a major challenge of the pilot.

**OCTA OC Flex (2018-present):** OC Flex is an on-demand pilot program operating accessible curb-to-curb shuttle service serving two zones in Orange County operated by the Orange County Transportation Authority (OCTA) in partnership with Via. The OC Flex is funded in part by a grant provided by the Mobile Source Air Pollution Reduction Review Committee (MSRC), which provides subsidies for clean transportation alternatives. As of June 2019, OCTA passed a balanced \$1.5 billion budget for the 2019-2020 fiscal year that includes ongoing funding for the pilot.

**MBTA Paratransit Pilot Program (2018-2019):** The Massachusetts Bay Transportation Authority (MBTA) is running a pilot program with TNC companies Uber, Lyft, and Curb to offer on-demand transit service to paratransit (RIDE) customers. Trips can be booked from a smartphone, instantly or by using a call-in option for concierge service. All RIDE customers can participate in the pilot program if: they are not currently suspended, their eligibility for The RIDE does not expire during the pilot time period, they are not up for renewal of RIDE membership during the pilot time period, and they have a valid email address, phone number, and payment method on file with The RIDE program. The pilot program's newest addition, Curb, offers RIDE customers on-demand taxi trips in Boston, Brookline, Cambridge, and Somerville. The pilot program has been extended to July 1, 2019 but is subject to change or cancellation during the current period.

## Marin Transit Options Explored

The District has been exploring options to fill the same day transportation void identified in the planning efforts. These included partnering with TNCs, enhancing the existing agency operated on-demand programs, and supporting enhanced taxi service in Marin County. Marin Transit also put out a request to the industry and identified funds to help solve this issue through its Innovative Incubator program in 2017.

### Transportation Network Company (TNC) Opportunities

Many transit and government agencies across the US have explored partnerships with private sector transportation companies. Transportation Network Companies (TNCs) rely on smartphone apps to match drivers and riders in need of transportation. While these companies pre-screen drivers and vehicles, their relationship closely resembles a contractor/sub-contractor relationship with their focus on technology, as opposed to service delivery. Compared to public transportation with contracted service such as Marin Transit, these companies have far less oversight and control over the service including driver training and screening and vehicle maintenance.

Marin Transit has initiated conversations with multiple private sector transportation providers that offer these types of service and has explored potential partnership opportunities. The District has also closely followed peers in the industry who have tested these arrangements. Ultimately, the District did not formally partner with TNCs for the following reasons:

- **Accommodation for riders with special needs and mobility devices.** The TNC industry does not, and in most cases cannot, require or suggest drivers provide vehicles that can accommodate mobility devices such as wheelchairs. Further, drivers are not expected to assist riders in or out of the vehicle, and to or from the curb to the front door. Accommodating those with disabilities is not only a federal requirement but also a priority for the District. While peers have supplemented their relationships with the TNC with other transportation providers that offer wheelchair accessible services, the ability to make these two service offerings comparable in terms of rider wait times, ability to book a reservation, and paying the fare, is challenging, if not impossible.

The District is also sensitive to the needs for senior riders and those with other disabilities that limit physical ability to get into and out of a vehicle. TNC drivers are not required to be trained to work with these riders.

- **Equity issues.** As previously mentioned, access to most TNC services requires not only a smartphone to book and manage the ride, but also a credit or debit card to pay for the ride. Although some TNCs offer a backend system to allow a call center to function on behalf of the smartphone, fare payment must still be worked out independently between the rider and booking party. Recent surveys of Marin Transit riders show 79% of fixed route and only 66% of Marin Access riders have a smartphone and could take advantage of the service without the support of a call center capable of dispatching trips on behalf of the rider.<sup>2</sup>
- **The ability to complement transit services, not duplicate transit services.** TNC's offer additional mobility options, or supply to the transportation network, and can play an effective role in supporting transit. However, unless very tight restrictions are put on the partnership and both parties agree to these, TNC services can

---

<sup>2</sup> 2017 fixed route on-board survey & 2018 Marin Access Rider Survey

duplicate public transit and, in some cases, add additional congestion to already congested roadways and transit centers. This is especially true if the agency does not have the ability to set parameters of the service such as routing, pick-up/drop-off points, requiring shared rides over single rider trips, and setting fare policy and pricing.

- **Data sharing.** Understanding rider usage and behavior of government subsidized services is critically important to justifying investments in taxpayer dollars and giving policymakers the necessary information to make informed decisions. Since TNCs are private entities with proprietary information on how their systems function, many are resistant to sharing data that assists the funding agency in adjusting or making changes to the program.
- **Integrated trip planning and fare payment.** The smartphone app that powers TNC services is an app specific to that company that is used nationally and globally for most TNCs. The ability to customize and integrate within their platform is highly unlikely for the transit agency. Thus, riders using TNC services to complement public transit services are using TNC apps that likely do not include other public service options, and likely use other apps to receive public transit information.
- **Lack of alternative on-demand options.** To comply with federal regulation and limit agency liability in subsidizing private transportation services, public transit agencies must allow the rider choice in who provides the trip for the rider. Typically, the rider must be given a choice of at least three options and all must provide a comparable service at a comparable price. Aside from TNCs, many peers have relied on local taxi providers and/or local social service or non-profits to be their options. In Marin County, the taxi industry has suffered significant reductions in drivers and providers in recent years and current companies limit service during peak hours due to standing commitments to home to school transportation services.

While some social service agencies and nonprofits employ drivers to support their program needs, very few can keep their vehicles in service to support on-demand trip requests countywide.

### Enhanced Paratransit

Paratransit services are designed to complement fixed route for individuals who are unable to use the fixed route bus system. Service design, policies, and fares recognized the federal ADA mandates. Riders must apply and be accepted to be eligible for the service. Rides must be booked at least a day in advance and 30 minutes pickup windows are given to the rider indicating when the ride will occur. Trips are grouped together the night before and drivers largely operate a set schedule or manifest of work based on pre-arranged bookings.

Marin Transit received federal funding for a Mobility Management Technology Backbone Project in 2013. This project provided funding to develop an overall systems approach to

**DRAFT**

Marin County's mobility management technology needs and create comprehensive technology functions to facilitate coordination of transportation for low-income residents.

From the time of award until recently, District staff searched for a vendor capable of providing suitable software. Following conversations with a variety of vendors, Marin Transit released a Request for Proposals for a comprehensive demand response scheduling software package and associated hardware for the operation of the Marin Access Paratransit program and all Marin Access mobility management programs in November 2016. The RFP asked the industry for an application that would allow the District to continue advanced reservation scheduling and dispatch to meet the requirements of the ADA and for optional enhancements that would allow on-demand scheduling to occur within a smartphone app. The results of this procurement identified that at the time, there was no single vendor that proposed that could offer both the baseline ADA requirements and the enhanced on-demand scheduling.

In April 2017, your Board authorized a contract with TripSpark for Demand Response Scheduling Software and Hardware. As the incumbent vendor, TripSpark offered new features from the previous contract. These features provide Marin Access riders and their support teams more ways to view, schedule, or update existing reservations and increase the efficiency of the call and dispatch center. They consolidate the functionalities of three software suites utilized by Marin Access contractors into one central software package. However, the TripSpark software did not provide the tools to integrate emerging mobility services or dynamically schedule same-day transportation.

### **Supporting Enhanced Taxi Service**

Traditionally, the District has relied on and subsidized local taxis to support short local trips and provide a same-day option for riders who are dependent on paratransit. Through the Marin Access Catch-A-Ride program, eligible riders receive either a \$14 or \$18 discount on up to eight one-way trips per month. The services provided are limited by the availability of taxis. Beginning in April 2015, there was a dramatic decrease in ridership when the county's largest cab company, On the Move, went out of business. Following that closure, the one remaining taxi subcontractor instituted "blackout" periods during hours of peak demand. In addition to limited availability and capacity, the taxi industry has found it difficult to operate and maintain wheelchair accessible vehicles to adequately serve all Marin residents.

### **Open Invitation to Industry**

In 2017, Marin Transit revised the Measure B Gap Grant program and reintroduced it as a Mobility Innovation Incubator. The 2017-2018 call for proposals made available up to \$100,000 over the period of two years, open to all interested parties. These included non-profits, community-based organizations, local government agencies, and private firms. The District was looking for projects and programs that required initial seed funding and technical support and addressed gaps in transportation for seniors and people with disabilities. The intent was to identify programs in areas where the District may have

expertise though may not be the appropriate entity to operate, implement, or market a particular solution. While all types of projects were eligible, Marin Transit specifically called out the lack of on-demand, accessible service as a top priority.

Chariot, a microtransit company operating in the San Francisco Bay Area, submitted the second highest scoring application. They proposed operating accessible on-demand transportation, and their proposal advanced to the next round for phone and in-person interviews. Through subsequent meetings, Marin Transit learned that Chariot's proposal required more than seed funding, would be less cost-efficient to operate compared to existing District contracts, and that the service delivery model that Chariot was ready to implement did not meet the needs of the intended population of older adults and persons with disabilities, including the lack of accessible vehicles.

### Guiding Principles for Deployment of On-Demand Services

In order to best leverage new technology and services, Marin Transit developed criteria and principles for evaluating partnership or pilot opportunities and developing programs for on-demand services. These criteria were informed by feedback from our peers, academic research, as well as outreach to private mobility providers and are intended to help Marin Transit and the Marin Transit Board of Directors identify ways to meet the agency's goals while most efficiently and effectively serving the public.

These criteria and principles will be developed recognizing the District and other Countywide mobility goals and focus on solutions that complement and enhance existing transit services.

1. **Transit First: Fixed Route Transit Provides the Backbone for Service.** It's important to note that on-demand transportation will not take the place of fixed route transit in the foreseeable future. On-demand services will not be able to move the volume of riders and achieve productivity results of fixed route transit. Simply put, mass transit will continue to offer the best solution to move large amounts of people and fight roadway congestion in dense, transit supportive corridors. Further, if ridesharing is not encouraged, on-demand transportation has the ability to increase traffic and congestion.

Public transportation services should also serve those unable to access or use traditional fixed route. Recognizing the challenging topography in many of Marin's communities and the rapidly aging population, the need to provide and continuously expand paratransit and dial-a-ride type services is a focus of the District. These services can both complement and better connect riders to fixed route.

2. **Focus on Riders in Need of Mobility Opportunities.** The private sector is quickly responding to market desires and availability for these services in Marin is on the rise. The District in no way should directly compete with these services and use its resources to simply subsidize their offerings. Rather, opportunities to encourage their use for those who are able and evaluate discounted transfer agreements to encourage transit use should be pursued.

3. **Accessibility for All.** The private sector has been unable to meet the needs of wheelchair users or those who need additional assistance with their travel due to a limiting physical or mental condition. These riders tend to rely on Marin Access services and have very few other options. As previously mentioned, access to most TNC services requires not only a smartphone to book and manage the ride, but also a credit or debit card to pay for the ride. Although some TNCs offer a backend system to allow a call center to function on behalf of the smartphone, fare payment must still be worked out independently between the rider and booking party. Recent surveys of Marin Transit riders show 79% of fixed route and only 66% of Marin Access riders have a smartphone and could take advantage of the service without the support of a call center capable of dispatching trips on behalf of the rider.<sup>3</sup>
4. **Ensure Accountability.** Sufficient data sharing agreements between the private and public sectors is needed to allow policy makers the ability to make informed decisions when spending taxpayer money.
5. **Riders Must Have Choice in Service Providers.** To comply with federal regulation and limit agency liability in subsidizing private transportation services public transit agencies must allow the rider choice in who provides the trip for the rider. Typically, the rider must be given a choice of at least three options and all must provide a comparable service at a comparable price. Aside from TNCs, many peers have relied on local taxi providers and/or local social service or non-profits to be there options. In Marin County, the taxi industry has suffered significant reductions in drivers and providers in recent years and current companies limit service during peak hours due to standing commitments to home to school transportation services. While some social service agencies and nonprofits employ drivers to support their program needs, very few can keep their vehicles in service to support on-demand trip requests countywide.
6. **Use Pricing and Fare Policies to Control Demand.** It's hard to argue that a curb-to-curb on-demand service is less convenient than a service you must get to and from and operates on its own schedule. If, however, on-demand and fixed route services are priced to encourage use of on-demand services for trips that are short, facilitate transfers to transit, and in areas of low congestion and transit demand, and discourage longer trips, the District could refocus fixed route resources on "trunkline" service to improve service frequencies.

### Selected Strategy

Through ongoing meetings and discussions with our partner Golden Gate Transit, Marin Transit was introduced to Via as a potential software partner to achieve the goals outlined in previous planning work. Via offered to provide Marin Transit with an opportunity to test the provision of accessible, on-demand service without making a significant investment in new software or having to contract with a new provider to operate the service. On November 20, 2017, the Marin Transit Board authorized the General Manager

---

<sup>3</sup> Ibid.

**DRAFT**

to enter into a no-fee agreement with NoMad Transit, LLC, a wholly owned subsidiary of Via Transportation, Inc. to provide a cloud-based technology platform for scheduling and dispatch of on-demand transit service. This agreement enabled staff to work with Via to develop the most appropriate use of the technology for existing or new services within Marin County. On February 26, 2018, the Board authorized the General Manager to purchase four accessible vans to provide the service. These vehicles were smaller than the traditional paratransit cutaway vehicles but offered wheelchair lifts and configurable seating options.

This selected public-private hybrid service model relies on a smartphone app and driver app technology (provided by Via) to schedule and dispatch services provided using District owned vehicles operated through current contracts. In comparison to a subsidy-only program (voucher or coupon code), this hybrid model enabled the District to control:

- Driver training, screening, and support to riders outside the vehicle;
- Vehicle design and maintenance, including wheelchair accommodation;
- Fares and fare policy, including the ability to accept cash and recognize transfer agreements with other transit services;
- Routing and operational policies, including where the service is available, limitations on trip distance, etc.; and
- Reporting metrics and data access.

Via had implemented or was in the process of implementing similar partnerships with public transit agencies throughout the country.

### Targeted Markets

The Marin Transit Connect pilot was an exciting opportunity for the District to test a transit service that could efficiently meet unmet needs of multiple markets and be more attractive for riders. The goal of the pilot is to gain experience with dynamic on-demand scheduling software and understand how it serves or does not serve the markets identified in Table 1 below. It should be noted that the pilot is focused on serving the senior/ADA market but also viewed an opportunity to serve other markets identified in the District's SRTP.

**DRAFT**

Table 1: Targeted Markets for Connect

Market	Objectives
Senior/ADA Riders	<ul style="list-style-type: none"> <li>Better understand same day paratransit opportunities and service delivery model</li> <li>Improve transit options for conditionally eligible paratransit riders</li> </ul>
Commuters traveling from outside of Marin	<ul style="list-style-type: none"> <li>Reduce number of drive alone commuters</li> </ul>
Northern San Rafael residents and commuters	<ul style="list-style-type: none"> <li>Improve first and last mile connectivity between Northern San Rafael residential neighborhoods and transit corridors</li> <li>Test delivery method for more effective/productive neighborhood shuttle</li> </ul>

### Operations & Funding

The Connect service is operated by the District’s paratransit contractor, Marin Senior Coordinating Council or “Whistlestop”. This decision was made because of the nature of the type of service (demand response), the nature of a curb-to-curb operation including scheduling and dispatch practices, and the desired level of driver training (ability to assist seniors and those with disabilities). Due to the unpredictable demand, the District agreed to pay the contractor for all scheduled driver hours as opposed to traditional revenue hours or only when the trips were being provided.

Initial operations consisted of a soft launch of up to two months where fares were offered for free and service supply was slowly ramped up as demand increased. The soft launch allowed Via, Whistlestop, and the District to communicate daily to identify issues and get quick resolution to refine the performance of the rider and driver app.

Operations costs for the service are based on the Whistlestop Contract service rates and estimated fuel prices. Other costs associated with service include scheduling, marketing, technology fees, staff time, and consultant support for service evaluation. Via, the software partner, is waiving the software licensing fees for the pilot period. Estimates for the technology fees are included in the ongoing service operation costs. While scheduling will primarily be done with the Via smartphone app, Marin Transit will provide phone-based scheduling under the District’s Travel Navigator program.

The initial budget for the program assumed approximately 11,000 hours of service and a total budget of just over \$800,000 annually. Estimated actuals for service are expected to be approximately 8,460 hours and at a cost of \$646,000. The primary difference in the original budget and the estimated actuals is the weekend service that was never implemented.

**DRAFT**

In FY 2019/20, the project was primarily funded with federal grants, fare revenue, and Marin County Vehicle Registration Fees (Measure B). In 2017, Marin Transit received \$700,000 Federal Transit Administration (FTA) Section 5310 grant for the operation of same day accessible service. A portion of these funds were allocated for operations during the first year.

## II. Program Overview

Marin Transit Connect was developed in partnership with Via and its contractor, Whistlestop. Compared to existing fixed route or demand responsive services offered by the District, the single largest difference offered by the new Connect service was the ability to dynamically request and manage your trip within a smartphone app.

### App Functionality

The partnership with Via allowed the District to test the use of technology alongside the new service to see how riders would respond. The app functions similar to TNC apps provided by Lyft and Uber and allows the following functionality:

- Requesting a shared ride from a specific pickup and drop-off location
  - Specifying if the request is for now or a later time. Also allowing a reoccurring (daily, weekly, monthly) request for this same ride request.
  - Specifying if a wheelchair accessible vehicle is needed
  - Specifying the number of passengers on the ride request
  - Receiving information on available pickup times and costs associated with the trip, then allowing a trip to be selected for pickup
  - Visually seeing the service area and notifying the rider if the requested pickup or drop-off falls outside these limits
- Providing real-time feedback to the rider on a requested ride
  - Showing the vehicle's location and movement prior to pickup
  - Updating the rider an estimated time of arrival
  - Push alerts to the rider when the vehicle is 2 minutes away, when the vehicle has arrived, and, if the rider is delayed, warnings that the driver needs to keep moving
- Managing payment and fare media
  - Management of a credit card to charge rides
  - Purchasing and storage of a monthly pass or ride credit
  - Input of coupon codes or other codes to get ride discounts
- Managing historic ride history allowing the user to see previous rides on the service including origin, destination, driver, and fare information
- Managing rider account and communication information including phone and email. Riders can also email Connect support through the app.

The images below in Figure 1 show the general booking process in the app environment.

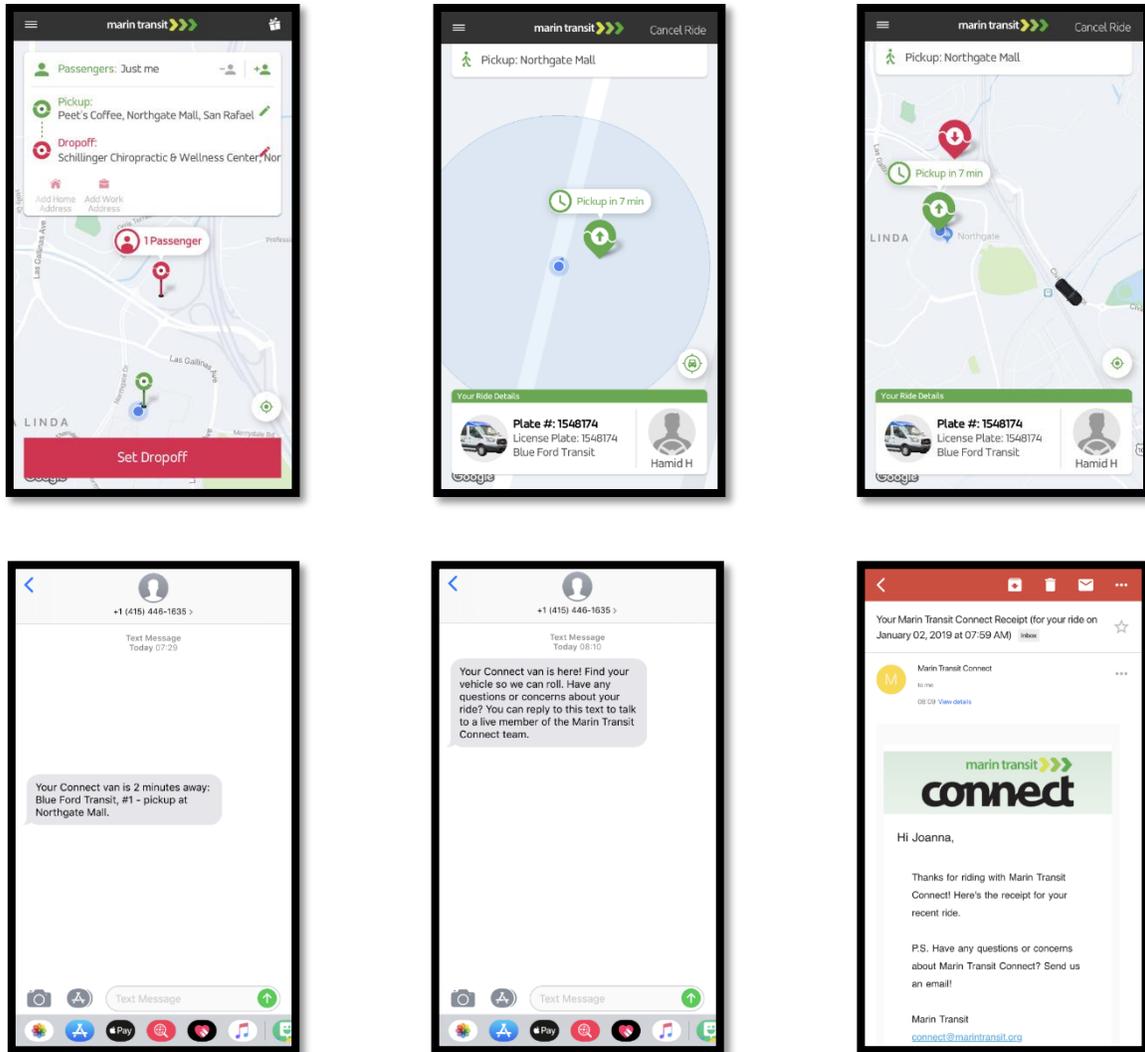


Figure 1: Trip Booking Flow in the App

## Service Characteristics

Table 2 below shows the service characteristics of the service as of May 2019.



**DRAFT**

Table 2: Service Profile Summary

<b>Service Hours</b>	6:20-7:00pm (weekdays only)
<b>Ride Requests</b>	Requested through the app or by calling scheduling line
<b>Regular Fares</b>	\$4.00 per trip \$40.00 monthly pass
<b>Discounted Fares</b>	\$2.00 (Senior / ADA) \$2.00 (to/from bus or rail stop)
<b>Service Area</b>	Northern San Rafael
<b>Vehicles</b>	Ford Transit (9 passenger or 5 passenger + WC)

### Service Hours

The original service hours were identified as 7:00 am to 7:00 pm, weekday. These hours were identified based on typical commute hours and when Marin Access rides were taken within the service area. The start of service was adjusted to 6:20 am after four months of service due to requests by riders to meet the SMART train that is scheduled to arrive at 6:20 am. Original funding for the program included the ability to expand service to weekends but that market was not explored during the pilot program due to lack of interest observed during surveying efforts.

### Ride Requests

Request for the service can be made through the app or by calling the scheduling line. The process for making a ride request is described in the app functionality section above. Requests can be for an on-demand ride where the user wants to travel now, or by requesting a pre-scheduled ride.

Pre-scheduled rides are provided as a 20-minute window, in 10-minute increments. For example, if a rider wants to travel at 7:30am, they can request either a pickup between 7:20-7:40am or 7:30-7:50am. A pre-schedule ride request does not guarantee a ride at a specific pickup time, rather it automatically pushes a request to the system five minutes before the pickup window starts and then selects the next ride option for the rider. For example, if the rider selected the 7:20-7:40 am window, the system will submit the request to the system at 7:15 am and, assuming the next pickup option is in say nine minutes, the rider would get picked up at 7:24 am. Once the ride has been placed by the system, the user would get all ride updates and notifications within the app just like booking an on-demand trip.

**DRAFT**

## Fares

The base fare for the service was set at \$4.00 per trip, per rider for the pilot. This fare allowed a curb-to-curb trip anywhere within the service area. A monthly pass was also offered at \$40.00 per month which provided unlimited rides for a 30-day period, starting with the date of the first ride.

Fares for additional passengers booked on the same reservation experience a discount of 50% for each passenger after the first two on the reservation. Figure 2 below shows this pricing structure.

per seat charges					
regular:	\$4	+\$4	+\$3	+\$2	+\$1
discounted:	\$2	+\$2	+\$1 <sup>50</sup>	+\$1	+\$0 <sup>50</sup>
# passengers in reservation					
	1	2	3	4	5+

**Figure 2: Fare Structure**

Several discounted fare options were offered during the pilot phase. The first was for a 50% discount for user who were eligible for Marin Access services (Senior/ADA programs). This discount applied to all base fares and passes. Eligible users were given a discount code that applied this discount to all fares associated with their account.

The second discount was offered to riders whose pickup or drop-off was at an existing transit stop (bus or rail). Over 50 of these locations were identified in the service area. This 50% discount was applied to the specific trip request and developed to encourage riders to use the service as an extension of the larger transit network and overcome the first/last mile challenges in the service area. Due to complexities with integrating the service into existing fare collection systems (GFI, Clipper), it was decided to offer this geographic discount instead of working out a transfer discount that would apply to fixed route and Connect services. The geographic discount was also viewed as an opportunity to aggregate trips along the major corridors, even if riders were not transferring to or from the other transit services.

## Service Area

The service area is approximately four-square miles and is shown below in Figure 3. As described in Service Strategy section in Section I, the area was selected due to: a good mix of employment, residential, educational, and other activity centers; a high level of transit services to connect to/from including fixed route local bus, fixed route regional

DRAFT

bus, and regional rail; and a high concentration of Marin Access trips and activity centers for these users.

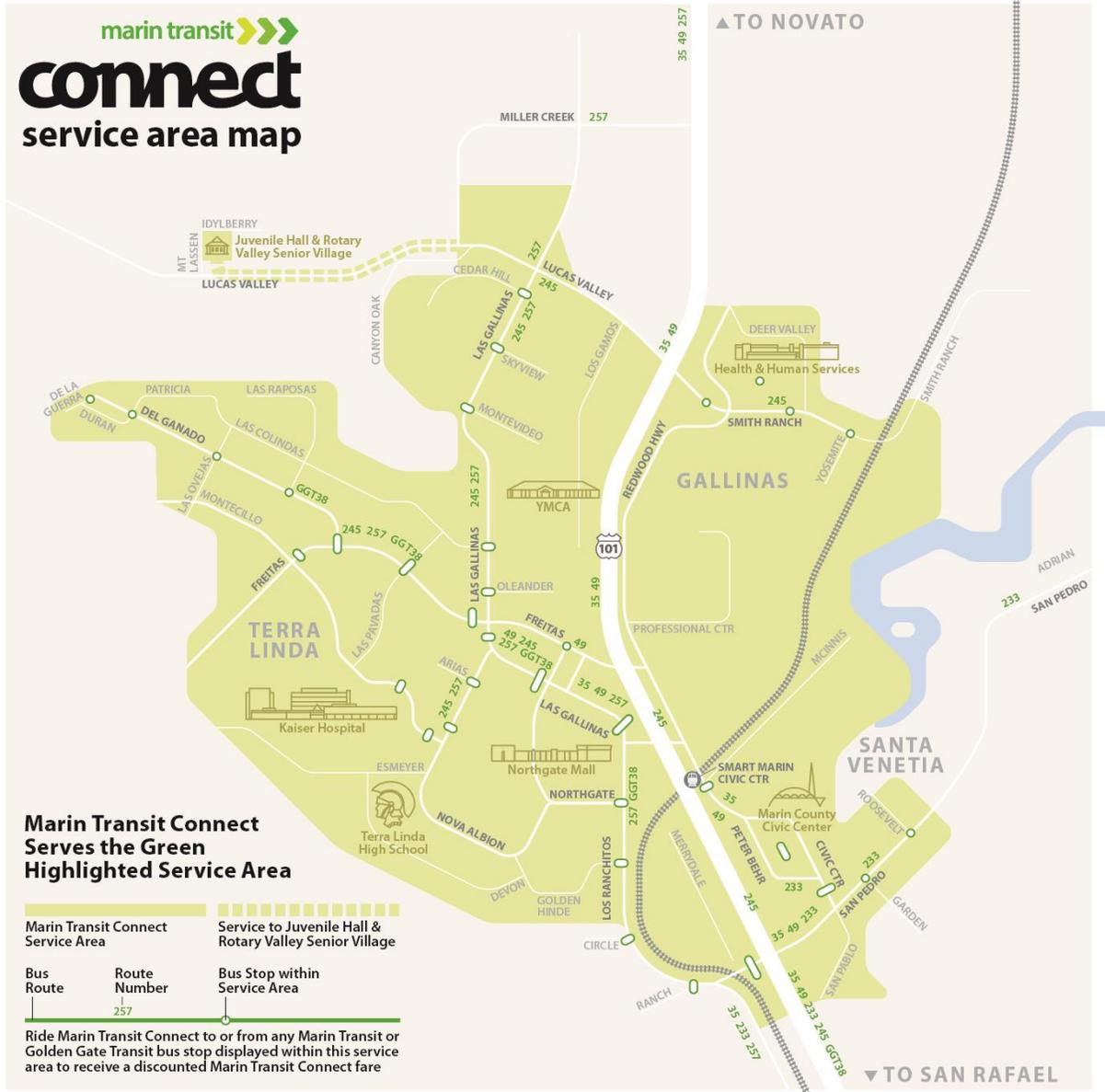


Figure 3: Service Area Map

### Vehicles

Vehicles were selected to balance the need for wheelchair accommodation and anticipated maximum passengers loads of six to eight passengers. The selected vehicle was a Ford Transit, mid-roof van. A total of four vehicles were purchased for the pilot project and each was decaled with a Connect specific branding and each was assigned a different color to allow for easier identification by riders using the service. The vehicle image is shown in Figure 4.





Figure 4: Connect Vehicle Image

The vans were designed with a smart-floor system that allowed the seating configuration to be modified based on the needs of the program. The maximum seating offered without accommodation for a wheelchair is nine passengers plus the driver and the maximum with one wheelchair is five passengers plus driver. The assignment of vehicles always allows for at least one wheelchair accessible vehicle to be in service and three of the four are currently configured to accommodate wheelchairs.

### Service Levels

Operation of on-demand service is a new operating model for the District and differs from traditional fixed route and demand response services. In fixed route operations, the service levels (schedules) are set and only adjusted with demand has demonstrated a steady and consistent increase or decrease. Fixed route shows the public exactly how much service (based on frequency and span of service) will be available on any given day. Changes to a schedule on the fixed route program usually only happens at a set service change or bid change date. On-time performance is based on the vehicles ability to service the timepoint stops at the posted times.

Demand responsive service such as paratransit and dial-a-ride (DAR) are a bit more dynamic but service needs can be planned for at least the day before service. Since paratransit and DAR require advanced reservation, the scheduling department can build shifts for the next day which are only adjusted day of for unplanned operational issues such road calls or driver absenteeism. On-time performance is based on performing pickups within a window of time that was pre-determined with the rider.

On-demand services challenge operations to be able to offer enough service to ensure requested pickups are available at an attractive time but not oversupply to point where drivers sit idle and productivity is low. Supply, or the number of vehicles available for

**DRAFT**

request, can be adjusted throughout the day or throughout the week to balance this rider experience and operational productivity.

After initial ramp up of service, the District’s approach to the pilot was to oversupply early on to (1) get a sense of unconstrained demand by time of day, (2) to give riders a positive experience of the service, and (3) offset early software issues that hindered batching of trips. Service levels were changed eight times throughout the pilot as ridership patterns changed and software bugs were reduced and eliminated. Figure 5 below shows typical daily hours of service offered, by month, during the first year of service. After a ramp up of service in August of 2018, service was slightly adjusted downward based on observed demand by time of day.

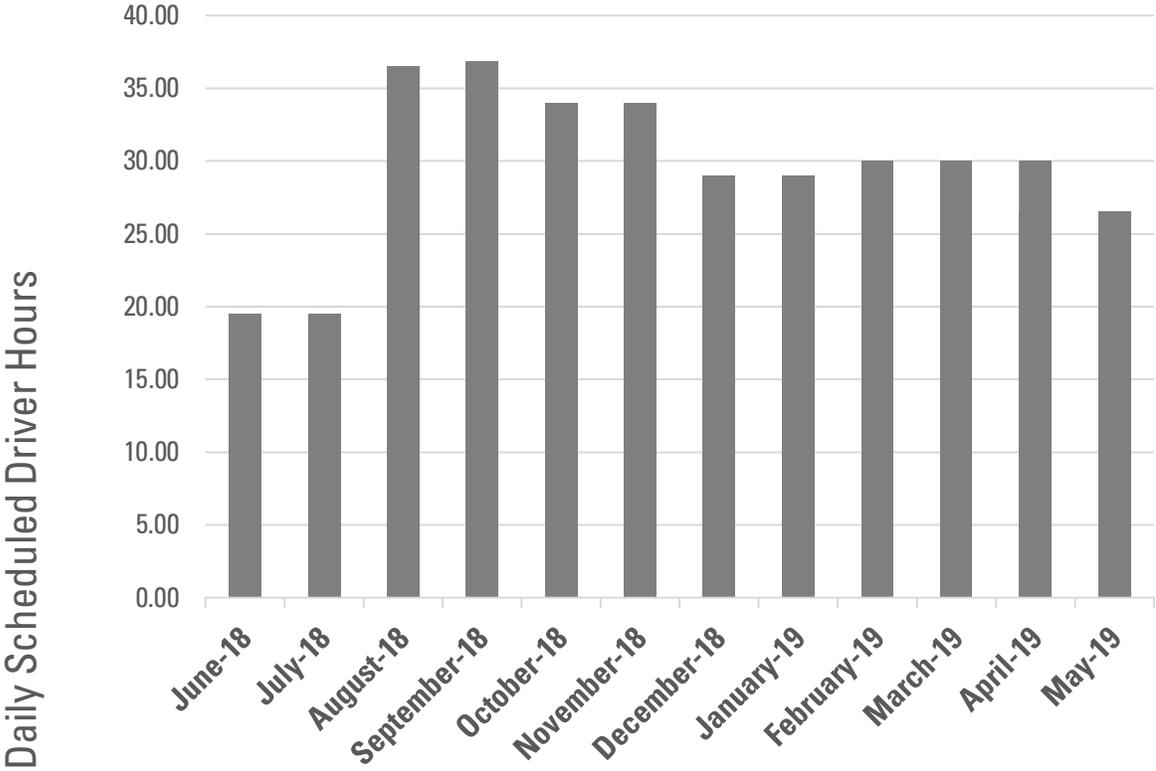


Figure 5: Scheduled Driver Hours

## Marketing and Outreach

The Connect program was heavily marketed since the launch of the service in late May 2018. Since the program included so many new elements to riders (app, defined service area, credit card payment, on-demand/no advanced reservation, etc.), numerous strategies were used to inform potential riders of the new service. The District partnered with Via, the Travel Navigators, and other community-based partners to conduct the outreach activities. The following briefly summarizes these efforts.

**Community Events:** Marin Transit spent significant time in the first few months of the program tabling at larger community events, focusing on those within or near the service area. These events included: Northgate Mall Summer Concert Series, Agricultural Institute of Marin Sunday and Thursday Farmer's Markets at the Marin Civic Center, Kaiser Permanente Employee Wellness Festival, Drawdown Marin Global Climate Action Summit, SMART 1-Year Anniversary Celebration, Jewish Community Center (JCC) Summer Concert Series. Visitors were given Marin Transit promotional items for signing up for a Connect account.

Marin Transit also informed members of the Paratransit Coordinating Council and Marin Mobility Consortium about the service and provided marketing information for partners to distribute.

**Senior Outreach:** One of the primary reasons for creating the Connect program was to address a gap in same-day accessible service. Thus, senior outreach was the primary focus of marketing efforts for the Connect program. Calls and emails were made to over thirty senior residential facilities. Many were sent information postcards to share with residents, and presentations were given at facilities willing to accommodate.

The Marin Transit Travel Navigators were also leveraged to contact Catch-A-Ride clients within the service area to create an account with ride credit to take free rides to test out the service. Travel Navigator staff also supported Marin Transit staff during presentations at senior residential facilities.

Marin Transit staff also reached out to senior coordinators at the City of San Rafael Community Centers, San Rafael Library, YMCA and JCC to schedule tabling times, presentation opportunities, newsletter marketing, and flyer distribution.

In 2019, Marin Transit used its partnership with Technology4Life to provide Connect information as part of its Tech Tips for Transportation classes. Technology4Life also produced a Connect informational video that will be used for marketing efforts.

**Business Outreach:** Marin Transit staff conducted in-person drop off of marketing materials or sent emails to businesses within the service area including popular destinations and employers like Northgate Mall, Marin Link, Bank of Marin, Sheraton San Rafael, Embassy Suites/Hilton, San Rafael Chamber of Commerce, Kaiser Permanente, Scotty's Market, Safeway, Rite Aid, CVS, Legal Aid of Marin, Marin Ventures, DaVita Dialysis, Guide Dogs for the Blind and FICO. Many of the businesses assisted with

marketing efforts by putting up informational posters, distributing postcards to customers, or sending out press releases or newsletters.

**On-Street Marketing:** Extensive canvassing was completed throughout the first few months of service, mainly revolving around the Civic Center SMART station—the most frequent pick-up and drop-off point within the service area. Canvassing was conducted for several hours during both the AM inbound peak and outbound PM peak. Via contributed to this effort by hiring a local brand ambassador team to provide additional support approaching riders at the SMART station, Northgate Mall, grocery stores, bus stops, and employment centers within the service area for three weeks in September of 2018. Canvassing around the SMART station continued in the April of 2019. All bus stops within the service area contain notices about the Connect service, and a large banner was installed at the SMART station.

**Digital Marketing:** The nature of Connect as an on-demand, app-based service provided the ability to directly communicate with passengers. This ability was helpful not only to communicate with riders about their trip but offer incentives to use the service. Promotional campaigns included free rides throughout May and June of 2018, \$10 in free ride credit for new riders, a two-week free ride promotion during lunch hours in October of 2018, and free rides during the 2019 Marin County Fair. Promotional codes were customized for staff to track the success of certain campaigns.

Press releases and newsletter announcements were distributed throughout the pilot period by community and business partners including Aging Action Initiative, Marin Villages, City Manager of San Rafael, JCC, Kaiser Permanente, Marin Center, and the San Rafael Chamber of Commerce.

**Employer Accounts:** Marin Transit signed agreements with the County of Marin and Kaiser Permanente to provide employee-sponsored rides for their employees. All trips taken by employees under this program had their ride charges directly billed to the respective employer. Kaiser and the County of Marin staff assisted with targeted messaging to employees to receive this transit benefit. Marin Transit was also able to send out a direct mailer to over 300 residents who subscribe to Marin County updates.

### III. Rider Survey Results

To better understand the active users of the Connect service and those who had downloaded the app but not taken a ride, staff conducted a survey in November of 2018, approximately six months after the start of service. The survey was administered online and sent to users at the email addresses associated with the Connect app account and by pushing notifications directly within the app. In total, 193 responses were received with 105 coming from active Connect users and 88 responses received from those who had downloaded the app but never taken a ride. Based on the number of active riders and downloads, this represents approximately 48% of total active users and 25% of total accounts.

The following is a distilled overview of the survey results.

#### Who's Using Connect?

The first area addressed in the survey was who was using the Connect service. Overall, results showed that the majority were commuters using the service to get to and from the SMART station. 67% reported that their primary trip purpose was work and nearly half reported that they lived in Sonoma County. The second most common response on trip purpose was social/recreational (23%) and only 26% lived within the service area.

Rider income levels were significantly higher than typical Marin Transit fixed route or Marin Access riders. Nearly half indicated their household income was over \$100,000 compared to just 18% on fixed route and 3% on Marin Access<sup>4</sup>. Access to an automobile was also significantly higher for Connect riders with only 16% not having access and over half having access to two or more vehicles. Fixed route riders have over twice as high a percentage without access to a vehicle (38%) and only 30% with access to two or more vehicles.

Interestingly, the most frequent comment of both users on improving the service—and non-users on what it would

#### SURVEY TAKEAWAYS

- Over 220 accounts have taken a ride in the last year
- 67% are traveling for work
- About half of riders are Sonoma County residents commuting on SMART
- Connect riders tend to be higher income commuters familiar with public transit
- 25% say they would drive to their destination if the Connect service was not available; 29% would take a Lyft, Uber or taxi; 8% would not make the trip altogether

<sup>4</sup> 2017 onboard rider survey & 2018 Marin Access Rider Survey

**DRAFT**

take to use Connect—was an expanded service area to downtown San Rafael.

### Survey Results

**Trip purpose and time:** The primary trip purpose for riders’ trips was for work but showed a healthy mix among other trip purpose categories. Over 55% answered that they travel during both the 6:00 am—9:00 am and 3:30 pm—6:00 pm windows.

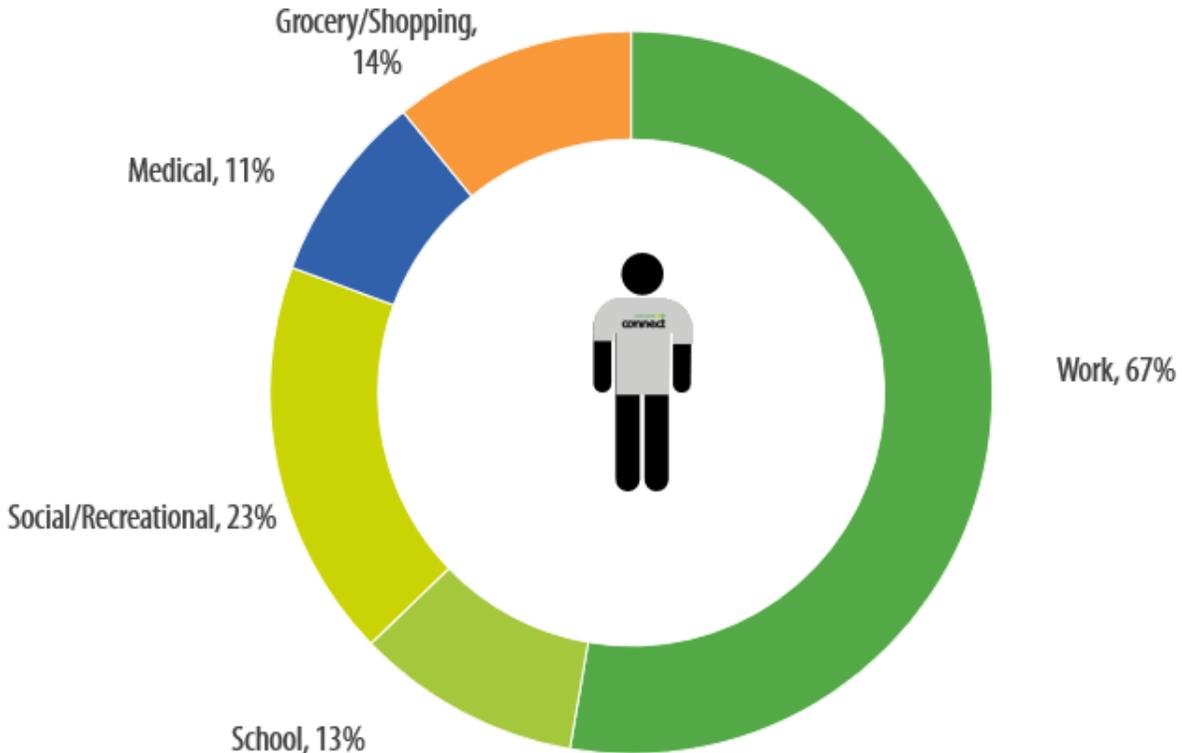


Figure 6: Trip Purpose of Connect User Survey Respondents

**Age:** Both the median and average age of riders was 46 years old.

**Ride Booking:** 97% of respondents said they booked their ride using the app as opposed to the call-in option.

**Other transportation options:** Nearly 56% of respondents use SMART; 33% use a Marin Transit fixed route service; 13% use a Marin Access service; and nearly 30% use Golden Gate Transit. Eighty-four percent of users said they have access to one or more vehicles.

**How’d you find out?** Over 40% of riders became aware of the Connect service through their employer. Seventeen percent responded that they became aware from a friend or co-worker, and 15% found out through a bus or bus stop announcement.

**DRAFT**

**Place of residence:** Most riders surveyed reside in Sonoma County, which is telling as to how Connect is being utilized as a first-last mile solution for SMART commuters to connect to their places of employment.

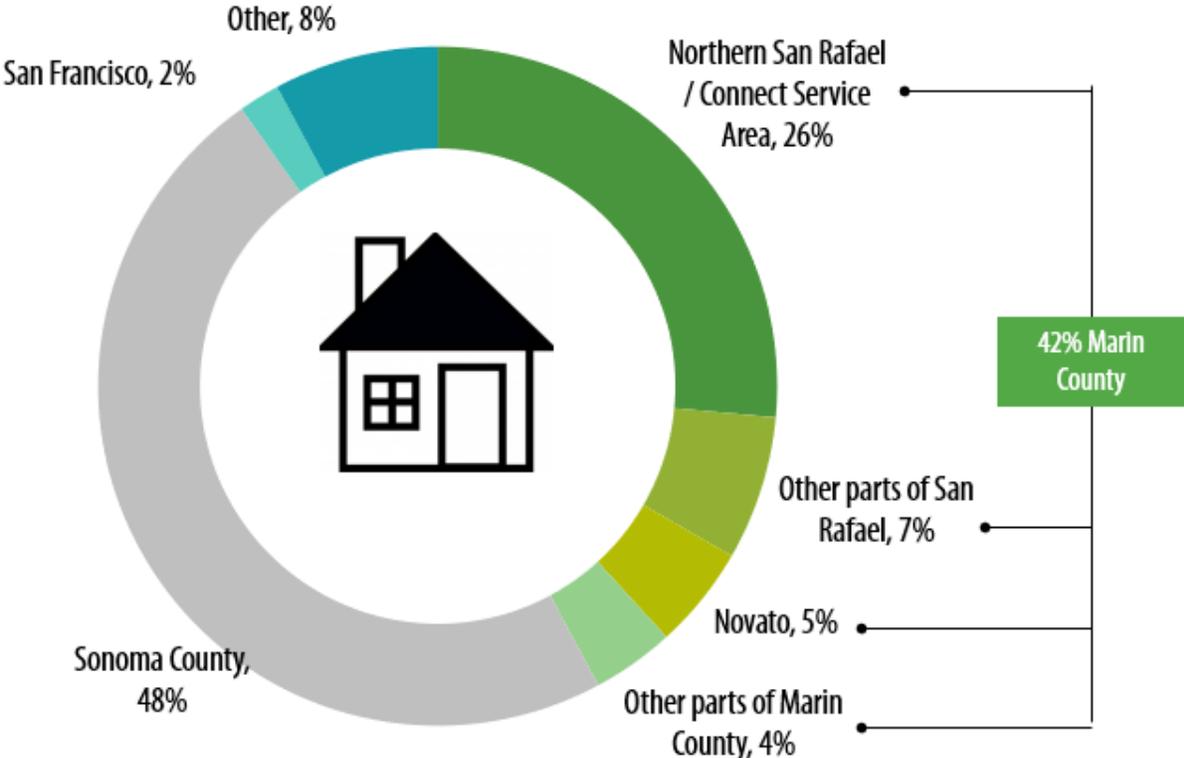


Figure 7: Residence of Connect User Survey Respondents

**DRAFT**

**Income levels:** Nearly 50% of all riders have an average household income over \$100,000 per year. The Connect rider tends to be a higher income customer than what is typically noticed on public transit.

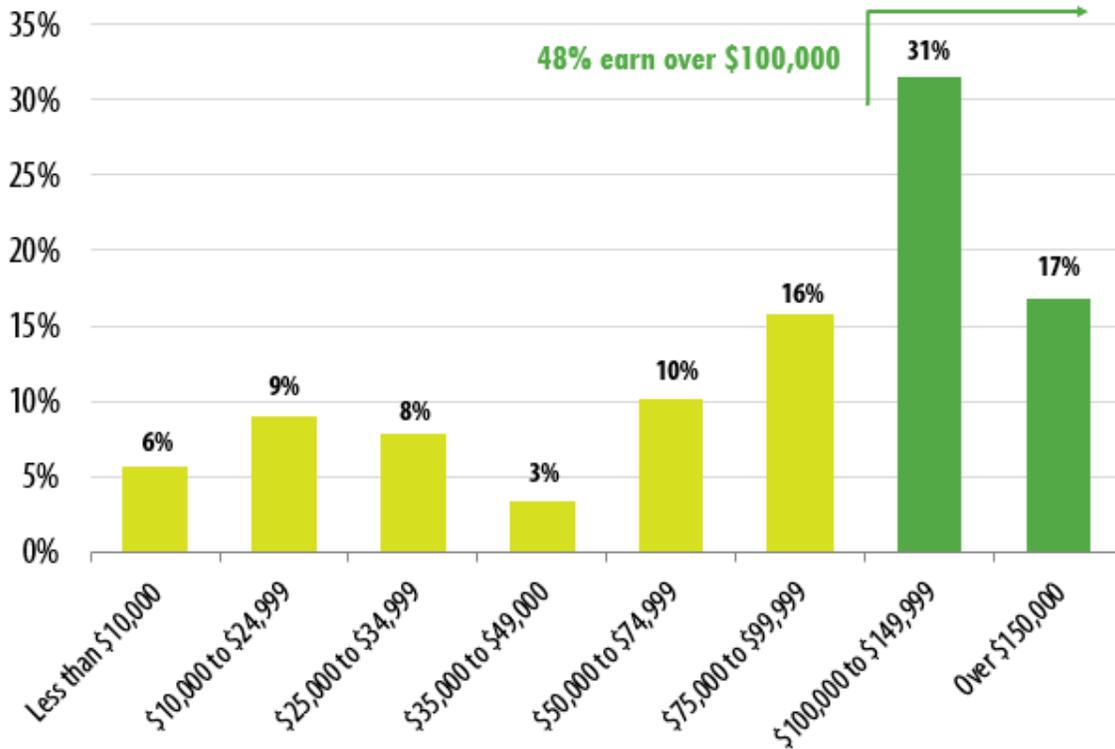


Figure 8: Connect Household Income Levels

**Rider ratings:** On a ten-point scale, 10 being completely satisfied and 1 being completely dissatisfied, components of quality of service received the following ratings:

- Reliability: 8/10
- Cost: 9/10
- Service area coverage: 7/10
- Drivers: 10/10
- Service hours: 8/10
- Vehicles: 9/10
- Customer service: 9/10

**Overall satisfaction:** Riders tend to be satisfied with the service—90% of those surveyed identified as somewhat satisfied (14%), satisfied (23%), or very satisfied (53%). Nearly 90% of rated rides are rated as 5/5. The average ride rating received is 4.8 within the app environment.

## IV. Data Analysis

### Systemwide Performance

One of the primary factors in selecting the partnership with Via for the on-demand service was the ability to have full access to the data. Via worked with the District to offer standard and custom reports to understand how the app was performing and how the service was performing. Multiple levels of the program were monitored and reporting including:

- App Download Activity
- Accounts Created and Special Type of Account (Employer-Sponsored, WAV/ADA) Created
- Rides Requested and Performed
- Rider Retention
- Pickup Time Estimates and On Time Performance
- Percent of Rides Shared
- Rides by Fare Types and Discounts
- Promo Code Usage

Reporting formats allowed most of these metrics to be filtered by a specific date range to see daily, weekly, and monthly totals.

### App Download Activity

Accounts were monitored using AppsFlyer and were split between Android and Apple Operation Systems. Figure 9 shows the number of times the app was downloaded from the iTunes or Google Play store between program launch and the end of May 2019. In total, the app has been downloaded nearly 2,500 times in the first year since the program launched.

Observations from the download activity show that aside from the first full month of service (June 2018), download activity of the app has been fairly steady, between 100-200 per month. Comparing Android to Apple operating systems, approximately 70% were downloaded for the Apple IOS compared to 30% on Android.

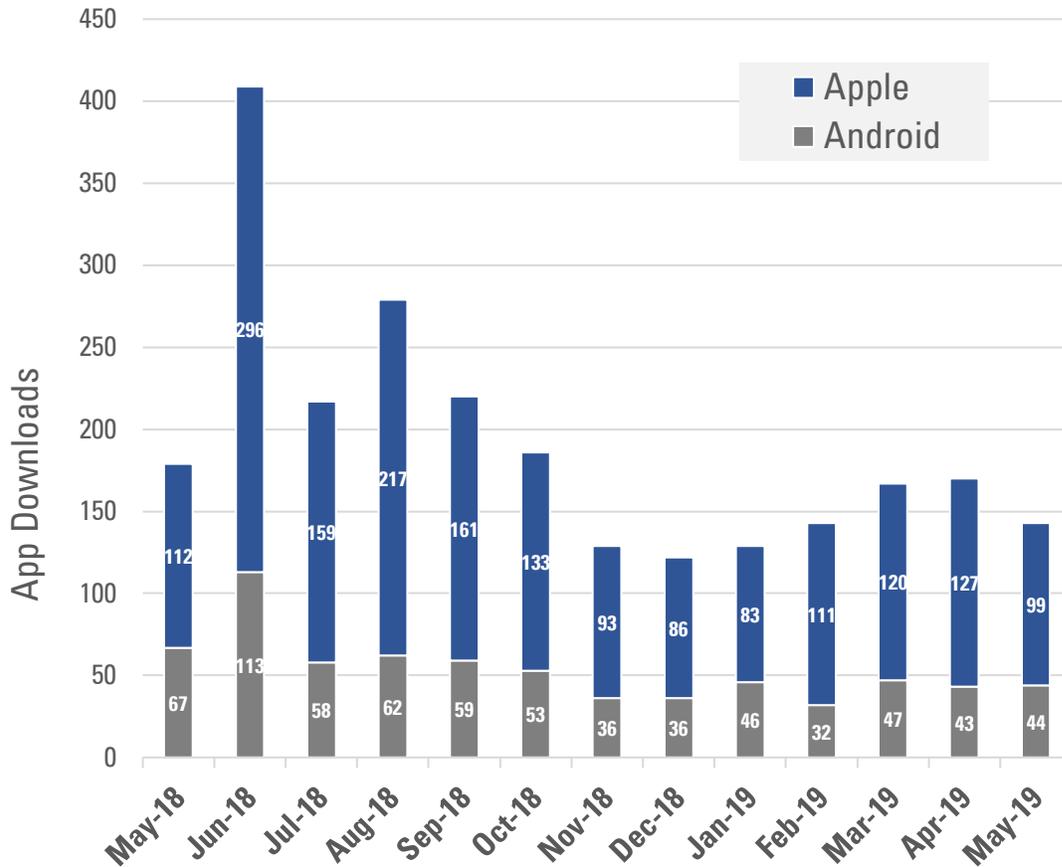


Figure 9: App Download Summary Chart

### Accounts Created

An account is created after the app has been downloaded and the rider profile is created, including credit card information for billing. Compared to total downloads, the number of users that take the next step to create an account is significantly less. Only approximately 1/3 of all downloaded apps turn into accounts. Figure 10 shows that of those who then create an account, only 30% actually tried the service, while the remaining never requested or never took at least one ride.

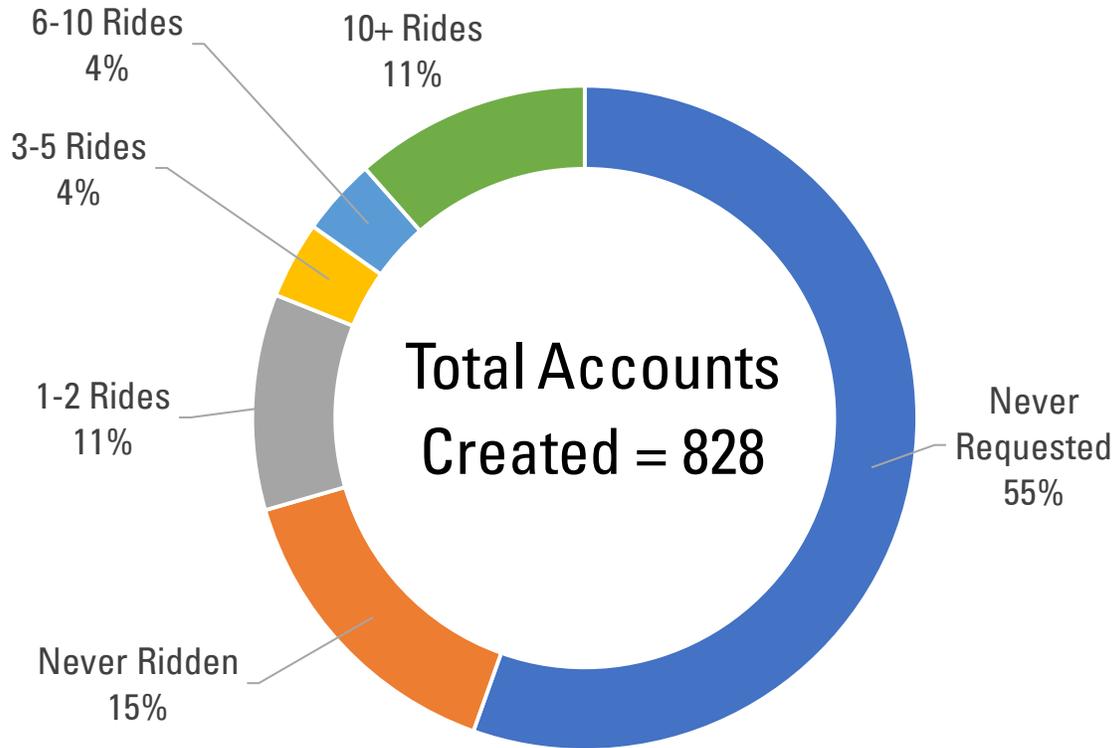


Figure 10: Accounts and Rides Taken

### Requested Rides and Performed Rides

Requesting a ride and taking a ride is the final step in process after downloading the app and creating an account. Ride requests are recorded when someone opens the app and requests a trip. Requests can either turn into a confirmed ride if the user likes the presented options, they can be denied for a variety of reasons including lack of availability or request parameters are outside the program limits (time or geography), or the request can expire if the rider doesn't like the options provided. Figure 11 shows ride requests and rides performed by month, since the start of service. This chart indicates the following trends in the service

- Monthly totals show continued growth in the first 6 months of service and a leveling of ridership in the last 3-4 months prior to June 2019. Monthly completed ride totals are currently averaging approximately 1,300 trips per month.
- The chart also shows an increase in the percentage of requests that turn into rides and a corresponding reduction in ride refusals and other errors. This is largely attributed to improvements in the app performance and a better match of supply (number of vehicles in service) to demand.
- Ridership drops during November and December attributed to the commuter-based ridership population that did not ride during the holiday season.

DRAFT

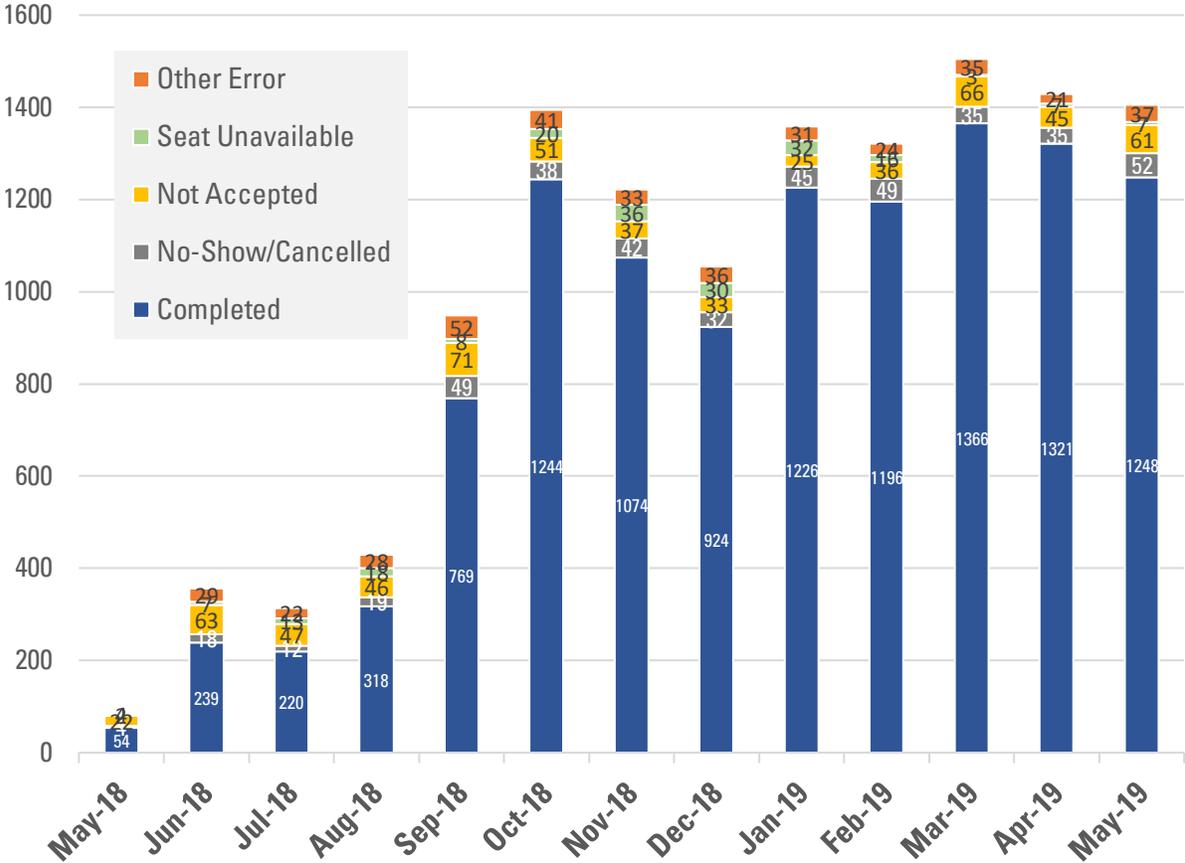


Figure 11: Ride Request Summary

When factoring in the number of service days, Figure 12 shows average daily ridership. The large dips in total ridership are smoothed out a bit for November and December in this chart. Overall, daily ridership has average over 50 passengers per day since October of 2018, with averages growing to over 60 per day experienced in recent months.

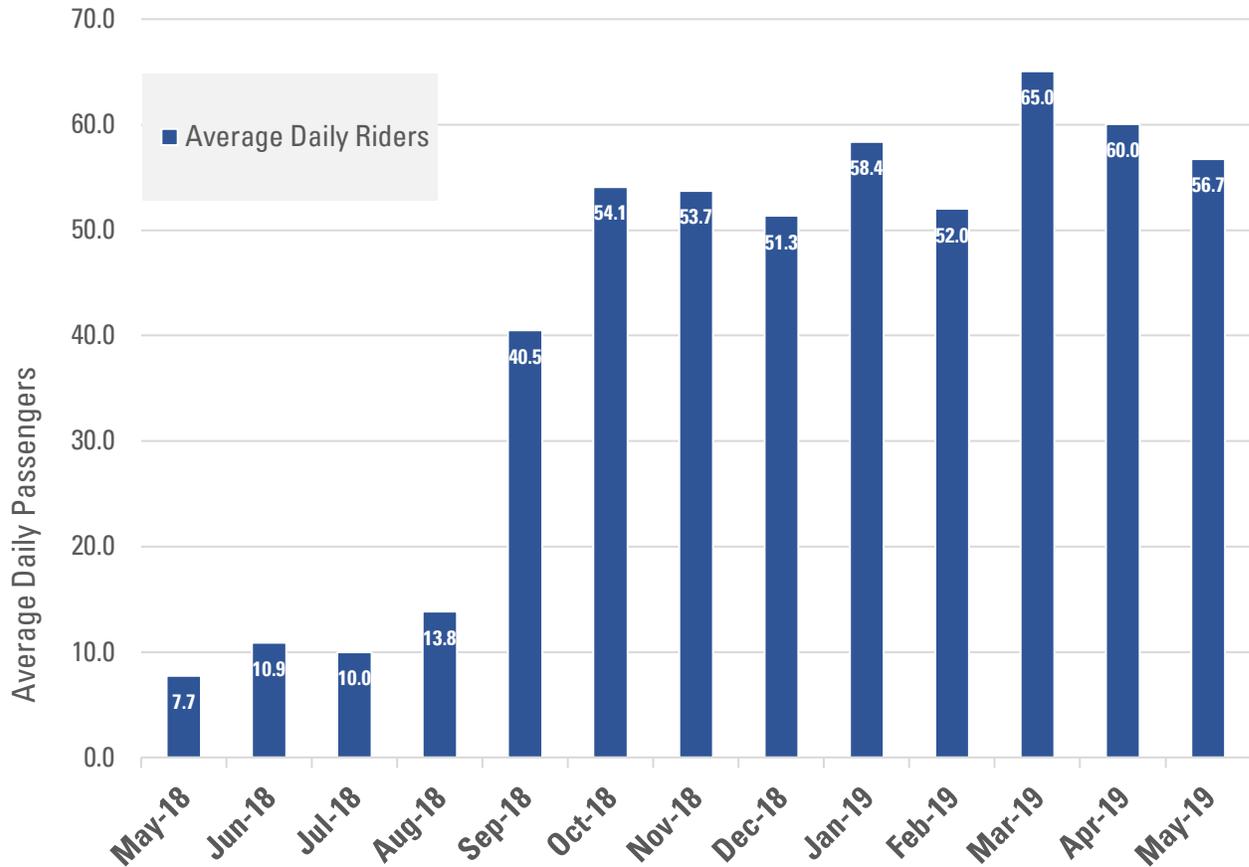


Figure 12: Average Daily Ridership

Using ridership data from January thru April 2019, Figure 13 shows the average number of daily riders, by hour for the service. The figure demonstrates the exaggerated demand due to commuters during the 6:00-9:00 am hours and between the 3:00-5:00 pm hours. During these hours, total trips per hour average between six and 12 passengers. The off-peak hours average three passengers or less per hour.

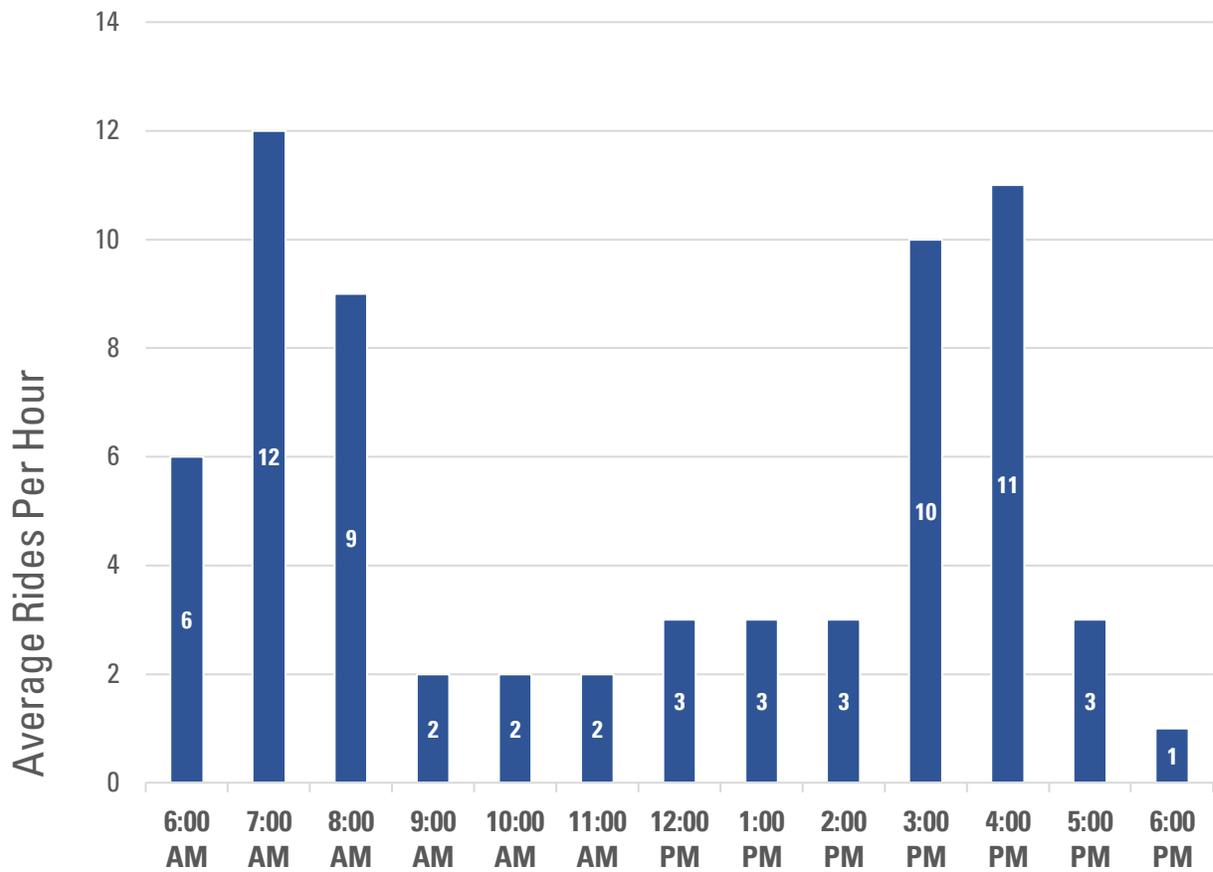
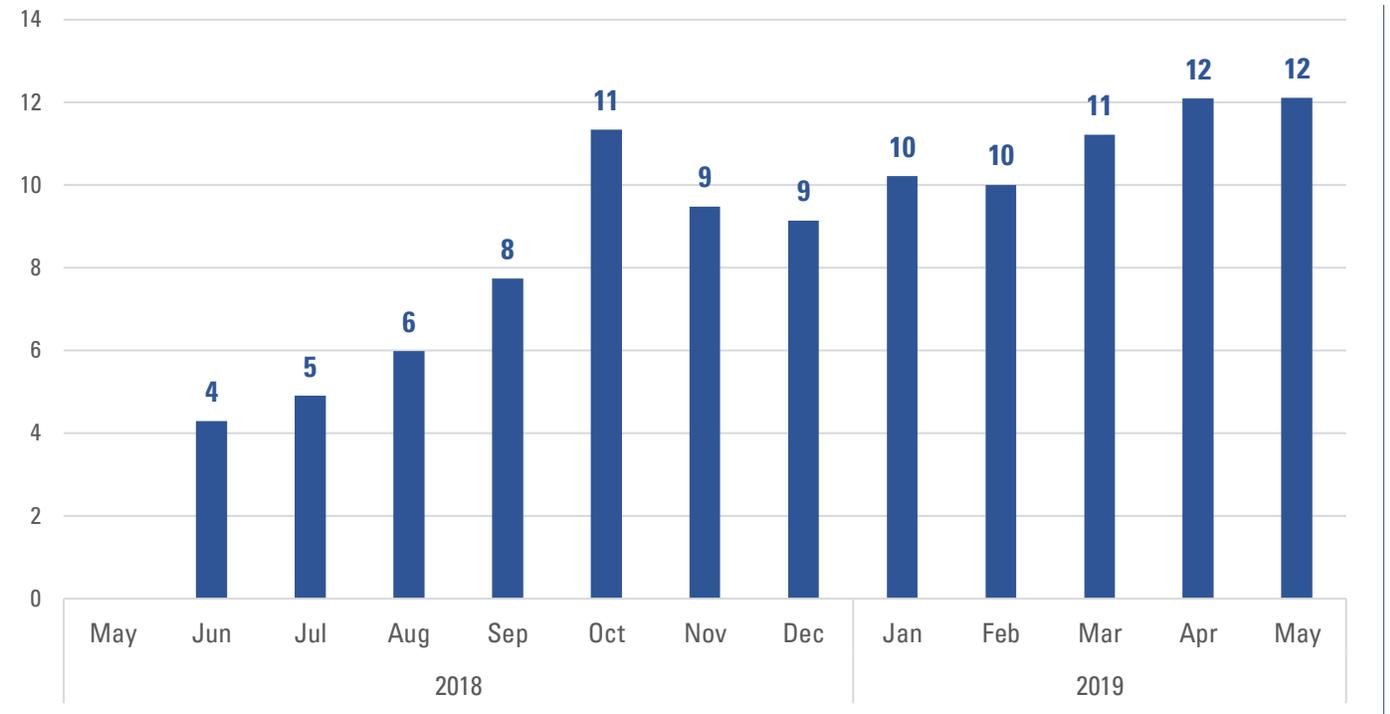


Figure 13: Rides by Hour of the Day

Another trend observed in the Connect program is a growing number of average trips per rider as the program has developed. Figure 14 shows the average number of trips per rider has slowly grown to approximately 12 per month.

**DRAFT**



**Figure 14: Average Trips per Rider by Month**

**Productivity**

Productivity is measured by the District in terms of passenger trips per revenue hour of service. This metric indicates utilization of the service. In traditional demand response services, passengers are required to schedule at least a day in advance. This advanced scheduling helps to ensure the right amount of service, or supply, is provided to meet the demand. Due to the inexperience with this type of program and the on-demand nature of the service, estimating the needed supply to meet the anticipated demands has been an ongoing effort.

Early in the pilot period, service was oversupplied to ensure new riders would have a positive experience and continue using the service. Added supply was also needed during the software development stages when the batching algorithms were still being refined and ride matching was not functioning as well as it does today. These factors, along with low initial ridership, showed very low productivity in the early stages of the program (less than 1 passenger per revenue hour). As ridership has matured, the technology has advanced, and supply levels have been adjusted to respond to stabilized demand trends, productivity has steadily increased. Figure 15 below shows the average monthly productivity trends since the start of service.

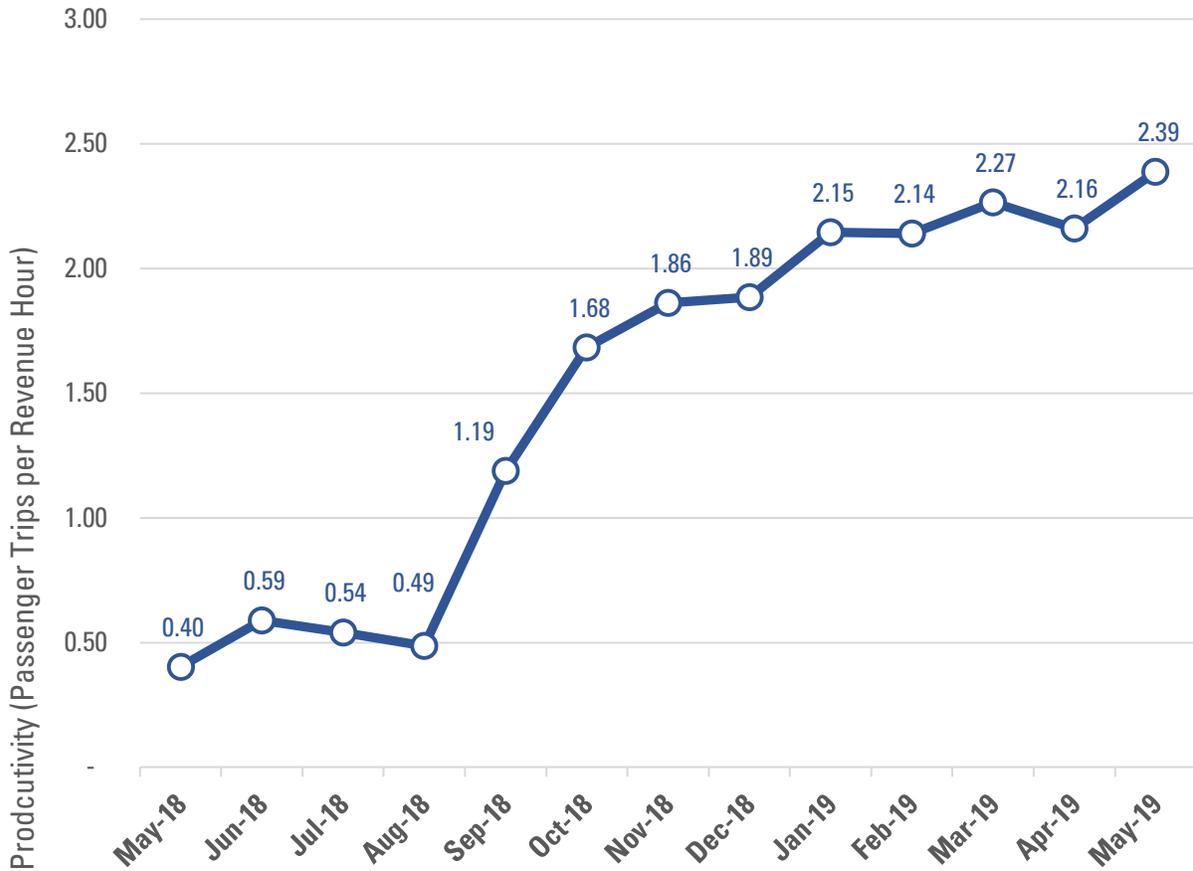


Figure 15: Productivity

### Rider Retention

Rider retention measures how many riders return to use the service after their first use and month over month. Rider retention provides a metric of satisfaction based on continuing to make trips after trying the service. Figure 16 shows approximately 100 riders per month actively use the service, with 90% being return riders and 10% new.

DRAFT

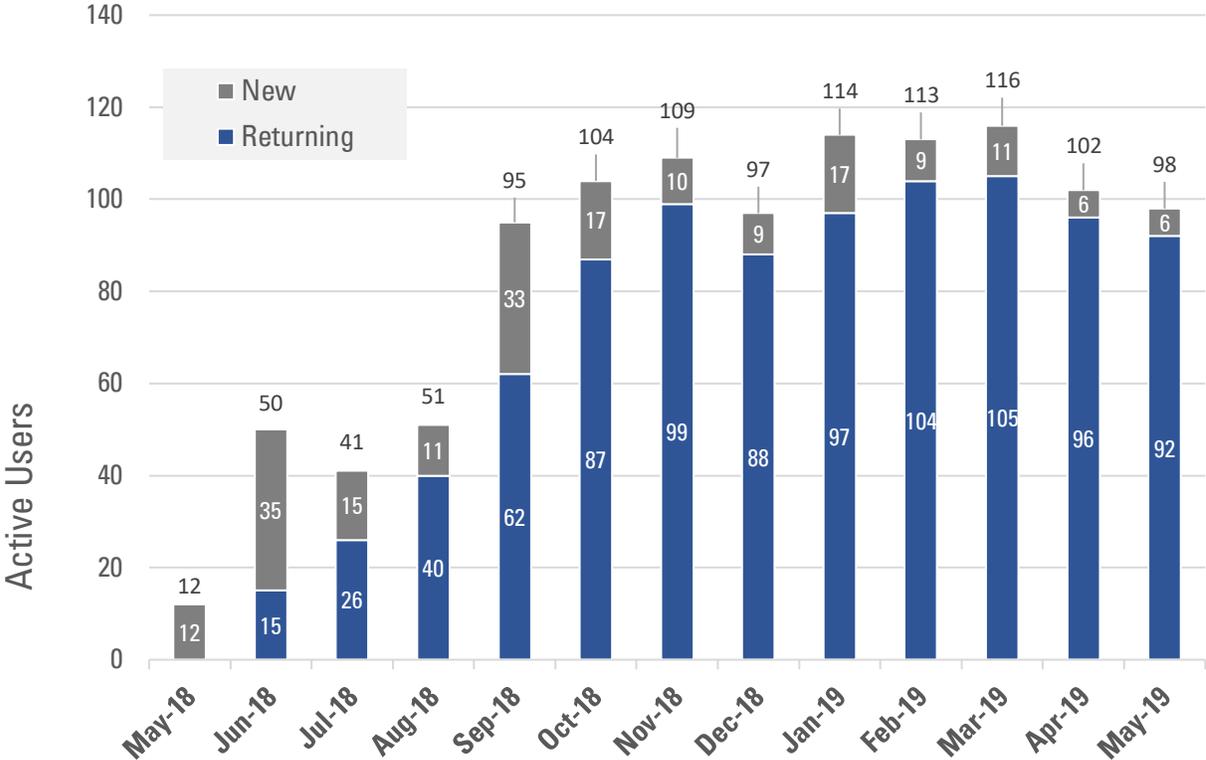


Figure 16: Rider Retention

Ridesharing

One of the primary objectives of the District is to reduce congestion on Marin County roadways by offering high capacity transit services. While Connect is primarily focused on improving mobility and access and less focused on capacity like other transit service typologies, it’s still looking to take single occupant vehicles off the road and provide alternatives to driving. The partnership with Via aligned with this objective since their platform is designed as a ridesharing platform.

Figure 17 below shows the percent of all rides that were shared, by time of day, since the start of the program. The highest percentages of shared rides occurred during the peak commute hours, specifically in the morning hours when most trips are originating from a single location – Civic Center SMART station. The lower percentages of ridesharing during the midday hours reflect the low ridership that occurs during these hours and the limited opportunities to share rides.

DRAFT

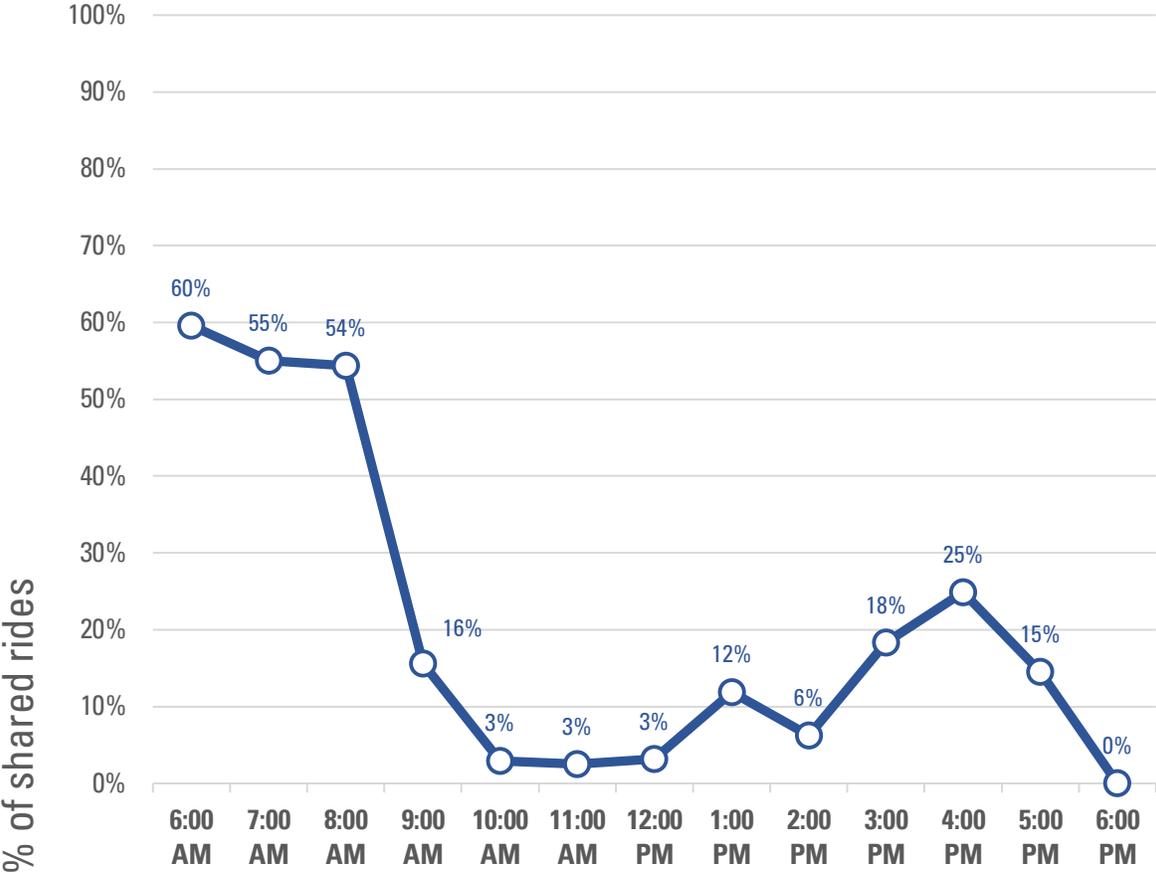


Figure 17: Ridesharing Percentages by Time of Day

Fare Media

Connect is the only program offered by Marin Transit that is completely cash free and the only program that allows integrated payment within the app. The pricing structure recognized the premium nature of the service, but the small travel area offered. An initial base fare of \$4.00, twice the fixed route and ADA paratransit fare, was established. Since the payment was not integrated with the fixed route or Marin Access media products and there was desire to encourage use of Connect as a first or last mile connection to the existing public transit service, discounts were offered for riders who started or ended their trip at an existing bus or rail station. A final 50% discount was offered for riders who qualified for the Marin Access programs. Finally, an unlimited month pass was offered at \$40 per month. Additional information on the pricing structure can be found in Section II.

Figure 18 shows the distribution of fare payment as a percentage of total rides. The chart shows that only 11% of trips made paid the full \$4.00 fare while 51% paid the \$2.00 fare offered through the bus stop discount. Only 7% of all trips received the Marin Access 50% discount and the remaining 31% of trips were made on an unlimited pass product. It should also be noted that 47% of trips had their fares paid by the employer through the partnerships with the County of Marin and Kaiser. Unsurprisingly, all monthly pass



**DRAFT**

purchases were made by the WAV/ADA and other non-employer markets since employee rides are paid for by respective employer, and Marin Transit would invoice the employers on a quarterly basis.

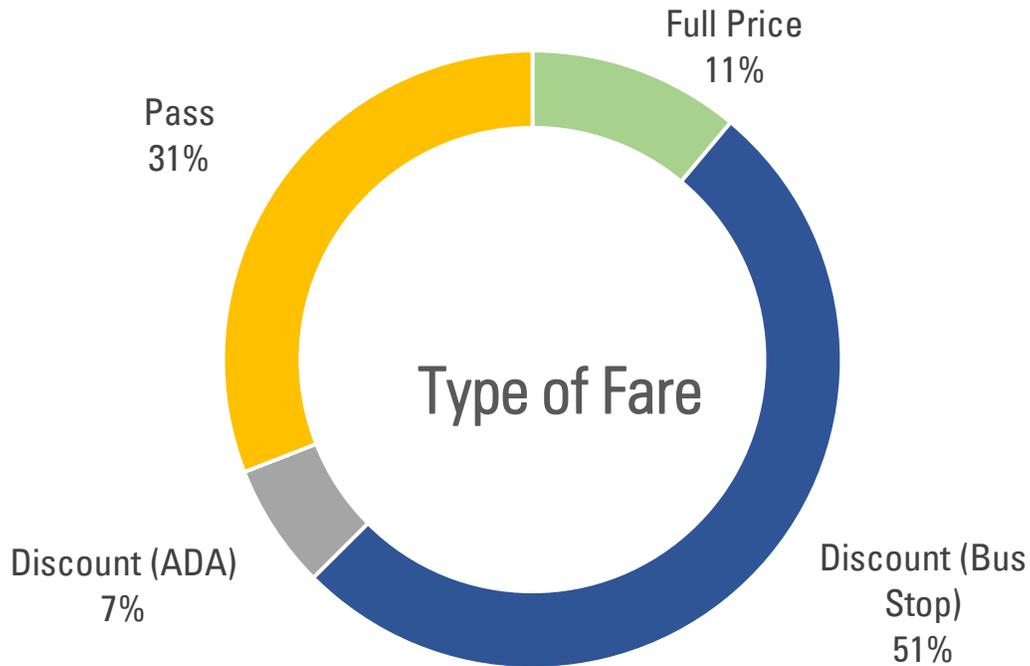


Figure 18: Fare Payment Distribution

### Trip Request and Ride Statistics

The experience of the rider is a function of the app's performance as well as the supply and demand conditions. The goal of the program was to create attractive ETAs (estimated time of arrival) for riders but also being mindful of costs and oversupplying service that can lead to low productivity. The District selected a 30-minute parameter for the maximum wait time. If demand exceeded this parameter, the app would indicate the rider that all seats were full and to ask the rider to try back later.

Based on these settings, Table 3 shows trip request and ride statistics by quarter.

**DRAFT**

**Table 3: Connect Ride Statistics**

		FY 2019/20				Total
		Q1	Q2	Q3	Q4 <sup>(1)</sup>	
Avg Wait Time for Pickup (min)		7.15	7.56	7.58	8.31	<b>7.73</b>
% On Time Arrival for Pickup	Within +/- 3 min.	84%	79%	84%	80%	<b>82%</b>
	Within +/- 5 min.	94%	93%	94%	93%	<b>93%</b>
Average Trip Length (Time, min)		7.61	7.50	7.53	7.45	<b>7.51</b>
Average Trip Length (Distance, mi.)		1.2	1.1	1.1	1.1	<b>1.1</b>

1. Date includes April 1-June 18, 2019

The District’s desire to keep ETAs below 10 minutes has been met in all quarters during the first year. As supply has been adjusted to better target demand, ETAs have slightly increased over time. On time performance exceeds the District’s standard for fixed route services and continues to perform at a reliable level for riders.

The trip length statistics reflect the relatively small service area geography and the types of trips the program is accommodating. The average trip length is approximately one mile which reflects the strong demands for the service as a first/last mile connection from the SMART station. The average travel time of these short trips (~8 minutes) reflects the high percentage of shared rides (shared origins and destinations) the system is accommodating during those peak commute hours.

### Market Segmentation

Via also worked closely with the District to segment ridership and trip data based on the goals of the pilot, including those associated with an Employer sponsored program (County of Marin and Kaiser), those eligible for Marin Access services or in need of an accessible vehicle, and a third category for all others. The segmentation of the markets was done to allow the District to determine if a single mobility service like Connect can feasibly serve multiple unmet needs from these different markets. Parsing out the data by markets provides the District an opportunity to apply and compare typical transit performance metrics (productivity and subsidy) to the service.

The District offers a wide variety of service targeted at various markets of riders including regular commuters, students, senior/ADA, recreational visitors, etc. These various services types are classified as service typologies in the Short Range Transit Plan and performance metrics are adopted for each. Table 4 shows how these metrics differ between the various types of services. The variation in these performance targets recognizes the differences in services and cost to provide the service.

Table 4: Typologies and Performance Targets

Route Typology	Routes	Productivity Target (minimum)	Subsidy Target (maximum)
Local Trunkline	35, 36, 71	20 passengers/ REV HR	\$4.50/passenger
Local Basic	17, 22, 23, 23X, 29, 49	18 passengers/ REV HR	\$6.50/passenger
Local Connector	219, 228, 233, 245, 251, 257	8 passengers/ REV HR	\$9.00/passenger
Supplemental	113, 115, 117, 119, 125, 139, 145, 151, 154	20 passengers/TRIP	\$3.00/passenger
Rural	61, 68	6 passengers/ REV HR	\$12.00/passenger
Recreational	66/66F	25 passengers/ REV HR	\$3.00/passenger
Demand Response	Local Paratransit, Dial-A-Ride	2 passengers/ REV HR	\$35.00/passenger
Partnership	122 (College of Marin Express)	<i>no target</i>	<i>no target</i> <sup>(1)</sup>

Developing performance targets at the start of the pilot was challenging because it wasn't clear how the service would be used and who would benefit from the new offering. The decision to make it a fully accessible, curb-to-curb, general public service didn't preclude any particular market from being served. Thus, if a program level target needed to be developed, it should be done only after understanding the type of mobility the program was supporting.

The discussion of performance targets should also capture the qualitative benefits offered by the new service. These include the following;

- **Convenience.** Connect offers an on-demand, curb-to-curb service within the service area. This is the only public transit service that offers this high quality connection and can be booked without advanced reservation.
- **Enhanced Communication.** The app powered service allows riders to get precise pick up time estimates and allow a visual tracking of the driver and vehicle throughout the trip. These predictions are specific to the requested trips and give the rider more information in the trip planning and trip making process.
- **Integrated payment.** Connect is the only public transit service offered by the District that allows a credit card to be placed on file and payment deducted automatically following a completed trip. While the Clipper program offers a similar system for fixed route, it still requires the user to engage during the trip to tag on and off.
- **Accessibility.** Marin County lacks taxi providers and TNC operators with wheelchair accessible vehicles. Connect is the only same-day travel option for

**DRAFT**

riders in wheelchairs who are unable to transfer from a wheelchair to a vehicle seat. Further, Connect drivers are fully trained to work with riders with special needs and go through the same testing practices and procedures as all other transit operators.

These unique program characteristics make it challenging to compare Connect to the performance of the other services offered by the District. Programs currently offered by the District that deliver similar types of services include traditional demand response service (paratransit, dial-a-ride), local connector fixed route services, and partnership services that includes the College of Marin express Route 122. Table 5 below shows productivity (passengers per revenue hour) targets for these programs and Table 6 shows cost effectiveness targets (subsidy per trip) for these programs.

**Table 5: Productivity Targets for Similar District Programs**

Connect Market	District Typology Match	District Typology Productivity Target (minimum)	FY 2017/18 Performance
Senior/ADA Trips	Demand Response	2.0 pax/rev hour	2.1 pax/rev hour
Employer Sponsored	Partnership	None identified	11.4 pax/rev hour
Regular/Other	Local Connector	8.0 pax/rev hour	9.1 pax/rev hour
<b>Suggested Target</b>		<b>4.0 pax/rev hour (suggested)</b>	<b>2.2 pax/rev hour</b>

**DRAFT**

**Table 6: Cost Effectiveness Targets for Similar District Programs**

Connect Market	District Typology Match	District Cost Effectiveness Target (maximum)	FY 2017/18 Performance
Senior/ADA Trips	Demand Response	\$35.00 per passenger trip	\$40.05 per passenger trip
Employer Sponsored	Partnership	None identified	\$5.89 per passenger trip
Regular/Other	Local Connector	\$9.00 per passenger trip	\$9.96 per passenger trip
<b>Suggested Target</b>		<b>\$15.00 per passenger trip (suggested)</b>	<b>\$39.48 per passenger trip</b>

Connect ridership (showing data since start, since stabilization, and projected) was segmented in order to understand travel behavior, the cost and levels of subsidy Marin Transit was segmented to each market. Segmented markets include employer sponsored programs (County/Kaiser), WAV/Marin Access, and other.

Since the start of revenue service in July of 2018 thru May 2019, the Connect program has provided 10,576 rides, and nearly 47% of those rides have been associated with an employer program with roughly a 70%/30% split between Marin County and Kaiser employees, respectively. WAV/Marin Access rides account for 8% of total rides, while 45% are categorized as other (non-employer, non-WAV/Marin Access). Figure 14 shows a month by month segmentation of rides by market. Looking at ridership trends, there has been steady growth since the official launch of the employer programs with the County and Kaiser.

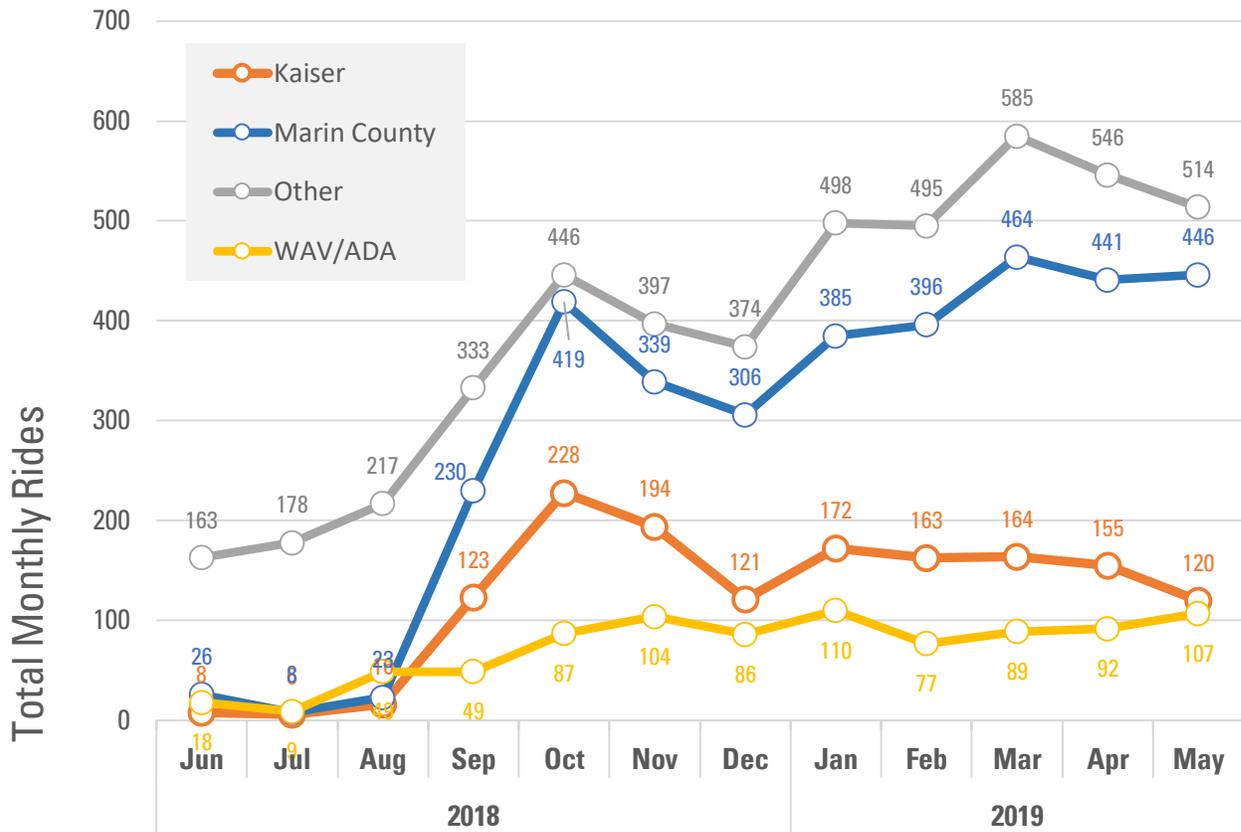


Figure 19: Monthly Ridership Segmented by Market

Connect experiences heavy utilization by the employer markets during the AM peak period (6:00 am-9:00 am) and the PM peak period (3:00 pm-6:00 pm). On average, nearly 20% of the rides in the AM peak are associated with Kaiser accounts and over 40% are associated with Marin County accounts. In the PM peak, the share of Kaiser and Marin County rides drops to 12% and 35%, respectively, which is attributed to more frequent outbound SMART trains which spreads demand throughout the afternoon. For the WAV/Marin Access market, the highest share of rides occurs during the off-peak period from 10:00 am until 3:00 pm, demonstrating where much of the senior-ADA activity occurs on the system (over 40%). Figure 15 provides an hour-by-hour break down of the share of rides by each market.

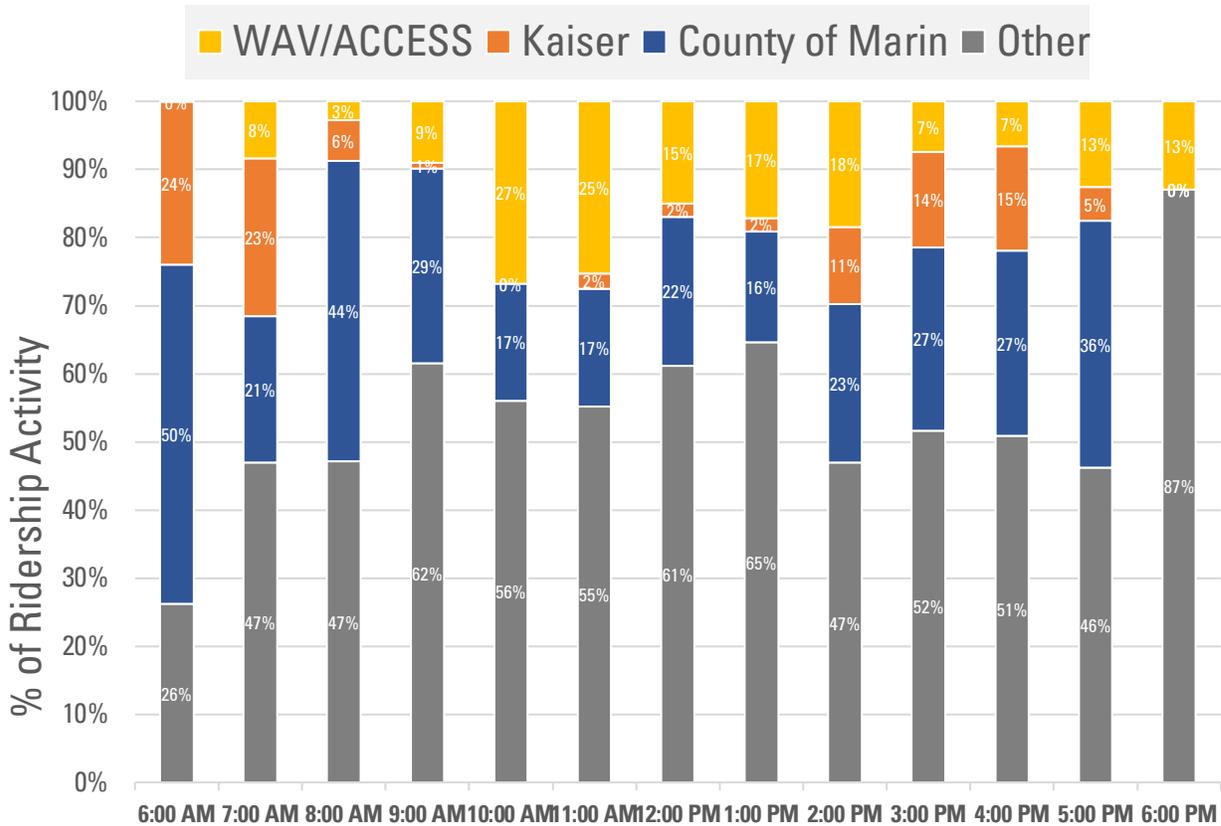


Figure 20: Market Segmentation by Service Hour

Understanding the market segmentation by hour of service is a helpful exercise to ultimately assign driver hours to each segmented service hour to allocate costs to determine passenger subsidies shown in Table 5 and Table 6. Reviewing activity throughout the day, there is high activity by the employer markets throughout the AM and PM peak periods and a modest, but consistent level of utilization by Marin County employees throughout the day.

Understanding that almost half of activity on Connect is driven by the Kaiser and Marin County employee markets, the total number of active users per employer was calculated by month to see how each program was retaining patrons. Figure 21 displays the monthly breakdown between Kaiser and Marin County employees—where there has been consistent utilization from 24 to 28 Marin County employees and decreasing usage by Kaiser employees since the programs officially began in September of 2018. There was a high of 22 Kaiser employees taking rides in October of 2018, but most recently that monthly number averages 13 users since January of 2019. For the County, the average in 2019 is about 27 monthly users.

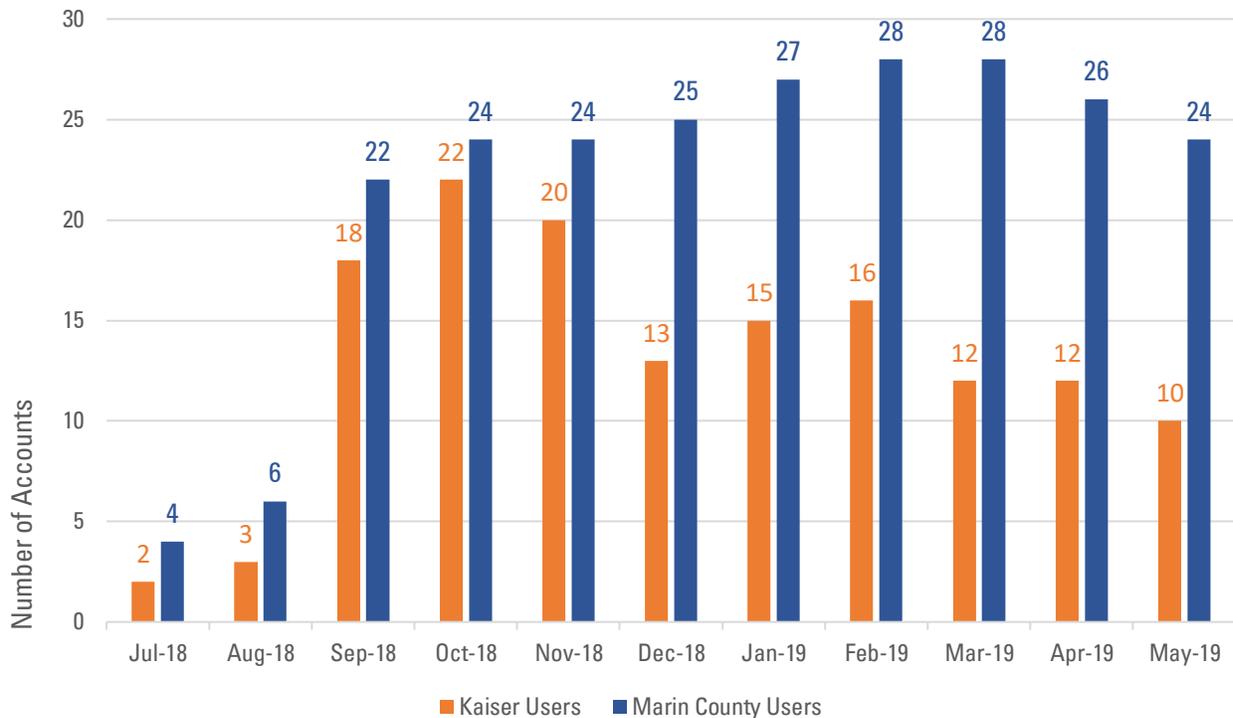


Figure 21: Active Employee Accounts

Figure 22 separates average trips per employer by month. Interestingly, despite less Kaiser employees utilizing Connect, the average trips by each user trends consistently averaging 12 trips per month in 2019, whereas average trips for Marin County employees trends positively and averages 16 trips per month.

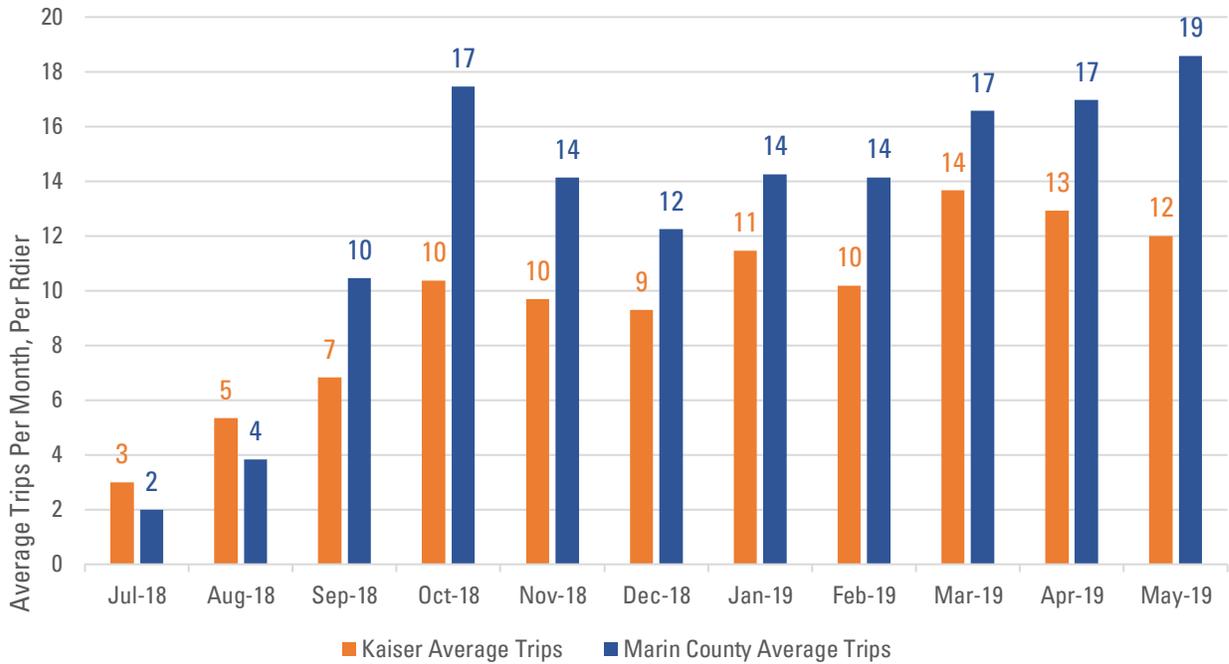


Figure 22: Average Employee Trips

Subsidy per passenger for each market was calculated by allocating monthly operating costs to each market by multiplying the total number of revenue hours (by time of day) and the percent of rides taken by each market (by hour of day). Productivity was determined by the ratio of monthly passengers and revenue hours allocated to each market. Table 7 shows these results for the period July 2018-June 2019 (estimate) and Table 8 shows these results January-May in 2019.

**DRAFT**

**Table 7: Annual Performance Estimate**

Connect Market	District Typology Match	Passenger Allocations	Driver Hours Allocations	Subsidy per passenger	Productivity
Senior/ADA Trips	Demand Response	8%	11%	\$70.18	1.10 pax/hr
Employer Sponsored: Kaiser	Partnership	14%	10%	\$35.49	2.02 pax/hr
Employer Sponsored: County	Partnership	33%	27%	\$39.87	1.81 pax/hr
Regular/Other	Local Connector	45%	52%	\$61.28	1.26 pax/hr
<b>TOTAL</b>				<b>\$52.70</b>	<b>1.47 pax/hr</b>

**Table 8: January 2019-May 2019 Performance (Software Stabilization Period)**

Connect Market	District Typology Match	Passenger Allocations	Driver Hours Allocations	Subsidy per passenger	Productivity
Senior/ADA Trips	Demand Response	8%	11%	\$54.13	1.62 pax/hr
Employer Sponsored: Kaiser	Partnership	13%	10%	\$27.59	2.88 pax/hr
Employer Sponsored: County	Partnership	35%	32%	\$33.03	2.44 pax/hr
Regular/Other	Local Connector	44%	47%	\$42.46	2.06 pax/hr
<b>TOTAL</b>				<b>\$39.48</b>	<b>2.22 pax/hr</b>

## V. Findings

Although the Connect service is still viewed as a new service and is continuously evolving, there are some findings that should be highlighted based on the first year of service.

### Rider Profile

The survey data and ridership data give insight on who has naturally been attracted to the service and those who have slowly adopted the service through marketing and outreach. In general, the primary market who embraced the Connect service is the first/last mile SMART commuter. These riders focus demand around the peak hour train arrival/departures at the Civic Center SMART station. Approximately 33% of this market are employees associated with the County of Marin, 14% are employees associated with Kaiser, and the remaining 45% are employees associated with other employment-based destinations including schools (Terra Linda High School, Mark Day, Marin County Office of Education, etc.), businesses located along Redwood Frontage, and businesses located along Smith Ranch Road.

While these riders are not necessarily new to transit, they are new to Marin Transit services. A small percentage of riders (13%) indicated using other Marin Access programs prior to riding Connect but only 33% indicating using other Marin Transit Service. Other significant differences in rider profiles compared to typical Marin Transit fixed route riders include higher income levels and greater access to personal vehicles.

### Community Benefits

Marin Transit Connect has increased available options for travel in a relatively small geographic area of the County. While this small geography has likely limited the scale of the program and number of natural origins and destinations for residents and employees, it has shown success in supporting community needs.

The first example is related to employers in the area. Prior to Connect, the largest employers, County of Marin and Kaiser, offered their employees a dedicated shuttle that provided transportation to and from their employment sites. While this was a convenient service for their employees, it did not serve others who worked at adjacent locations, even when capacity was available. In total, approximately \$400,000 was invested by these two employers for this service.

After the launch of Connect, these two large employers decided to cancel their dedicated shuttle programs and pay the Connect fares on behalf of their employees. This change allowed these employers significant savings in shuttle operations, contract management, and customer service. As a public transit service, Connect serves other employees in the service area that do not work for these two employers.

Other successes have been observed by the senior and ADA community. Several examples of increased mobility and independence including:

- A middle school rider who attends Miller Creek Middle School. This individual relies on yellow school bus service to get to and from school but did not have options to attend after school programs and other unplanned social events. Connect has been used regularly to get to these after school programs and then back home.
- Marin Ventures is a day program for developmentally disabled adults. Located within the service area, staff often use Connect to take participants on social outings including Northgate Mall. Connect reduces the need for the program to have drivers and vehicles on hand to service these trips needs. The accessible vehicles allow all participants to join on these outings.
- Rotary Village is a Senior Residential facility located off Lucas Valley Road. The remote location results in a very long walk to access any fixed route services. Although this location is within the ADA paratransit service area, Connect has been used as a resource for those who do not qualify for paratransit or those who choose not to pre-schedule their ride.

### Role in the Transit Network

Transit agencies, including Marin Transit, have been grappling with the concept of on-demand or microtransit and what role it plays in the overall delivery of service. Marin Transit, unlike many of its peers, is fortunate to have funding and Board support to test out new models for service delivery including Connect. This pilot has provided invaluable insight for Marin County and the other transit agencies.

Based on the first year of operations, some general conclusion can be drawn as outlined below:

- While productivity has been slowly increasing month over month, it will likely never reach the same levels as fixed route transit. Connect has shown a steady growth resulting from increased ridership and adjustments to supply. However, at best, it is predicted that productivity will not surpass 5 passenger trips per hour.
- Agency operated service is significantly more expensive than other on-demand delivery models. This is no surprise but it is important to recognize that transit agencies have high standards for driver training and performance that result in relatively high operating costs. In the case of Marin Transit specifically, the paratransit operations and maintenance contract includes a significant amount of fixed fees associated with administrative staff traditionally needed to support on-demand operations. These administrative fees include scheduling, dispatch, customer service, and management staff. Many of these administrative costs are

not needed due to the automation of the software so there could be future cost savings if the service was re-bid as a stand-alone operation.

The other added costs specific to Connect's operation is the payment of driver and overtime time when vehicles are not servicing rides. Traditional demand response services allocate drivers and service hours based on pre-scheduled demand. Revenue hours form the basis for compensation since the demand is predictable. The Connect service is on-demand and there is no way to guarantee when and how much demand will occur at any given time. Thus, the payment agreement is to compensate for time when the vehicles are **available** for service (in the service area and signed into the app) as **opposed** to operating in revenue service.

Private sector solutions offered by TNCs and others have demonstrated significant cost savings in providing these services. These companies often have financial backing that help subsidize the cost to the user and usually do not pay or train drivers to the same level as public transit operators. In the case of TNC operators, drivers are typically paid per trip and not compensated for their "down time" or travel time to and from trips. In West Sacramento where Via is offering a full turnkey solution including vehicles, drivers, technology, marketing, and customer service for a citywide program. Hourly costs for the service are less than half of Connect's full allocated hourly costs<sup>5</sup>. It should be noted that there are significant differences in labor markets between Marin and Yolo County, but there are potential opportunities to reduce operating costs if the program was scaled to be attractive to providers such as Via.

- Connect has not been adopted as a first/last mile connection to the fixed route bus network, primarily just to the regional rail network. While passengers transferring between local fixed route and Connect are offered a discount of \$2.00 off the regular \$4.00 Connect fare, few are using the connection for this purpose. Transfers are generally recognized as a barrier to using transit and this is more pronounced for short trips rather than longer regional trips. Since the Connect service area has four other local fixed route options (Routes 35, 49, 245, and 257) that serve the area, riders are likely walking longer distances to get a one-seat ride as opposed to using the service as a connecting option. Riders with disabilities that prevent walking the longer distances are likely using the paratransit service and avoiding a transfer which can be especially challenging for these riders.
- Expanded geography of the service could increase ridership. The single largest request from riders and non-riders in survey responses was to expand the service area. The most requested area of expansion was Downtown San Rafael and the San Rafael Transit Center. In developing the parameters for the service, Staff have focused on a program that expands mobility for those in need without

---

<sup>5</sup> <https://www.cityofwestsacramento.org/home/showdocument?id=8847>

offering a subsidized service that directly competes with private sector offerings and directly competes with higher capacity fixed route transit service. For example, Route 245 operates completely within the Connect service area with the exception of one stop, the San Rafael Transit Center. Average weekday ridership is 180 passenger trips which is over double the average daily ridership for Connect. Further, this route only operates 12 revenue hours per day, or approximately half as much service as Connect. Thus, productivity is 14 passengers per hour compared to just over three passengers per hour on Connect and subsidy levels are around \$5.50 per trip compared to \$40.00 per trip we are seeing in recent months on Connect. While it could be argued that reducing fixed route service would increase ridership on Connect, overall productivity and cost effectiveness would decline.

To preserve attractive ETAs, expanded geography would also require additional service and added costs. Therefore, if fixed route service was reduced, the added resources needed to backfill coverage using Connect would surpass any net savings.

- The Connect model has potential to complement the District's other programs focused on senior and ADA mobility but changes should be evaluated to better accommodate these riders. Currently only 8% of all passenger trips are taken by riders that either need an accessible vehicle or are registered for one of the other Marin Access services. While some of these riders have access to a smartphone and find the experience seamless to use, those without a smartphone lack the additional communication supporting the ride requests. Additional support for the call center should be considered if the pilot program continues to enhance the experience for these riders. As previously noted, the expanded geography is also an important element to encouraging more senior and ADA trips on this program.

## VI. Conclusions, Considerations, and Next Steps

The Connect program has shown a steady growth in ridership and productivity and a steady decline in per trip subsidies. However, it is estimated that this type of on-demand service, with an extremely high level of rider convenience, will never outperform traditional fixed route service.

As transportation services are currently in a period of rapid advancements, especially related to technology, the District should consider some near-term changes that may impact the Connect program.

1. Marin Transit's initial agreement with Via allows the District the use the technology free of charge. Future commitments should expect operating costs to increase as technology fees are included.
2. SMART is currently under construction with its extension to Larkspur and build out of a third train station in Novato. Along with these additional Marin stations, it is anticipated that SMART will make schedule adjustments and potentially increase service frequency. If 30-minute morning southbound service frequencies are introduced, ridership would likely be spread out and service levels on Connect could decrease, while still meeting peak ridership demand. A drop in service hours, coupled with steady or increases in ridership, would help increase performance.
3. The State of California recently passed SB 1376, Hill, which calls for all TNCs to provide accessible options or pay into a fund to support increases in on-demand accessible services. While it is still very unclear how this law will be enforced and where eligible funds will go, it appears the State is supporting the local goals or increasing on-demand options in for those who need accessible vehicles.

Any future recommendations will need to recognize that the primary users of the service today are first/last mile commuters. As options are considered for the Connect program moving forward, the needs of this market must be balanced with the intended goals of the program, increasing on-demand, accessible service for those in need.

Potential recommendations for the future of the Connect program should include:

- **Evaluating consolidation of Connect and Catch-A-Ride services.** The primary objective of the Connect service was to fill the void of on-demand, accessible services in Marin County. However, the small geographic area has likely limited the quantity of demand for this service. Catch-A-Ride is the most similar offering by the District to Connect but it currently lacks the technology provided by Via. Consolidating these programs would have to address the expanded geographic coverage offered by Catch-A-Ride and likely have to limit general public service currently provided by Connect.

- **Adjusting to fixed route services to target high demand origin/destination patterns.** Based on an initial assessment, timed adjustments to routes in the area to the train station and major employment zones could be explored.
- **Examining the potential to increase fares and employer contributions to financially support the program and reduce the per public trip subsidy.** Revisiting fare pricing and policies could be explored to achieve increased financial stability. Additional contributions from employers could be another option to increasing revenues.
- **Exploring a new service delivery (operations & maintenance) option for the on-demand service.** The program's operations can function with a much lower level of scheduling, dispatch and customer service support than traditional demand response services. The required vehicle maintenance and driver training is also less compared to other transit services. The largest challenge with pursuing a contract tailored to this service, similar to current contracts, is the ability to find a suitable facility to store and maintain the vehicles. The relatively small program could be attractive to potential contractors because it requires minimal parking; however, it will also make it unattractive to those looking to get economies of scale and mobilizing in Marin County.
- **Evaluating a closer partnership with TAM's LYFT program.** This voucher program provides a way to leverage Lyft's technology (driver and rider apps) and utilize its network of drivers to provide on-demand services. The program has demonstrated a much lower subsidy per trip average but lacks the reporting and data offered by the Via platform. A potential partnership could leverage Lyft's technology and have agency-operated accessible vehicles support the ADA elements of the service. This partnership could allow geographic coverage expansion to occur without additional investments in service hours.

Staff will be working in the coming month with its project partners and others identified above to explore recommended next steps for the pilot program. It is anticipated that a formal recommendation will be presented as part of the District's Short Range Transit Planning exercise and include financial projections to support any ongoing needs of the program.