

UTAH TRANSIT AUTHORITY QUARTERLY MICROTRANSIT PILOT PROJECT EVALUATION

SOUTH SALT LAKE COUNTY, FIRST QUARTER OPERATIONS
FOR THE MONTHS OF: DECEMBER 2019, JANUARY 2020, FEBRUARY 2020

Prepared by UTA Innovative Mobility Solutions under the Office of Communications & Marketing



EXECUTIVE SUMMARY

BACKGROUND

Utah Transit Authority’s Innovative Mobility Solutions Team has partnered with Via to deploy a Microtransit Pilot (Pilot) for one year beginning on November 20, 2019. This on-demand, shared-ride Pilot is designed to expand access to UTA services throughout the zone, to improve mobility for all users, and to provide a quality customer experience. In general, the project team is interested in understanding whether Microtransit provides a valuable and cost-effective service to meet the needs of customers in the region, as well as future deployment potential for Microtransit Services in UTA’s Five Year Mobility Plan.

EVALUATION PROCESS

In order to evaluate the Pilot, performance metrics as identified in the Microtransit Evaluation Plan will be collected and reported out monthly. Comprehensive quarterly reports will take place at three-month intervals throughout the project. A final evaluation report will be prepared upon Pilot completion.

OVERALL HEALTH OF PILOT PROJECT

In the early growth phase of the Pilot, thousands of customers tried the microtransit service for the first time and had a quality experience. All KPIs are either meeting or are on track to meet their performance targets by the six-month mark.

Figure 1: Key Performance Indicators (KPIs)

Pilot Objective	Metric	DEC	JAN	FEB	Q1
Ridership	Avg. weekday ridership	224	334	392	316
	Utilization ¹	1.33	2.00	2.31	1.88
Customer Experience	Avg. wait time (minutes)	9	11	12	11
	Avg. customer rating ²	4.8	4.8	4.8	4.8
Overall Performance	Cost per rider	\$26.91	\$17.91	\$15.54	\$19.10
	Public support	TBD	TBD	TBD	✓
	Days of operation	21	22	20	63

Key:

	= On target		= Approaching 6-month target, on track		= Not on target, requires mitigation or change
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¹ Utilization – Average riders per hour per vehicle

² Average customer rating – Based on a scale of 1-5

BEYOND METRICS – DETERMINING SUCCESS

OBJECTIVE SUMMARY

While tracking to KPIs is essential, quantitative metrics alone cannot tell the whole story. The prime qualitative objectives of the Pilot and current status are:

	OBJECTIVE	STATUS
1.	Improve mobility and enhance the customer experience.	<i>On target</i>
2.	Provide expanded access for all users in the area, especially for users with disabilities.	<i>On target</i>
3.	Improve overall transit ridership by providing first and last mile connections to UTA TRAX and FrontRunner stations.	<i>On target</i>
4.	Provide trips to other important destinations in the area such as job sites, hospitals, and grocery stores.	<i>On target</i>
5.	Present economically sustainable models for scaled implementation.	<i>On target</i>
6.	Engage the public and garner public support for the Pilot.	<i>On target</i>

Status is currently on target for six out of six objectives as assessed by the Pilot team. Pilot Objectives are referred to throughout this report to check progress towards a successful Pilot project.

SUCCESS

For UTA, the Pilot will be successful if after 12 months:

1. UTA can measure the Pilot’s performance using quantitative and qualitative data.
2. The Pilot Objectives are achieved.
3. UTA can make informed, data-driven decisions on whether to continue the Pilot and to extend UTA’s contract with Via, determine the future of Flex Routes in the service area, and the potential for microtransit in the UTA Five Year Mobility Plan.

PUBLIC SUPPORT

The hardest objective to gauge is public support. The Pilot team must estimate the level of public approval based on direct engagement, ridership trends, customer satisfaction scores and inferences. Public support for the Pilot can be inferred from generally positive feedback from riders, community stakeholders, city and county elected officials and the public at large. Media coverage has been favorable and presentations to elected officials have been well received. Several stakeholders publicly referred to the service as a “**game-changer**.” Moreover, appreciative comments are being received from riders who were previously walking long distances or paying more for other ride hailing services. The Pilot team aims to build on this early support through continued community outreach and quality service delivery.

QUARTERLY PERFORMANCE DETAIL

Figure 2: Q1 Data Table

Pilot Objective	Metric	Goal	DEC 2019	JAN 2020	FEB 2020	Q1 Total	Q1 WAV ³ Only
Ridership	Total ridership	N/A	4,701	7,346	7,844	19,891	239
	Avg. weekday ridership	350 - 450 (at 6 months)	224	334	392	316	4
	Avg. riders per hour per vehicle (utilization)	2.5 - 4.5 (at 6 months)	1.3	2.0	2.3	1.88	N/A
	WAV request %	2% - 5%	1.4%	1.2%	1.1%	N/A	1.2%
	Shared rides %	25.0% (at 6 months)	12.7%	20.8%	29.3%	N/A	N/A
Customer Experience	Avg. customer rating	4.8 out of 5.0	4.8	4.8	4.8	4.8	4.8
	Average wait time	< 15 minutes	9	11	12	11	15
	On time pick up %	95%	95%	93%	92%	93%	81%
	Avg. minutes per ride (trip duration)	N/A	10	10	10	10	12
	Avg. miles per ride (trip distance)	N/A	3.7	3.8	3.7	3.8	3.6
	Avg. travel time (trip speed v. driving)	< 3 minutes per mile	2.7	2.6	2.8	2.6	3.3
Overall Performance	Operating cost ⁴	\$464,678 (Q1 budget)	\$126,483	\$131,572	\$121,867	\$379,921	N/A
	Operating hours	12,621 (Q1 budget)	3,435	3,666	3,401	10,502	N/A
	Operating miles	N/A	44,948	63,090	60,625	168,663	N/A
	Cost per hour	\$36.82 (Q1 budget)	\$36.82	\$35.89	\$35.83	\$36.18	N/A
	Cost per rider	< \$13.08	\$26.91	\$17.91	\$15.54	\$19.10	N/A
	Cost per mile	N/A	N/A	N/A	N/A	N/A	N/A
	Safe operations (avoidable accidents)	< 1 per 100,000 miles	0	0	0	0	N/A
	Trips booked through Via's call center	N/A	3%	2%	2%	2%	36%
	Fares from credit cards ⁵	N/A	\$1,197	\$2,615	\$3,003	\$6,815	N/A

³ WAV – Wheelchair Accessible Vehicle. Three of the 17 total Via vehicles are WAVs.

⁴ Operating cost – Fully allocated; includes operating and capital costs. Excludes marketing expenses.

⁵ Fares from credit cards – Includes credit card, debit card, Apple Pay and Google Pay.

RIDERSHIP

Average weekday ridership has steadily increased since the Pilot’s launch and it grew by 75% over Q1. As shown in Figures 1 and 2, as ridership expanded the **utilization** rate improved by 77% from 1.3 in December to 2.3 in February. Similarly, the percentage of **shared rides** increased by 16.6% from 12.7% in December to 29.3% in February. Based on Via’s experience, as demand grows sharing and utilization rates typically improve as well because the vehicles can aggregate more riders more often.

Figure 4 displays the top pick up (origin) and drop off (destination) points during the first quarter of the Pilot. It shows that riders are most frequently using the service to connect to UTA TRAX and FrontRunner trains providing **first and last mile** connections plus local businesses and apartments. Analysis of trip-level data provided by Via reveals that riders also travel to hospitals, grocery stores, schools, and other important destinations within the service area as the Pilot intended.

UTA has partnered with Brigham Young University (BYU) to help evaluate the microtransit Pilot and gather qualitative feedback. Rider survey data collected by BYU engineering students found that the most popular **trip purposes** were for work, shopping, and visiting family and friends. Together this data demonstrates that **mobility has improved** in the Pilot service area, especially for users with disabilities, and for a diverse set of needs.

Figure 3: Average Weekday Ridership by Month

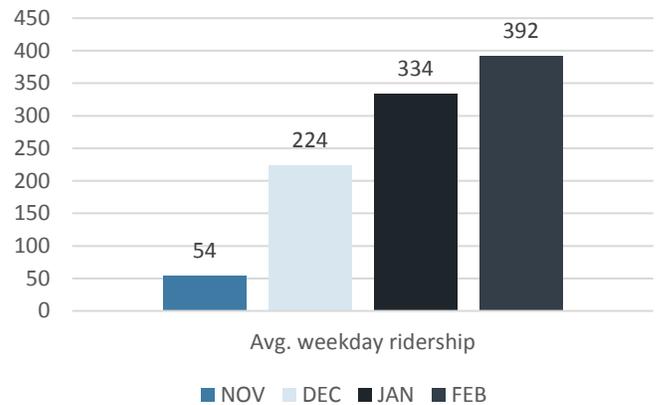


Figure 4: Top Locations in Q1

Top 10 Pick Up Locations			Top 10 Drop Off Locations		
#	Origin	City	#	Destination	City
1	Draper FrontRunner	Draper	1	Draper FrontRunner	Draper
2	Daybreak Parkway TRAX	South Jordan	2	Daybreak Parkway TRAX	South Jordan
3	Crescent View TRAX	Sandy	3	Crescent View TRAX	Sandy
4	South Jordan FrontRunner	South Jordan	4	South Jordan FrontRunner	South Jordan
5	Draper Town Center TRAX	Draper	5	Draper Town Center TRAX	Draper
6	Business	Riverton	6	Business	Riverton
7	Business	Riverton	7	Business	Draper
8	Business	Draper	8	Business	Riverton
9	Residential Apartments	Draper	9	Residential Apartments	Draper
10	Kimball’s Lane TRAX	Draper	10	Kimball’s Lane TRAX	Draper

CUSTOMER EXPERIENCE

Providing an **enhanced customer experience** is one of the Pilot’s primary objectives. This is being measured by customers rating their experience in the Via app immediately after their ride. Approximately 45% of riders rated their trips in the first quarter, giving the Pilot service an average score of 4.8 out of 5.0 stars and meeting the Pilot’s stated goal of 4.8.



Formal **customer feedback** was collected mainly through the Via app and by UTA customer service representatives. Over the quarter there were 392 total comments logged, 365 through Via’s app and 27 through UTA Customer Service. Figure 6 shows that there were more commendations than any other type of feedback. Praise for the service was followed by complaints about vehicle routing, concerns about driving habits, and requests to expand the level of service (i.e. longer hours, larger zone). Complaints about driver behavior and other types of issues (i.e. fares, app usage) rounded out the feedback. These comments are reviewed by the Pilot team and with Via to continuously improve the service. In addition to the formally logged and tracked feedback, the Pilot team is listening to customers in face-to-face settings, on social media, and through an Open UTA survey.

An **average ride** is short in both distance and duration. As shown in Figure 2, a typical ride is 3-4 miles and lasts about 10 minutes from pick up to drop off. The average travel speed is 2.6 minutes per mile, or approximately 23 MPH. This compares favorably to travel times on mainly 25-40 MPH roads and non-highway auto trips. **On-time pickups** declined slightly from an average of 95% in December to 92% in February.

Figure 5: Customer Comments, Q1

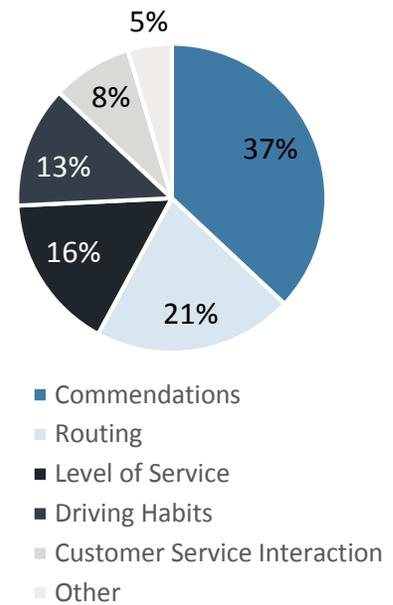
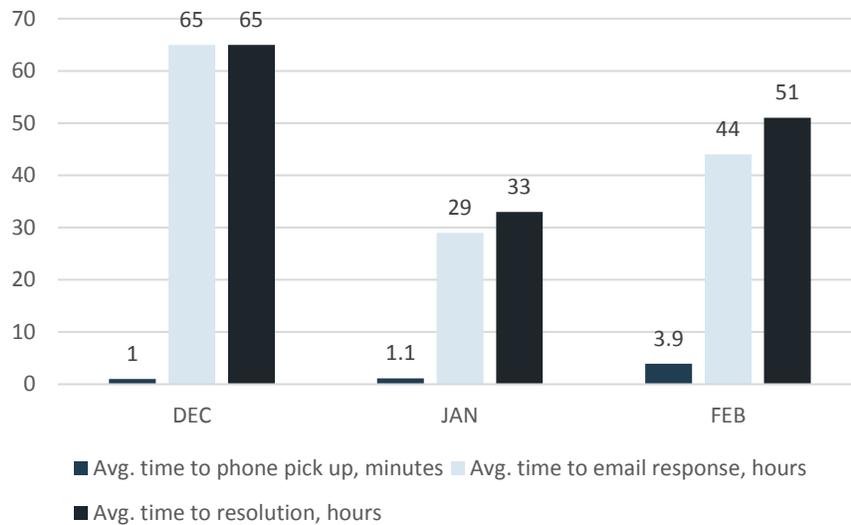


Figure 6: Sample Rider Feedback from Various Sources

Sample Comment	Source
<i>"Need weekend service"</i>	Via app
<i>"I just wasted 45 minutes trying to take Via to the Draper station...."</i>	UTA Customer Service
<i>"I love, love, love this service!! Before, I was walking over a mile to get to a bus for a ride to the Fronrunner. Now, it's my nearest corner for the Rideshare"</i>	Open UTA survey
<i>"I'm not happy with the app at all, but the drivers and the cars and the convenience are superb! I've really been thrilled to leave my truck behind and save pollution!"</i>	Social media
<i>"I could use this to take TRAX to the airport and leave my car at home."</i>	Community outreach at a senior center meeting

When customers need to book a ride over the phone or resolve a problem, they dial into a Via-operated call center. Figure 7 shows that average phone pick-up times have increased from 1 minute in December to 3.9 minutes in February, while other service levels have improved since the start of the quarter.

Figure 7: Via Customer Call Center Service Levels



“Saves me an hour+ from my commute daily” – Customer comment January 16th

“Changed my life” – Customer comment February 11th

“... My kids are using it constantly.” – Customer comment, February 28th

COST EFFECTIVENESS

The Pilot’s **budget** is based on a Transportation-as-a-Service (TaaS) model. UTA’s cost to run each hour of service is fixed as negotiated in the UTA-Via agreement. As shown in Figure 2, the Pilot is currently under budget by 2,119 hours and \$84,757 (18%).

The Pilot team analyzes **costs** per the Pilot Objectives to present economically sustainable models for scaled implementation. In general, a microtransit cost per rider is expected to be higher than a fixed route bus but lower than a paratransit bus. UTA’s Flex Route operating costs fall into that mid-range, and therefore set the basis for the Pilot’s cost per rider goal. In 2018 Flex Routes in the service area had an average investment per rider (IPR) of \$16.35.

The Pilot aims to be more cost effective than existing service and aims to reduce costs by 20% from \$16.35 to \$13.08 per microtransit rider. Note that the \$13.08 microtransit goal reflects fully allocated expenses whereas Flex Routes and other UTA services only track only operational expenses.⁶ In Q1 the Pilot averaged \$19.10 per rider as shown in Figure 2 with progressively declining costs as ridership grew each month. This metric will improve in Q2 if the ridership growth trend continues.

⁶ Unique to microtransit, this Pilot is tracking fully allocated costs that include both operating and capital expenses, while all other UTA services track only operating expenses making it difficult to compare costs across service types. All costs per rider exclude fares and marketing expenses.

FLEX ROUTES

As part of the Pilot, UTA seeks to understand if microtransit can be an alternative mode of transit to traditional bus services in low density and harder to serve areas. During the Pilot planning phase, routes F504, F518, F534, F546, and F547 were identified as routes which do not meet UTA service and performance standards.⁷ These standards include low ridership and a high IPR. While the Flex Routes remain in operations during the Pilot, the project team continues to monitor and evaluate their performance as part of the overall recommendations regarding the future of the microtransit service.

Q1 Flex Route performance indicates a year over year total reduction in ridership across routes F504, F518, F534, F546, and F547 by 23%. While the project team does not have supporting quantitative or qualitative data to support a mode shift from the Flex Routes to the microtransit service, it can be inferred that UTA customers are likely changing modes as the microtransit ridership continues to increase.

Figure 8: Selected Flex Route Trends

	DEC	JAN	FEB	Q1 TOTAL
	DEC 2018	JAN 2019	FEB 2019	
F504	1,768	2,272	2,108	
F518	1,370	1,937	1,616	
F534	317	371	337	
F546	1,510	1,890	1,702	
F547	1,938	2,284	2,167	
FLEX ROUTE RIDERSHIP	6,903	8,754	7,950	23,607
	DEC 2019	JAN 2020	FEB 2020	
F504	1,658	1,900	1,840	
F518	1,171	1,344	1,077	
F534	307	257	251	
F546	1,210	1,364	1,200	
F547	1,572	1,574	1,409	
FLEX ROUTE RIDERSHIP	5,918	6,439	5,777	18,134
YEAR OVER YEAR FLEX ROUTE RIDERSHIP CHANGE	-985	-2,315	-2,173	-5,473
% CHANGE	-14%	-26%	-27%	-23%
	DEC 2019	JAN 2020	FEB 2020	
<i>FOR COMPARISON, Q1 MICROTRANSIT RIDERSHIP</i>	<i>4,701</i>	<i>7,346</i>	<i>7,844</i>	<i>19,891</i>

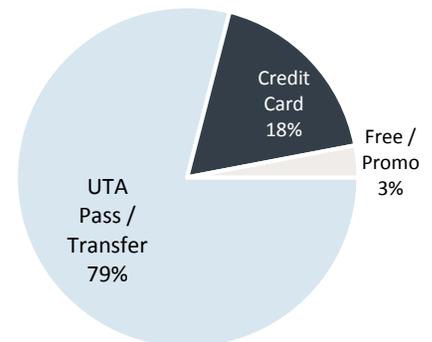
⁷ The microtransit service area was subsequently modified prior to launch. The F514, which meets UTA service and performance standards for Flex Routes, was included in the modified service area but is not included in the Flex Route Performance Indicators.

OVERALL PERFORMANCE

The microtransit Pilot is testing a **coverage service model** by providing on-demand access to everyone in the area. Over the next few months, the Pilot team will determine if microtransit is working as an efficient and effective coverage service by measuring against the KPIs in Figure 1 and Pilot Objectives on page 3.

The majority (79%) of riders **pay** with a UTA pass, ticket, or transfer as shown in Figure 9. Credit card payment (18%) includes credit cards, debit cards, Apple Pay, and Google Pay. Free and promotional fares (3%) include free ride credits tied to a single-use promotional code and fares waived to smooth out customer service issues. On January 8th an introductory fare expired and the promotional \$1.00 rate changed to the regular \$2.50 base fare. This change had no discernable impact on ridership as usage continued to grow.

Figure 9: Fare Payment by Type



The Pilot’s **safety** goal is less than one unavoidable accident per 100,000 miles. In the first quarter of Pilot operations there were zero unavoidable accidents over 168,663 total miles surpassing the safety metric. Customer comments that touch on safety typically fall under Driver Habits (i.e. driving too fast) and Routing (i.e. unsafe drop off point). The Pilot team has developed an Incident Response Plan to define and report any safety incidents.

The Pilot is designed to deliver **accessible and equitable** service and the team is focusing on these key components:

- WAV trips – UTA estimates that 2-5% of fixed route transit riders use a wheelchair ramp to board a train or bus. The Pilot’s goal is to fall within that same 2-5% range. In the first quarter approximately 1.2% of Pilot riders requested WAVs as shown in Figure 2.
- CAT committee feedback – On November 5, 2019, the committee previewed the microtransit service plan and advised the Pilot team before launch. CAT committee members living in the target area expressed enthusiasm about personally trying the service. In the future, the committee advised the team to provide the ability to accept FAREPAY cards and to look at expanding the service to additional communities.
- Equivalent service – The Pilot team logs quality of service data specific to WAV trips such as average wait time and customer satisfaction ratings. This data is then compared to the overall Pilot statistics, as shown in Figure 2, to check if WAV customers are receiving an equivalent customer experience.

MARKETING AND PROMOTIONS

Marketing is an essential element to raise awareness of the new service and to encourage trial. UTA and Via collaborated on a marketing plan to promote the service in a cost-effective manner, including a robust media and advertising campaign for the pilot launch. Impression counts for the launch ad campaign totaled 85,896 for social media and 2,480,156 for paid media. To date the most productive marketing efforts at generating new riders have been organic growth, clicks to UTA’s Pilot webpage, street marketing efforts, and referrals from other riders based on performance tracking data provided by Via.

In November 2019, BYU engineering students interviewed UTA customers at train stations in the service area about the upcoming Pilot. At the time only 11% of respondents were aware of the planned microtransit service. In February after several months of testing the service, students surveyed again and found that 63% of respondents were aware of microtransit, an increase of 52%

which demonstrates the effectiveness of marketing and promotional campaigns. According to survey responses from the microtransit users, they most frequently heard about microtransit through friends, word of mouth, UTA signage, social media, and street marketing.

CHALLENGES

No new service will launch without challenges. Operational **gaps** that temporarily hinder this Pilot are:

- **Paratransit connections.** The testing and implementation of Paratransit connection scheduling software is taking longer than anticipated.
- **DSPD certification.** The Pilot team relies on Utah's Division of Services for People with Disabilities (DSPD) program to vet driver eligibility to transport DSPD clients. The average time to certify drivers is currently nine weeks or longer.
- Other Pilot challenges include limits on data, fare reconciliation, reporting difficulties, setting proper customer expectations, refining the routing, pick up / drop off points, and ongoing driver training.

NEXT STEPS

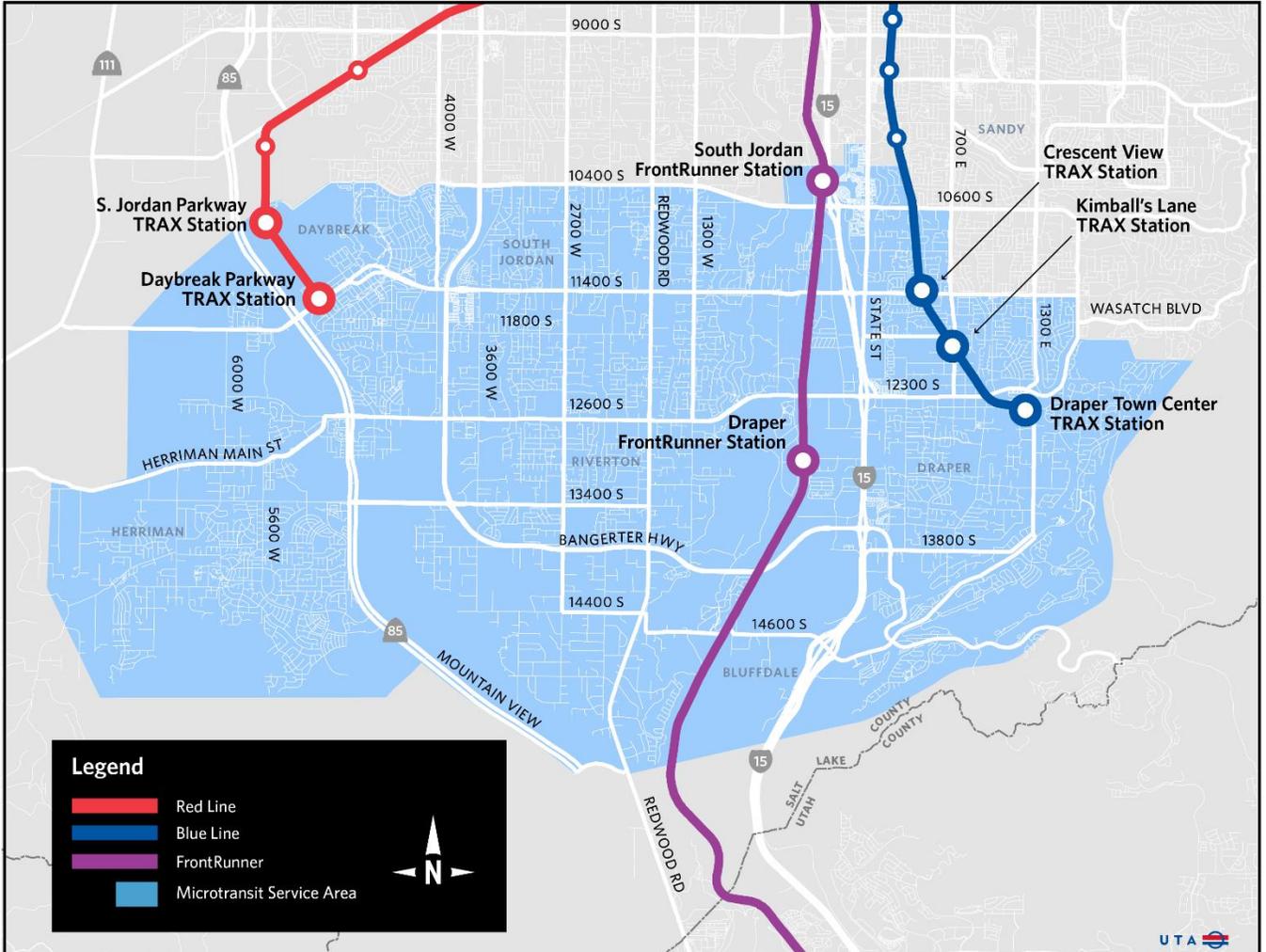
It's worth noting that there are no significant changes recommended by the Pilot team because the Pilot is currently achieving or is fast approaching its stated Objectives. Via continues to train drivers and respond to new feedback and data. The Pilot team continues to learn and fine-tune the service delivery. Priorities over the next quarter include:

- Testing **paratransit scheduling** software to make timed connections between Via and Paratransit vehicles at designated service points. This is a critical component of the Pilot.
- Exploring planned **enhancements** for electronic fare payment validation, integrated trip planning with Transit App, and inclusion of electric vehicles. Scoping a limited number of enhancements is part of the Pilot agreement between UTA and Via. The Pilot partners will develop time and cost estimates for options that could be implemented in 2020 or later.
- Continued **marketing** and outreach to key customer groups. The Pilot team is refining a marketing plan and budget for the rest of 2020.
- Determining how to evaluate potential **changes** to the Pilot. For example, should the operating hours or days be expanded? Should the service boundaries be modified? What are the cost and quality of service impacts?

The **contract** with Via has a base term of one year, with two options to extend for two additional years. In the coming months, UTA will determine if the contract should be extended for a second year.

APPENDIX A

PILOT SERVICE AREA



APPENDIX B

MEDIA COVERAGE

SELECTED NEWS ARTICLES FEATURING THE MICROTRANSIT PILOT

- UTA Via On Demand
<https://attheu.utah.edu/facultystaff/uta-on-demand-by-via/>
- Congressman is new fan of experimental 'microtransit' service in south Salt Lake County
<https://www.sltrib.com/news/politics/2020/01/22/congressman-is-new-fan/>
- Riders say UTA's new Via app is 'cheap' and 'valuable'
<https://kutv.com/news/local/riders-say-utas-new-via-app-is-cheap-and-valuable>
- New UTA on demand services offer rides for a dollar
<https://fox13now.com/2019/11/29/new-uta-on-demand-services-offer-rides-for-a-dollar/>
- UTA debuts Pilot program with Via
The program aims to provide more transit service and improve connections to TRAX and FrontRunner.
<https://www.masstransitmag.com/alt-mobility/shared-mobility/car-sharing/press-release/21116132/utah-transit-authority-uta-debuts-Pilot-program-with-via>
- More options. More mobility.
<https://www.rideuta.com/news/2019/11/Via-Launch-UTA-on-Demand>
- 'Microtransit' experiment exceeds early expectations as UTA OKs continued funding in new budget
<https://www.sltrib.com/news/politics/2019/12/18/microtransit-experiment/>
- Free Fares
<https://www.cityweekly.net/UrbanLiving/archives/2020/01/15/free-fares>
- UTA's new on-demand service shows it's high-tech, easy, cheap — and underused
<https://www.sltrib.com/news/politics/2019/11/29/my-experience-utas-new-on/>
- UTA goes on demand with new ridesharing partnership
<https://fox13now.com/2019/11/24/uta-goes-on-demand-with-new-ridesharing-partnership/>
- Via launches first service in Salt Lake City with UTA
<https://kutv.com/news/local/via-launches-first-service-in-salt-lake-city-with-uta>

UTA | MICROTRANSIT FIRST QUARTER PROJECT EVALUATION

- UTA renews Salt Lake City discount passes, awards contract for new on-demand transit Pilot project in south valley
<https://www.sltrib.com/news/politics/2019/07/11/uta-renews-salt-lake-city/>
- UTA OKs continued funding for 'microtransit' experiment
<https://www.sltrib.com/news/politics/2019/12/18/microtransit-experiment/>
- UTA, ride-share company launch Salt Lake County microtransit Pilot program
<https://www.ksl.com/article/46679250/uta-ride-share-company-launch-salt-lake-county-microtransit-Pilot-program>

SOCIAL MEDIA

SELECTED TWEETS TO #UTAONDEMAND



Jenny Wilson @JennyWilsonUT · Nov 25, 2019

Be sure to download the [@ridewithvia](#) app to start riding today!

#SLCo #UTAonDemand



UTA @RideUTA · Nov 25, 2019

Check out this great introduction to our new service, #UTAonDemand by [@ridewithvia](#). via.fox13now.com/d29xM via [@fox13](#)



Draper City @drapercity · Nov 20, 2019

Join us tomorrow to kick-off [@RideUTA](#) and [@ridewithvia](#)'s #microtransit pilot program. 65 square miles of on-demand #transit. 3pm @ Draper FrontRunner Station. #UTAonDemand #Draper

