



## Board Report

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### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE OCTOBER 21, 2021

**SUBJECT: COMPREHENSIVE REPORT ON MICROTRANSIT PILOT PROJECT**

**ACTION: RECEIVE AND FILE**

#### **RECOMMENDATION**

RECEIVE AND FILE a status report on MicroTransit Pilot Project (Micro), costs, and resources.

#### **ISSUE**

Per the request of Metro Operations, Safety and Customer Experience Committee Chair Mike Bonin, this first comprehensive report discusses performance and challenges associated with the Micro program. This report provides key information on the following topics:

- Year One: Launching During COVID-19 Pandemic
- Pilot Evaluation Framework
- Performance: Ridership and Financials
- Next Steps: Year Two

#### **BACKGROUND**

Micro is a multi-year pilot project designed and developed to evaluate how, and if, Metro should invest in offering a ride-hail product for customers in the County of Los Angeles. The project was initiated within the New Mobility unit of Metro's Office of Extraordinary Innovation and utilized the industry's first Pre-Development Agreement Public Private Partnership (PDA-P3) for transit service delivery. What is unique about this pilot is the collaboration with our labor partners (SMART and AFSCME) to ensure our own workforce fills the positions of drivers and supervisors.

In advance of launching the new offering, staff conducted best practice research, participated in industry working groups and forums, and tested a minimum viable product in select communities using seed funding from the Federal Transit Administration.

Micro was moved to Metro's Operations Department in 2019 and Year One of revenue service began on December 13, 2020, with the first NextGen bus restructure shake-up. Year Two of Micro is set to begin on December 12, 2021.

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## **DISCUSSION**

### **Year One: Launching During COVID-19 Pandemic**

In year one as much of the transportation industry was shutting down, Micro was in the process of stepping up. In less than a year, Metro will have stood up the largest deployment of publicly operated ride-hail in the United States. Today, Micro operates across eight zones with 154 active staff and three reporting locations, including the San Gabriel Valley, San Fernando Valley and South Bay.

The Board of Directors approved the ride-hail product, Micro, in February 2020. The pilot was put on pause briefly as a result of the COVID-19 pandemic in Spring 2020. As such, the approach to Micro was adjusted within new operating constraints resulting from the COVID-19 pandemic. Cost containment drove nearly all major project decisions during Year One. These major changes to service implementation had a direct impact on service delivery in the initial 10 months of revenue service. Outlined below are six of the major changes that were implemented in the agency's approach to launching Micro:

1. Hiring Freeze
2. Reallocation of Existing Ops Resources
3. Reduction in Fleet Size
4. Operator Shortage & Hiring Challenges
5. NextGen Alignment
6. Introductory Fare

#### Hiring Freeze

As a result of the agency-wide hiring freeze, Micro, like many business units, was short-staffed by three positions.

#### Reallocation of Existing Ops Resources

As a stop-gap measure, Micro was assigned temporary staff from multiple Metro Operations business units in Year One. Under the CEO's re-alignment plan, Micro is consolidated in the Shared Mobility unit within Metro's Operations Department.

#### Reduction in Fleet Size

The Pilot was intended and approved to be operated in six unique Micro Zones which were identified through the PDA-P3 Part A design process. Accordingly, the Micro Zones were selected for unique demographic make-up, applicable use cases, major trip generators, and topography/terrain. The concept driving the Micro Zone selection was to test a variety of unique environments to help Metro assess how ride-hail could be scaled across similar communities should the pilot continue beyond the initial three-year testing period.

Under the contract, each Micro Zone would be allocated 16 vehicles, for a total of 96 in regular revenue service. Subsequently, the Micro fleet would be constantly re-balanced in response to customer appetite for publicly operated ride hail. In January 2021, per Board direction, Micro

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absorbed three additional zones bringing the program to a total of nine Micro Zones. Vehicle counts were set at an initial eight per Micro Zone. To-date a total of 60 vehicles were placed in revenue service across eight zones. This resulted in the fleet operating without spares in contrast to the 20% spare ratio as envisioned for the pilot.

### Operator Shortage & Hiring Challenges

To reduce spending during the pandemic, Micro was staffed 50% below anticipated operator counts. As such, the Micro Operators that joined the agency were encouraged to work as much as possible to achieve coverage across the Micro Zones. The workload was impacted by the direction to expand Micro to an additional three zones in January 2021. As a result, most team members, who joined with an expectation of a 25-hour work week minimum, regularly work 36 hours and overtime to keep up with the aggressive launch schedule. The lean counts and the slow ramp-up of hiring combined with COVID-19 pandemic outbreaks had major impacts on service delivery. As such, Micro fell short of achieving the 3:1 operator-to-vehicle ratio. Today, Micro has 139 active operators. The allocation in FY22 is 147 FTEs. Class 14 of Micro Operator training is set for October 25, 2021. Micro will begin Year Two with approximately 154 Operators.

Currently, the transportation industry is experiencing nation-wide challenges with hiring and reattaining bus operators. A recent survey of over 50 agencies revealed that 22 are currently experiencing a 10%-30% shortage.

### NextGen Alignment

To support changes to the Metro network under the NextGen bus restructure, Micro was deployed on the NextGen shake-up schedule. Zones were aligned to NextGen deployment dates (including the 12/13/20, 6/27/21 and 9/12/21 launch) and hours of operation and zone boundaries were adjusted to support impacts from changes within Bus Operations. As such, some of the Micro use-cases were not tested in Year One. For example, service hours at the Micro LAX/Inglewood Zone were adjusted to match changes to bus line (625) rather than to address the needs of shift workers and the Micro LAX/Inglewood Zone did not include the City of Inglewood.

Ridership analysis has revealed that Micro has been successful in serving customers impacted by NextGen. In partnership with Burbank Airport, Micro will begin serving the Burbank Airport terminal on Sunday, October 17, 2021.

### Introductory Fare

In light of the impact of the COVID-19 pandemic on the economy in 2020, Metro's internal fare working group recommended an introductory rate for Micro. With Equity-Focused Communities (EFCs) incorporated in all Micro Zones, this rate of \$1 per trip was intended to make Micro accessible for all. Metro staff will recommend extending the \$1 introductory rate through Year Two. Micro is exempt from the pilots conducted under the Fareless System Initiative (FSI).

### Pilot Evaluation Framework

As we prepare to complete Year One, it has been critical to look back to our driving principles for the

Micro Pilot. Below is a chart of key measures which are coded within categories as discussed previously with the Board is provide in Attachment A. Customer experience is prioritized across both Micro Zone and program-wide KPIs. Select targets have been adjusted based on current ridership.

<b>Zone-Level Measures</b>				
<i>Category</i>	<i>Measure</i>	<i>Target</i>	<i>Current</i>	<i>Vision 2028 Goal</i>
Ridership	Passengers per vehicle per hour	3	2.55	
	Average number of trips per week on Micro by unique users	3	3.04	
Customer Experience	Percentage of trips with maximum wait time of 15 mins	75%	51%	Yes
	Percentage of failed searches	<10%	7%	
Connectivity	Percentage of linked trips to fixed-route services	50% of trips are linked	20%	Yes
Financial Viability	Cost per trip in comparison with paratransit	75% of average trip cost per trip in comparison with Access Services (2021)	120%	

<b>Project-Level Measures</b>				
<i>Category</i>	<i>Measure</i>	<i>Target</i>	<i>Current</i>	<i>Vision 2028</i>
Innovation	Launch six service zones testing a variety of use cases	6	8	
	% of flexible operators per SMART-TD side letter	80%	20%	
Customer Experience	Star rating from customer in Micro mobile application	4.5 of 5 stars	4.8	Yes

Strategic Partnerships	Number of partnerships with health, transport and higher education institutions	2 per zone	4	Yes
Workforce Investment	Percentage of Micro Operators promoting to full-time positions throughout Metro	5%	4%	
	Percentage of Micro Operators which stay on project for one (1) year in revenue service	50%	N/A	
	Percentage of Supervisors that reached a one (1) year anniversary with Micro	80%	100%	

Of note based on a recent survey of Micro riders 60% of the riders have never taken Metro bus or rail.

**Performance: Ridership and Financials**

**Ridership**

Micro Zone Name	Service Hours	Launch Date	Number of Trips	Avg. Weekday Boardings (September)	Average Star Rating	Average Wait Time (minutes)
Watts/Compton*	5 am - 11 pm	12/13/20	45464	246	4.80	15.32
LAX/Inglewood	5 am - 10 am; 2 pm - 7 pm M-F	12/13/20	6367	45	4.85	8.33
Compton/Artesia*	9 am - 9 pm	1/25/21	(see zone 1)			

El Monte	9 am - 9 pm M-F; 10 am - 10 pm S-S	1/25/21	17,010	106	4.86	15.83
North Hollywood/ Burbank	10 am - 10 pm	1/25/21	13,852	89	4.92	16.03
Highland Park/ Eagle Rock/ Glendale	5:30 am - 9:30 pm	6/27/21	13,711	182	4.92	17.61
Altadena/ Pasadena/ Sierra Madre	5:30 am - 9:30 pm	6/27/21	20,198	287	4.84	16.00
Northwest San Fernando Valley	5:30 am - 9:30 pm	9/12/21	927	57	4.80	13.43

Budget

- FY22
  - For Q1 of FY22, Micro has expended \$2.3 million, with an additional \$3.1 million in pending invoices from the P3 Contract for July through September
  - A total of \$5.4 million in adjusted FY22 Q1 actuals out of \$9.7 million budgeted YTD
  - As the COVID-19 pandemic impacts are stabilizing, it is crucial for Micro to have access to the full \$39.5 million budgeted
- Project To-Date
  - Of the \$22,741,210.15 spent on the Micro to-date (including pending invoices), approximately \$9.3 million or 41% of the total budget was used for Start-Up Costs
  - Today, Micro has three Reporting Locations and a team of 154 active staff

The table below shows project-to-date expenses categorized as Start-Up Costs or Revenue Expenses. Start-Up Costs are expenses that have been required to bring the entire Micro or individual Micro Zones online, including (but not limited to) down payments on Reporting Locations and vehicles; software configuration; recruiting, onboarding, and training; developing policies and procedures; legal costs for setting up user terms for customers.

Project-to-date Expenses		Spent to Date	Start-Up Costs	Operating Costs
<b>P3 Contract</b>				
	Labor	\$5,343,612.28	\$3,206,167.37	\$2,137,444.91
	Communications	\$1,578,582.00	\$789,291.00	\$789,291.00
	Vehicles	\$3,098,528.45	\$765,000.00	\$2,333,528.45
	Reporting Locations	\$1,026,509.56	\$312,819.00	\$713,690.56
	Hardware	\$1,639,731.00	\$1,636,106.00	\$3,625.00
	Software	\$1,393,781.50	\$582,000.00	\$811,781.50
	Insurance	\$2,459,099.00	\$0.00	\$2,459,099.00
<b>SUBTOTAL -</b>		<b>\$16,539,843.79</b>	<b>\$7,291,383.37</b>	<b>\$9,248,460.42</b>
<b>Metro Labor</b>				
	Supervisors	\$1,078,766.08	\$195,254.35	\$883,511.73
	Non-Contract	\$1,080,786.62	\$810,589.97	\$270,196.66
	Operators	\$2,792,971.58	\$615,625.38	\$2,177,346.20
	Other (mostly WC)	\$438,005.55	\$33,684.72	\$404,320.83
<b>SUBTOTAL -</b>		<b>\$5,390,529.83</b>	<b>\$1,655,154.42</b>	<b>\$3,735,375.42</b>
<b>Other Metro Costs</b>				
	E.g., Legal, Equipment, and Allocated Overhead	\$810,836.53	\$364,876.44	\$445,960.09
<b>GRAND TOTALS</b>		<b>\$22,741,210.15</b>	<b>\$9,311,414.22</b>	<b>\$13,429,795.93</b>

With 64,642 Revenue Service Hours provided from 12/13/2020 through 9/30/2021, this puts operating cost per Revenue Service Hour at \$207.76 in Year One thus far.

At many points during the pilot, our P3 Contractor RideCo has recommended enhancements to service levels in response to growing customer demand, including:

- Increase service span to a minimum of 16 hours daily
- Restore Inglewood portion of the Micro LAX/Inglewood Zone
- Increase launch capacity (vehicles, operators) in Micro Highland Park/Eagle Rock/Glendale Zone and Micro Altadena/Pasadena/Sierra Madre Zone
- If these changes had been made, we would have added approximately 26,677.5 Revenue Service Hours to the total above, an increase of 41.3%. Accounting for proportional increases in costs for labor and vehicles, this would have resulted in an operating cost of \$170 per Revenue Service Hour in Year One to-date. This simulation shows how service constraints have raised per-unit operating costs while reducing total costs, due to fixed recurring costs such as Reporting Locations. According to a survey of Micro customers in August 2021, nearly half (47%) say limited Revenue Service Hours are keeping them from riding more.

In September 2021, many Micro Zones show increasing ridership. The current cost per Revenue Service Hour across the project is \$140.84. This cost varies by Micro Zone, as some Micro Zones

perform better than others.

When we apply the September figures against our current passengers per vehicle hour, the cost of a trip on Micro can run between \$44 and \$70 depending on the Micro Zone and allocations of vehicles, staffing and Revenue Service Hours. For reference, the most recent data for cost per trip for Access Services is \$51.

If by the end of pilot term Micro moves five passengers per vehicle hour at the regular fare of \$2.50 per trip, the cost of a trip on Micro will land at \$26. This assumes no adjustments as outlined in the Next Steps section of the Board Report are implemented.

Figures will be audited by independent contracted auditors as part of Metro's Annual Financial Audit.

### Marketing and Communications

To drive utilization of Micro, paid and earned communications have been used to promote the service through several channels. Heavy emphasis was placed on digital media early on in the COVID-19 pandemic, and has continued to be a key strategy, including paid search promotion, organic and promoted social media, video ads on streaming platforms, and email-based campaigns.

To achieve successful alignment with NextGen, outreach staff conducted ride-alongs on affected bus routes ahead of shake-ups to inform customers about service changes. Outreach has also been conducted at key destinations including rail stations, parks, and other points of interest as the risk from the COVID-19 pandemic has abated. Campaigns have been local as to target customers within the communities in which Micro operates.

### Next Steps: Year Two

With the recent re-org, staff continues to elevate and prioritize customer responsive design. Metro's internal Customer Experience Committee will continue to accelerate the implementation of customer facing training, cross industry best practices and technical

At this juncture, the following five actions will be taken within Micro's FY22 budget of \$39.5 million:

1. Bring Revenue Service Hours in-line with Customer Demand
2. Right Size Staffing
3. Fleet Rebalancing
4. Ride Reliability
5. Use Case Prioritization

### Bring Revenue Service Hours in-line with Customer Demand

Micro Zones were launched with limited hours of operation to achieve cost containment objectives in response to the financial impacts of the COVID-19 pandemic. The majority of Micro Zones operated 12 hours and in some cases weekend service was unavailable. The outlier in Year One was the Micro Watts/Willowbrook Zone which was adjusted to match hours of operations for bus service under the NextGen alignment.



By increasing Revenue Service Hours, maximum wait times will be improved, passengers per vehicle hour will be increased and search failures will be significantly reduced. Direct experience teaches us that this action, can yield impressive results, see chart below.

For example, in Pasadena:

<b>Pasadena Metrics</b>	<b>Week of July 4</b>	<b>Week of Sep 12</b>	<b>Week of Oct 03</b>
<i>Weekday averages</i>			
RSH weekday average	74	97	133
Failed ride searches %	13.50%	16.10%	2.30%
Failed ride searches #	83	173	19
Operator Count	11	20	24

### Right Size Staffing

To right size staffing, Micro will add three Supervisors to achieve coverage levels program-wide in Year Two. Additionally, all three Non-Contract vacancies will be filled, and three temporary positions will be staffed using existing FY22 budget. In partnership with Human Capital and Development, Metro staff will target start dates for all team members by December 2021, to ensure Micro is fully staffed by Year Two.

In respect to Operator counts, Metro staff will work with our existing SMART-TD workforce to assess shortages. Projections for FY23 non-contract and contract staffing will be produced in early 2022 in coordination with our partners in Strategic Financial Planning.

### Fleet Rebalancing

Metro staff, in coordination with RideCo, will initiate a program-wide re-balancing initiative to achieve maximum productivity of the leased fleet. As such, Micro vehicles will be scheduled to service multiple zones daily and supply will more closely match customer demand where we are currently experiencing shortages. This targeted approach, which will utilize 82 vehicles out of the 110 initially budgeted, will ensure a minimum spare ratio across the program. Metro staff will also conduct ongoing evaluation of Electric Vehicles utilized in the December 12, 2021 launch to inform future orders of EVs, which are anticipated to comprise 10% of the Micro fleet. Additionally, analysis will be conducted as it pertains to vehicles with accessibility features in consultation with our partners at Access Services.

### Ride Reliability

In August 2021, Metro staff reported to Operations, Safety and Customer Experience Committee on search delays impacting Micro customers. Metro will continue to prioritize Micro's availability and reliability. As such, mini-shake-ups will be conducted across Micro and between adjacent Micro Zones to improve service delivery.

### Use Case Prioritization

Micro was designed to be used for access to educational institutions at all levels. In light of the impacts of the COVID-19 pandemic on education systems and the growth in remote learning as well as hybrid classrooms, Metro staff will continue to analyze new traffic patterns on these trip types. In Year Two, Micro will feature the ability to book rides for children needing a car seat and booster seat and as such, make this offering usable for many working families. Evaluation of car seat products has begun and focus groups will be held in consultation with Metro's Women and Girls Governing Council and Youth Council.

### **FINANCIAL IMPACT**

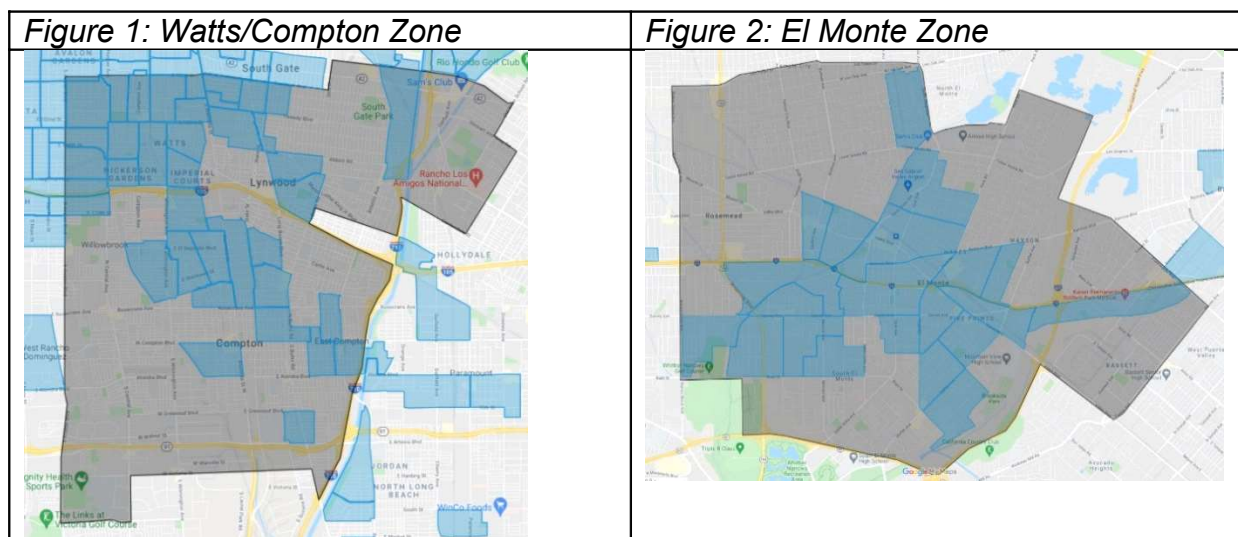
The Micro under cost center has an approved annual Fiscal Year 2022 budget of \$39.5 million, up from the \$25.1 million allocated in Fiscal Year 2021.

### **EQUITY PLATFORM**

Micro seeks to address equity for our customers by bringing on-demand transportation to communities which are under-served by private ride-hail companies. Micro Zones were designed to capture this use-case based upon data accessed during the PDA-P3 Part A design process.

A survey conducted during August of 2021 found that nearly half of Micro customers are using the service to connect to other transit modes; 42% are using it to get to stores (including grocery, clothing, and other essential shopping), a third are using it to get to work, and 16% have used it to get to a medical appointment. (Customers were able to select more than one option in this section, so this doesn't reflect a cumulative proportion of the population.)

As Micro staff is testing out a portfolio of use cases, the overlap between Micro Zones and Equity Focused Communities (EFCs) varies. The Micro El Monte Zone and Micro Watts/Compton Zone (See figures 1 and 2; EFCs are highlighted in blue) feature the greatest coverage of EFCs and are the two largest Micro Zones. Micro Watts/Compton Zone was first launched as the Micro Watts/Willowbrook Zone and Micro Compton/Artesia Zones, which overlapped significantly and were merged on 9/12/2021. This merger was driven by many factors, including requests from customers who did not like having to book two separate rides to get across the area. As this Micro Zone is approximately 35 square miles, much larger than recommended by RideCo, we are also testing the ability to deliver quality service across such a large area. With the recent merger, the Micro Watts/Compton Zone now operates 18 hours per day, as Micro Watts/Willowbrook Zone has since service launch in December 2020.



**Note:** Maps are not to scale.

In line with the maps, a recent survey of Micro riders found that Micro Watts/Compton Zone had the highest proportion of riders who report an income under \$35,000 per year, at 74.9%, with the Micro El Monte Zone next at 55%. The Micro El Monte Zone had a higher proportion of users with an annual income between \$35-75,000, resulting in a similar proportion with an income below \$75k.

Additionally, Micro seeks to address equity for our workforce by hiring within the communities we serve, reducing or eliminating bias in hiring with blinded panels and implicit bias training for panel members, and trialing changes to how Micro operators are scheduled and supervised, to remove unintentional barriers for employees with caregiving responsibilities and other challenges. An analysis of our workforce demographics will be initiated in January 2022.

### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

Micro supports strategic plan goals #1, 2 and 3. Micro is an investment in a world-class system that is reliable, convenient, and attractive to more customers for more trips. Micro will continue to apply the equity framework to all aspects of the project and continue to deliver high quality service to meet customer satisfaction by offering an accessible, flexible service that better adapts to customer demand and needs.

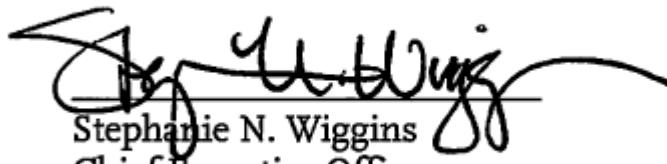
### **NEXT STEPS**

Under the new re-alignment staff continues to elevate and prioritize customer responsive design. Metro's internal Customer Experience Committee will accelerate the implementation of customer facing training, cross industry best practices and technical enhancements throughout Year Two. With more than 120,000 trips served by Micro in the first ten months of operation during COVID-19 and a 4.8 out of five-star customer rating, the pilot has set a strong foundation for growth in the years ahead.

Micro has the potential to achieve the aspirational goals outlined in Vision 2028 including increasing Metro ridership and connectivity in the region. To maximize the program's effectiveness and efficiency, Metro will apply lessons learned from challenges associated with launching this service during the COVID-19 pandemic. Staff will continue to work collaboratively and cooperatively to remain focused on customer experience, safety, and exceed KPIs.

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