UPDATED SERVICE RECOVERY PRIORITIES

INTRODUCTION

In July 2021, the Board approved Service Recovery Priorities that established a framework to guide how the District would recover from the pandemic and restore pre-pandemic service levels until implementation of a then-anticipated network redesign in August 2022.

The framework grouped AC Transit's local routes into three priority groups, with Transbay scored based on the following factors:
1. Is the line below pre-pandemic service levels?
2. Does the line serve a Disadvantaged Community?
3. Does the line have high ridership or pass-ups?
4. Does the line provide critical coverage in the network?

Each local line operating below full service levels as of July 2021 was grouped into Priority Groups 1, 2, or 3 based on its performance in a particular category. Peak-only Transbay lines were placed on a parallel track for recovery as efficiencies with supplemental school trips made implementation feasible. Shuttle services were to be restored following the resumption of all other lines.

Exhibit 1 – AC Transit Service Recovery Priorities (adopted July 2021)

Priority	Lines
Full Service	1T, 6, 10, 14, 39. 40, 46L, 51A, 51B, 54, 62, 72, 72M, 72R, 74, 200, 215, 239, 376, 800, 801, 802, 805, 840, 851, F, NL
Supplementary	600s and Trippers
Priority 1	12, 18, 20, 21, 29, 33, 36, 45, 57, 60, 70, 71, 73, 76, 86, 88, 90, 96, 97, 98
Priority 2	28, 34, 35, 41, 47, 52, 56, 65, 67, 80, 99, 217, 232
Priority 3	7, 19, 46, 79, 83, 93, 94, 95, 210, 212, 216, 251
Transbay	B, C, CB, E, FS, G, H, J, L, LA, M, NX, NX1, NX2, NX3, NX4, O, OX, P, S, SB, U, V, W, Z
Shuttle	314, 339, 356, 701, 702, 703, 705, 707, 710, FLEX, Broadway Shuttle

Following the adoption of these criteria, staff heard from the public and the Board that more clarity was needed around Transbay service given the critical role it plays in reducing congestion, particularly in the peak-hour, and so an additional priority list was developed to provide guidance regarding how Transbay service would be recovered. In October 2021, the Board approved four guiding principles to underpin the District's strategy for recovering Transbay service:
1.   Equitable service,
2. Ridership,
3. Congestion Reduction, and
4. Available Alternatives.

In November 2021, the Board approved a staff's recommendation to prioritize service recovery of the pre-pandemic service network instead of a network redesign for implementation in August 2022. The Board also called for a more granular prioritization for how service across the network is to be recovered.

EXISTING CONDITIONS – JANUARY 2022

Nearly two years after the beginning of the pandemic, it is important to ensure updates to the District's service recovery priorities respond to how riders are using the system today and do so with a keen equity focus. Since the Board adopted its initial recovery priorities, ridership patterns have changed, in-person learning at schools and universities across the District has resumed, and the region has seen a slow return to in-person work and regular non-work activities outside of essential trips.

Exhibits 2 and 3 depict average weekday ridership numbers before and after the onset of the pandemic. Overall weekday ridership in Fall 2021 has recovered to above 50 percent of pre-pandemic levels. However, Automatic Passenger Counter (APC) ridership data show all-day local and Transbay services and supplemental and owl services are exhibiting strong growth relative to the beginning of the pandemic (over 55 percent of pre-pandemic ridership) while the Peak Transbay market is very far from recovery (6.9 percent).

Exhibit 2 – Average Weekday Riders by Service Type by Month
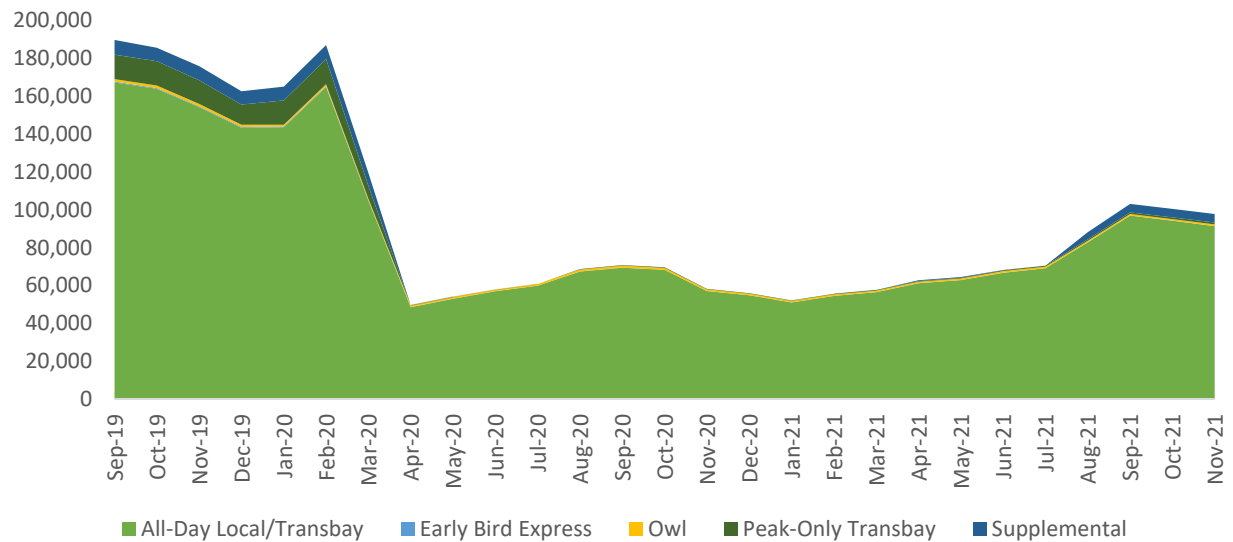
Exhibit 3 – Average Weekday Ridership by Service Type

Service Type	Average Weekday Boardings		
	Fall 2019	Fall 2021	% of Fall 2019 Total
All-Day Local/Transbay	160,252	92,687	57.8%
Peak Transbay	12,885	891	6.9%
Supplemental	7,441	4,359	58.6%
Owl	1,550	1,015	65.5%

Service productivity metrics like Boardings per Platform Hour (Exhibit 4) and Boardings per Trip (Exhibit 5) that normalize ridership by the amount of service provided help account for the significant differences between current scheduled service levels and those offered pre-pandemic. Given that the District has yet to fully recover to pre-pandemic service levels, benchmarking raw ridership in a vacuum can skew the growth picture. However, even when normalizing for the differences in service delivered in Fall 2021, both peak Transbay ridership and productivity are dwarfed by the growth seen on other service types.

Exhibit 4 – Boardings per Platform Hour

Service Type	Boardings per Platform Hour		
	Fall 2019	Fall 2021	% of Fall 2019 Total
Local/All-Day Transbay	27.4	19.1	69.7%
Peak Transbay	20.0	5.5	27.7%
Supplemental	35.9	22.3	62.2%
Owl	14.3	6.1	42.6%

Exhibit 5 – Boardings per Trip

Service Type	Passengers per Trip		
	Fall 2019	Fall 2021	% of Fall 2019 Total
Local/All-Day Transbay	27.4	19.0	69.3%
Peak Transbay	34.2	9.4	27.4%
Supplemental	49.9	29.9	59.8%
Owl	15.7	7.7	49.1%

Aside from changing ridership trends, AC Transit also faces other operational challenges in its path towards full service recovery. Like other transit operators in the region and nation-wide, the District has far fewer operators than required to regularly operate all scheduled service; staff aims to identify whether reallocating resources more efficiently in the short-term could help mitigate impacts on the greatest number of riders more equitably.

The District's Key Performance Indicators (KPIs) program provides a high-level look at the percentage of service operated. At the November 2021 board meeting, staff reported that in Q1 of FY 2021-22, the District operated just 94.4 percent of its service. In other words, the District failed to operate over 1 in 20 scheduled trips. Looking more closely at August and September 2021 numbers, AC Transit operated only 92.6 and 92.9 percent of its service, which translates to roughly 1 in 14 scheduled trips not operated and

a customer experience characterized by inconsistent gaps in service that make it hard for riders to rely on AC Transit getting them where they need to go.

Appendices A and B provide context for how these numbers translate into what customers across the system experience. On a given day in October 2021, based on information from the Computer Aided Dispatch (CAD) system, a customer riding Line 99 on Mission Blvd in Hayward or along Decoto Road in Fremont could reasonably expect to see at least one gap of 40 to 60 minutes in the schedule on most days throughout the month rather than the scheduled 20- to 30- minute frequency that the District aims to deliver. Conversely, those catching any peak-only Transbay services throughout the District would expect to see schedule gaps less than 20 percent of the time due to the way in which the District prioritizes Transbay above local service in accordance with Board Policy 471 (Cancellation of Scheduled Service).

PRIORITIZATION CRITERIA

At the Board's direction, staff reviewed the methodology originally developed and reworked it to address the Board's concerns about granularity. In addition, staff systematically reviewed and remedied issues identified during its review of the original priorities, ultimately establishing a hierarchy more responsive to current Bay Area travel market trends and the needs of the District's most vulnerable communities.

Original Methodology

Staff's original July 2021 methodology scored lines within the AC Transit network by giving each line points for meeting certain criteria. For example, Line 29 was given 3 of 3 possible points for not being at full service in July 2021, 1 of 1 possible point for being a line that serves a disadvantaged community under the state's SB 535 definition (the top 25 percent scoring areas from CalEnviroScreen, along with other areas of high pollution and low population), 2 of 2 possible points for carrying higher pre-pandemic ridership relative to other lines in the AC Transit service area and 0 points for not being a route that provides so-called "essential coverage," giving Line 29 a total of 6 points and placing it in Priority Group 1 for implementation of full service.

While listing priority groups for implementation offers staff flexibility in the decision-making process, one of the methodology's key weaknesses is that all lines below pre-pandemic service levels in July 2021 were scored with either a 4, 5, 6, or 7, leaving little room for differentiation or specificity as to the order in which lines within each priority group would be prioritized for service recovery as resources became available.

In addition to these concerns about specificity identified by the Board, the original methodology used the SB 535 Disadvantaged Communities dataset, which defines disadvantaged communities as those with top EnviroScreen 3.0 scores as well as including areas within the state with high amounts of pollution and low populations. The state's definition for disadvantaged communities under SB 535 was employed as part of staff's Clean Corridors Plan. Both this definition and the plan are designed to maximize equity benefits for communities that currently experience pollution most acutely. While the SB 535 dataset is particularly appropriate for use with the Clean Corridors Plan, given its specific focus on improving air quality and high

pollution areas, the way in which the SB 535 categories specifically include low population areas as priorities proves problematic when prioritizing service restoration given the District's role as a mass transit provider.

Staff's original methodology also identified some lines throughout the District as providing "critical coverage," a term defined qualitatively to award points for select low productivity lines throughout the AC Transit network outside of the core priorities outlined in the District's strategic plan.

Updated Methodology

Staff's updated methodology for service recovery uses demographic data from the most recent American Community Survey 5-Year dataset (2015-19). This aligns with how the District conducts Title VI service equity analyses in compliance with FTA guidance. Dropping the SB 535 dataset and its partial focus on low population areas in favor of more transit-oriented equity criteria will better focus the District's service recovery efforts on areas with both low-income communities of color with significant need and geographies with the historically densest transit ridership.

The updated methodology also drops the "critical coverage" criteria in favor of a more balanced and systematic approach that prioritizes some lower productivity services that serve a large population of underserved individuals in line with the District's equity goals. Staff's updated approach to service restoration emphasizes bringing back lines with higher pre-pandemic ridership balanced to serve the most individuals in priority populations at full service levels according to need.

This shift to more effectively focus resources according to need means that some lines that the District has yet to bring back in any capacity (i.e. Line 83, which serves MTC Equity Priority Communities in South Hayward) have seen their priority elevated relative to their place under the July 2021 methodology, while lower-productivity lines that serve fewer low-income individuals and communities of color (i.e. Line 80) have remained lower on the priorities list for service recovery. In addition, the updated methodology also prioritizes bringing some lines back to full service before bringing back some temporarily discontinued lines to help maintain service reliability and capacity where most riders are riding today.

The updated methodology uses weekday line-level productivity data from February 2020 from the District's KPI program, the number of low-income individuals and people of color (non-white or identifying as Hispanic) in Census block groups within a quarter-mile of service stops on the line, and employs a percentile rank for each factor for each local and Transbay line. The percentile rank for each factor is then multiplied by a weight (100 for the productivity percentile rank and 50 for both the percentile rank of low income individuals and people of color) to generate an overall weighted priority score for how the District should restore service going forward.

In addition to the three primary factors listed, staff may alter the priority list to ensure that the District's service recovery efforts properly account for key compliance obligations, which may include the terms of

Special Transit Service District 2's incorporation into the larger overall AC Transit District, and/or any other relevant grant agreements.

For scoring and ranking local service productivity, staff has employed the use of passengers per platform hour as a metric, which reflects the more consistent passenger turnover that characterizes a local bus service along the length of its alignment. For scoring and ranking peak Transbay service productivity, passengers per revenue trip was utilized as a productivity metric, reflecting the goal of a peak-only commuter express service to fill seats to and from downtown San Francisco rather than encourage turnover to intervening destinations along an alignment.

Note that staff has intentionally prioritized bringing back all local service yet to be recovered to pre-pandemic levels above peak Transbay service. This is a very deliberate choice in response to the ridership trends and operator shortages discussed in the existing conditions section of this attachment. The overwhelming majority of those riding AC Transit are doing so on the local system, and the region has not seen peak commute demand on transit to downtown San Francisco and the Peninsula recover to anywhere near local bus demand. As such, it is essential that AC Transit responds to this moment and does everything in its power to provide high-quality service on local routes where most riders are actually riding today.

Future Considerations

To provide higher-quality service on the local system in the immediate term, the Board should consider exploring novel short-term concepts that better utilize the District's limited financial resources and workforce by reallocating resources from unproductive Transbay service. While more analysis, planning, and significant outreach would be necessary to fully gauge impacts on existing riders, the large scale reliability issues experienced today throughout the local network call for strong near-term action to maintain service quality and the customer experience for the local riders that make up the vast majority of AC Transit ridership.

In the mid-to-long-term, as the District increases its staffing levels and recovers service to full pre-pandemic levels, staff intends to initiate a new comprehensive planning effort to evaluate how local and Transbay service might better match whatever new profile of transportation demand may take shape in a post-pandemic future. Such an effort would include a full investigation of new market possibilities across the entire East Bay.

Taking measures to improve service delivery and the customer experience for most riders in the short-term might include 1) allowing local riders on all Transbay lines to enhance service productivity and increase local travel options and service coverage; 2) revisiting Board Policy 471 (Cancellation of Scheduled Service) to reprioritize the local network above Transbay service; 3) reallocating Transbay resources into high-frequency shuttles that double as local service; 4) repurposing Transbay service hours to provide booster bus service on existing local lines where meeting pullout is already a challenge; or 5) pursuing novel partnerships with other agency partners (i.e. transfer discounts, new fare products with

BART in line with the MTC Transit Fare Coordination and Integration Study recommendations) to better meet mobility needs throughout the District through means outside of AC Transit's traditional offerings.

UPDATED SERVICE RECOVERY PRIORITIES

Priority	Line	February 2020 Weekday Productivity, Passengers per Hour (Local Percentile Rank)	Low Income Individuals in Block Groups within a ¼ Mile (Local Percentile Rank)	People of Color in Block Groups within a ¼ Mile (Local Percentile Rank)	Weighted Score (100 x Productivity) + (50 x Low Income) + (50 x PoC)
1	57	90%	100%	90%	186
2	76	86%	88%	74%	167
3	18	83%	98%	57%	161
4	88	81%	95%	55%	156
5	36	88%	93%	38%	154
6	79	100%	81%	26%	154
7	97	74%	48%	93%	144
8	33	79%	62%	45%	132
9	45	55%	83%	67%	130
10	96	62%	79%	52%	127
11	12	50%	90%	62%	126
12	71	45%	86%	76%	126
13	98	69%	69%	43%	125
14	29	60%	71%	48%	119
15	99	33%	67%	100%	117
16	73	95%	29%	12%	115
17	90	76%	45%	29%	113
18	83	38%	64%	79%	110
19	210	48%	26%	98%	110
20	34	24%	74%	88%	105
21	65	93%	17%	0%	101
22	95	98%	2%	5%	101
23	70	57%	52%	36%	101
24	28	19%	76%	86%	100
25	60	67%	21%	33%	94
26	46	64%	36%	19%	92
27	93	21%	57%	83%	92
28	41	26%	55%	71%	89

Priority	Line	February 2020 Weekday Productivity, Passengers per Hour (Local Percentile Rank)	Low Income Individuals in Block Groups within a ¼ Mile (Local Percentile Rank)	People of Color in Block Groups within a ¼ Mile (Local Percentile Rank)	Weighted Score (100 x Productivity) + (50 x Low Income) + (50 x PoC)
29	86	29%	50%	69%	88
30	339	52%	43%	21%	85
31	35	31%	40%	60%	81
32	67	71%	12%	2%	79
33	56	7%	60%	81%	77
34	232	10%	19%	95%	67
35	217	40%	0%	40%	61
36	7	43%	24%	10%	60
37	47	36%	33%	14%	60
38	19	17%	38%	24%	48
39	216	5%	14%	64%	44
40	80	14%	31%	17%	38
41	212	0%	5%	50%	27
42	251	2%	7%	31%	21
43	94	12%	10%	7%	20

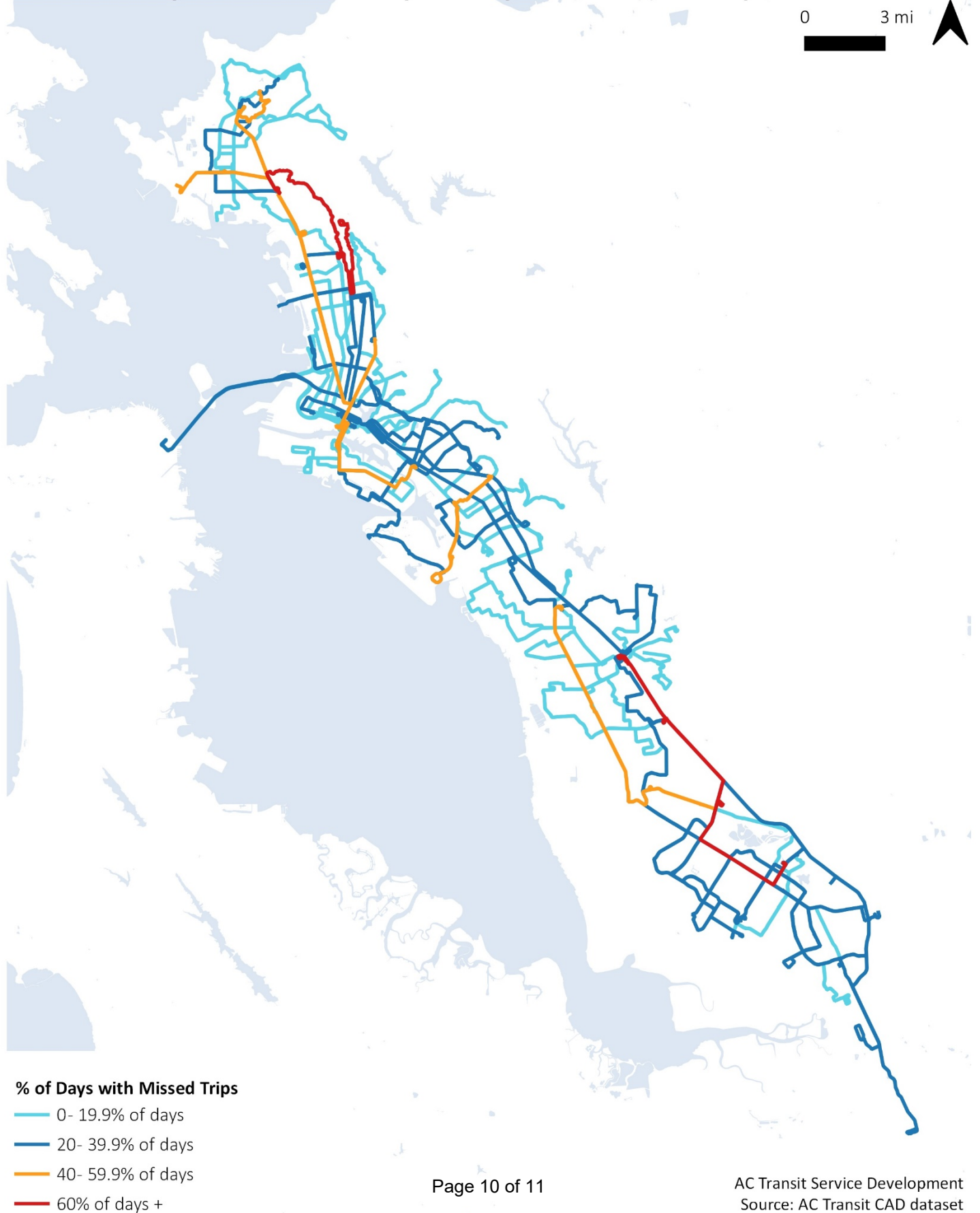| Priority	Line	February 2020 Weekday Productivity, Passengers per Trip (Transbay Percentile Rank)	Low Income Individuals in Block Groups within a ¼ Mile (Transbay Percentile Rank)	People of Color in Block Groups within a ¼ Mile (Transbay Percentile Rank)	Weighted Score (100 x Productivity) + (50 x Low Income) + (50 x PoC)
44	J	100%	64%	52%	158
45	NX4	52%	96%	96%	148
46	FS	96%	68%	20%	140
47	NX	68%	72%	68%	138
48	G	84%	56%	48%	136
49	NX3	40%	92%	88%	130
50	LA	60%	60%	60%	120
51	O	28%	88%	80%	112
52	C	80%	36%	24%	110
53	H	72%	32%	40%	108

Priority	Line	February 2020 Weekday Productivity, Passengers per Trip (Transbay Percentile Rank)	Low Income Individuals in Block Groups within a ¼ Mile (Transbay Percentile Rank)	People of Color in Block Groups within a ¼ Mile (Transbay Percentile Rank)	Weighted Score (100 x Productivity) + (50 x Low Income) + (50 x PoC)
54	SB	36%	52%	92%	108
55	NXC	4%	100%	100%	104
56	L	20%	84%	76%	100
57	P	88%	12%	4%	96
58	E	92%	4%	0%	94
59	NX2	56%	44%	32%	94
60	W	16%	80%	72%	92
61	S	12%	76%	84%	92
62	NX1	48%	48%	36%	90
63	V	64%	20%	28%	88
64	CB	76%	8%	12%	86
65	U	44%	16%	64%	84
66	OX	32%	24%	44%	66
67	M	0%	40%	56%	48
68	Z	8%	28%	16%	30
69	B	24%	0%	8%	28

Appendix A:

% of Service Days on Local and All-Day Transbay Lines with Missed Trips, October 2021

0   3 mi

% of Days with Missed Trips

— 0- 19.9% of days

— 20- 39.9% of days

— 40- 59.9% of days

— 60% of days +

AC Transit Service Development
Source: AC Transit CAD dataset

Appendix B:

% of Service Days on Peak-Only Transbay Lines with Missed Trips, October 2021

0   3 mi

% of Days with Missed Trips

— 0- 19.9% of days

— 20- 39.9% of days

— 40- 59.9% of days

— 60% of days +

AC Transit Service Development
Source: AC Transit CAD dataset