

SFMTA Municipal Transportation Agency



Citizens Advisory Council Engineering, Maintenance, and Safety Committee January 23, 2018



- How we manage service
- How we measure performance
- Next steps

How we manage service – Control Center

Central Control/ Transportation Management Center (TMC)

- Communicates with operators, field staff, and customers
- Coordinates management of service on the street, including special events, and incident response

Modernizations

- Transitioning to multi-modal TMC to consolidate all functions (e.g., bus & maintenance support, public information officers)
- New Radio and Computer Aided
 Dispatch/Automatic Vehicle Location
 (CAD/AVL) systems enable better
 communication and management





How we manage service – Transit Supervisors

Transit Supervisors

- Interact with operators and assist in responding to incidents
- Manage service according to schedule and service plan
- Initiates changes to service as directed by TMC

- Modernizations
 - Reorganizing and redeploying workforce into Performance and Incident Response Units
 - Field manager role directly manage supervisors and communicate with TMC



How we measure performance – OTP

- Metrics based on GPS from all vehicles
- On-time performance (OTP)
 - Measures adherence to the schedule at timepoints
 - "On-time" defined as between 1 minute early and up to 4 minutes late
 - Terminal performance critical

5 Inbound ~ Weekday ~							
Fulton St & 8th Ave	Fulton St & 6th Ave	Fulton St & Masonic Ave	Mcallister St & Fillmore St	Mcallister St & Van Ness Ave			
10:05 AM	10:06 AM	10:12 AM	10:17 AM	10:25 AM			
10:15 AM	10:16 AM	10:22 AM	10:27 AM	10:35 AM			
10:25 AM	10:26 AM	10:32 AM	10:37 AM	10:45 AM			
10:35 AM	10:36 AM	10:42 AM	10:47 AM	10:55 AM			
10:45 AM	10:46 AM	10:52 AM	10:57 AM	11:05 AM			

How we measure performance – Headway, Gaps & Bunches

	📩 Before 10 am	- : 10 am - 3 pm	📩 3 pm - 7 pm	🕒 After 7 pm
5 Fulton	9 min	10 min	10 min	15–20 min
Service Frequencies	011111		1011111	10 2011
Wait time between vehicles	12 min	11 min	10 min	15 min

- Headway measures spacing of all vehicles serving a route
 - What is the longest amount of time a customer will actually wait for a bus/train to arrive?
- Gaps in service occur when actual headway is greater than 5 minutes from schedule
- Bunches in service occur when a vehicle arrives less than 2 minutes after the previous vehicle
 - Or less than 1 minute for service with a scheduled frequency of 5 minutes or less
 - Bunches are often the result of gaps

How we measure performance – Modernizations

- New technology and tools enable:
 - Real-time performance measurement
 - More active service management to focus on improving customer experience
 - Centralized and data-driven deployment of resources



Next Steps

- Fully staff and completely transition to Transportation Management Center to better manage service in real-time
- Train staff on new techniques and use of technology to support service management goals
- Implement suite of new systems to improve data collection, reporting, and inform improvements to practice