SFMTA

Muni Equity Working Group

September 19, 2024

Welcome!

Grab some food and drink. The meeting will start at 5:30 p.m.

Agenda

Time	Item
5:30 p.m.	Welcome
5:35 p.m.	Update on fall service changes
5:40 p.m.	Guest speaker: Diana Hammons, SFMTA Fare Programs
6:00 p.m.	Break
6:10 p.m.	Recap of service decision-making & metrics
6:20 p.m.	Service scenario exercise
6:55 p.m.	Closing and planning next meeting
7:00 p.m.	Meeting adjourns

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Update on Fall Service Changes

Fall Service Change Update

- **August 17th –** Implemented bus service changes to address school demand
- **September 28th –** Implementing rail service changes including start of L Taraval rail service

SFMTA Fare Programs

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Service Scenario Exercise

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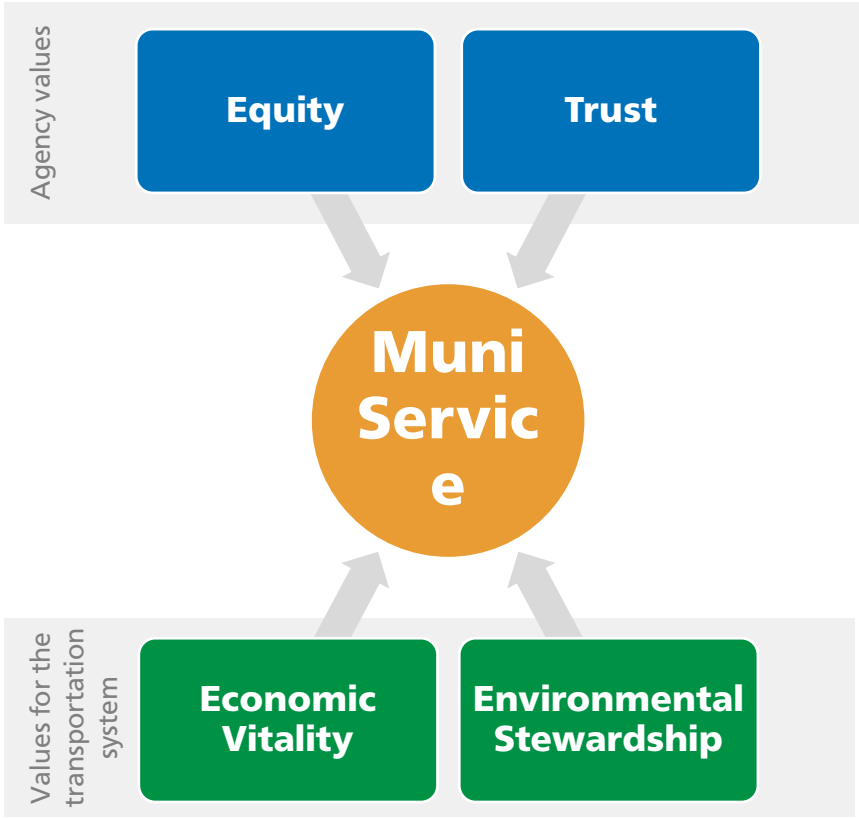
Recap of Current Decision-Making and Evaluation Process

Muni Service Decision-Making Criteria

- Resource neutral changes
- Neighborhoods identified by the Muni Service Equity Strategy
- Ridership demand (crowding) and frequency
- Minimum policy frequencies
- Access for people with disabilities and seniors
- Support economic recovery



Muni service criteria based on agency values

Developing Service Plans

Service Needs Analysis

- Service Standards & Equity
  - Is there service that is not meeting our standards?
- Ridership & Performance Analysis
  - Where is the most crowding and what routes are not meeting their schedule?
- Feedback
  - What are we hearing from customers, operators and other front-line staff?
- Operator & Fleet Availability
  - How many operators and vehicles do we have available for service?

Decision Making Criteria

Service Plan Details

- Frequency
  - How often does the bus run?
- Time Span
  - From when to when does the service run?
- Route
  - On what streets does the bus run?
- Bus Stops
  - Where are the stops and what type?
- Vehicle Type
  - What mode should the routes run on - rail, electric trolley, motor coach, streetcar, etc.?

Working Group Support Needed

- **Collaborate in development of performance metrics**
- Define policy to prioritize implementing service needs
- Review reporting tools and provide feedback
- Inform your communities of this process and bring feedback

Service Standards & Performance Metrics

Service Standards

establish baseline for service

- Policy headways
- Service coverage
- Transit amenities

Performance Metrics

establish threshold for service quality

- Service delivery
- Crowding
- Headway adherence/on-time performance

Service Standards

Baseline for Service

Policy Headways	• How frequent should the service come?
Service Coverage	• What is the minimum amount of area of San Francisco we should serve?
Transit Stop Amenities	• What are the basic needs at each stop?

Performance Standards

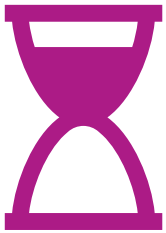
thresholds for service quality

Service delivery

How well scheduled trips are started and completed.

Crowding

Passenger loads on high-ridership segments and times.



Performance

How well buses are spaced apart.

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Neighborhood Exercise

Inner Mission

Inner Mission Exercise

Scenario:
SFMTA is being faced with a 10% service cut to service. Service change decisions should be rooted in data which can include ridership, performance, productivity and demographic data.

Evaluation Tools:
- Neighborhood Map – shows which routes service the neighborhood
- Web Dashboard – displays different data at the route level with the ability to weigh them differently or the same
- Route Information Table – provides at-a-glance information about the routes serving the Inner Mission including ridership, performance, productivity and resources

Inner Mission Exercise

- **Exercise:** Break out into three groups and create an evaluation framework using the evaluation tools.
- **Time:**
  - 25 minutes to work with group
  - 10 minutes for report back
- **Task:**
  - Evaluate Muni service in the Inner Mission neighborhood and develop an evaluation framework to identify service cuts.
- **Report Back:**
  - What data did you include in your evaluation framework?
  - Were they all weighed the same?
  - Was there other data you thought should be included?
  - What routes were identified for potential service cuts and why?

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Next Meeting Discussion Items

Next Meeting

Date: Thursday, November 21 5:30 – 7 p.m.

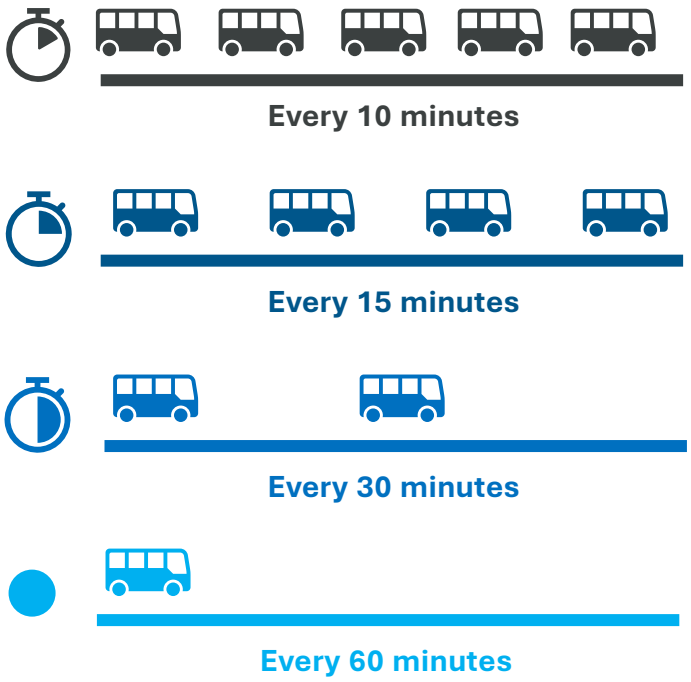
Location: 1 South Van Ness, 7th Floor

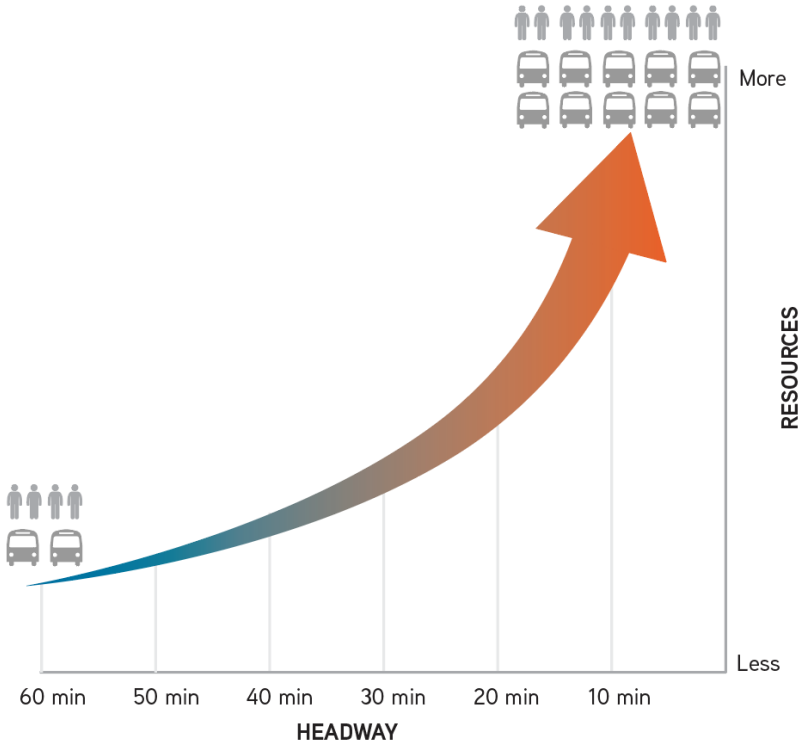
Appendix

Frequency

Higher Frequency = **More $$$**

- **Headways** describe how frequently a bus arrives at a stop, *i.e. headways of 10 mins = bus arrives every 10 mins*
- Set **based on service standards and ridership demand**
- **Can vary** by time of day, day of week, and route segment

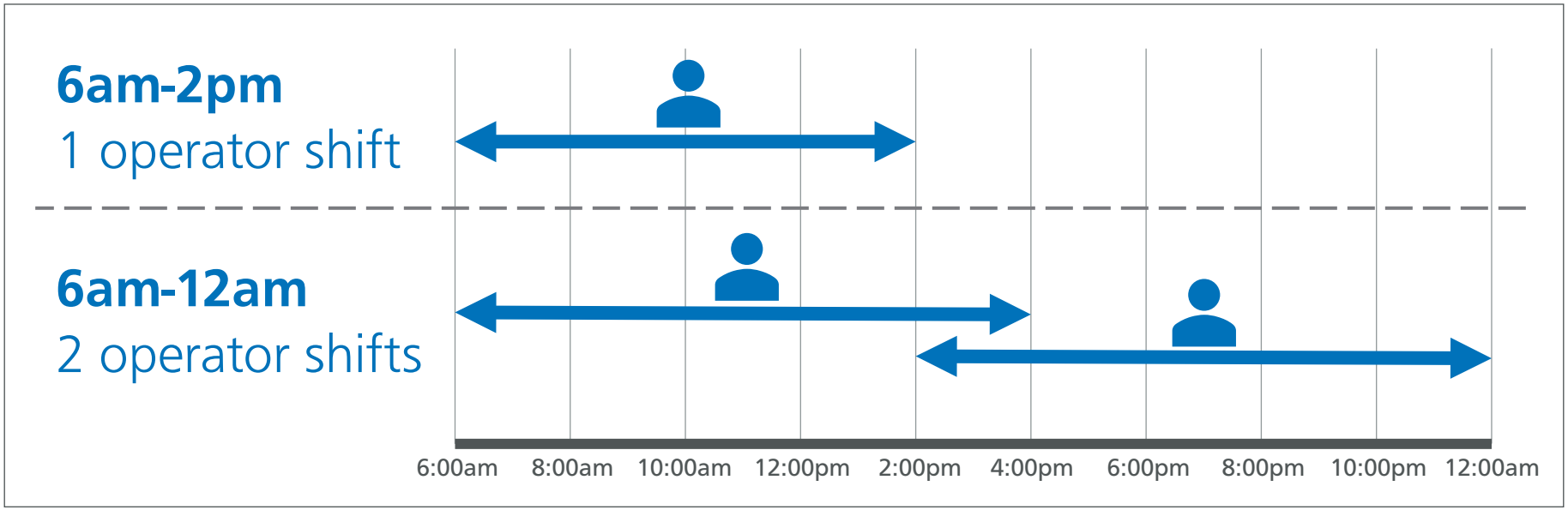




Time Span

Longer Time Spans = **More $$$**

- Time Span describes the time the **service starts and ends** on a given service day
- Spans are **consistent** across service day types
- Typically a service day is **18 hours** and is covered by **two shifts of operators**
- Service can be **covered with one shift** if the **span is less than 8 hours**



Travel Time

More Time = **More $$$**

EXAMPLE: Cost to Provide 10-Minute Bus Frequency, 6 AM – 12 AM, daily

Travel time and cost increase together

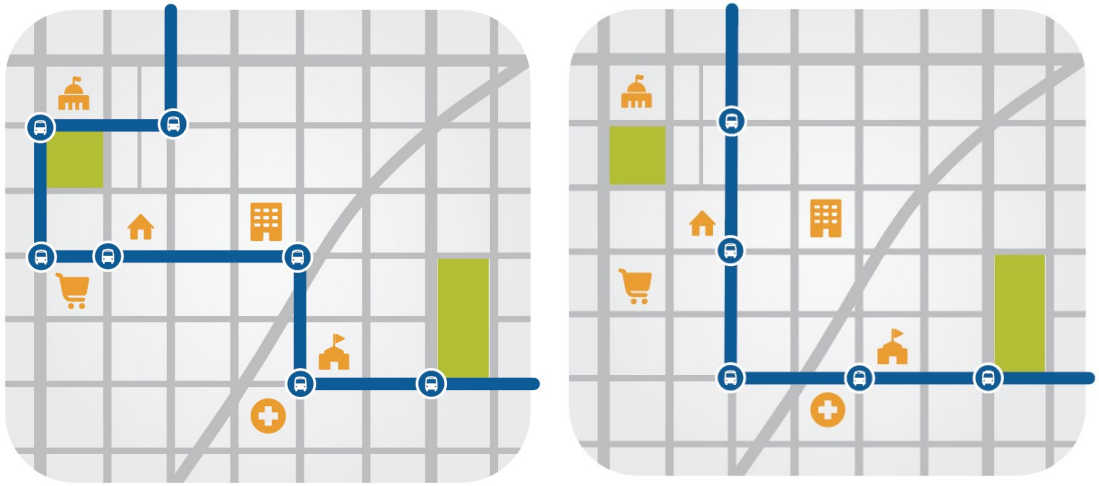
Travel Time	Buses Required	Annual Cost
30 minutes		$4 million
45		$6 million
60		$8 million
75		$10 million

Assumes operating cost of $200/hour per vehicle for example purposes only. Actual costs vary by mode.

Factors that influence travel time include **route design and congestion**

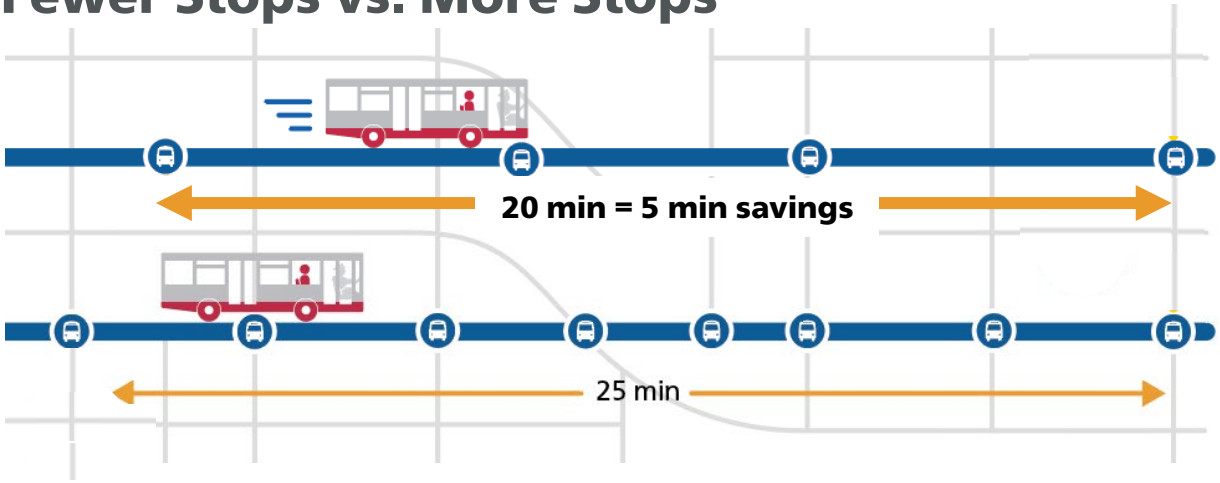
Route Design – Impacts to Time

Access to Destinations vs. Direct Routes



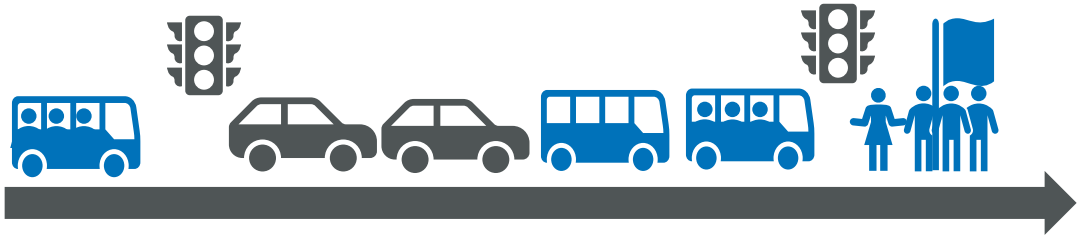
- Shorter routes take fewer vehicles to run at higher frequencies
- Direct routes mean fewer opportunities for it to get delayed

Fewer Stops vs. More Stops



- Fewer stops means faster service and fewer opportunities for the bus to be delayed at stops

Congestion – Impacts to Time



Roundtrip Travel Time: 60 mins
6 Coaches for 10 mins service

Unreliable service (bunching and gapping), lack of traffic signal priority or transit only lanes, slow speeds

Time Savings of 10 mins
Roundtrip Travel Time: 50 mins
5 Coaches for 10 mins service
(~1 million/year)

Traffic signal priority and transit only lanes, more reliable service, faster speeds

Policy Headways

Daytime Service – varies based on service type

Service Category	Typical Frequency
Muni Metro/Rapid	10 to 12 minutes or less & skip stop service
Frequent	10 minutes or less
Grid	12 to 30 minutes
Connector	30 minutes
Specialized/Historic	Based on demand

Owl Service – 12am-5am service

Service Category	Typical Frequency
Owl	15 to 30 minutes

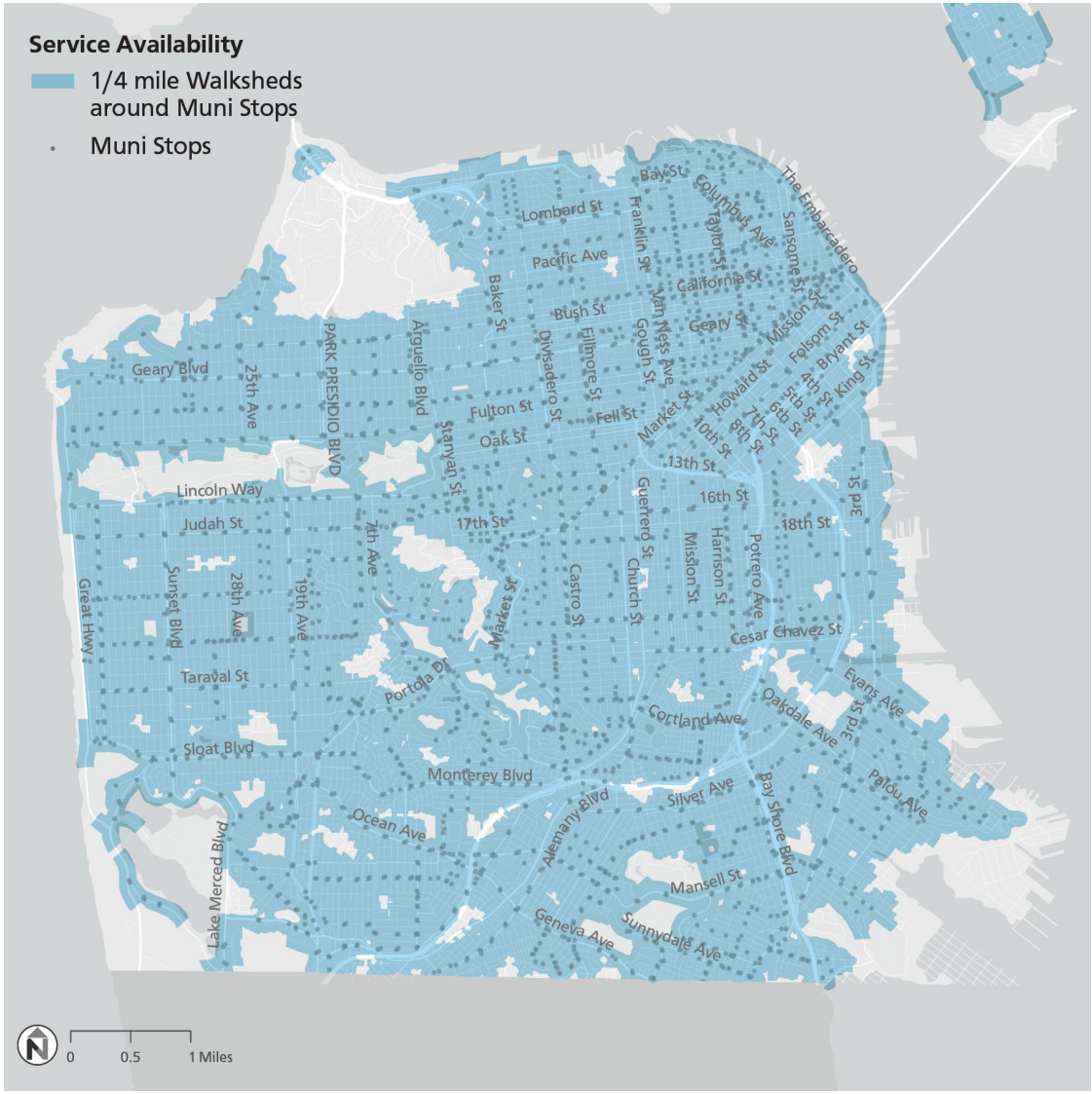
Service Coverage

Daytime Service

- All residential areas within **¼ mile walking distance (or 5 min)** of a Muni stop

Owl Service

- All residential areas within **½ mile walking distance (or 10 min)** of an Owl stop

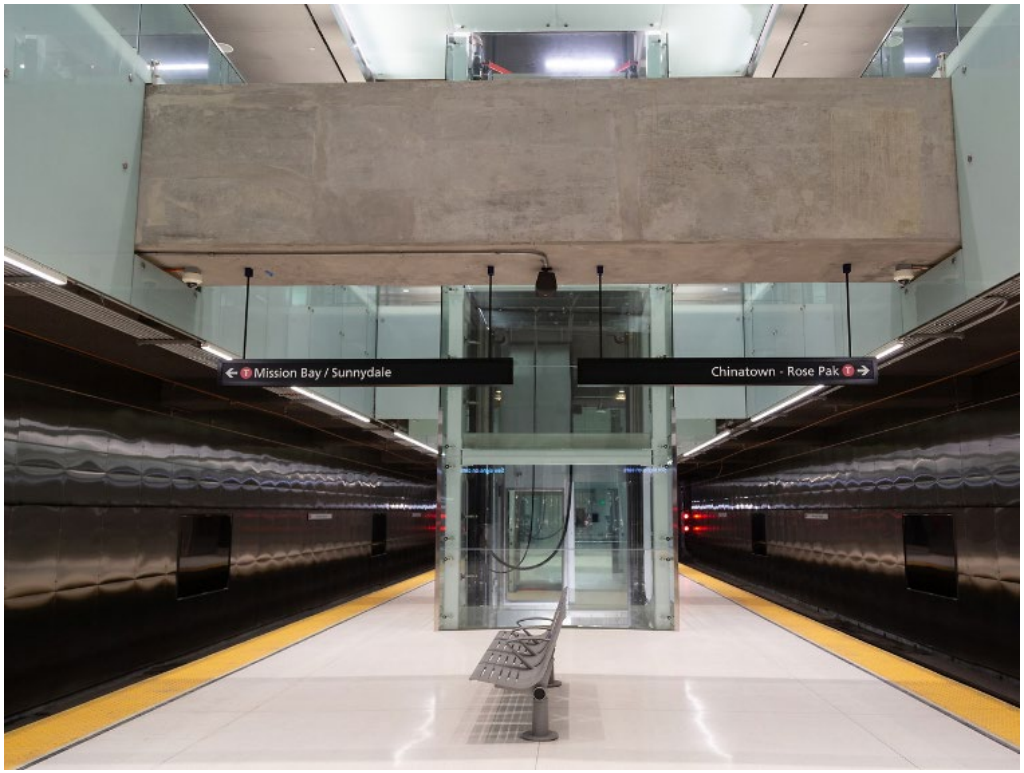


Transit Stop Amenities

All Stops

- Stop markings and flags
- Transit shelters (priority at stops with 125+ boardings)
- System maps
- Next Bus displays and push-to-talk

Subway Muni Metro stations



- Elevators and escalators
- Digital displays
- Automated voice information systems

Performance Metric

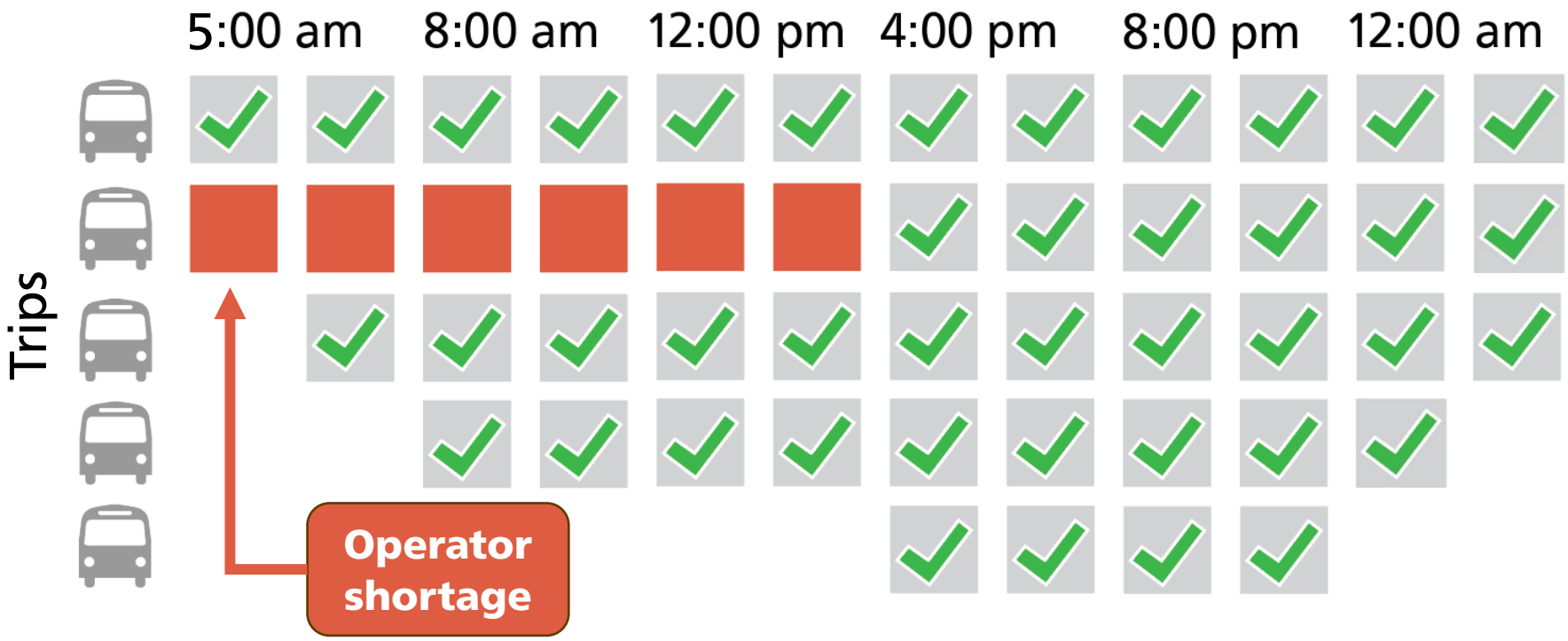
Service Delivery

Scheduled Service Filled

Measure: % of scheduled service filled

Target: 100% of shifts

Measures the number of operator shifts (or runs) filled, accounts for operator availability to deliver service.



Performance Metric

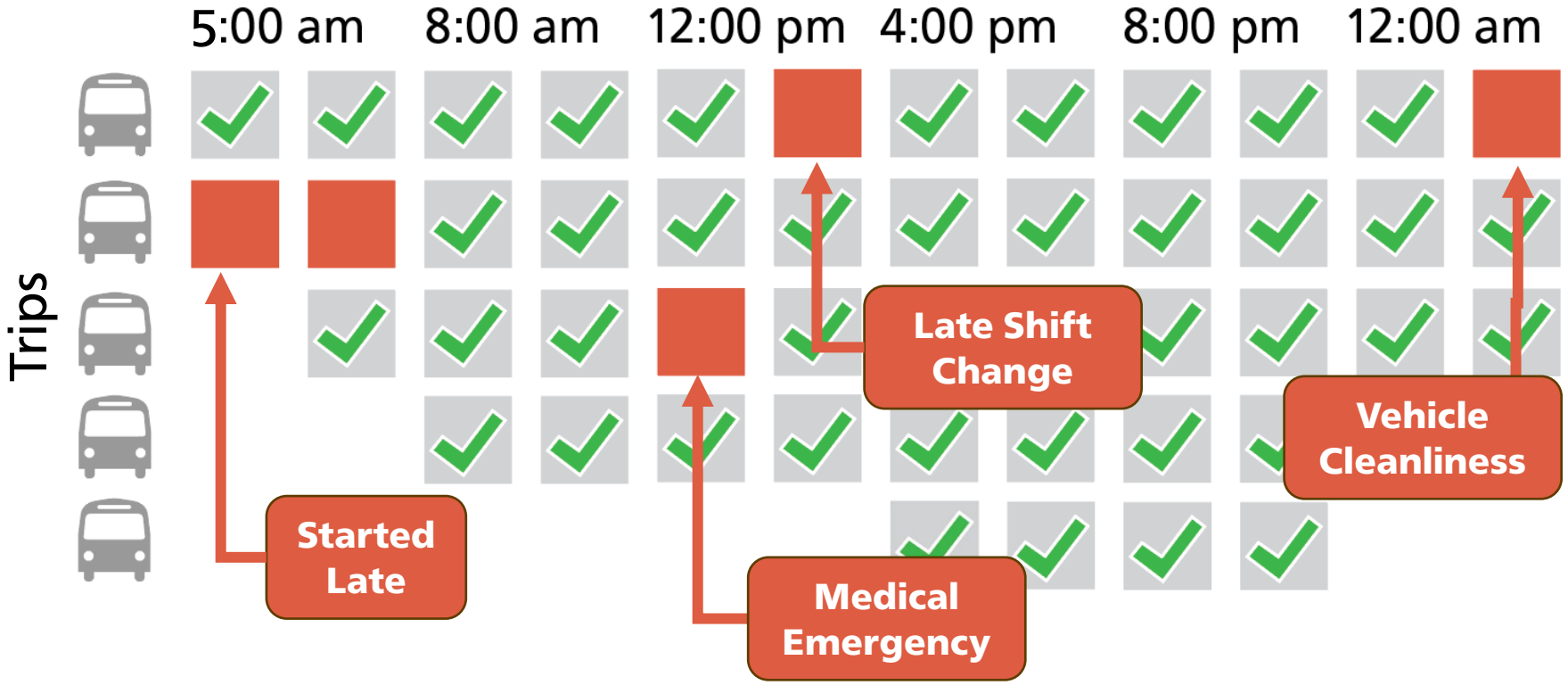
Service Delivery

Scheduled Hours Delivered

Measure: % of scheduled hours delivered

Target: More than 98.5% of scheduled hours

Measures the number of scheduled hours delivered, accounts for unexpected disruptions in service.



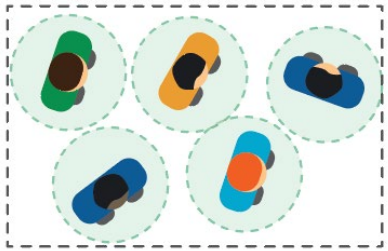
Crowding

Performance Metric

- SFMTA has three different thresholds for capacity standards based on number of seats plus standing space for passengers (in square feet)
- Standing space varies by vehicle type
- Capacity thresholds balance comfort and efficiently carrying people

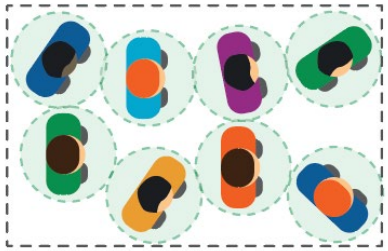
Planning Capacity

Per standing passenger:
4.5 sq ft (bus)
3.7 sq ft (rail)



Crowding Capacity

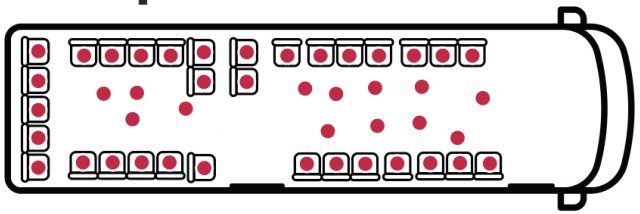
Per standing passenger:
3.0 sq ft (bus)
2.7 sq ft (rail)



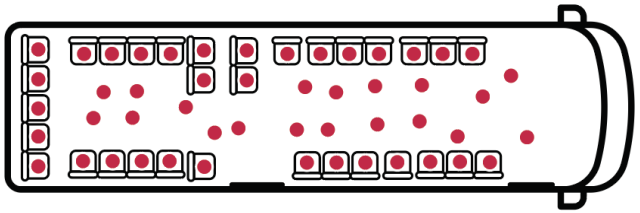
Crush Capacity

Per standing passenger:
1.5 sq ft (bus)
1.8 sq ft (rail)

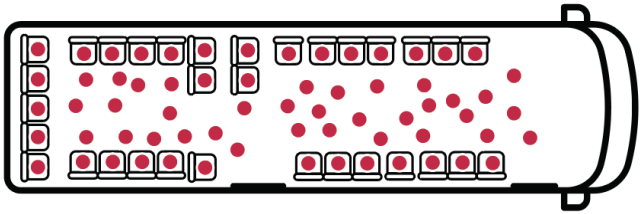
Example: 40 ft Motor Coach



44
Total



51
Total



71
Total

Crowding

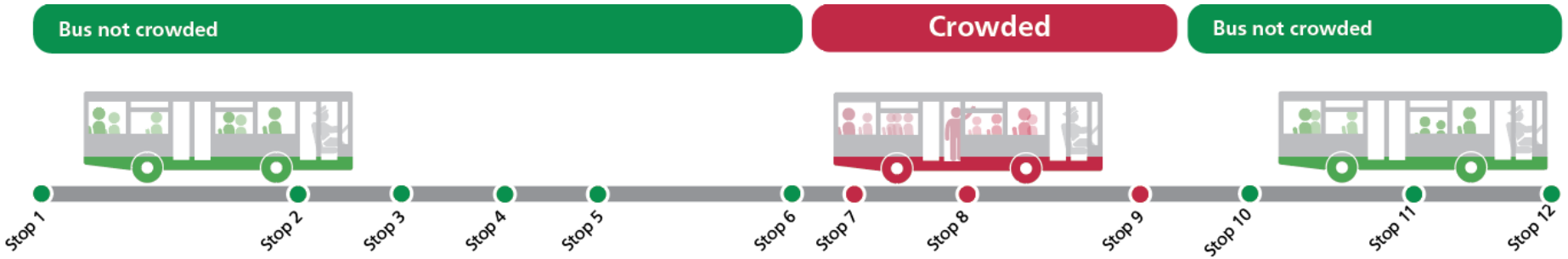
Performance Metric

Measure: % of trips over "crowding" capacity
Target: Less than 10% of trips crowded in one hour

Measures the number of trips with passenger loads over the crowding capacity for at least 5% of stops.

- Track total percent of trips in hourly increments that are crowded.
- Routes with 10% of more of trips crowded are "most crowded" routes.

Example of Crowded Trip = 25% (3 of 12) of the stops at "crowding" capacity



Performance Metric

Route Performance

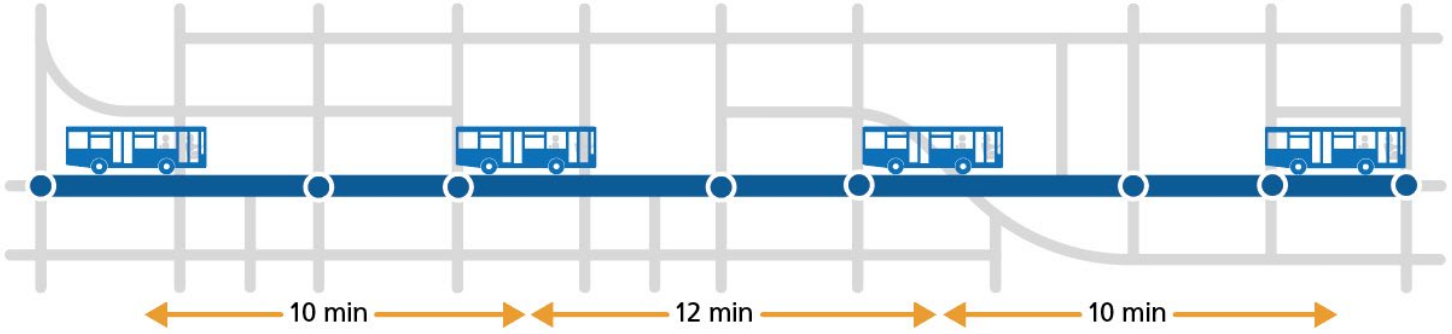
Headway Adherence

Measure: % of evenly spaced arrivals

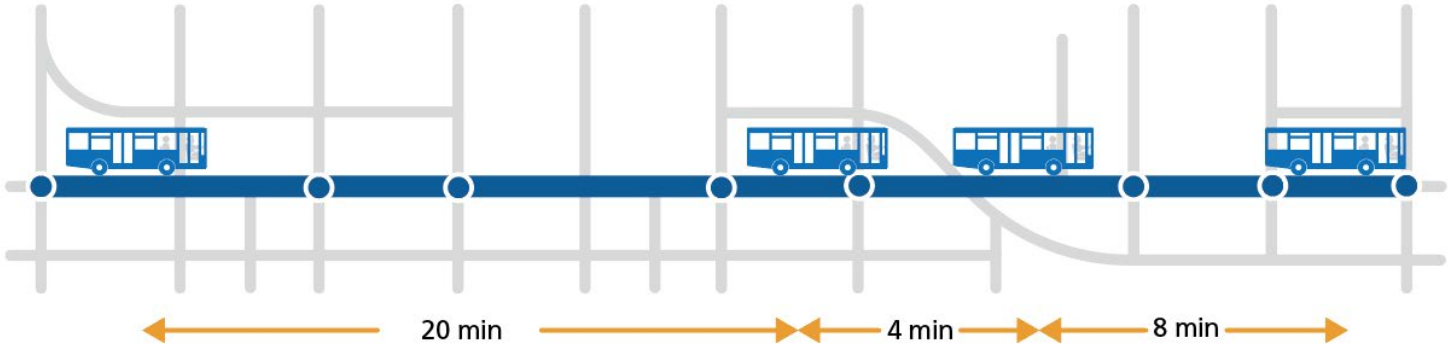
Target: More than 86% of arrivals evenly spaced

Measures the number of times a vehicle arrives evenly spaced (gap is less than 5 mins above scheduled headway) at stops along the route.

Evenly Spaced



Gapped & Bunched



Performance Metric

Route Performance

Schedule Adherence

Measure: % of timepoints on time
Target: 85% of arrivals on time
Measures the number of times a vehicle meets the scheduled timed arrival (up to 1 minute early and four minutes late).