

Planning and Scheduling Efficiencies in a Growing San Francisco

Kathleen Phu

SFMTA, Transit Planner

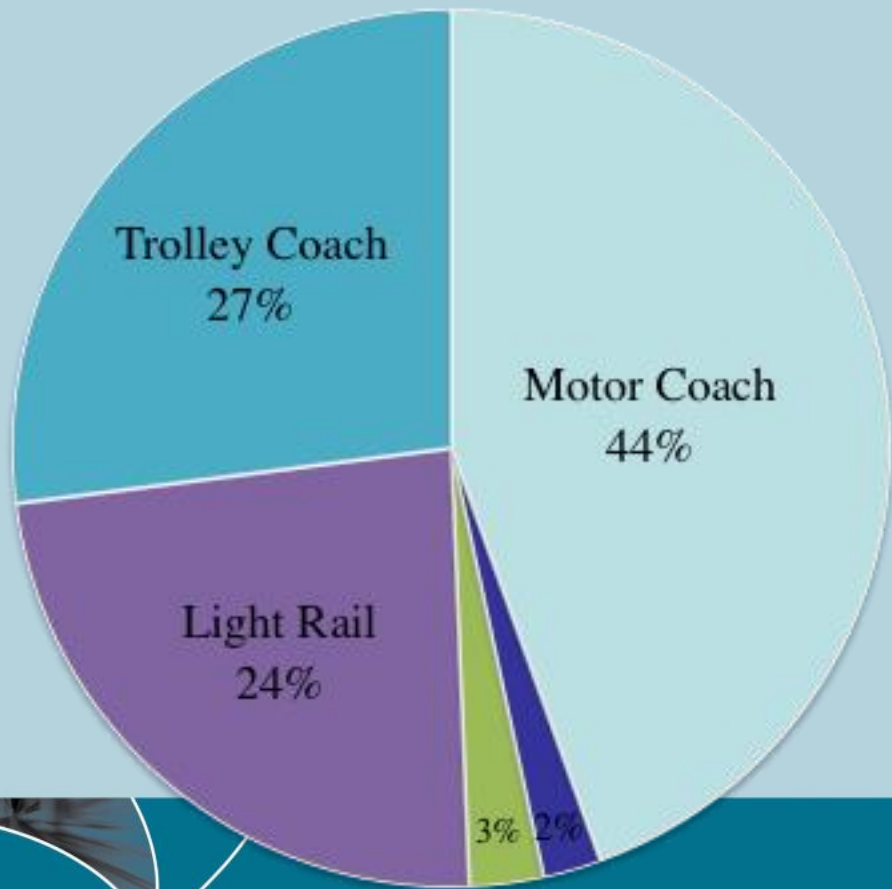
San Francisco, CA

Outline

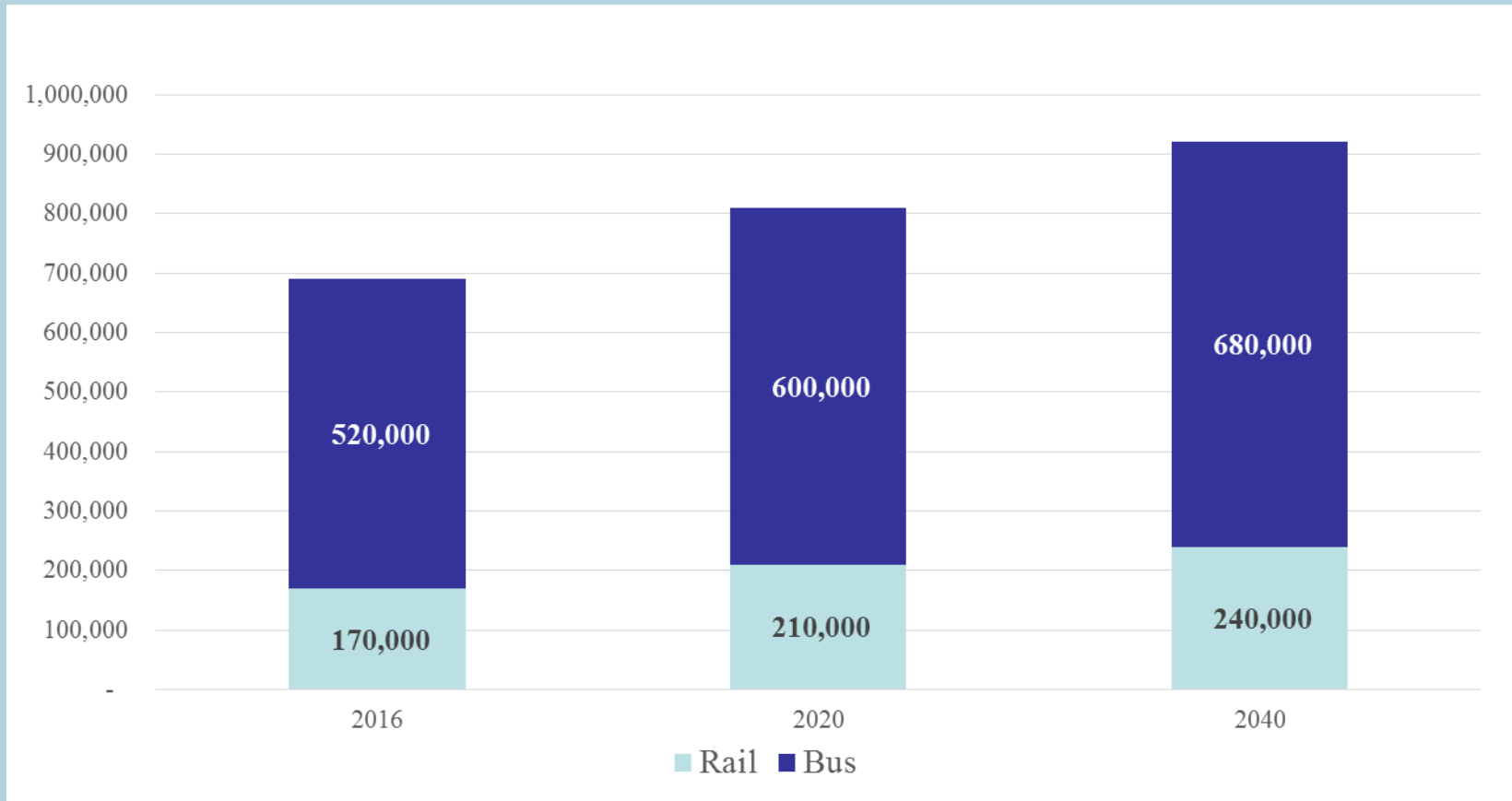
- San Francisco Background
 - Projected Growth, Challenges
- Route Efficiencies
- Lessons Learned

San Francisco Transit – At a Glance

720,000 daily boardings



Ridership Projection



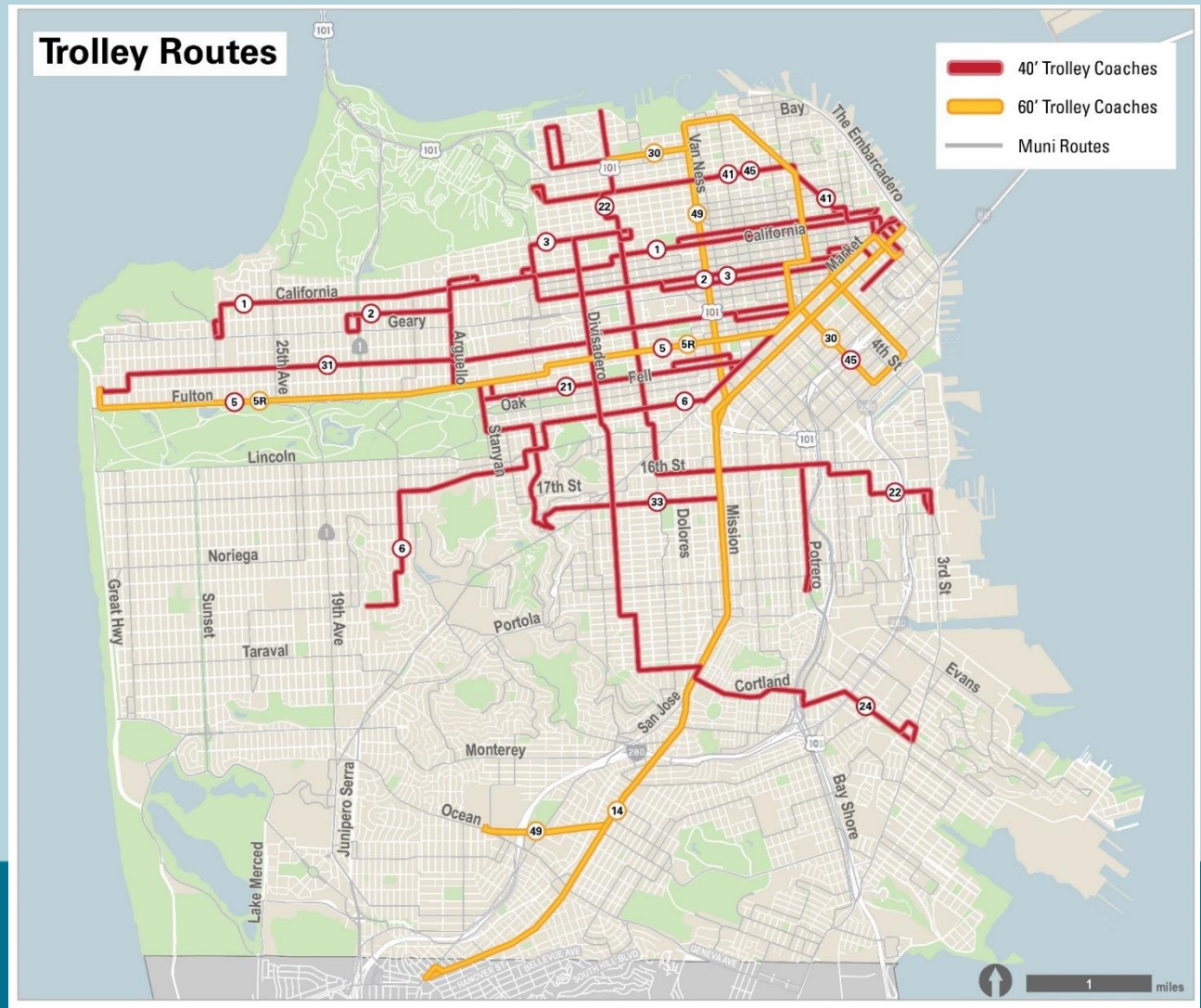
Costly Challenges

- Citywide congestion, traffic up 20%
- Construction motorization demands
 - 2018-2020: 15-20% of motor coaches used for motorization projects
- Aging trolley infrastructure and fleet



Trolley Network

- Trolley customers make up 27% of total ridership
- 15 routes in the Trolley Network
- Includes some of the highest ridership in the system (e.g., 1 California, 14 Mission, 30 Stockton)



Trolley Wires



Efficiencies Examples

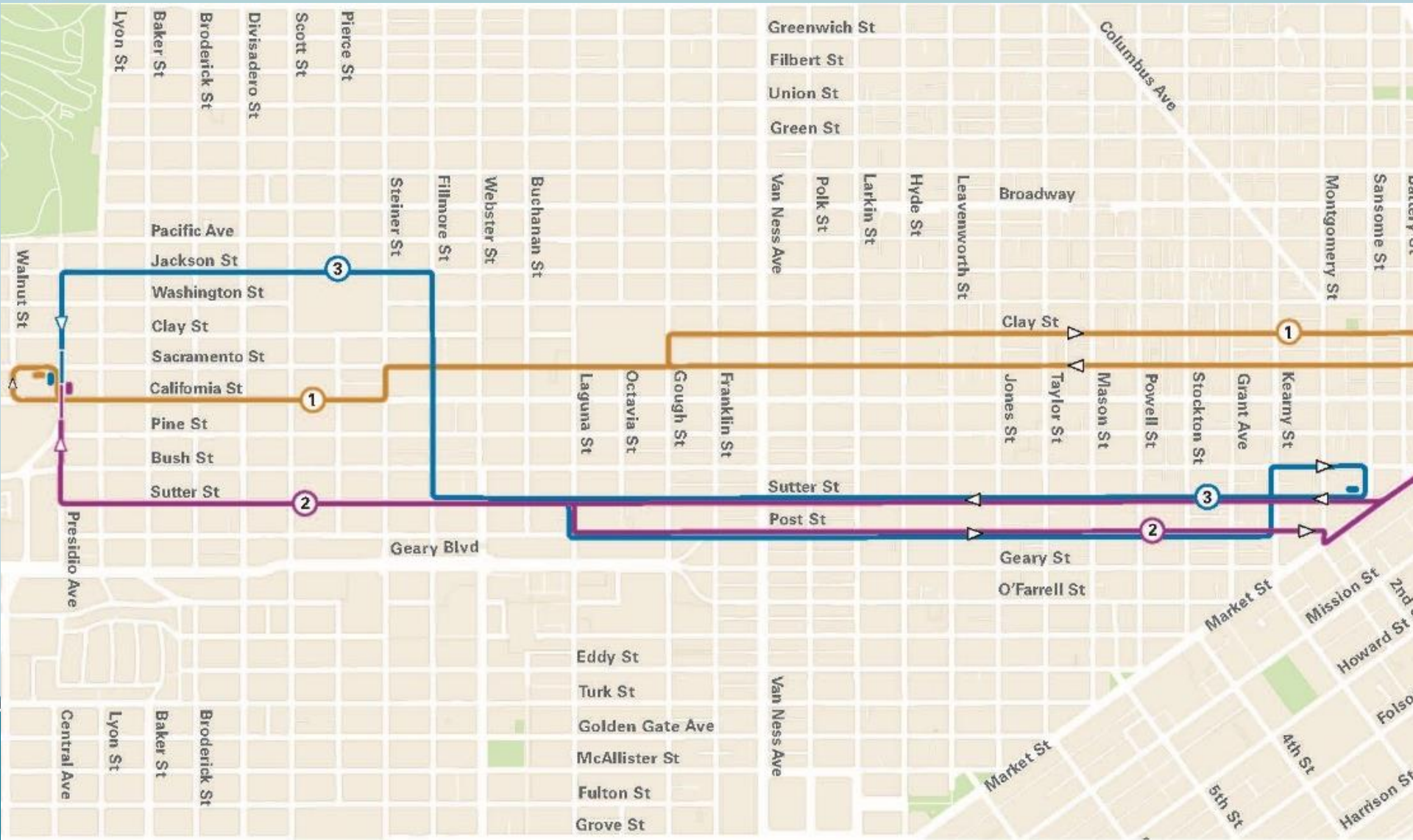
- 2 Clement/3 Jackson Combination
- 5R Fulton corridor
- 9/9R San Bruno corridor

Sutter Corridor

- Ridership demand on Sutter corridor
- Developed a peak-hour short line for the 2 Clement to supplement service
- Terminal space became the biggest challenge for route

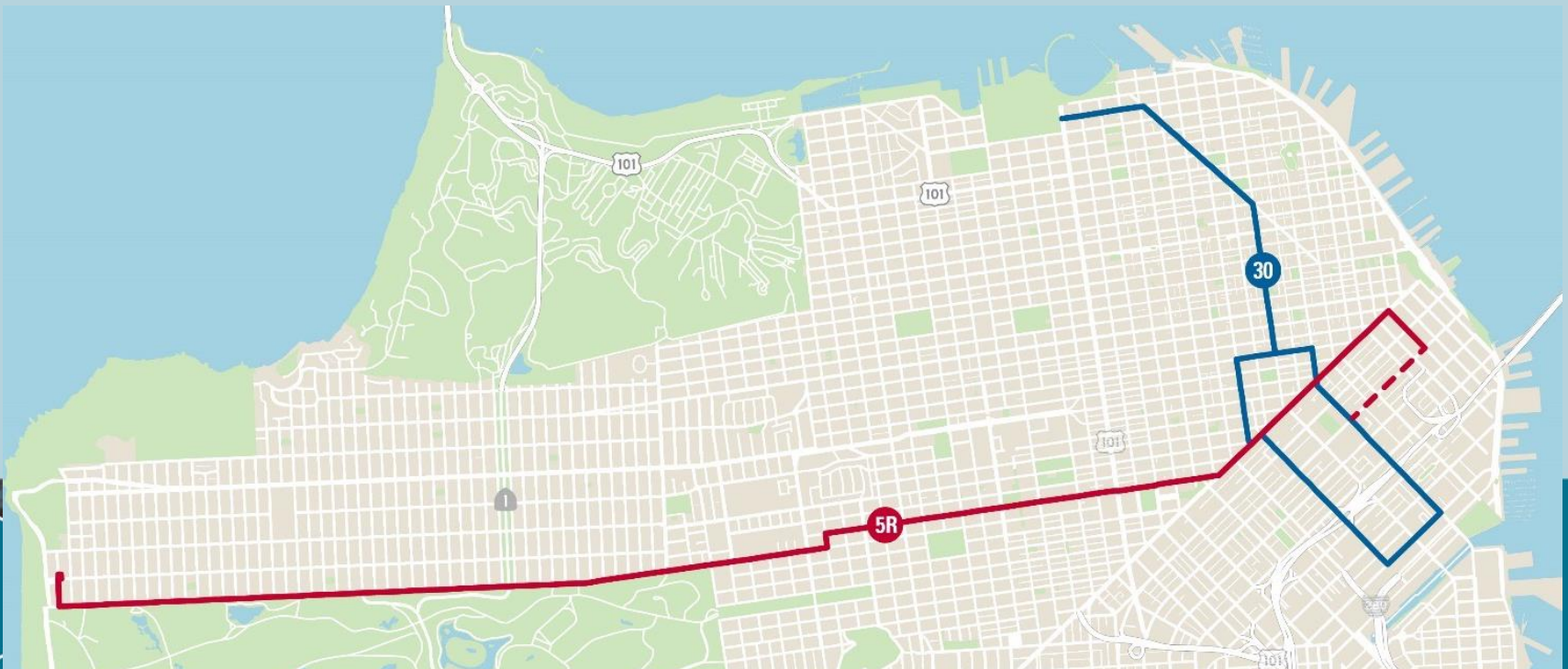


Combining 2 Sutter/3 Jackson



5 Fulton Rapid

- Upsized 5R route to articulated coaches
- Opened headways
- Interlined 5 Fulton Rapid & 30 Stockton



5R Rider Survey

WHAT ARE 5R RIDERS SAYING ABOUT THE CHANGES SO FAR?

In May 2017, we surveyed 239 riders in person over one week. Here is some of what they said.



90% were satisfied overall by service on the 5/5R

El 90% está satisfecho en general con el servicio de la 5/5R

90%的人整體而言對5/5R的服務感到滿意

90% ang nasisiyahan sa pangkalahatan sa serbisyo ng 5/5R



84% agreed that the 5/5R is reliable

El 84% está de acuerdo en que la 5/5R es confiable.

84%的人同意5/5R是可靠的

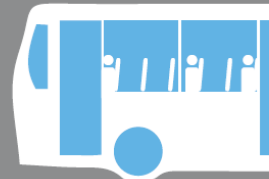
84% ang sumang-ayon na maaasahan ang 5/5R

66% of riders agreed that the 5/5R is less crowded than when they first started riding it

El 66% está de los pasajeros está de acuerdo en que la 5/5R está menos abarrotada que cuando empezaron a viajar en ella.

66%的乘客同意5/5R不像搭乘初期時那麼擁擠了。

El 66% está de los pasajeros está de acuerdo en que la 5/5R está menos abarrotada que cuando empezaron a viajar en ella.



Nearly 15% of riders previously drove before switching to the 5 Fulton Rapid

Casi el 15% de los pasajeros manejaba antes de cambiar a la 5 Fulton Rapid

將近15%的乘客在改搭5 Fulton快車線之前是自己開車的

Halos 15% ng mga sumasakay ang nagmamaneho noon bago lumipat sa pagsakay sa 5 Fulton Rapid



Rapid/Local Overlays: 9/9R San Bruno Rapid



- Swapped rapid/local terminals
- Local stops on end of rapid line
- Weekend service local only

Summary

	Peak Bus Savings	Ridership Growth
2 Clement/ 3 Jackson Combination	1 bus saving	7% growth
5R Fulton Rapid - frequency adjustments	4 bus savings	5% growth
5R-30 interlining	10 less runs	
9/9R San Bruno	1 bus saving	8% drop

Takeways

- Feedback from operators/street inspectors
- Prioritize customer notification
- New tradeoffs pop up (e.g. artic trolley speeds vs standard trolleys)
- Flexibility is key
- Importance of newer vehicle technology