Topline Reasons To Shorten Some Trains

• Multiple safety benefits (for riders, BPD, and Train Operators)
• Quicker phase-out of legacy cars (almost all FOTF; fewer delays)
• Cleaner train cars in service (crews have fewer cars to focus on at the end of the line)
• Power and labor cost savings
• Increases ready reserve trains (fewer delays)
• Responsive to calls for BART to be more efficient
Safety & Environment

• Active spaces are **safer spaces**
  • Empty spaces encourage anti-social behavior, harassment, and targeted crimes
• Responsive to feedback from the *Not One More Girl* initiative
  • Many people request a “women only” car; but it isn’t enforceable
  • We recommend people sit in the first car near the operator, but this requires waiting at the very end of the platform, a place riders deem as unsafe, dark, and often scary
Police & Security

• We can significantly increase police visibility on trains and platforms using the same number of staff
• During calls for service, officers can clear shorter trains much quicker
• BPD train teams will be able to walk more of the in-service train cars
  • More eyes on each train car
• Safety in numbers
• New cars have higher-quality surveillance footage
Comms/Customer Experience

• Messaging: "BART will shorten its least crowded trains to enhance safety, save costs, and provide cleaner, more reliable service”
• Long trains will run systemwide during special events
• Crowded lines will still have long trains; BART will constantly monitor data and adjust to avoid overcrowding
• With this change, only Fleet of the Future trains will be in service beginning September 11th. Old trains will run only when needed
• Eliminating empty and sparse train cars will create a safer, more welcoming environment for women, girls, gender non-conforming people, senior citizens, families, and all riders
• Announce as part of Not One More Girl initiative on August 31
  • We are bringing the first car closer to all riders
• Courtesy announcements will be increased about priority seating, removing backpacks, and no bikes on crowded cars
Train Length Sizing

• Start by sizing trains to match current demand
• We’ll monitor return-to-work trends after Labor Day and scale up with ridership growth
• Liberal use of long trains for events

Expect train lengths to change as ridership grows and patterns change
Load modeling

- Performed load analysis of current and proposed September train lengths
- Used busiest weekday (May 17) and busiest Saturday (April 22) from 2023
### Peak hour analysis

#### Train Length by line

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<th>Schedule</th>
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#### Estimated average passengers/car

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**Busy Weekday**

May 17, 2023

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**Busy Saturday**

April 22, 2023

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*We expect manageable crowding during the peak, and improved safety nights and weekends*
FOTF Implications

**Fleet: Current Service level**
- Gradual cutover to FOTF in late FY24

**Fleet: Recommended Service level**
- **FOTF**: All base service
- **Legacy**: events, contingency

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Sep 11 FOTF Forecast: 596

*With Recommended Service level, September peak car requirement can be met with FOTF*
Operational Flexibility

*Improved responsiveness and delay recovery*

- Reduced peak car count enables adding several Ready-Reserve trains
- Reduced peak power demand provides improved power system contingency operation
- Fewer cars for mainline techs to trouble shoot
Power/Infrastructure

• Reduced power consumption and strain on power infrastructure
  • Direct correlations between the number of cars and power consumption
  • Shorter trains means lower power draw and reduced stress on legacy systems

• Lower power demand results in improved efficiency and resilience
  • Improved energy savings
  • Ability to support train service even with suboptimal power system configurations
Expense Reduction

Forecast plan annual savings: 750,000 car-hours
Likely annual savings: 600,000 car-hours

• RS&S operating budget savings of approximately $2M/year
• Power/Energy savings of approximately $10M/year
Conclusion

- Improved safety
- Moves quickly to FOTF
- Cleaner train cars in service
- Power and labor cost savings
- More ready reserve trains means fewer delays
- Responsive to calls for BART to be more efficient

*BART will implement new train lengths on September 11th*