Quarterly Service Performance Review
Third Quarter, FY 2018
January - March, 2018
Operations & Safety Committee
May 10, 2018
<table>
<thead>
<tr>
<th>PERFORMANCE INDICATORS</th>
<th>SUMMARY CHART 3rd QUARTER FY 2018</th>
<th>CURRENT QUARTER</th>
<th>PRIOR QTR ACTUALS</th>
<th>YEAR TO DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACTUAL</td>
<td>STANDARD</td>
<td>STATUS</td>
<td>LAST QUARTER</td>
</tr>
<tr>
<td>Average Ridership - Weekday</td>
<td>405,801</td>
<td>420,566</td>
<td>NOT MET</td>
<td>426,492</td>
</tr>
<tr>
<td>Customers on Time</td>
<td>89.31%</td>
<td>3.19</td>
<td>0.10</td>
<td>7.24</td>
</tr>
<tr>
<td>Trains on Time</td>
<td>86.56%</td>
<td>N/A</td>
<td>N/A</td>
<td>84.07%</td>
</tr>
<tr>
<td>Peak Period Transbay Car Throughput</td>
<td>89.5%</td>
<td>97.5%</td>
<td>NOT MET</td>
<td>95.05%</td>
</tr>
<tr>
<td>AM Peak</td>
<td>95.56%</td>
<td>97.50%</td>
<td>NOT MET</td>
<td>95.27%</td>
</tr>
<tr>
<td>PM Peak</td>
<td>59.7%</td>
<td>59.5%</td>
<td>58%</td>
<td>590</td>
</tr>
<tr>
<td>Mean Time Between Service Delays</td>
<td>4,737</td>
<td>4,000</td>
<td>MET</td>
<td>4,627</td>
</tr>
<tr>
<td>Elevators in Service</td>
<td>97.9%</td>
<td>98.0%</td>
<td>NOT MET</td>
<td>98.73%</td>
</tr>
<tr>
<td>Escalators in Service</td>
<td>97.20%</td>
<td>98.00%</td>
<td>NOT MET</td>
<td>98.53%</td>
</tr>
<tr>
<td>Street</td>
<td>84.17%</td>
<td>95.00%</td>
<td>NOT MET</td>
<td>91.67%</td>
</tr>
<tr>
<td>Platform</td>
<td>95.30%</td>
<td>96.00%</td>
<td>NOT MET</td>
<td>95.80%</td>
</tr>
<tr>
<td>Automatic Fare Collection</td>
<td>99.33%</td>
<td>99.00%</td>
<td>MET</td>
<td>99.56%</td>
</tr>
<tr>
<td>Vendors</td>
<td>96.90%</td>
<td>95.00%</td>
<td>MET</td>
<td>95.84%</td>
</tr>
<tr>
<td>Wayside Train Control System</td>
<td>0.84</td>
<td>1.00</td>
<td>MET</td>
<td>1.49</td>
</tr>
<tr>
<td>Computer Control System</td>
<td>0.02</td>
<td>0.08</td>
<td>MET</td>
<td>0.097</td>
</tr>
<tr>
<td>Traction Power</td>
<td>0.13</td>
<td>0.20</td>
<td>MET</td>
<td>0.12</td>
</tr>
<tr>
<td>Track</td>
<td>0.04</td>
<td>0.30</td>
<td>MET</td>
<td>0.10</td>
</tr>
<tr>
<td>Environment Outside Stations</td>
<td>2.66</td>
<td>2.80</td>
<td>NOT MET</td>
<td>2.64</td>
</tr>
<tr>
<td>Environment Inside Stations</td>
<td>2.56</td>
<td>3.00</td>
<td>NOT MET</td>
<td>2.53</td>
</tr>
<tr>
<td>Station Vandalism</td>
<td>2.90</td>
<td>3.19</td>
<td>NOT MET</td>
<td>2.88</td>
</tr>
<tr>
<td>Station Services</td>
<td>2.87</td>
<td>3.06</td>
<td>NOT MET</td>
<td>2.84</td>
</tr>
<tr>
<td>Train P.A. Announcements</td>
<td>3.12</td>
<td>3.17</td>
<td>NOT MET</td>
<td>3.09</td>
</tr>
<tr>
<td>Train Exterior Appearance</td>
<td>2.78</td>
<td>3.00</td>
<td>NOT MET</td>
<td>2.79</td>
</tr>
<tr>
<td>Train Interior Appearance</td>
<td>2.78</td>
<td>3.00</td>
<td>NOT MET</td>
<td>2.80</td>
</tr>
<tr>
<td>Train Temperature</td>
<td>3.15</td>
<td>3.12</td>
<td>MET</td>
<td>3.10</td>
</tr>
<tr>
<td>Customer Complaints</td>
<td>7.15</td>
<td>5.07</td>
<td>NOT MET</td>
<td>6.84</td>
</tr>
<tr>
<td>Safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td>1.10</td>
<td>5.50</td>
<td>MET</td>
<td>1.68</td>
</tr>
<tr>
<td>Vehicle Incidents/Million Patrons</td>
<td>0.38</td>
<td>1.30</td>
<td>MET</td>
<td>0.47</td>
</tr>
<tr>
<td>Lost Time Injuries/ILLnesses/Per OSHA</td>
<td>5.60</td>
<td>7.50</td>
<td>MET</td>
<td>7.66</td>
</tr>
<tr>
<td>OSHA-Recordable Injuries/ILLnesses/Per OSHA</td>
<td>8.20</td>
<td>13.30</td>
<td>MET</td>
<td>11.07</td>
</tr>
<tr>
<td>Unscheduled Door Openings/Million Car Miles</td>
<td>0.210</td>
<td>0.300</td>
<td>MET</td>
<td>0.100</td>
</tr>
<tr>
<td>Rule Violations Summary/Million Car Miles</td>
<td>0.050</td>
<td>0.500</td>
<td>MET</td>
<td>0.210</td>
</tr>
<tr>
<td>Police</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BART Police Presence</td>
<td>11%</td>
<td>12%</td>
<td>NOT MET</td>
<td>10%</td>
</tr>
<tr>
<td>Quality of Life per million riders</td>
<td>134.41</td>
<td>N/A</td>
<td>N/A</td>
<td>67.79</td>
</tr>
<tr>
<td>Crimes Against Persons per million riders</td>
<td>3.60</td>
<td>2.00</td>
<td>NOT MET</td>
<td>3.49</td>
</tr>
<tr>
<td>Auto Burglaries per 1,000 parking spaces</td>
<td>4.41</td>
<td>8.00</td>
<td>MET</td>
<td>6.26</td>
</tr>
<tr>
<td>Auto Thefts per 1,000 parking spaces</td>
<td>2.24</td>
<td>6.00</td>
<td>MET</td>
<td>2.29</td>
</tr>
<tr>
<td>Police Response Time per Emergency Incident (Minutes)</td>
<td>4.96</td>
<td>5.00</td>
<td>MET</td>
<td>5.18</td>
</tr>
<tr>
<td>Bike Thefts (Quarterly Total and YTD Quarterly Average)</td>
<td>71</td>
<td>150.00</td>
<td>MET</td>
<td>88</td>
</tr>
</tbody>
</table>
Ridership decline continues, slightly lower rate of decline than last quarter (Weekday -2.4%)

Steady improvement in service reliability continues

Equipment Reliability: Car, Track, Train Control, Traction Power, and Computer Control System all met goal

Equipment Availability: Car, Fare Gates and Ticket Vendors met; Escalators (platform and street) and Elevators (station and garage) not met

Passenger Environment: 4 of 4 Station indicators improved, none met goal; 2 of 4 Train indicators improved, one met goal

Complaint numbers validated statistical improvement in service reliability and station cleanliness
Customer Ridership

- Total ridership decreased by 3.2% compared to same quarter last year
- Average weekday ridership (405,801) down by 2.4% from same quarter last year
- Core weekday ridership down by 2.3% from same quarter last year
- SFO Extension weekday ridership down by 3.0% from same quarter last year
- Average peak ridership down by 0.7% compared to same quarter last year
- Saturday and Sunday down by 11.1% and 5.2%, respectively, from same quarter last year (2017 Women’s March had higher Saturday ridership)
On-Time Service - Customer

- 93.4%, 95.00% goal not met, but continuing significant improvement
- Delay events causing the most late trains:

<table>
<thead>
<tr>
<th></th>
<th>Date</th>
<th>Location</th>
<th>Event Description</th>
<th>Cause</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20-Mar-18</td>
<td>Civic Center</td>
<td>Debris Fire On Trackway</td>
<td>Fire on Trk</td>
<td>101</td>
</tr>
<tr>
<td>2</td>
<td>1-Feb-18</td>
<td>H.Yd. I-Ik NLd</td>
<td>Maintenance Vehicle(Derailer) Wayside Damage</td>
<td>Equip</td>
<td>96</td>
</tr>
<tr>
<td>3</td>
<td>20-Mar-18</td>
<td>24th Street</td>
<td>Debris Fire - Wayside Equipment Damage</td>
<td>Fire on Trk</td>
<td>90</td>
</tr>
<tr>
<td>4</td>
<td>23-Feb-18</td>
<td>Systemwide</td>
<td>Earthquake</td>
<td>Earthquake</td>
<td>85</td>
</tr>
<tr>
<td>5</td>
<td>1-Mar-18</td>
<td>Systemwide</td>
<td>Weather (Wet Tracks)</td>
<td>Weather</td>
<td>78</td>
</tr>
<tr>
<td>6</td>
<td>16-Mar-18</td>
<td>16th Street</td>
<td>PG&amp;E Power Outage</td>
<td>PG&amp;E</td>
<td>75</td>
</tr>
<tr>
<td>7</td>
<td>6-Mar-18</td>
<td>Bay Fair</td>
<td>Vehicle (Aux. Electric)</td>
<td>Vehicle</td>
<td>53</td>
</tr>
<tr>
<td>8</td>
<td>8-Feb-18</td>
<td>Coliseum</td>
<td>Vehicle (Collector Shunt Not Secured)</td>
<td>Vehicle</td>
<td>52</td>
</tr>
<tr>
<td>9</td>
<td>8-Mar-18</td>
<td>MacArthur</td>
<td>Train Struck A Patron On Trackway</td>
<td>People</td>
<td>50</td>
</tr>
<tr>
<td>10</td>
<td>20-Feb-18</td>
<td>M,K &amp; C Lines</td>
<td>Multiple Overlapping BPD &amp; Medical Emergency</td>
<td>People</td>
<td>48</td>
</tr>
</tbody>
</table>
88.8%, 92.00% goal not met, but continuing significant improvement
45.4% of late trains were late due to multiple small delays, each under 5 minutes
Categorization of late trains due to a known delay event of 5 minutes or greater:

<table>
<thead>
<tr>
<th>Category</th>
<th>% of Delayed Trains</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLICE ACTIONS</td>
<td>27.7%</td>
</tr>
<tr>
<td>RAIL CAR</td>
<td>10.9%</td>
</tr>
<tr>
<td>TRAIN CONTROL</td>
<td>10.6%</td>
</tr>
<tr>
<td>OPERATIONS</td>
<td>7.0%</td>
</tr>
<tr>
<td>WEATHER</td>
<td>6.5%</td>
</tr>
<tr>
<td>MEDICAL EMERGENCY</td>
<td>4.7%</td>
</tr>
<tr>
<td>VANDALISM</td>
<td>4.7%</td>
</tr>
<tr>
<td>EARTHQUAKE</td>
<td>4.6%</td>
</tr>
<tr>
<td>OBJECT ON TRACK</td>
<td>3.6%</td>
</tr>
<tr>
<td>CONGESTION</td>
<td>3.4%</td>
</tr>
</tbody>
</table>
Goal met! Continuing improvement in an important area

Actual .84 / Goal 1.0

Good teamwork – Engineering & Maintenance, Train Control & OCC
Includes ICS computer & SORS, Delays per 100 train runs

- Goal met – Actual 0.02 / Goal 0.08
- Open issues are aggressively being addressed, including the management of computer storage
Traction Power

#include coverboards, insulators, third rail trips, substations, delays per 100 train runs

✓ Goal met – Actual .13 / Goal .2
✓ M-Line Insulator replacement in progress
✓ Ongoing RR projects such as 3rd Rail and Insulator Replacement, UPS Replacement, Substation Rehab Projects (MPR, Rectifier) have increased reliability.
**Transportation**

Includes Late Dispatches, Controller-Train Operator-Tower Procedures and Other Operational Delays Per 100 Train Runs

- **Goal not met** – Actual .55 / Goal .5
- **Jan** – Train Controller and Train Operator Procedures = 18 secondary delays each
- **March** – Challenges with Train Operator staffing levels
Goal met – Actual .04 / Goal .30
Solid performance
Results

Goal met – MTBSD 4,737 hours / Goal 4,000 hours
Monitoring closely
Car Equipment –
Availability @ 0400 hours

✓ Goal met – 596 Actual vs. 595 Required
✓ SCRAM is more balanced – reserved trains are split between shops
Elevator Availability - Stations

- Goal 98%. Goal just missed – Actual 97.9%
- Civic Center elevator 57, particularly problematic (doors and re-roping)
Goal 98%. Goal not met - Actual 97.2%

Several garage elevator repairs were not prioritized due to parking structure elevator redundancy and other higher priority work.
Escalator Availability - Street

- Goal 95%. Goal not met - Actual 84.2%
- Down 7.47% from last quarter of 91.67%
- March rain resulted in an increase in outages
- Seven scheduled step chain replacements exceeded our staffing capacity
Goal 96%. Goal not met - Actual 95.3%
Busy quarter managing a large number of heavy repairs
Hired four MWIII during this quarter, currently at headcount
AFC Gate Availability

✓ Goal met - Actual 99.3% / Goal 99.0%
AFC Vendor Availability

- Goal met - Actual 96.9% / Goal 95.0%
- Parking Validation Machines Availability – 99.6%
- Completed 125 Clipper HCR4 “Handheld Card Reader” installation system-wide; improving station agent customer service.
Environment - Outside Stations

Composite rating of:
- Walkways & Entry Plaza Cleanliness (50%) 2.56
- BART Parking Lot Cleanliness (25%) 2.87
- Appearance of BART Landscaping (25%) 2.66

✓ Goal not met, but slight improvement in performance
✓ Cleaning homeless encampments continues to be a huge resource drain
✓ Cleanliness ratings of either Excellent or Good:
  - Walkways/Entry Plazas: 56.4%
  - Parking Lots: 71.4%
  - Landscaping Appearance: 62.9%

Ratings guide:
- 4 = Excellent
- 3 = Good
- 2.80 = Goal
- 2 = Only Fair
- 1 = Poor
### Environment - Inside Stations

#### Composite rating for Cleanliness of:
- **Station Platform (60%)** \[2.69\]
- **Other Station Areas (20%)** \[2.53 \uparrow\]
- **Restrooms (10%)** \[2.03\]
- **Elevator Cleanliness (10%)** \[2.33\]

- **Goal not met**
- **Slight improvement for second consecutive quarter after more than 2 years of consecutive decline**
- **New System Service Work Program in place for part of the quarter**
- **Cleanliness ratings of either Excellent or Good:**
  - Station Platform: 63.9%; Other Station Areas: 55.4%
  - Restrooms: 32.9%    Elevators: 45.7%

\[\uparrow\] indicates a statistically significant increase from the prior quarter
Station Vandalism

Ratings guide:
4 = Excellent
3.19 = Goal
3 = Good
2 = Only Fair
1 = Poor

Station Kept Free of Graffiti – 2.90

✓ Goal not met, improved performance
✓ 73.9% of those surveyed ranked this category as either Excellent or Good
Station Services

Composite rating of:
Station Agent Availability (65%) 2.85 ↑
Brochures Availability (35%) 2.90

✓ Goal not met, improved performance
✓ Availability ratings of either Excellent or Good:
  Station Agents: 71.9%
  Brochures: 74.3%

† indicates a statistically significant increase from the prior quarter
Train P.A. Announcements

Composite rating of:
- P.A. Arrival Announcements (33%) 3.10 ↑
- P.A. Transfer Announcements (33%) 3.05
- P.A. Destination Announcements (33%) 3.20

- Goal not met, improved performance
- Announcement ratings of either Excellent or Good:
  - Arrivals: 79.0%
  - Transfers: 77.8%
  - Destinations: 83.4%

↑ indicates a statistically significant increase from the prior quarter
Train Exterior Appearance

Goal not met

69.9% of those surveyed ranked this category as either Excellent or Good
Train Interior Cleanliness

Composite rating of:
- Train interior cleanliness (60%) 2.49
- Train interior kept free of graffiti (40%) 3.22

- Goal not met
- Goal not met
- Train Interior ratings of either Excellent or Good:
  - Train Interior Cleanliness: 52.2%; Graffiti-free: 87.7%
- Window Cleaning project began in February
- Increase in calls for bio clean-up on in-service trains (approx. 90/wk including 15-20 syringes)
- New strategy to respond to bio calls quicker
- Thoroughly cleaned over 95% of the fleet this quarter
- Looking at process changes due to changing nature of the challenge
Train Temperature

Comfortable Temperature Onboard Train – 3.15 ↑

✓ Goal met
✓ 85.8% of those surveyed rated this category as either Excellent or Good

↑ indicates a statistically significant increase from the prior quarter
Total complaints lodged this period saw a slight rise 41 (2%) from last quarter, but down 372 (15.2%) when compared with the third quarter FY17.

Complaint numbers increased in the categories AFC, Announcements, Bike Program, Parking, Personnel, Police Services, Quality Of Life, Train Cleanliness, and Trains while decreases appear in M&E, Passenger Service, Policies, Service, and Station Cleanliness.

“Compliments” number 109, down from 112 last quarter (one year ago these numbered 157).

Notable that areas of focused attention – service reliability and station cleanliness – had fewer complaints. Conversely, riders confirmed interior car cleanliness as a problem.
Patron Safety:
Station Incidents per Million Patrons

![Graph showing station incidents per million patrons for FY2017 Qtr 3 to FY2018 Qtr 3. The benchmark is met for all quarters.]

- Goal met
Patron Safety

Vehicle Incidents per Million Patrons

Goal met
Employee Safety: Lost Time Injuries/Illnesses per OSHA Incidence Rate

Goal met
Employee Safety:
OSHA-Recordable Injuries/Illnesses per OSHA Incidence Rate

Goal met
Operating Safety:

Unscheduled Door Openings per Million Car Miles

Goal met
Operating Safety:
Rule Violations per Million Car Miles

Goal met
BART Police Presence

✓ Goal not met

<table>
<thead>
<tr>
<th>Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Police seen on train</td>
<td>5.4%</td>
</tr>
<tr>
<td>Police seen outside the station</td>
<td>14.6%</td>
</tr>
<tr>
<td>Police seen in the station</td>
<td>11.0%</td>
</tr>
<tr>
<td>Police seen on train after 7:00PM</td>
<td>3.3%</td>
</tr>
<tr>
<td>Police seen outside the station after 7:00PM</td>
<td>15.7%</td>
</tr>
<tr>
<td>Police seen in the station after 7:00PM</td>
<td>13.9%</td>
</tr>
</tbody>
</table>

‡ indicates a statistically significant decrease from the prior quarter
Quality of Life incidents are up from the last quarter and up from the corresponding quarter of the prior fiscal year.

*Quality of Life Violations include: Disturbing the Peace, Vagrancy, Public Urination, Fare Evasion, Loud Music/Radios, Smoking, Eating/Drinking and Expectoration
Crimes against persons are up from the last quarter and up from the corresponding quarter of the prior fiscal year.
The number of incidents per thousand parking spaces is down from last quarter and slightly up from the corresponding quarter of the prior fiscal year.

Goal met
Goal met

The number of incidents per thousand parking spaces are down from last quarter but up from the corresponding quarter of the prior fiscal year.
The average Emergency Response Time goal was met for the quarter and down from the prior quarter as well as the corresponding quarter of the prior fiscal year.
Goal met
71 bike thefts for current quarter, down 17 from last quarter.