Schedule Considerations

Caltrain CAC
October 21, 2015

History of Caltrain Schedules

<table>
<thead>
<tr>
<th>Year</th>
<th>Weekday</th>
<th>Saturday</th>
<th>Sunday</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1991</td>
<td>54</td>
<td>26</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>July 1992</td>
<td>60</td>
<td>26</td>
<td>19</td>
<td>JPB assumed ownership of Caltrain;</td>
</tr>
<tr>
<td>February 1994</td>
<td>60</td>
<td>26</td>
<td>19</td>
<td>Gilroy service added</td>
</tr>
<tr>
<td>July 1997</td>
<td>66</td>
<td>28</td>
<td>19</td>
<td>Added 4 round trips to Gilroy</td>
</tr>
<tr>
<td>April 1999</td>
<td>68</td>
<td>28</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>September 2000</td>
<td>78</td>
<td>32</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>April 2001</td>
<td>80</td>
<td>32</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>76</td>
<td>0</td>
<td>0</td>
<td>Two year CTX Construction project;</td>
</tr>
<tr>
<td>June 2004</td>
<td>86</td>
<td>32</td>
<td>30</td>
<td>construction of 4-track passing segments</td>
</tr>
<tr>
<td>May 2005</td>
<td>88</td>
<td>32</td>
<td>30</td>
<td>Start of baby bullet service; one baby</td>
</tr>
<tr>
<td>August 2005</td>
<td>96</td>
<td>32</td>
<td>28</td>
<td>bullet per peak hour; one local per peak hour; two limiteds per peak hour</td>
</tr>
<tr>
<td>March 2008</td>
<td>96</td>
<td>32</td>
<td>28</td>
<td>Addition of 2 reverse-commute baby bullet trains</td>
</tr>
<tr>
<td>August 2009</td>
<td>90</td>
<td>32</td>
<td>28</td>
<td>Addition of 10 baby bullet trains</td>
</tr>
<tr>
<td>January 2011</td>
<td>86</td>
<td>36</td>
<td>32</td>
<td>8 mid-day trains eliminated</td>
</tr>
<tr>
<td>October 2012</td>
<td>92</td>
<td>36</td>
<td>32</td>
<td>4 weekday mid-day trains eliminated; 4 weekend baby bullet trains added</td>
</tr>
</tbody>
</table>
Caltrain Success Story

- Introduction of Baby Bullet service is a success story
- Current stopping pattern has proven successful
- Ridership has increased
  - 143% since 2004
  - 71% since 2010
- Some stations would like to see more service, but this would cause additional run time

Challenges with Adding Service

- Funding
- Crews
- Equipment
- Maintenance
- Construction
Construction

• Current Projects
  – San Mateo Bridge Replacement (single tracking and speed restriction)
  – San Francisco Road Bridges Replacement (single tracking)
  – Quint Street Bridge Replacement (speed restriction)

• Upcoming Projects
  – Los Gatos Bridge Replacement
  – 25th Avenue Grade Separation (contingent on funding)
  – South San Francisco Station (contingent on Union Pacific)
  – New Control Point at Brittan
  – Electrification

Electrification

• Scheduled to begin in 2016 and go through 2020
• Continuous construction requiring consistent access to railroad
• Railroad will be divided into four segments
• Work can be expected to be occurring in two non-consecutive segments at once
• Expecting to have significant amounts of single tracking during all off peak hours (weekdays, weeknights, and weekends) and complete railroad outages during non-revenue times
Electrification

• Potential to affect weekend service
• Tunnel modifications will require full weekend shut downs north of Bayshore with bus bridging
• Will also need to continue to maintain the railroad

Upcoming Schedule Change

• OTP is down
  – More people, more PNAs, more bikes
  – Leads to longer dwell times
  – Roughly 60-75% of trains that are delayed are arriving at their final destination within 10 minutes
OTP Analysis

• Working through OTP analysis
  – Historical data for the first six months of the year (good mix of baseball and non-baseball service)
  – Some trains are consistently late; some are consistently early
• Schedule checks
  – Staff riding trains with stopwatches
  – Checking dwell time and pure run time
• Goal: Create an improved schedule with current trains and stopping patterns that is more reliable for our customers
• Targeting to coordinate with the fare change in February 2016

Future Schedule Changes

• Potential schedule changes and/or reduced service during electrification construction
• Post-electrification schedules
  – Faster acceleration and deceleration times
  – Potential to add station stops to current schedule or keep current schedule and reduce schedule time
  – Additional service
• These scenarios are still in the beginning of their planning stages.
Questions?