



2016 Annual Passenger Counts

Board of Directors
May 5, 2016
Agenda Item 17



Presentation Outline

- Purpose and Count Methodology
- 2016 Challenges
- 2016 Count Results
- Summary
- Next Steps



Purpose of Ridership Counts

- Provide a measurement relative to previous years
- Data for evaluating service changes
 - Identify trends: station, time, train, direction
- Allocate resources to address capacity issues
- Validate revenue-based ridership estimates

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Data Collection Methodology

- Headcount on every weekday train averaged over 5 weekdays
- Headcount on every weekend train for one weekend
- Differs from monthly revenue-based average weekday ridership calculations
- Fifth year for “bikes denied boarding” count

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Challenges

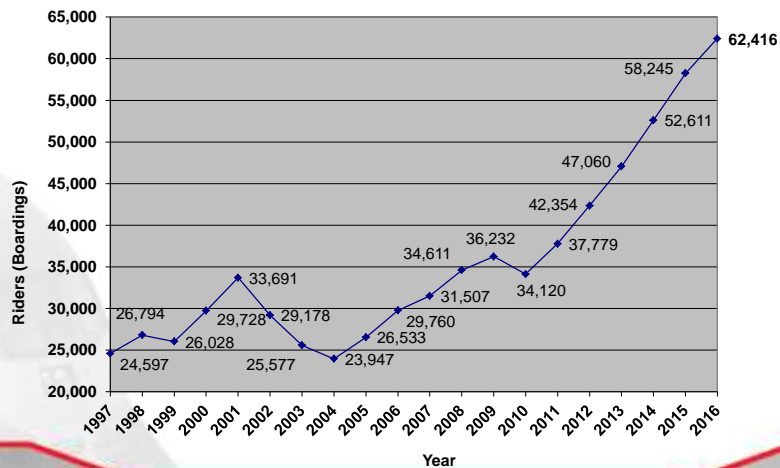
- Surveys suspended during special events & construction activities
- Surveys extended into mid-March
- More rain in 2016 than in past several years

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Average Weekday Ridership

7.2% increase



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Riders by Time Period: 2015 vs. 2016

	Feb 2015 92 Trains	Feb 2016 92 Trains	Difference	% Change
Traditional Peak	29,143	31,948	2,805	9.6%
Midday	6,988	7,544	556	8.0%
Reverse Peak	18,842	19,564	722	3.8%
Night	3,272	3360	88	2.7%
TOTAL	58,245	62,416	4,171	7.2%

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2016 Station Ridership

24 stations increased weekday ridership 2015 vs. 2016

San Francisco	1,198	San Carlos	40	Lawrence	44
22 nd Street	86	Redwood City	581	Santa Clara	87
San Bruno	34	Menlo Park	33	San Jose Diridon	552
Millbrae	70	Palo Alto	227	Tamien	182
Burlingame	56	California Ave.	75	Capitol	21
San Mateo	117	San Antonio	69	Blossom Hill	7
Hayward Park	60	Mountain View	90	Morgan Hill	11
Hillsdale	253	Sunnyvale	309	San Martin	6
				Gilroy	26

4 stations decreased weekday ridership 2015 vs. 2016

Bayshore	<1>	Belmont	<35>
South SF	<1>	College Park	<25>

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Top 10 Stations (Weekday Boardings)

Station	2015 92 trains		2016 92 trains		Change In AWR	% AWR Growth
	Rank	AWR	Rank	AWR		
San Francisco	1	13,571	1	14,769	1,198	8.8%
Palo Alto	2	7,197	2	7,424	227	3.2%
San Jose Diridon	4	4,160	3	4,712	552	13.3%
Mountain View	3	4,570	4	4,659	89	1.9%
Redwood City	6	3,233	5	3,814	581	18.0%
Millbrae	5	3,536	6	3,606	70	2.0%
Sunnyvale	7	2,881	7	3,190	309	10.7%
Hillsdale	8	2,706	8	2,958	252	9.3%
San Mateo	9	2,061	9	2,179	118	5.7%
Menlo Park	10	1,762	10	1,796	34	1.9%

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County-by-county Comparison

All counties saw increases in ridership

County	2015 AWR	2016 AWR	Change	%
San Francisco	15,454	16,737	1,283	8.3%
San Mateo	17,952	19,160	1,208	6.7%
Santa Clara	24,839	26,518	1,679	6.8%
TOTAL	58,245	62,416	4,171	7.2%

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Gilroy Extension Ridership*

- Gilroy extension ridership was declining prior to introduction of Baby Bullet service
 - 2001: 1,524 (highest)
 - 2005: 598 (last year of 4 round trips)
 - 2010: 323 (lowest)
 - 2014: 463 (+41 AWR)
 - 2015: 559 (+96 AWR)
 - 2016: 630 (+71)
- Ridership increased 12.7% since last year

* Numbers represent cumulative ridership for 5 stations

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2016 Riders per Train Type

Peak-period average ridership per train type

Train Type	Feb 2015	Feb 2016	Percent Change
Baby Bullet	798	870	9.0%
Limited	735	784	6.7%
Local	358	368	2.8%

- Continued growth for all train travel times
- Most growth for Baby Bullet train travel

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2016 Top 10 Trains: Maximum Load

Northbound				
Train No.	Depart SJ	Max Load	Train Seating Capacity	Percent of Seated Capacity
319	7:03 AM	951	762	125%
323	7:45 AM	950	762	125%
329	8:03 AM	882	762	116%
375	5:23 PM	841	762	110%
217	6:57 AM	818	650	126%
225	7:50 AM	764	762	100%
269	4:39 PM	756	762	99%
313	6:45 AM	747	762	98%
233	8:40 AM	722	650	111%
215	6:50 AM	719	650	111%

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2016 Top 10 Trains: Maximum Load

Southbound				
Train No.	Depart SF	Max Load	Train Seating Capacity	Percent of Seated Capacity
366	4:33 PM	950	762	125%
376	5:33 PM	927	762	122%
370	5:14 PM	829	762	109%
278	5:56 PM	814	650	125%
268	4:56 PM	740	650	114%
272	5:20 PM	727	650	112%
380	6:14 PM	705	650	108%
220	7:44 AM	694	650	107%
322	7:57 AM	663	650	102%
324	8:14 AM	633	762	83%

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Average Trip Length

Weekday average trip length for 2016 is slightly higher than 2015 (except Baby Bullet)

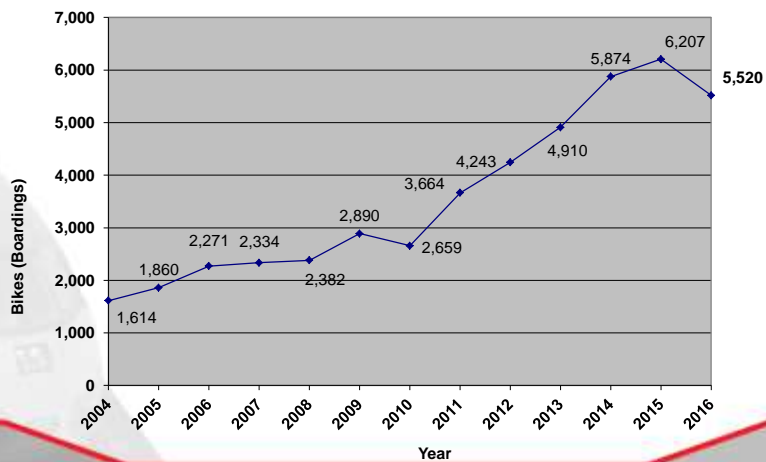
Train Type	Average Trip Length (miles)
Weekday	22.8
Baby Bullet	27.7
Peak Non-Baby Bullet	20.5
Off Peak	21.1
All Locals	20.8

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Average Weekday Bike Ridership

-11.1% decrease



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Bicycle Boardings: Top 5 Stations

Station	2015	2016	% change
San Francisco	1,442	1,325	-8.1%
Palo Alto	796	711	-10.7%
Mountain View	551	451	-18.2%
San Jose Diridon	407	377	-7.3%
Redwood City	359	329	-8.3%

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2016 Bicycle Top 10: Maximum Load

Train No.	Departs		Max Load	AWBR
278	5:56 PM	SF	83	123
324	8:14 AM	SF	76	88
220	7:44 AM	SF	76	111
269	4:39 PM	SJ	74	100
376	5:33 PM	SF	73	106
322	7:57 AM	SF	72	84
375	5:23 PM	SJ	72	88
230	8:44 AM	SF	69	94
272	5:20 PM	SF	68	109
217	6:49 PM	SJ	64	112

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Bikes: Denied Boardings

- Fifth year counted with annual count
- 118 bikes were denied boarding from the 528 trains counted
- Carried approximately 29,130 bikes on the trains counted
- Denied boardings were observed at 16 stations
- Denials on 15 northbound trains and 8 southbound trains

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Weekend Service

	2015	2016	Numeric Difference	Percent Change
Saturday	17,392	15,003	-2,389	-13.7%
Sunday	8,849	12,631	3,782	42.7%
TOTAL	26,241	27,634	1,393	5.3%

Average Boardings at Weekend-only Stations

	2015	2016	Change
Broadway	217	157	-27.6%
Atherton	111	162	45.9%

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Summary

- **PAX Ridership is at an all-time high: 83% increase since 2010**
- **Caltrain has a strong reverse-peak ridership**
- **The majority of stations saw growth**
- **All three counties saw increases**
- **Overall weekend ridership increased**

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Next Steps

- **Review allocation of 6-car trains**
- **FY2017 Operating and Capital budgets must support the required resources to meet demand**
- **Increasing capacity FY2017 – FY2020 is essential to continue ridership/revenue growth**
- **Future service planning requires use of ridership data to develop potential service scenarios to improve capacity pre-/post-electrification**

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