# SQL Final

### **Emily Gomez**

**BigQuery: San Francisco Bike Share** 

- 1. Title Slide
- 2. Station Health
- 3. System Health
- 4. \*Page Break\*
- 5. Additional Data Exploration (section 3 of exam)

### **Station Health**

Data Source: Bigquery-public-data.san\_francisco\_bikeshare

	Popular Trips				
	Starting Station	Ending Station	Trips		
1.	Harry Bridges Plaza (Ferry Buildi	Embarcadero at Sansome	9150		
2.	San Francisco Caltrain 2 (330 To	Townsend at 7th	8508		
3.	2nd at Townsend	Harry Bridges Plaza (Ferry	7620		

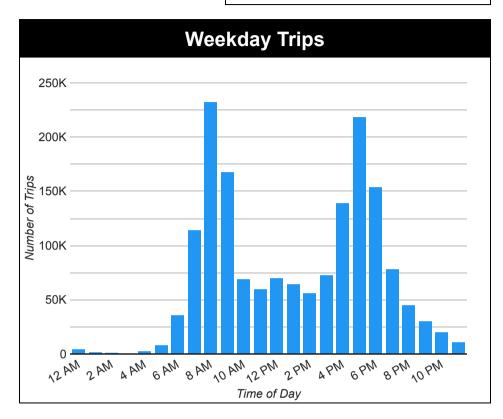
Most Popular Starting Station			
Starting Station Trips			
San Francisco Caltrain (Town	72,683		

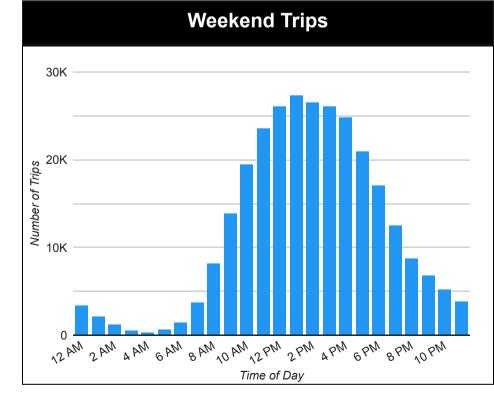
Most Popular Ending Station			
Ending Station	Trips		
San Francisco Caltrain (Town	92014		

Station... •

Station Fill Rates			
Station Name •	Fill Rate		
10th Ave at E 15th St	0.6		
10th Ave at Irving St	0.61		
10th St at Empire St	0.3		
10th St at Fallon St	0.35		
10th St at Mission St	0.65		
10th St at University Ave	0.58		
11th St at Bryant St	0.7		
11th St at Natoma St	0.42		
	1 - 100 / 444		

10





**Stations Without Capacity\*** 

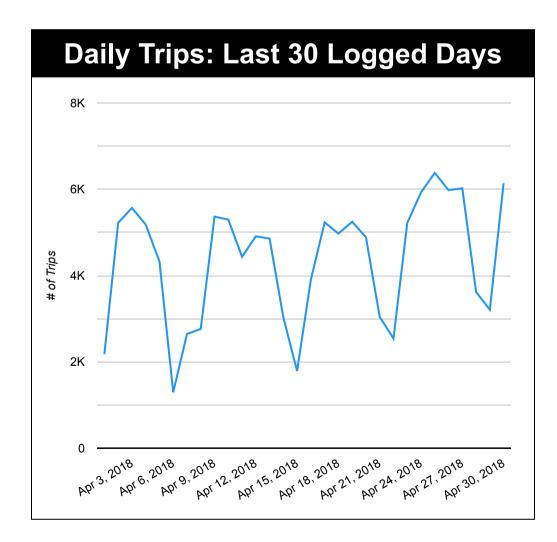
## System Health

Data Source: Bigguery-public-data.san\_francisco\_bikeshare

Trip Duration (minutes)				
MIN AVG MAX RANG				
1	12	171	170	

Daily Trips: Last 30 Logged Days					
MIN AVG MAX					
1294	4372	6377			

Bike Usage (Hrs)					
	Bike #	Total Hrs ▼	Avg. Hrs/Trip	# of Trips	
1.	535	5,464.60	2.23	2,453	
2.	466	1,300.48	0.54	2,393	
3.	326	958.90	0.30	3,218	
4.	613	943.53	0.32	2,934	
5.	376	928.68	0.32	2,901	
6.	441	915.55	0.29	3,168	
7.	625	906.07	0.27	3,345	
8.	526	894.25	0.29	3,060	
9.	395	894.20	0.26	3,394	
10.	524	892.40	0.29	3,045	
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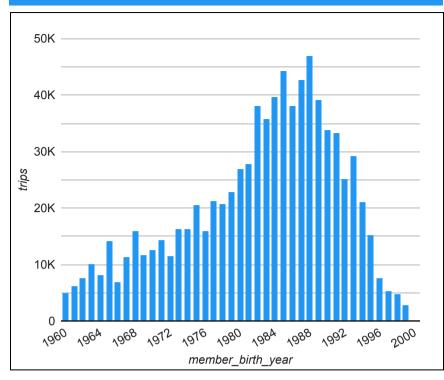


<sup>\*&#</sup>x27;Trip Duration' and 'Bike Usage' exclude the top 1% of trip duration which were more than 3 days to account for return errors.

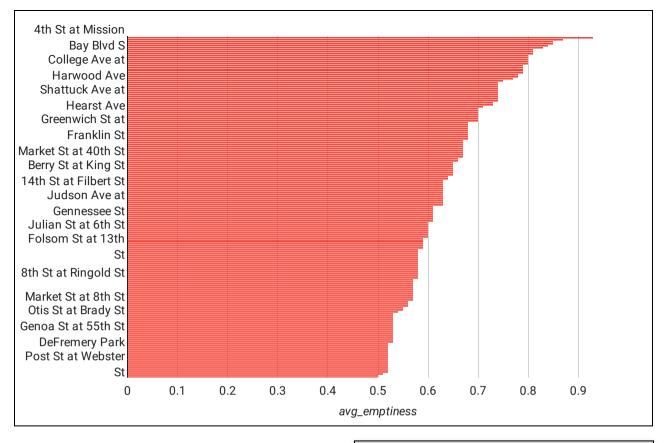
## Page Break:

The following Page is additional data exploration for Section 3 of the exam (a report).

#### **Section 3 additional queries**



Station •		Reg	gion •
	station	region	avg_emptiness
1.	4th St at Missi	San Franc	0.93
2.	Cruise Termin	San Franc	0.87
3.	Parker Ave at	San Franc	0.85
4.	Montgomery	San Franc	0.85
5.	Almaden Blvd	San Jose	0.84
6.	Mechanics M	San Franc	0.83
7.	Battery St at	null	0.81
8.	Irwin St at 8th	San Franc	0.81
9.	St. Joseph's	null	0.81
10.	Vine St at Sh	Berkeley	0.8
11.	Bestor Art Park	San Jose	0.8
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				Region	<b>~</b>
	region	hour	bike_trip -	bikes_available	trips
1.	Emeryville	5 AM	7.25	29	4
2.	Emeryville	7 AM	7.66	1838	240
3.	Emeryville	6 AM	7.67	437	57
4.	Emeryville	9 AM	8.33	2590	311
5.	Emeryville	8 AM	8.36	3513	420
6.	Emeryville	10 AM	9.11	1841	202
7.	Oakland	7 AM	9.14	58711	6421
8.	Emeryville	12 PM	9.34	3819	409
9.	Oakland	9 AM	9.34	67031	7176
10.	Oakland	8 AM	9.46	105831	11186
11.	San Jose	5 AM	9.58	1188	124
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