

BART



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Background

- As avid consumers of public transportation, we take BART to go to work or school everyday.
- We are interested in visualizing the number of riders for each station and any significant changes that developed for the last ~~16 years (from 2001 to 2017)~~ 7 years (2011 to 2017)



Questions

- How does BART traffic change according to time of day and day of week?
- When is it the best time to take BART and what line should a user take?
- At this time, is it best to take Uber, BART, or bus?

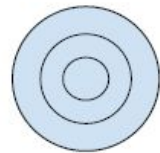


Data Processing

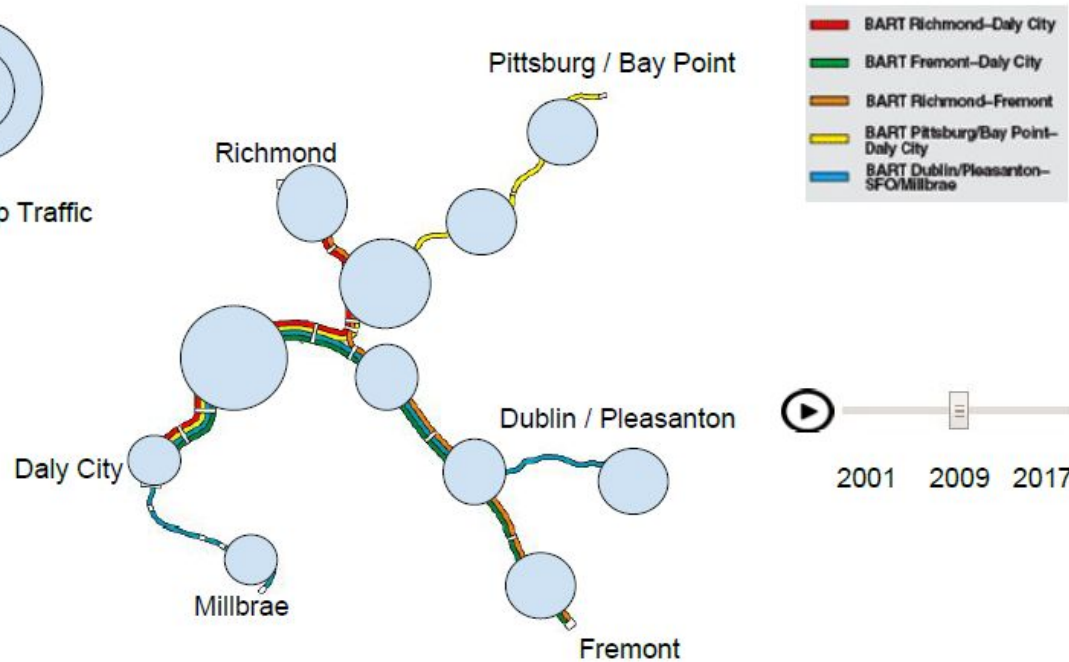
Date	Hour	Origin	Destination	# riders
1/1/2016	0	12TH	12TH	1
1/1/2016	0	12TH	16TH	1
1/1/2016	0	12TH	24TH	4
1/1/2016	0	12TH	ASHB	4
1/1/2016	0	12TH	BALB	2
1/1/2016	0	12TH	BAYF	2
1/1/2016	0	12TH	CIVC	7
1/1/2016	0	12TH	CONC	2
1/1/2016	0	12TH	DBRK	6
1/1/2016	0	12TH	DELN	2
1/1/2016	0	12TH	DUBL	1
1/1/2016	0	12TH	EMBR	2
1/1/2016	0	12TH	FTVL	1
1/1/2016	0	12TH	LAFY	4
1/1/2016	0	12TH	LAKE	2
1/1/2016	0	12TH	MCAR	13
1/1/2016	0	12TH	MONT	23
1/1/2016	0	12TH	NBRK	5
1/1/2016	0	12TH	ORIN	3
1/1/2016	0	12TH	PHIL	3

name	id	abbr	gtfs_latitude	gtfs_longitude
12th St. Oakland City Center	12	12TH	37.803664	-122.271604
16th St. Mission	16	16TH	37.765062	-122.419694
19th St. Oakland	19	19TH	37.80787	-122.269029

Bart Traffic for Clusters of Different Stations based on Geographic Location



Ridership Traffic

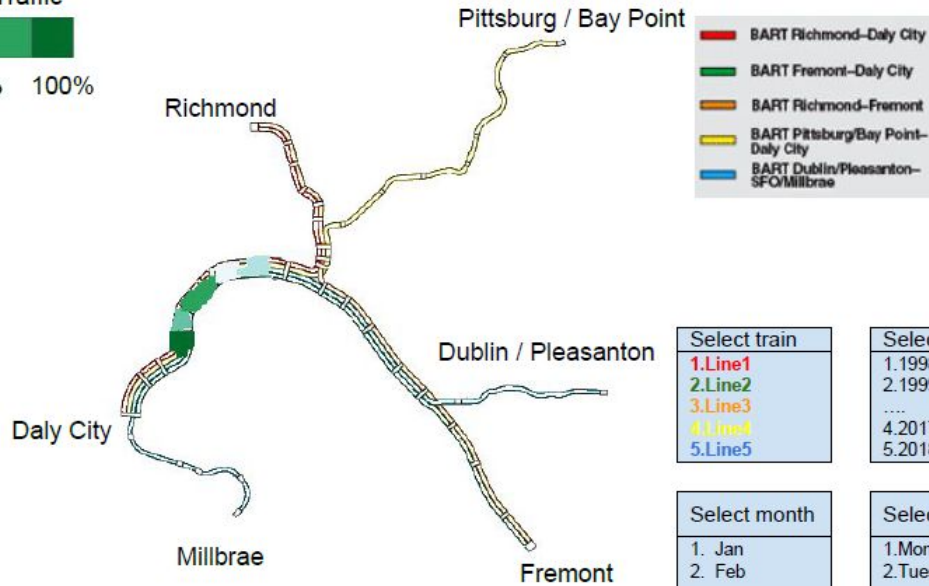


Bart Traffic for <Line Number> on <Month> <Year> During <Weekday>s

Ridership Traffic



0% 50% 100%



- BART Richmond-Daly City
- BART Fremont-Daly City
- BART Richmond-Fremont
- BART Pittsburg/Bay Point-Daly City
- BART Dublin/Pleasanton-SFO/Millbrae

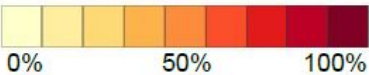
Select train
1.Line1
2.Line2
3.Line3
4.Line4
5.Line5

Select year
1.1998
2.1999
....
4.2017
5.2018

Select month
1. Jan
2. Feb
....
11. Nov
12. Dec

Select DOW
1.Monday
2.Tuesday
....
6.Saturday
7.Sunday

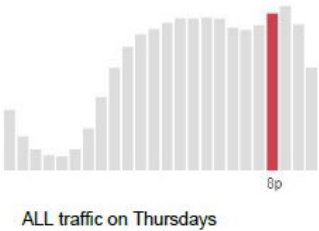
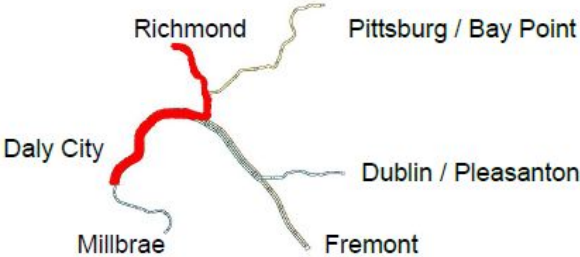
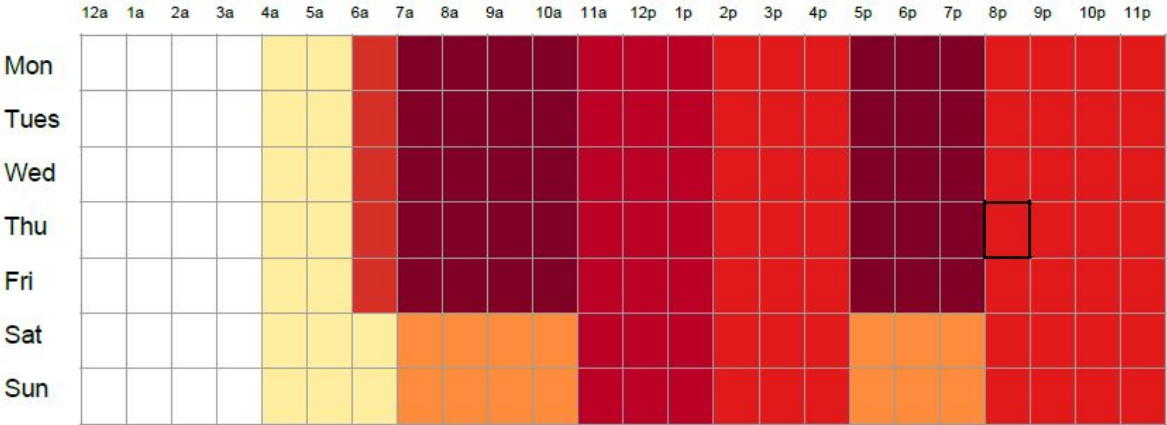
BART Heatmap for <Line Number> on <Month> <Year>



Select train
1.Line1
2.Line2
3.Line3
4.Line4
5.Line5

Select year
1.1998
2.1999
.....
4.2017
5.2018

Select month
1. Jan
2. Feb
.....
11. Nov
12. Dec



DEMO

<https://dongchris.github.io/bart-data-visualization/>

