







TAM Origin and Destination Data

July 26, 2018











Study Purpose

- Provide an updated understanding of Marin County travel patterns
 - County-to-county <u>and</u> local travel patterns
 - Marin residents' Home to Work trips
 - Updated based on conversations with local jurisdiction staff
- Support the development of the TAM Travel Demand Model (TAMDM)













Study Approach

 Use "Big Data" to obtain travel behavior data passively and anonymously from mobile devices















Benefits of "Big Data"

- Observed origin-destination and home/work location data – not from a model or survey
- Relatively low cost for large sample
- 75 million data points from GPS sources
- Continuous passive data collection
- Customization and flexibility
- Can supplement with other data sources













Limitations of "Big Data"

- Sample of data (sample size and potential bias)
- Inferred using machine learning
- Spatial resolution (20 to 30 meter)
- Intermediate trips and tour length
- Vehicle occupancy and trip length
- Another "tool" in the toolbox



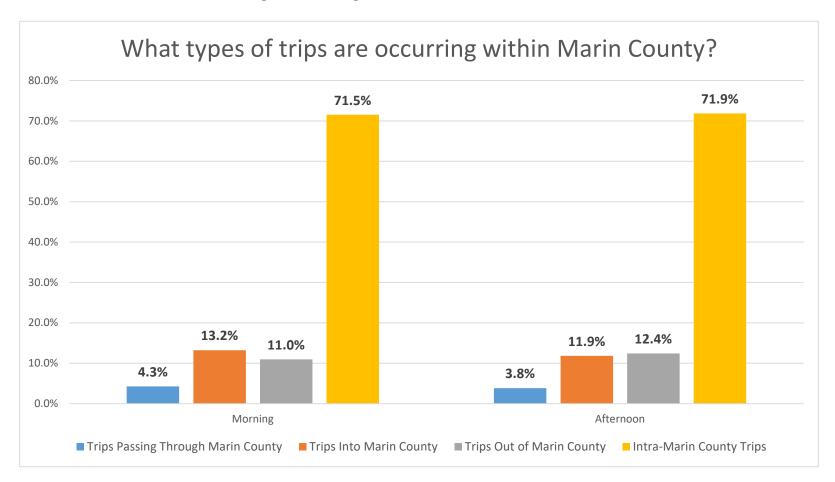








Marin County Trips





Intra-Marin County trips include trips made by non-residents





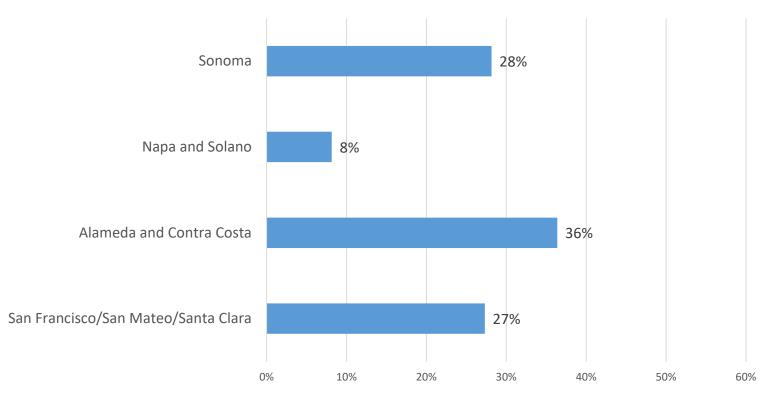






AM Peak Period Trips into Marin County

Where are morning trips into Marin County coming from?









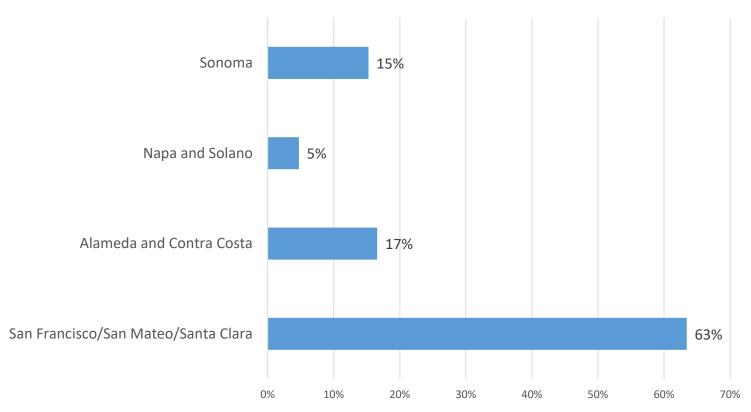






AM Peak Period Trips out of Marin County

Where are morning trips out of Marin County going to?





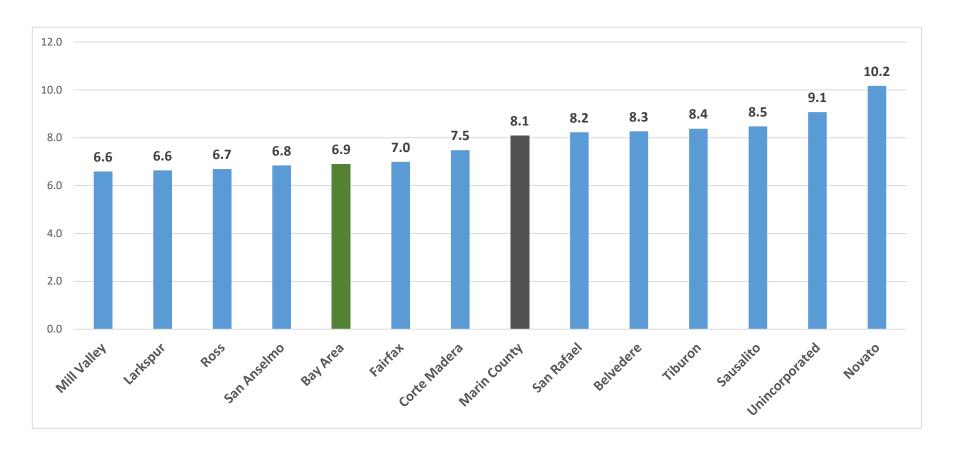








Average Daily Trip Length





17% longer than Bay Area Average

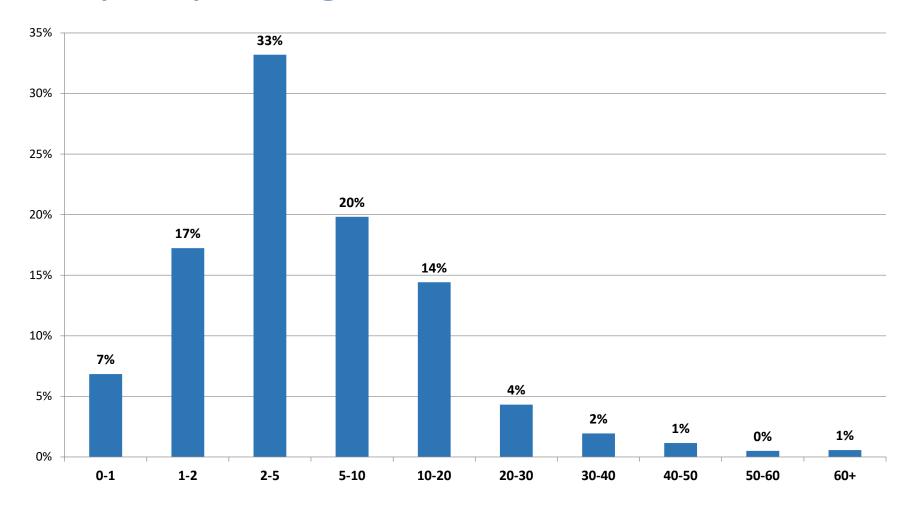








Daily Trip Length Distribution (miles)





Roughly 60% of trips are less than 5 miles



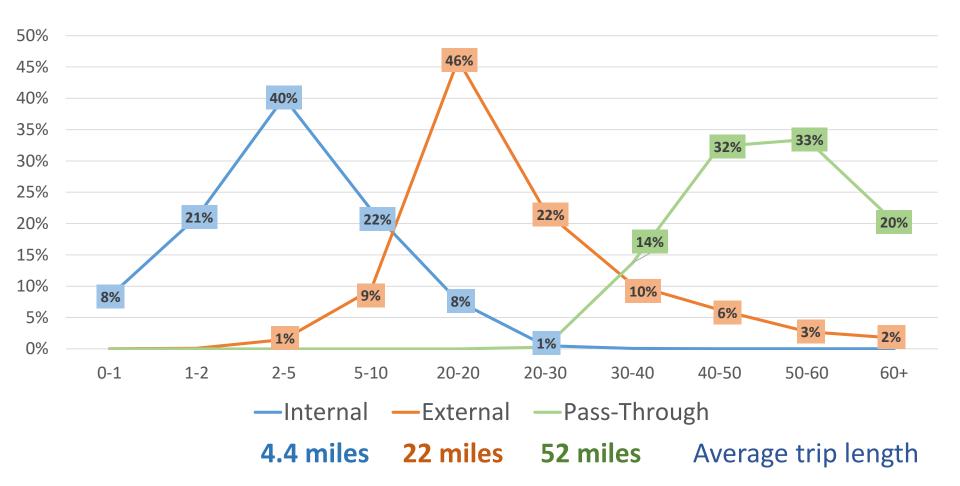








Daily Trip Length Distribution (by type)







2.1 million





Total Marin VMT



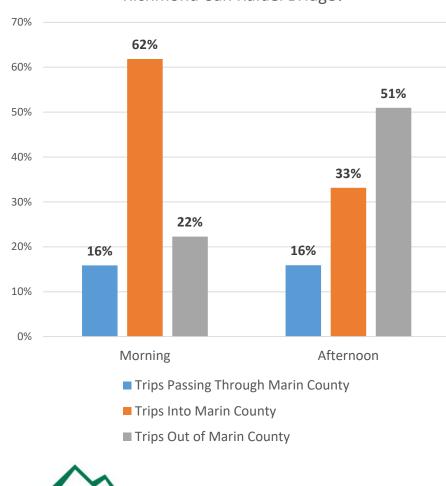


5.2 million

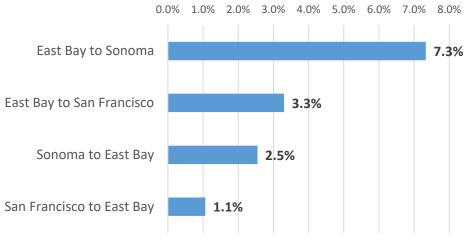
3.1 million

Richmond-San Rafael Bridge

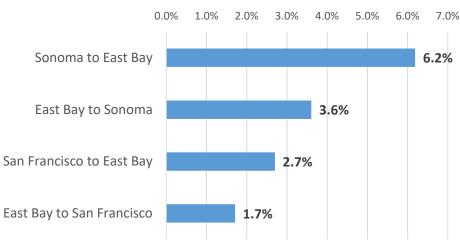
What types of trips are occurring on the Richmond-San Rafael Bridge?



Morning Cut-Through Traffic



Afternoon Cut-Through Traffic





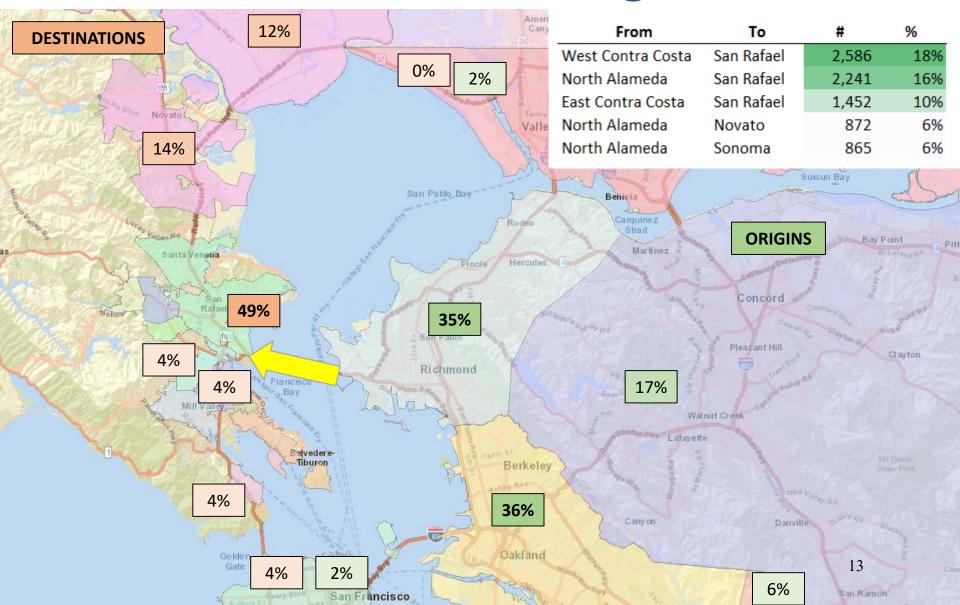




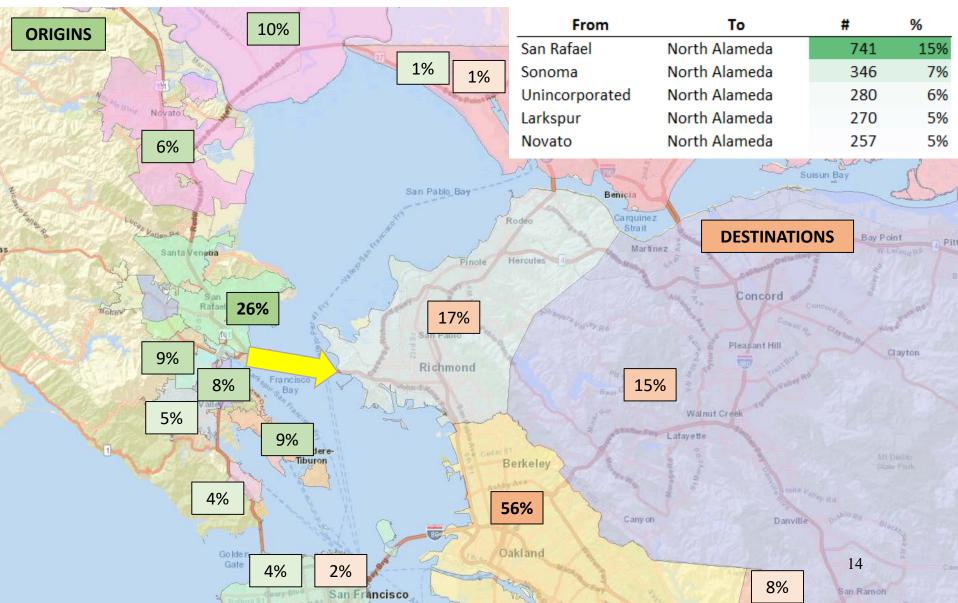




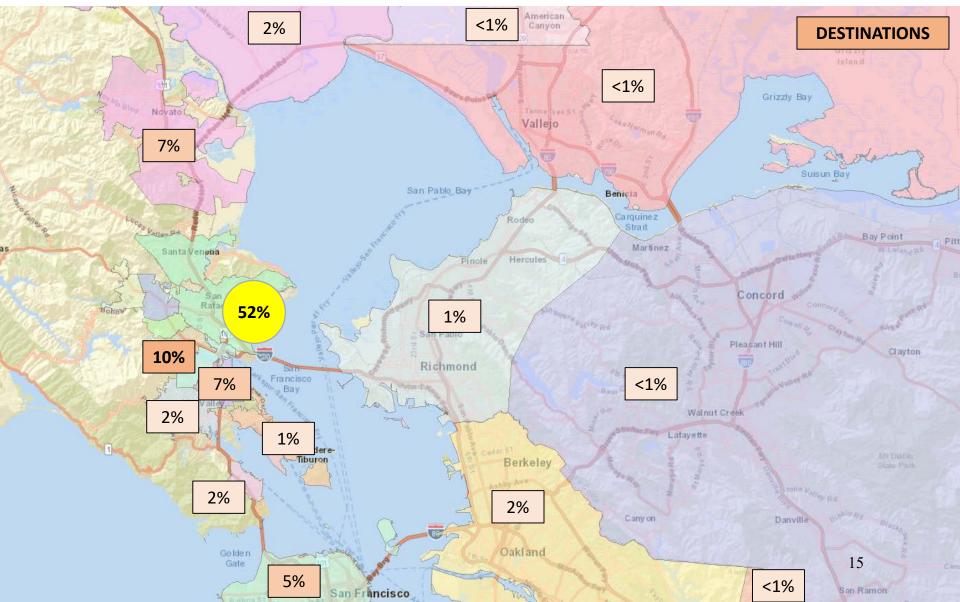
Richmond-San Rafael Bridge – WB AM



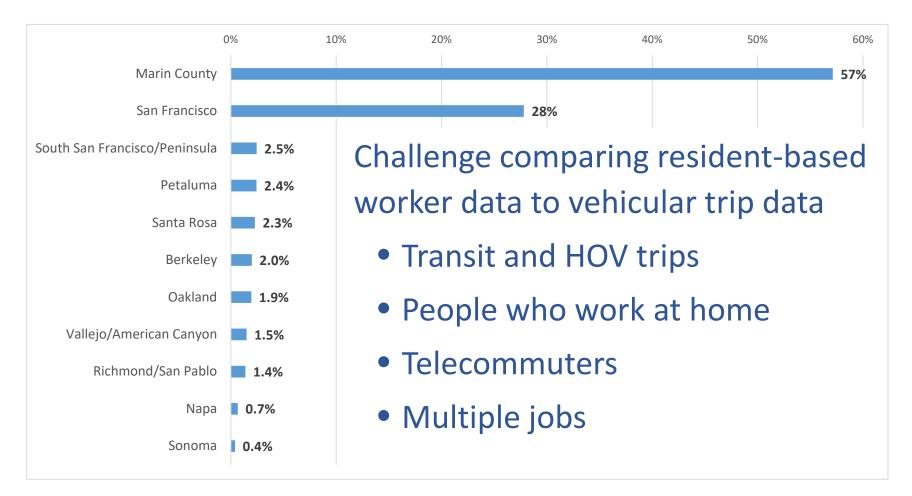
Richmond-San Rafael Bridge – EB AM



Where do San Rafael trips go in the AM?



Where do Marin County residents work?





Compared to ACS and CHTS data



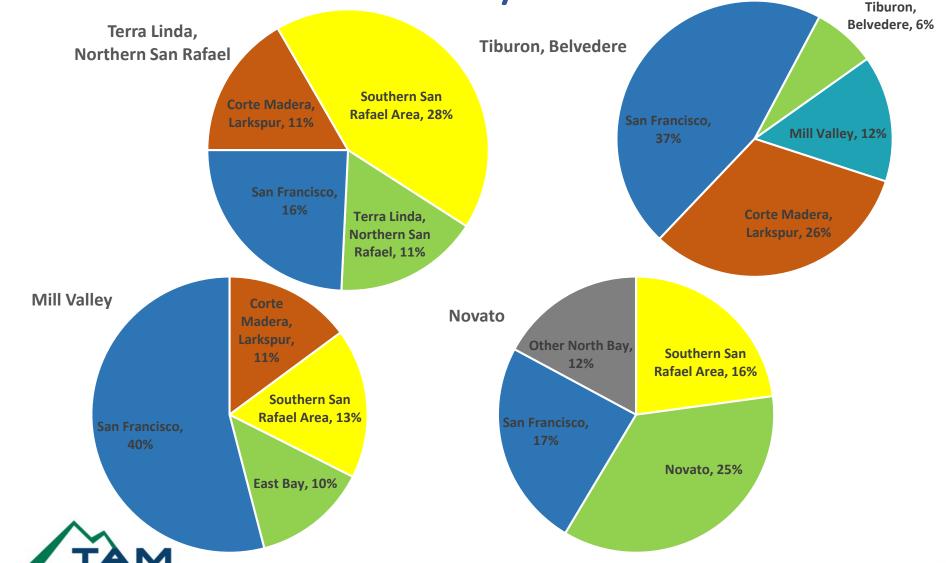








Where do Marin County residents work?

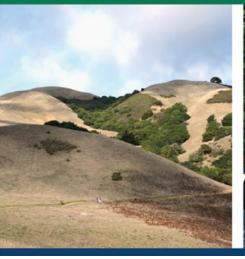








Transportation Authority of Marin









Questions and Discussion

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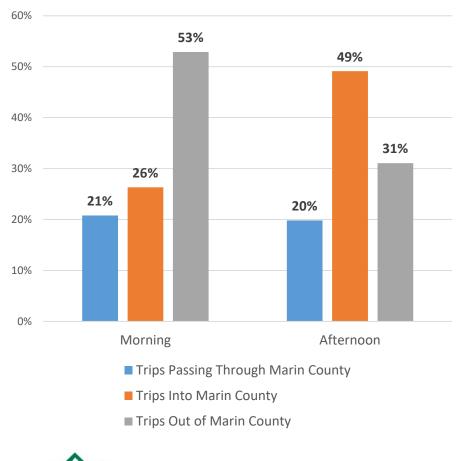
Tel: 415-226-0825



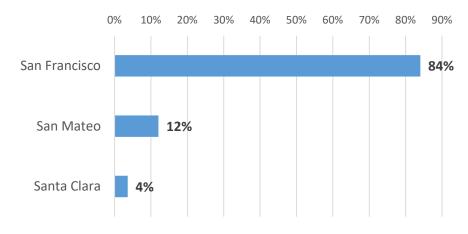


Golden Gate Bridge

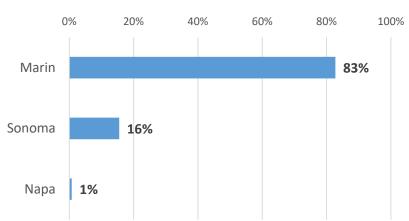
What types of trips are occurring on the Golden Gate Bridge?



Southbound AM Destinations



Northbound PM Destinations









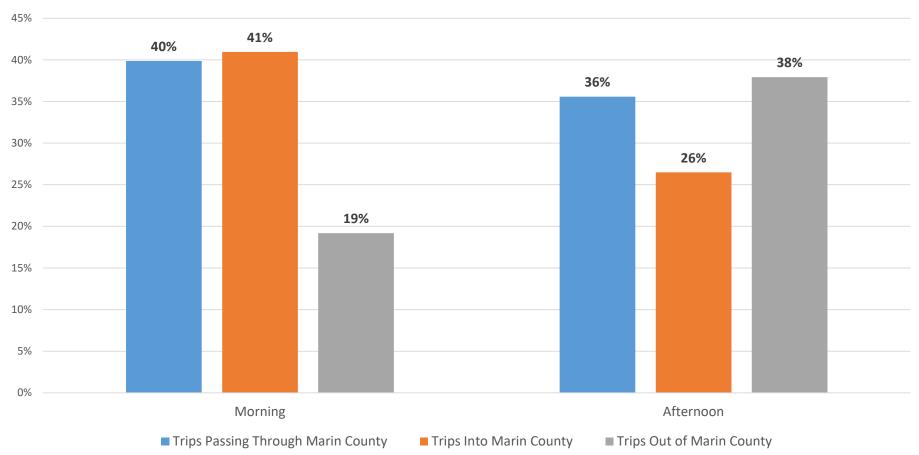






Marin/Sonoma County Line (101 and 37)

What types of trips are occurring at the Marin/Sonoma County Line?





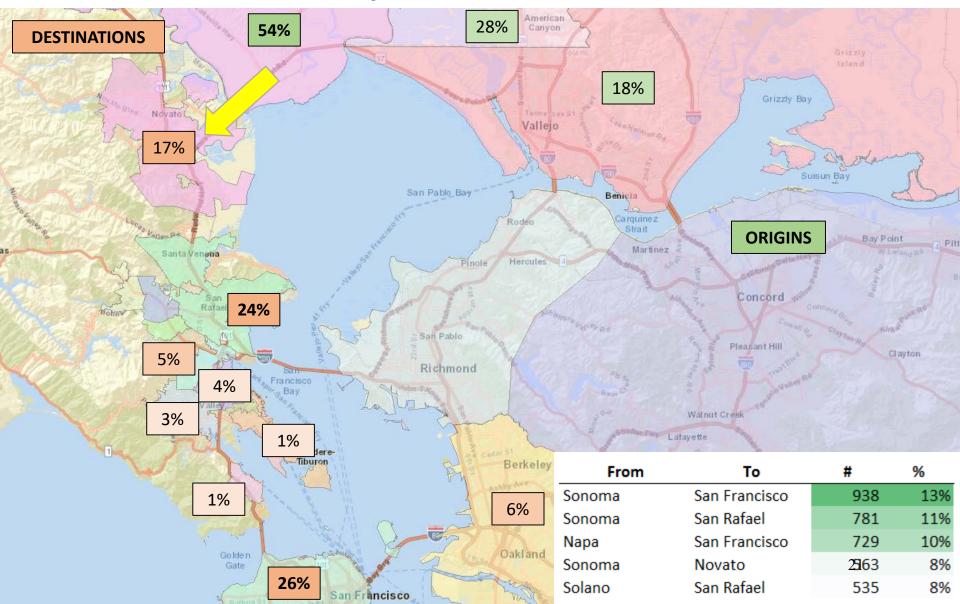




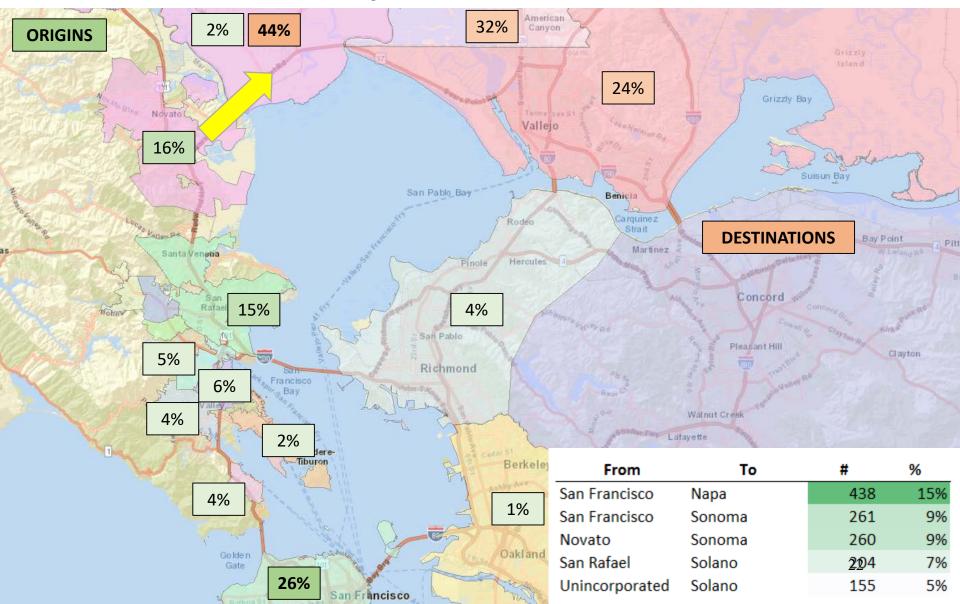




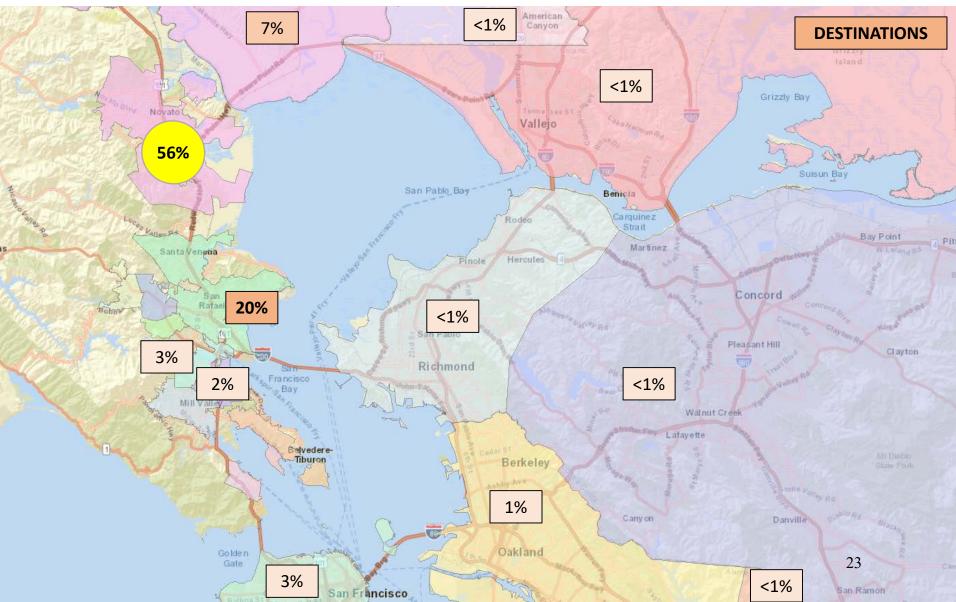
SR 37 at County Line – WB AM



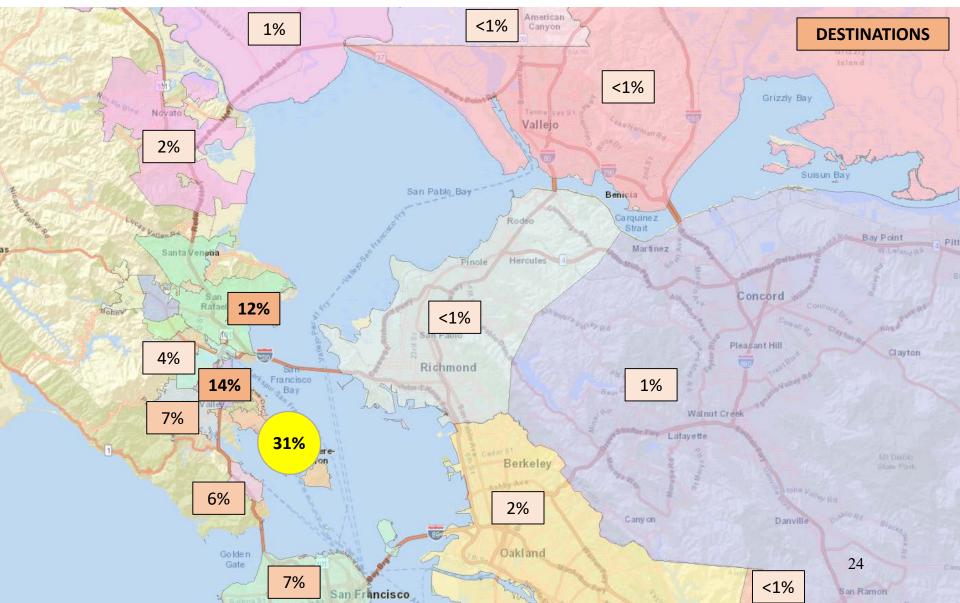
SR 37 at County Line – EB AM



Where do Novato trips go in the AM?



Where do Tiburon trips go in the AM?



Where do Mill Valley trips go in the AM?

