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## NAPA VALLEY TRANSPORTATION AUTHORITY CAC Agenda Letter

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**TO:** Citizens Advisory Committee  
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**SUBJECT:** Travel Behavior Study – State Route 37 Transit Feasibility Study  
Preliminary Findings

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### **RECOMMENDATION**

Information only

### **EXECUTIVE SUMMARY**

In an effort to understand the origins and destinations and transit propensity of travelers on State Route 37 (SR 37), Napa Valley Transportation Authority (NVRTA) along with the three other North Bay Transportation Agencies, is conducting a State Route 37 Origin-Destination and Transit Feasibility Study as part of the greater SR 37 Compact work. NVRTA as the lead agency, contracted with consulting firm Fehr & Peers to conduct origin and destination and transit propensity analysis. Attachment 1 gives an overview of Fehr & Peers' preliminary findings. The next steps are to take a deeper look at what transit options would best serve the corridor users.

### **FISCAL IMPACT**

Is there a Fiscal Impact? No

### **BACKGROUND AND DISCUSSION**

State Route 37 is the most traveled east-west corridor in the North Bay. The corridor has significant traveler delays and is frequently inundated due to storm-related flooding. Traffic congestion in the a.m. peak westbound is experienced for 6 hours daily during the weekday with the average delay of about 30 minutes. Weekday travelers are inundated with an 80 minute delay headed east on SR 37. The eastbound 80 minute delay is experienced for approximately 7 hours each weekday. The corridor is also frequently congested on weekends.

The four North Bay Area County Transportation Agencies (BACTAs), Napa Valley Transportation Authority (NVTa), Solano Transportation Authority (STA), Sonoma County Transportation Authority (SCTA), and Transportation Authority of Marin (TAM), formed a policy board to address congestion and sea level rise issues along the corridor. The SR 37 working group is evaluating near and long term improvements.

In addition to evaluating highway infrastructure improvements, the Transportation Agencies are also evaluating other modes in the corridor to both relieve congestion and to address equity questions that have arisen as part of the tolling proposal including studying Bus Transit and improved Van/Car Pool service along the corridor.

The purpose of this study is to understand the demand and propensity to use bus transit or van/car pools on SR 37. Currently there is no east-west transit service. The Transportation Agencies are also studying Ferry and Rail service as part of a separate effort. This study will build on existing origin and destination studies and surveys to analyze trip purpose. The study will help identify trip purpose to understand how or if, and when personal vehicles are necessary.

The project team is made up of the SR 37 Bus Transit/Van Pool Steering Committee ("Committee") which includes staff members from the following agencies led by NVTa (Vine):

- Solano Transportation Authority (STA)
- Sonoma County Transportation Authority (SCTA)
- Transportation Authority of Marin

In coordination with affected Transit Agencies:

- Golden Gate Transit
- Marin Transit
- Soltrans
- Sonoma County Transit
- Water Emergency Transportation Authority
- SMART

## **SUPPORTING DOCUMENTS**

Attachment: (1) SR 37 Travel Behavior & Transit Feasibility Study Preliminary Findings  
PowerPoint Presentation

ATTACHMENT 1  
CAC Agenda Item 7.5  
January 9, 2019

# SR 37 Travel Behavior & Transit Feasibility Study Preliminary Findings

Citizen Advisory Committee  
January 9, 2019

# Topics

- Study Purpose
- Study Approach
- Preliminary Findings
- Next Steps




# Study Purpose

- Explore other modes of travel to relieve congestion
- Address equity concerns
- Understand demand and propensity to use fixed bus service, micro-transit, and pooling options

About incrementally getting people out of their cars



# “Right-Sized Transit” Approach

Backbone		Crowd-Sourced		Door-to-Door	
					
Rail	Hi Cap Bus, BRT	Coverage Bus	Shuttles	Pooling	Drive
High density, limited linear corridors	High / Moderate demand density corridor trunks	Moderate demand corridors and branches		Low moderate many-many demand landscape	Low demand landscape

- Corridor serves lower density, dispersed development patterns
- Suggests on-demand and pooling as opposed to fixed route service

# Four-Step Approach

- ☑ Who is using the corridor?
  - ☑ What do the travel markets look like?
  - ☑ What are the demographics of the users? What is their transit propensity?
4. What transit approaches might work in this corridor?

# Key Findings

- Solano residents accessing jobs in Marin/Sonoma counties

Source: StreetLight Data  
Average of Tue to Thu in March to  
May 2018, Westbound 6 to 10 AM

- Mostly long distance, work-related trips

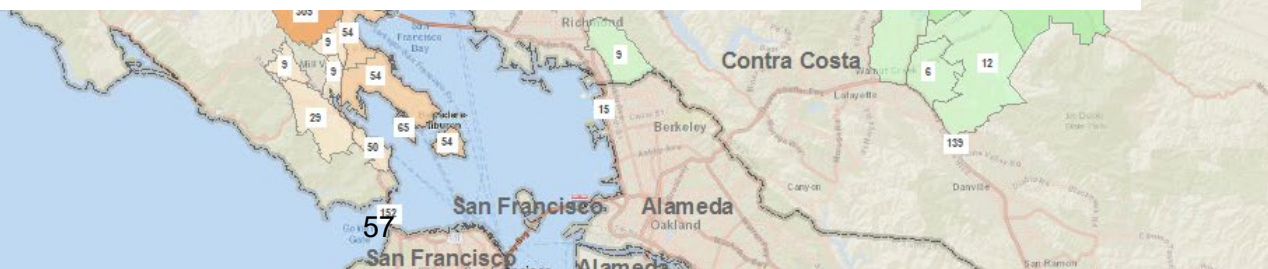
- High percentage of trips made by those earning at or below the median income

- Many-to-many demand landscape with just a few trip centers

- Some bus opportunities, micro-transit and pooling options best to serve others

Origins

Destinations

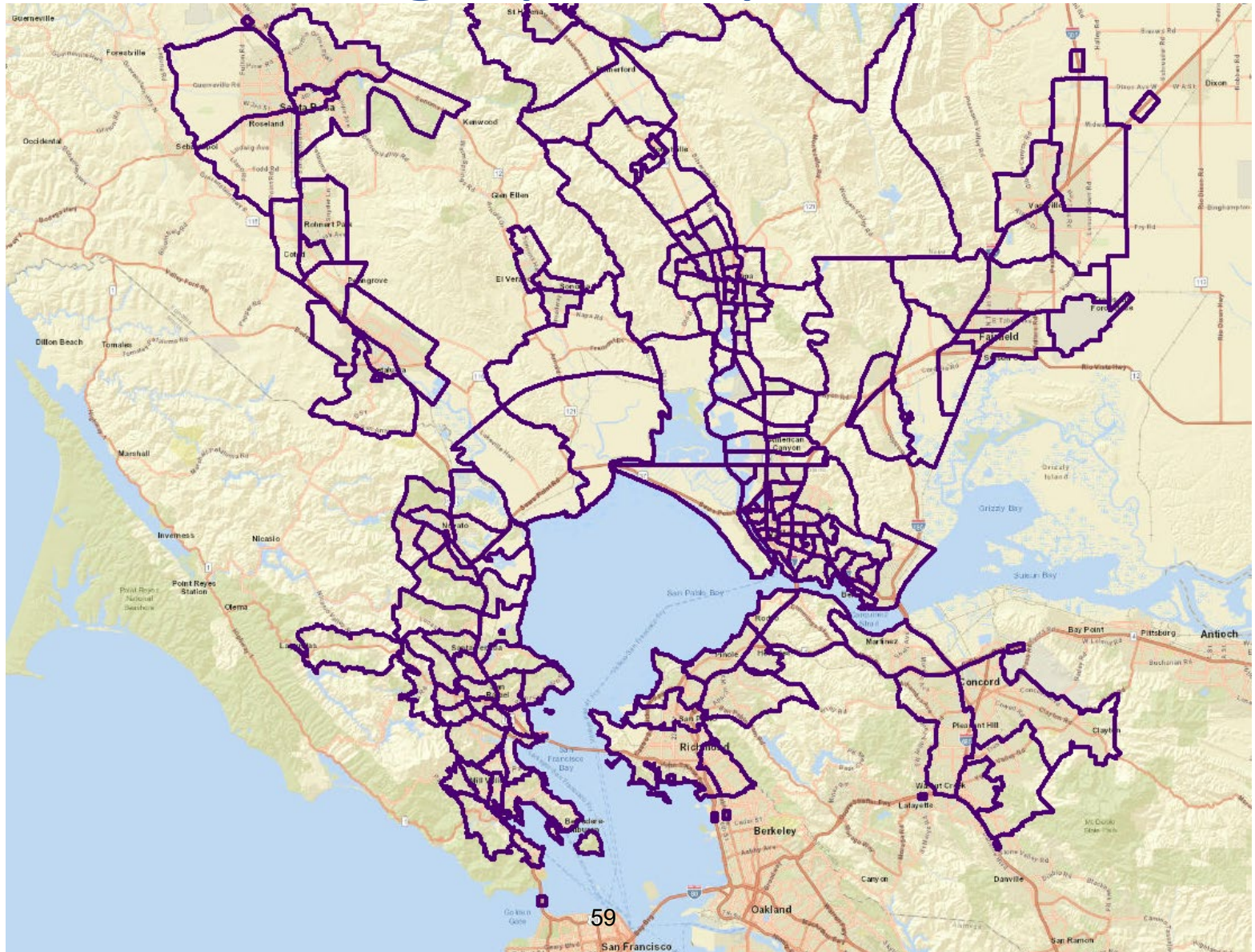


**STREETLIGHTDATA**

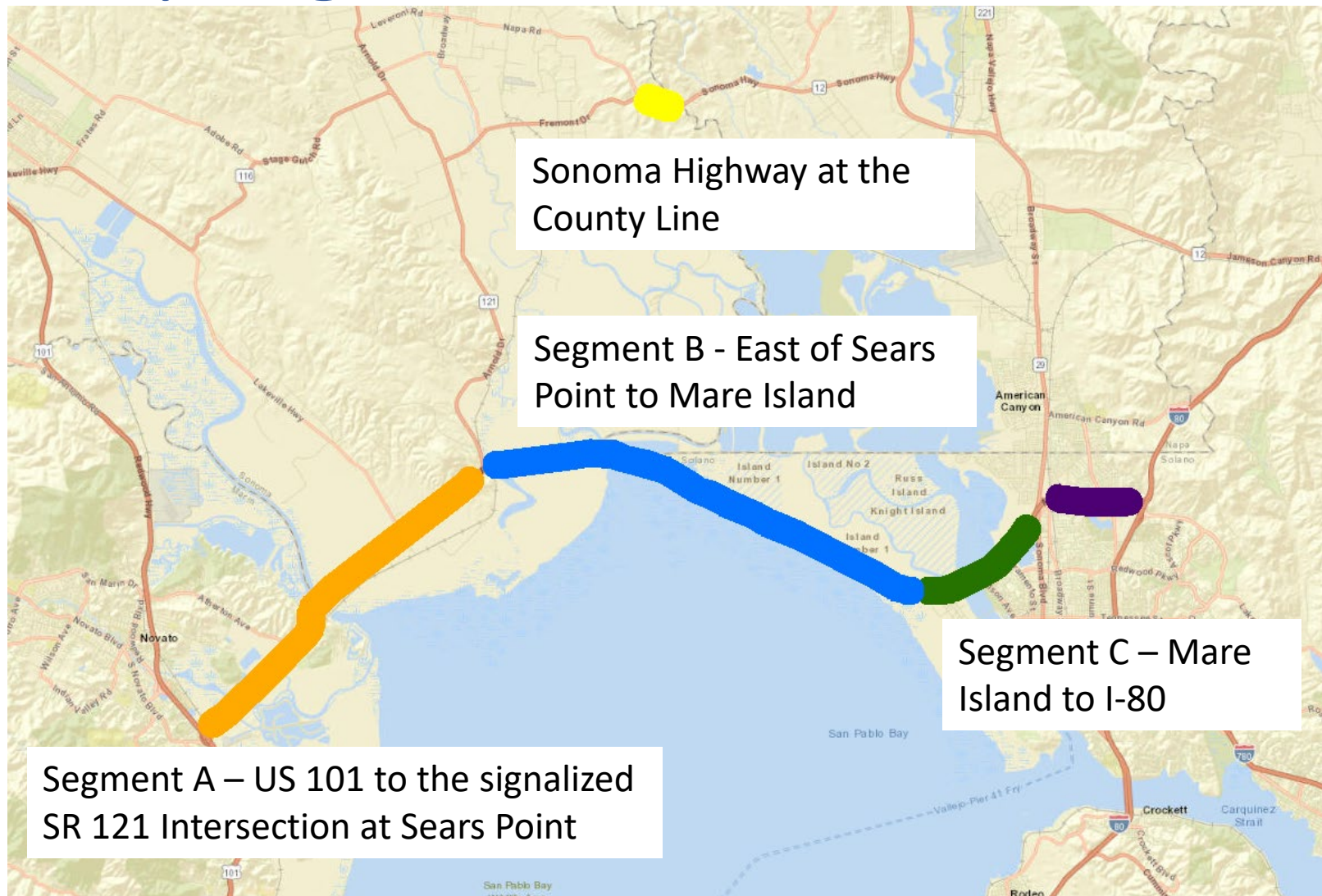
- CUEBIQ



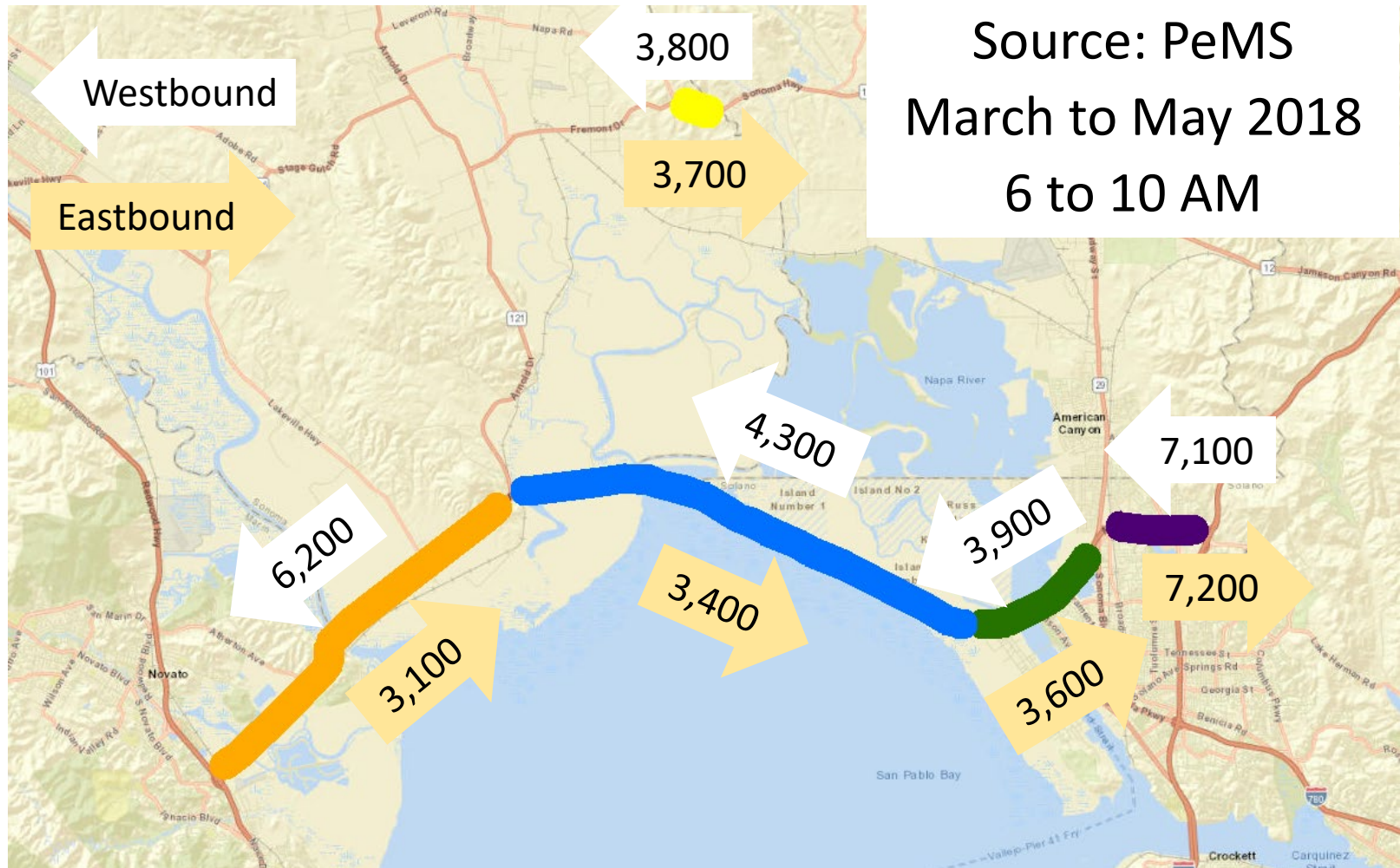
# 180-Zone Geographic System



# 5 Study Segments



# Traffic Count Data

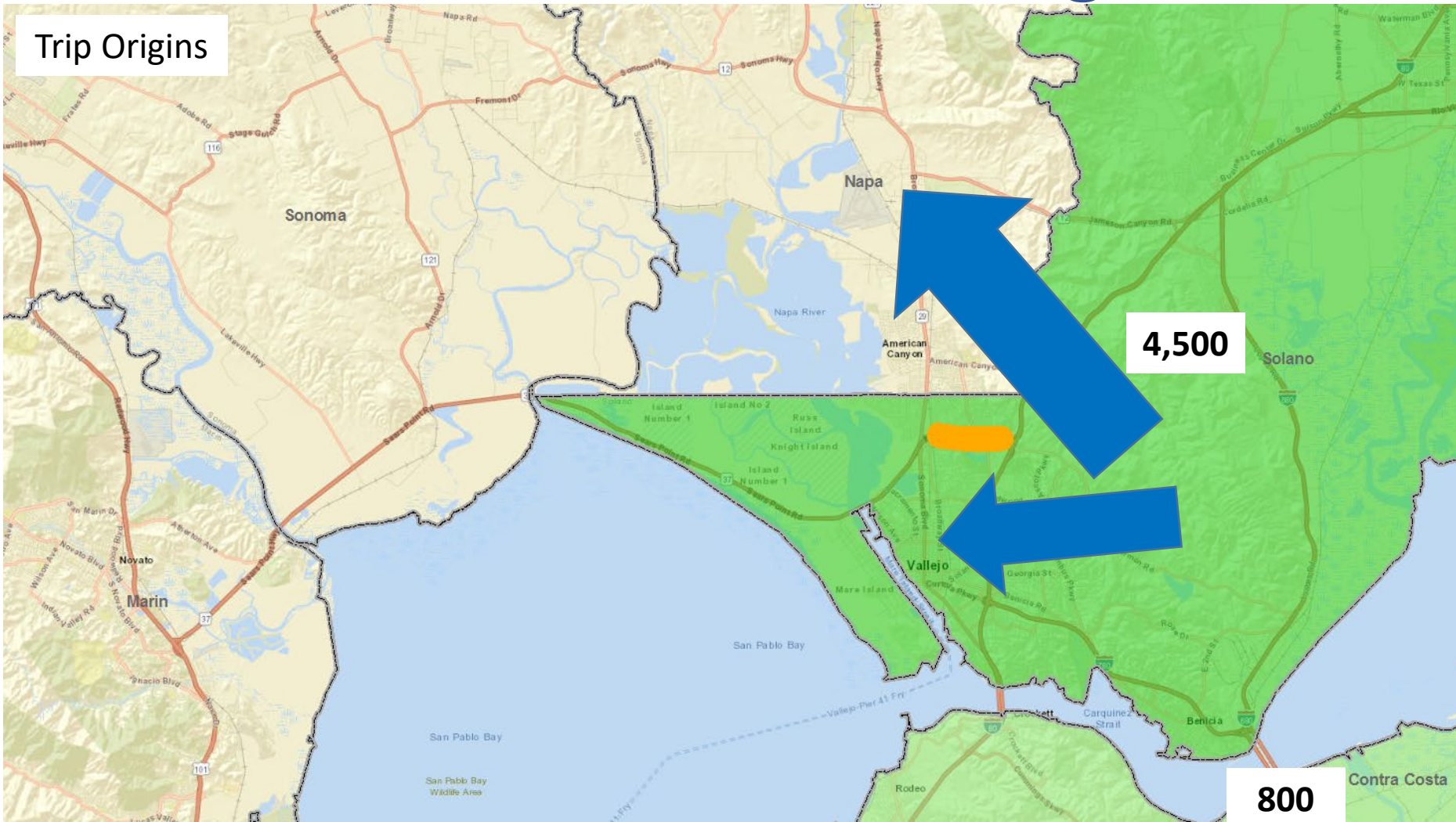


Focus on AM Peak Period because typically when modal decision is made

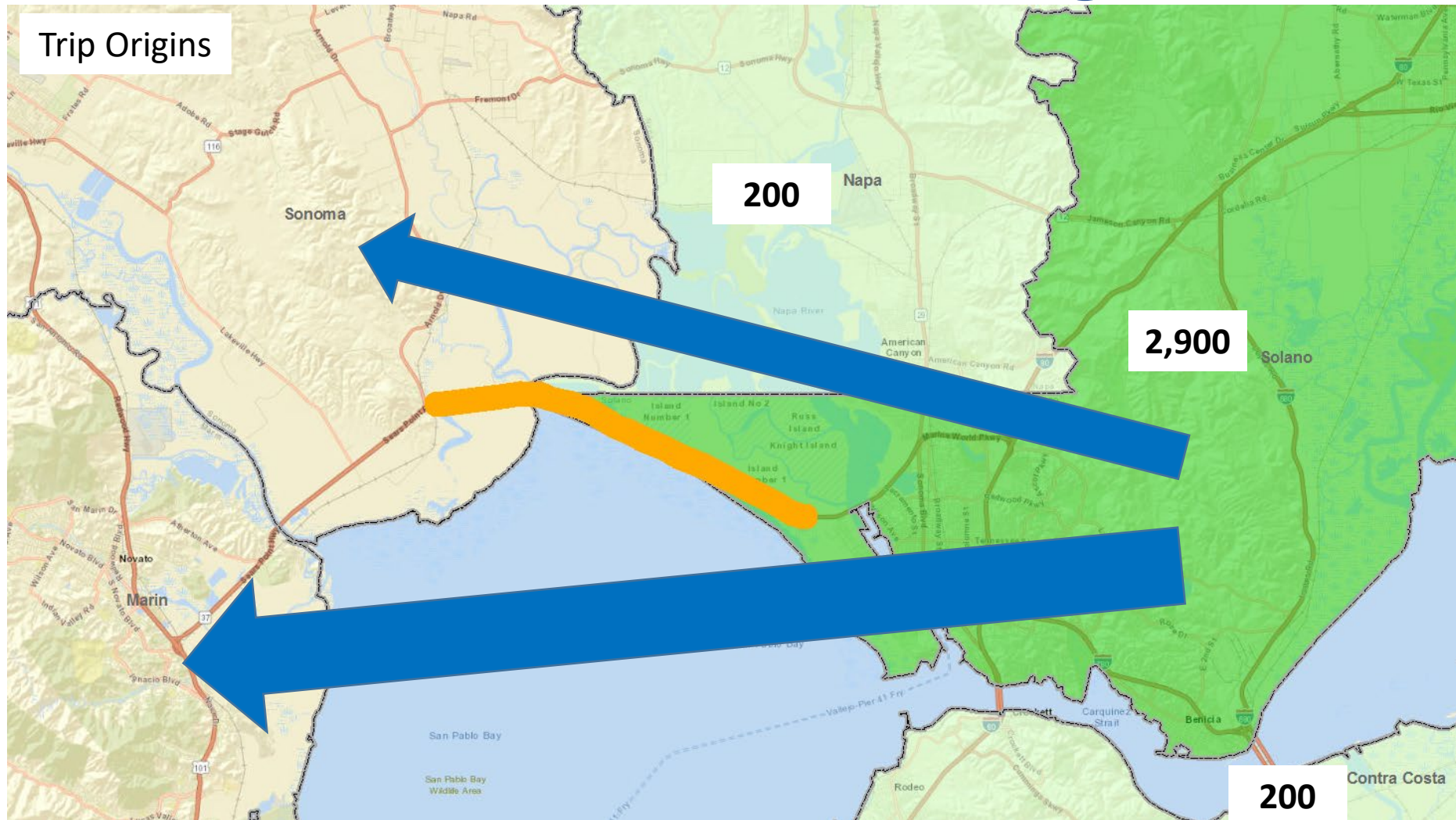
# Step 1

Who is using the corridor?

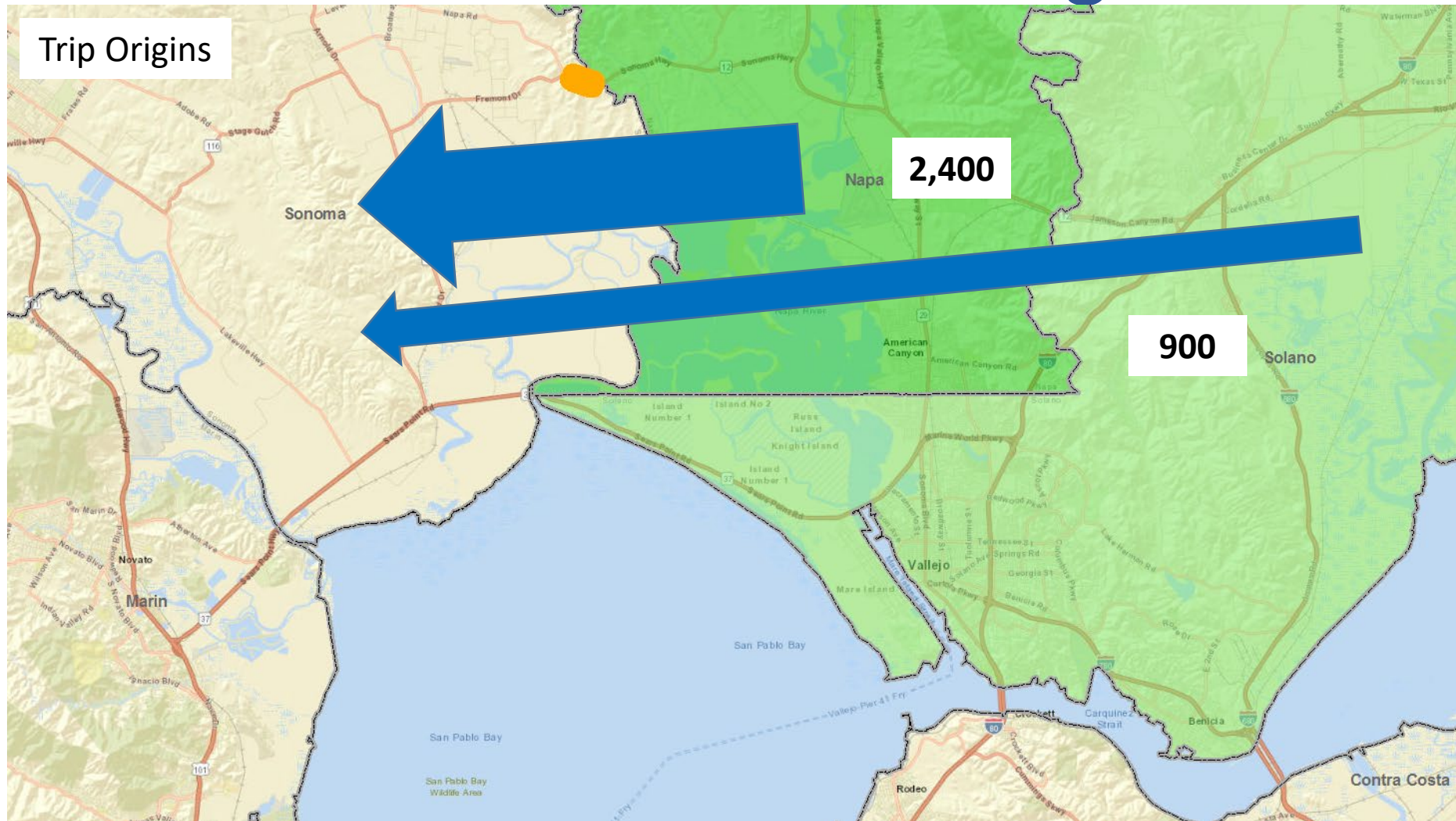
# Westbound AM Corridor Usage



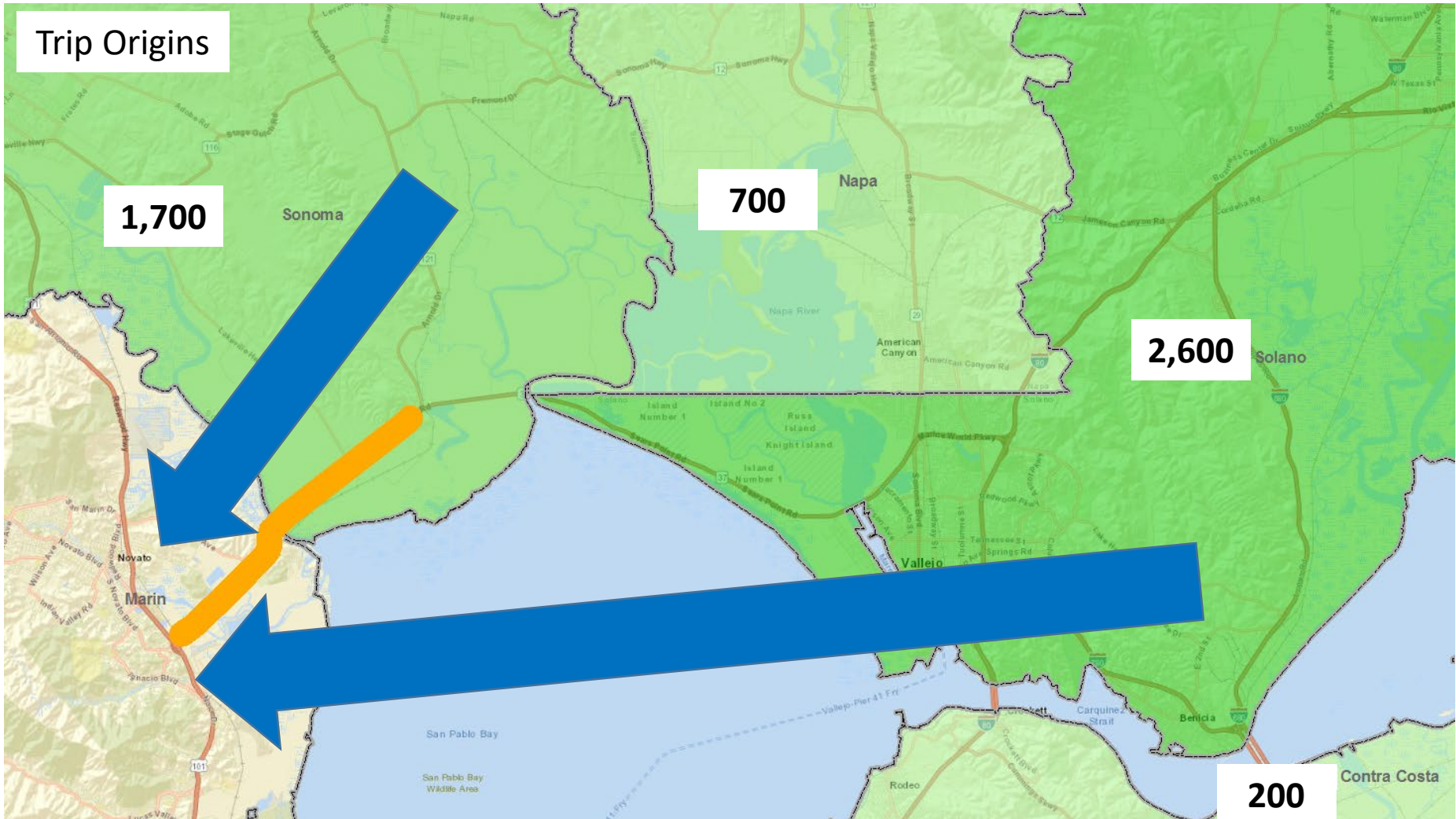
# Westbound AM Corridor Usage



# Westbound AM Corridor Usage



# Westbound AM Corridor Usage



# Segment Usage by County

## Westbound AM

County	Origin %	Destination %
Marin		9%
Sonoma		<b>84%</b>
Napa	<b>64%</b>	
Solano	23%	
Contra Costa	1%	

County	Origin %	Destination %
Marin		11%
Sonoma		10%
Napa		<b>46%</b>
Solano	<b>64%</b>	29%
Contra Costa	12%	

County	Origin %	Destination %
Marin		<b>67%</b>
Sonoma	28%	23%
Napa	11%	
Solano	<b>42%</b>	
Contra Costa	4%	

County	Origin %	Destination %
Marin		<b>55%</b>
Sonoma		39%
Napa	4%	
Solano	<b>68%</b>	
Contra Costa	6%	

County	Origin %	Destination %
Marin		<b>40%</b>
Sonoma		30%
Napa	7%	2%
Solano	<b>65%</b>	23%
Contra Costa	5%	

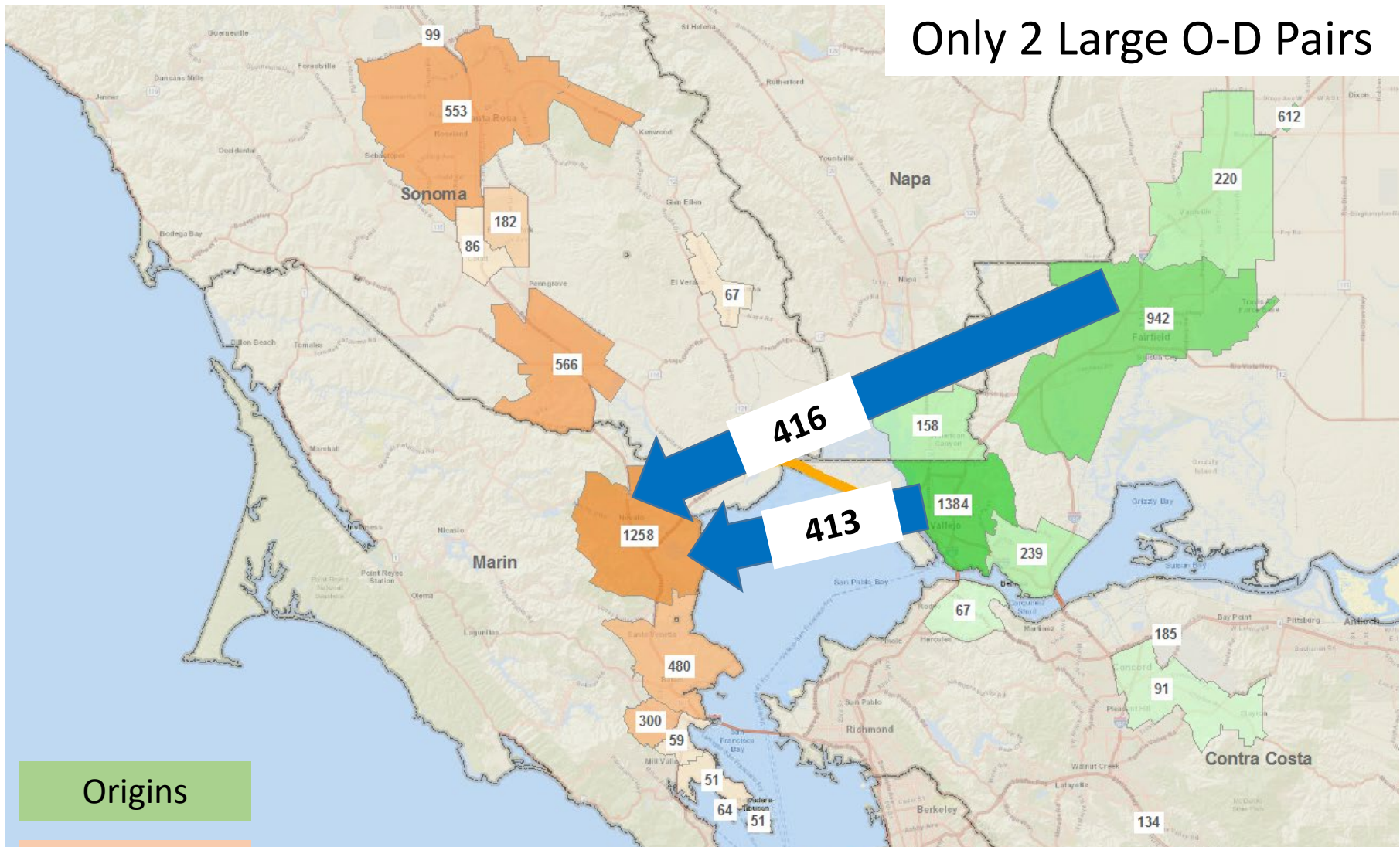
## Step 2

What do the travel markets look like?

Origin and Destination  
Combinations Matter for Transit

## Segment B - Westbound AM

## Only 2 Large O-D Pairs

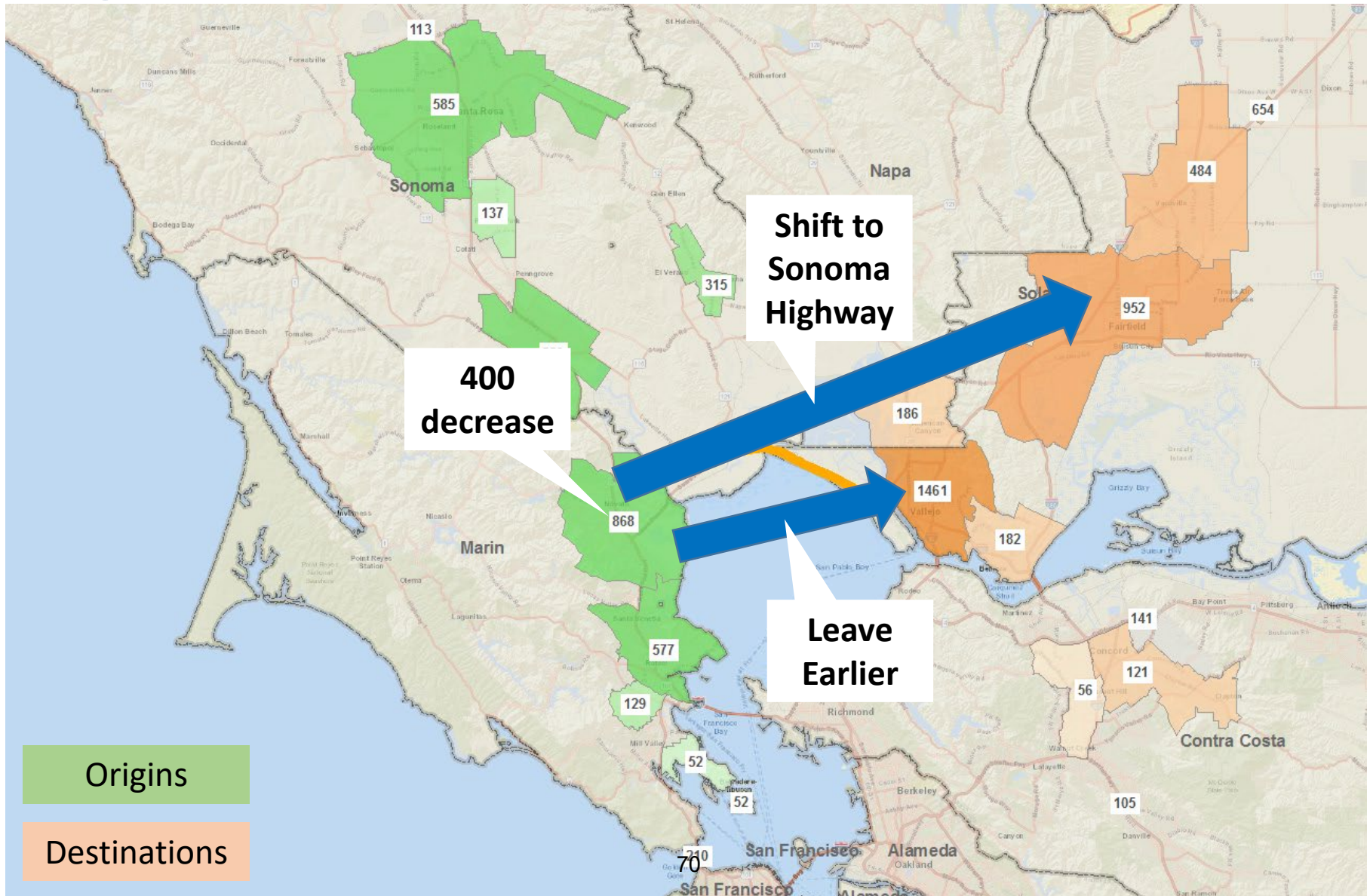


## Origins

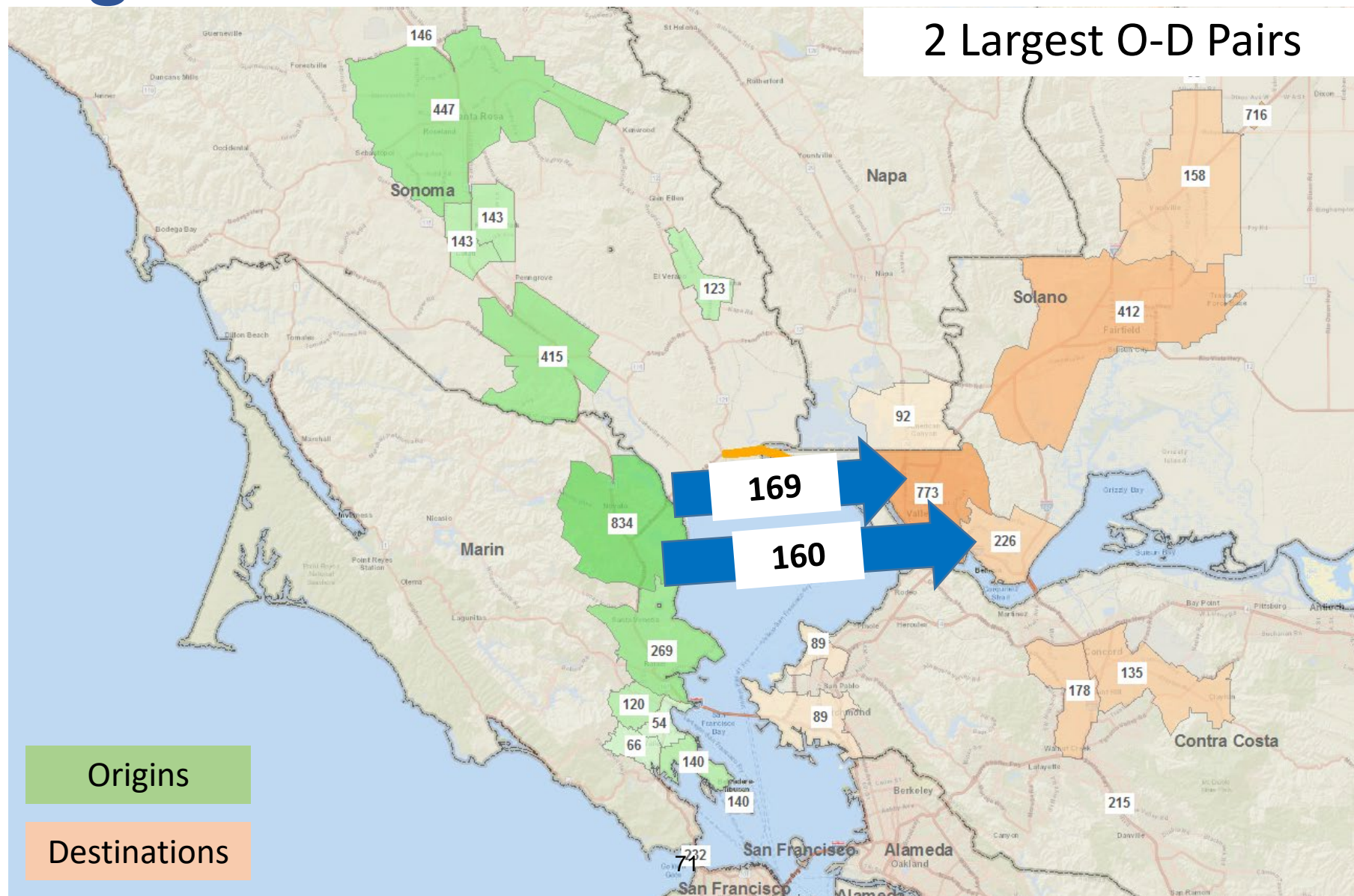
## Destinations

Focus on AM Peak Period because typically when modal decision is made

# Segment B – Eastbound PM



# Segment B – Eastbound AM



## Step 3

What is their transit propensity?

# Propensity for Taking Transit

- Focus on metrics that influence transit ridership
  - Low Income
  - Work Trip Percentage
  - Kids in Household
  - Trip Length

Origin-Destination Pair	Average TLI
Novato to Vallejo	8.7
Novato to Fairfield	6.6
San Rafael to Vallejo	8.8
Vallejo to Petaluma	7.6
Vallejo to San Rafael	8.3
Petaluma to Vallejo	7.5
Sonoma to Vallejo	8.8
Sonoma County to Vallejo	8.4
Vallejo to Larkspur	8.5
San Rafael to Fairfield	7.3
Fairfield to San Rafael	7.2

# Next Steps

## Step 4: What transit approaches might work in this corridor?

- Express bus, micro-transit, park and pool, etc.
- Specific capital improvements
- Mobility-as-a-Service App
- High-level cost and revenue analysis



# Questions?