

# Comprehensive Operational Analysis (COA)



## Existing Market and Conditions Evaluation

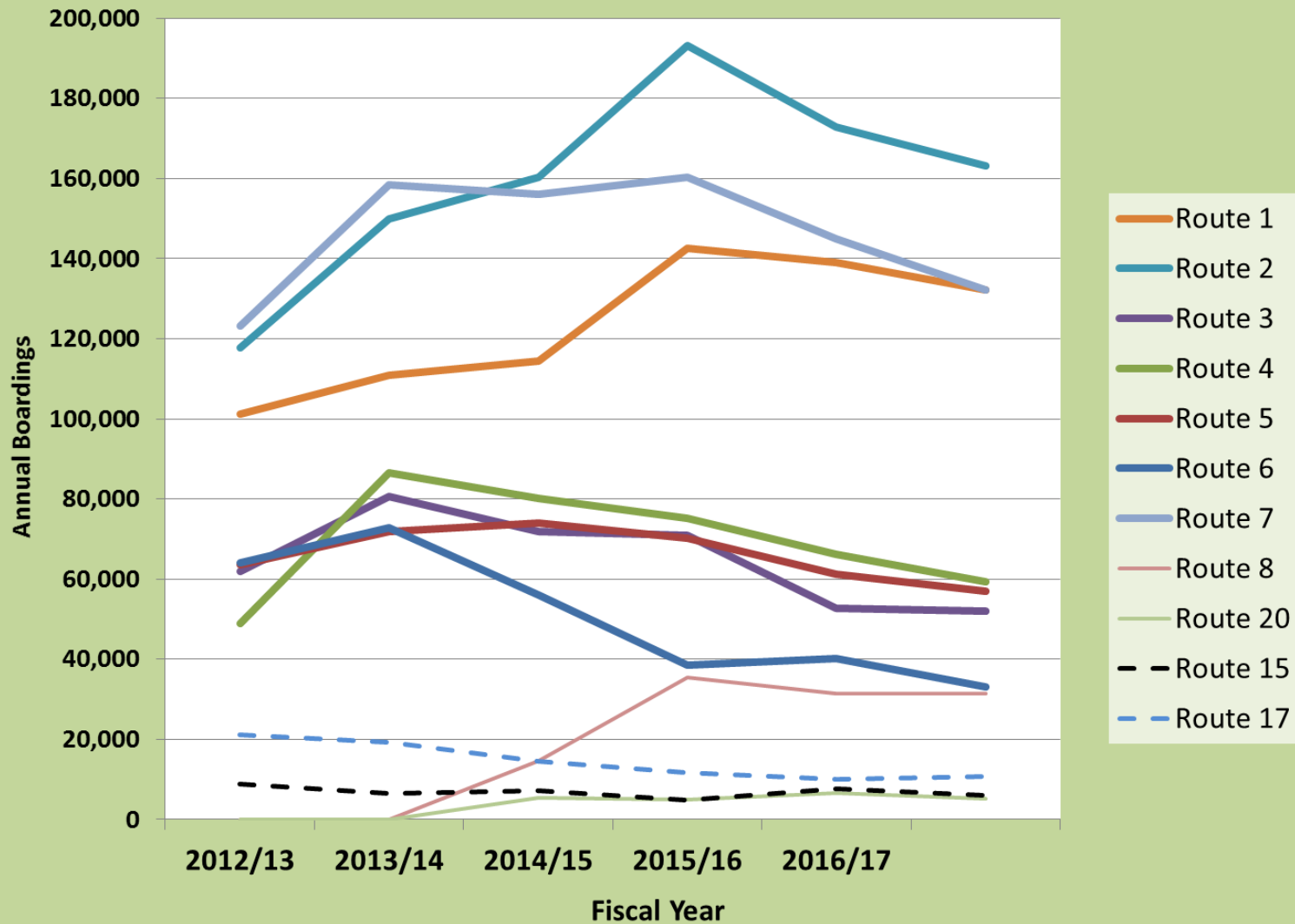
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LSC Transportation Consultants, Inc.



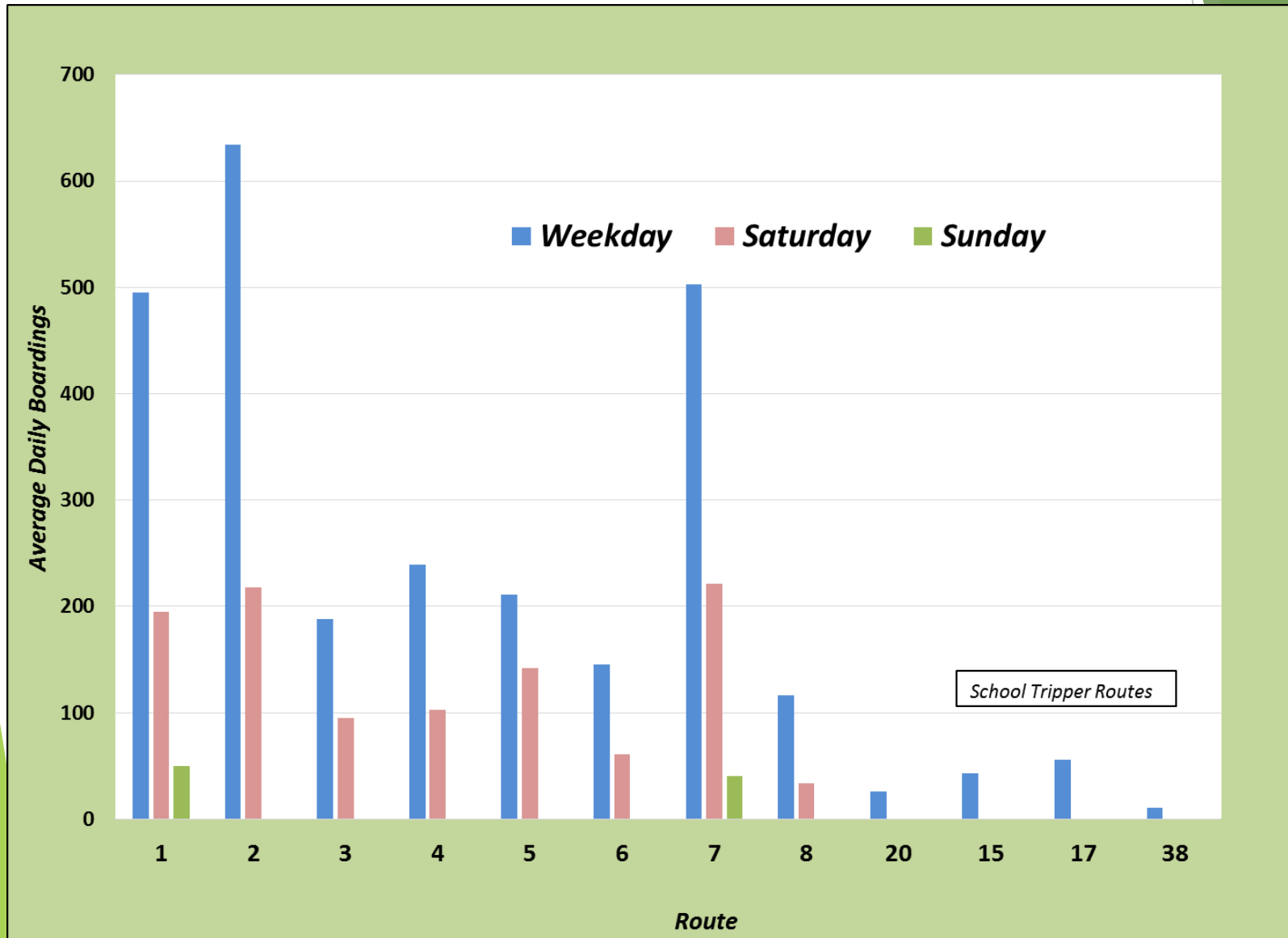
# What is the COA?

- ▶ a detailed study of SolTrans' current routes, customers and customer needs
  - ▶ focusing only on Local Routes (Non-Express), General Public Dial-A-Ride and Local Taxi Scrip
- ▶ will be used to make a 5 to 7 year plan for SolTrans
- ▶ Today we're going to talk about:
  - ▶ SolTrans' transit demographics
  - ▶ what we've seen so far in our review of current routes
  - ▶ A draft list of possible changes

# Trends in Ridership by Route



# Ridership by Weekday/Sat/Sun



# Demographic Study Conclusions

- ▶ Population size will increase
  - ▶ Will lead to moderate growth across all transit riders
  - ▶ Will lead to large increase in senior riders due “Baby Boomer” aging and limited mobility
- ▶ City of Vallejo development along Sonoma Boulevard indicates need to consider better routing options and service levels
  - ▶ Including Bus Rapid Transit

# Demographic Study Conclusions

- ▶ Most schools are directly served
- ▶ Commute patterns indicate that travel to/from work is a relatively small demographic for Local Routes
- ▶ Current routes focus well on the areas with the greatest need
  - ▶ 93% of households without a vehicle
  - ▶ 85% of all households are within ¼ mile of a bus stop

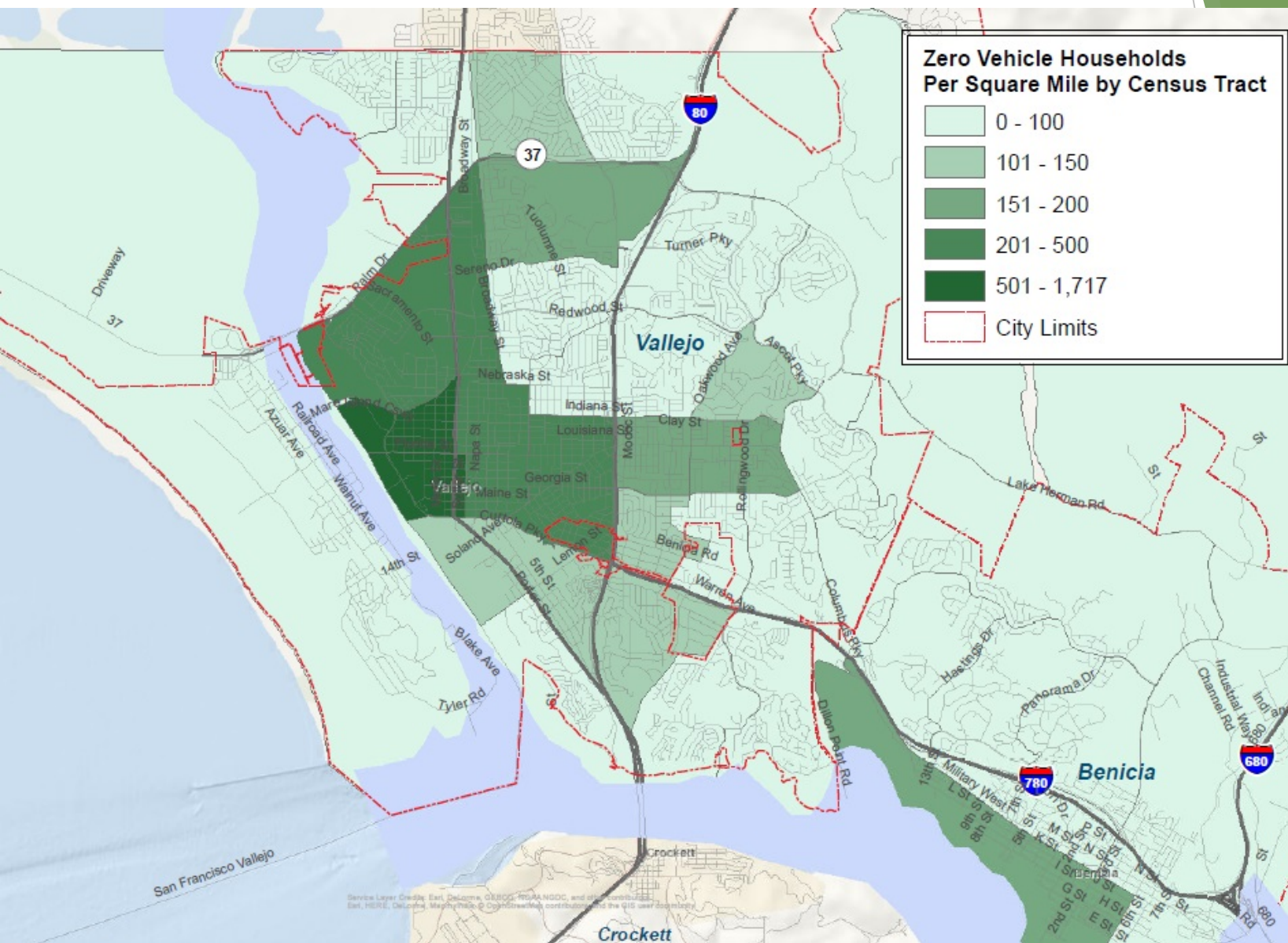


# Demographic Study Conclusions

- ▶ Most underserved areas in Vallejo:
  - ▶ Mare Island
  - ▶ east of Oakwood Avenue
  - ▶ west of Ascot/north of Tennessee Street
  - ▶ around Oakwood Avenue/Skyline Drive
  - ▶ portions of Glen Cove
  - ▶ Georgia Street/Steffan Street
  
- ▶ Most underserved areas in Benicia:
  - ▶ Eastern industrial areas of Benicia
  - ▶ Arsenal (southernmost portion of the Industrial Park)

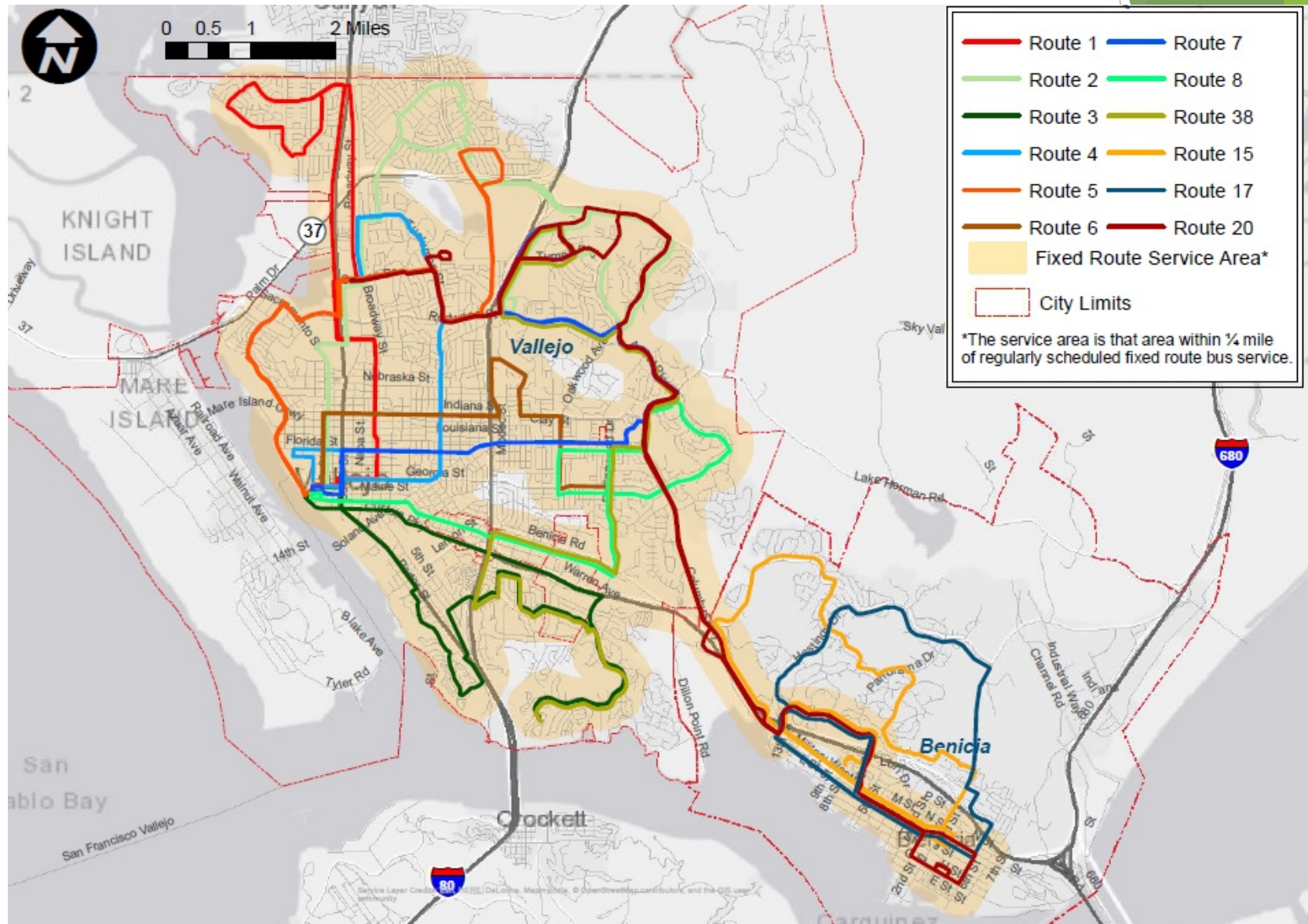


# Households Without Vehicles





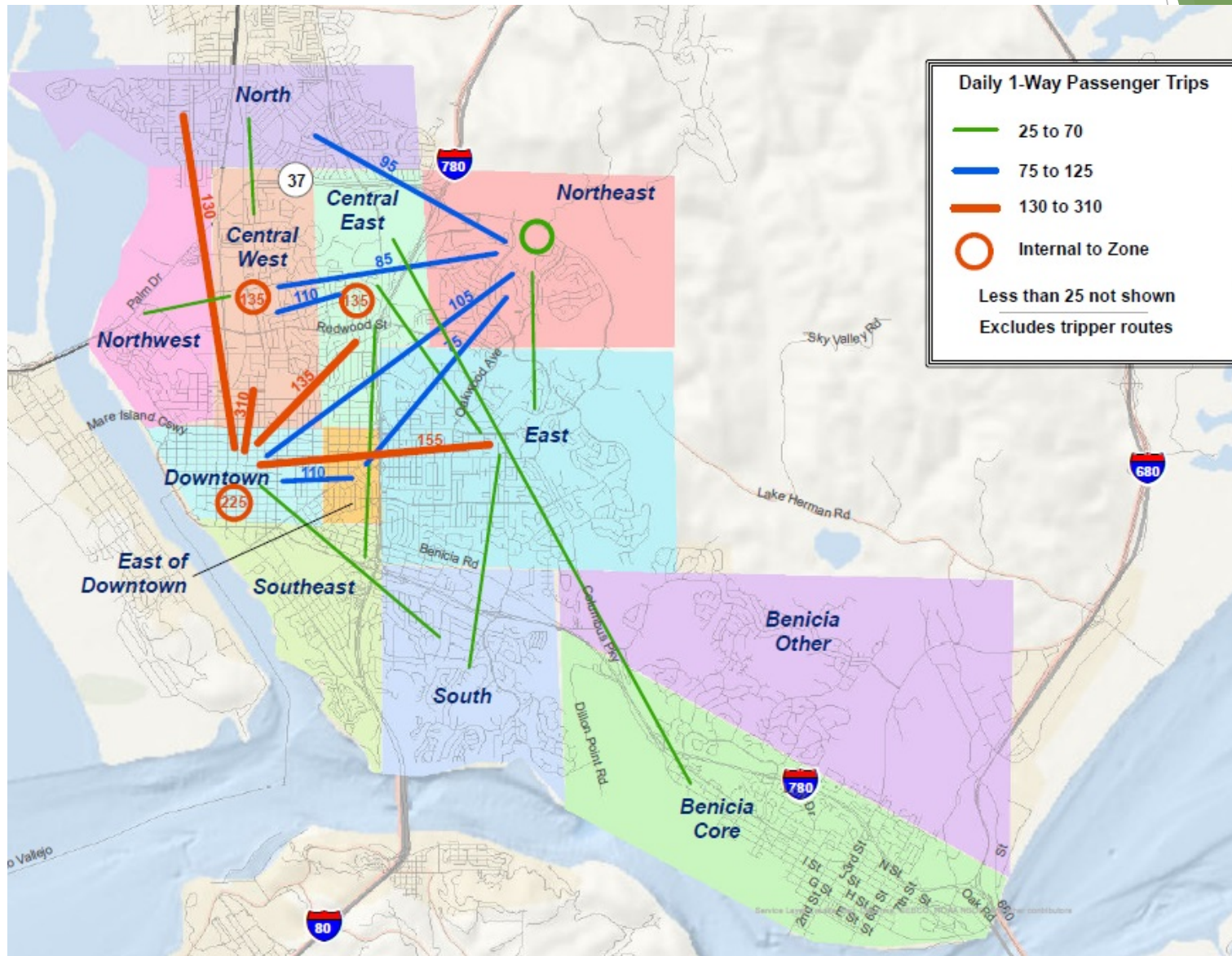
# Existing SolTrans Coverage Area



# Current SolTrans Route Frequency & Span of Service

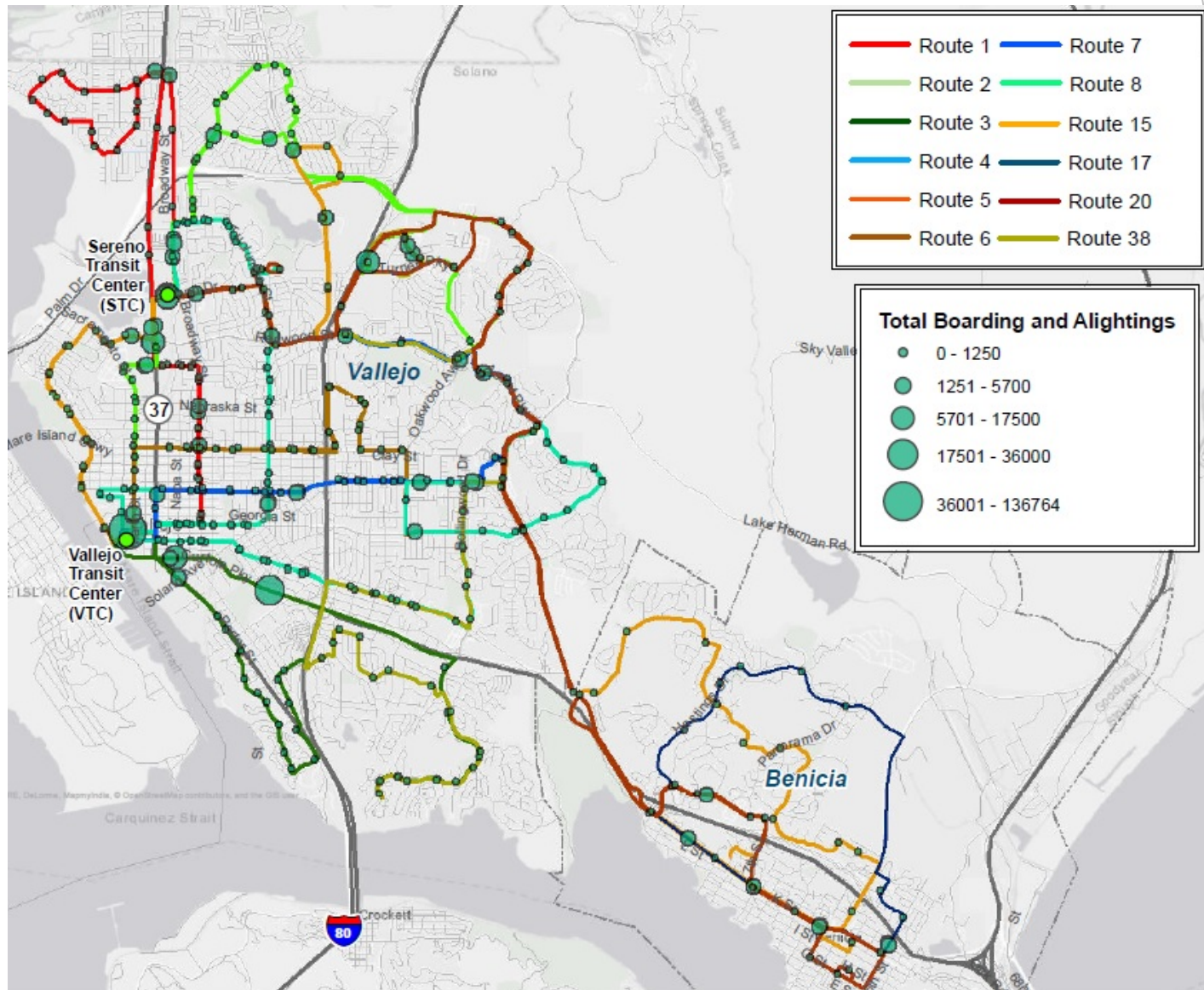
Routes													
										1	2	3	4
										5	6	7	8
										20	15	17	38
										School Trippers			
Weekday	5:00 AM	30											
	6:00 AM	30	30	60		30	60	30	60				
	7:00 AM	30	30	30	30	30	60	30	60		2 Runs	2 Runs	1 Run
	8:00 AM	30	30	60	60	60	60	30	60				
	9:00 AM	30	30	60	60	60	60	30	60	120			
	10:00 AM	30	30	60	60	60	60	30	60	120			
	11:00 AM	30	30	60	60	60	60	30	60	120			
	12:00 PM	30	30	60	60	60	60	30	60	120			
	1:00 PM	30	30	60	60	60	60	30	60	120	1 Run	1 Run	
	2:00 PM	30	30	60	60	60	60	30	60	120			
	3:00 PM	30	30	60	60	60	60	30	60	120	2 Runs	2 Runs	
	4:00 PM	30	30	30	30	30	60	30	60	120			
	5:00 PM	30	30	30	30	30	60	30	60	120			
	6:00 PM	30	30	30	30	30	60	30	60	120			
	7:00 PM	30	30	30			60	30	60				
	8:00 PM		30					30					
Saturday	5:00 AM												
	6:00 AM	60	90	60	60			60					
	7:00 AM	60	90	60	60	60	60	60	60				
	8:00 AM	60	90	60	60	60	60	60	60				
	9:00 AM	60	90	60	60	60	60	60	60				
	10:00 AM	60	90	60	60	60	60	90	60				
	11:00 AM	60	90	60	60	60	60	90	60				
	12:00 PM	60	90	60	60	60	60	90	60				
	1:00 PM	60	90	60	60	60	60	90	60				
	2:00 PM	60	90	60	60	60	60	90	60				
	3:00 PM	60	90	60	60	60	60	90	60				
	4:00 PM	60	90	60	60	60	60	60	60				
	5:00 PM	60	90	60	60	60	60	60	60				
	6:00 PM	60	90	60	60	60	60	60	60				
	7:00 PM	60	90			60	60	60					
	8:00 PM		90			60	60						
Sunday	8:00 AM	60						90					
	9:00 AM	60						90					
	10:00 AM	60						90					
	11:00 AM	60						90					
	12:00 PM							90					
	1:00 PM							90					
	2:00 PM												
	3:00 PM												
	4:00 PM	60											
	5:00 PM	60						90					
	6:00 PM	60						90					
	7:00 PM	60						90					

# Daily Rider Trips Between Zones

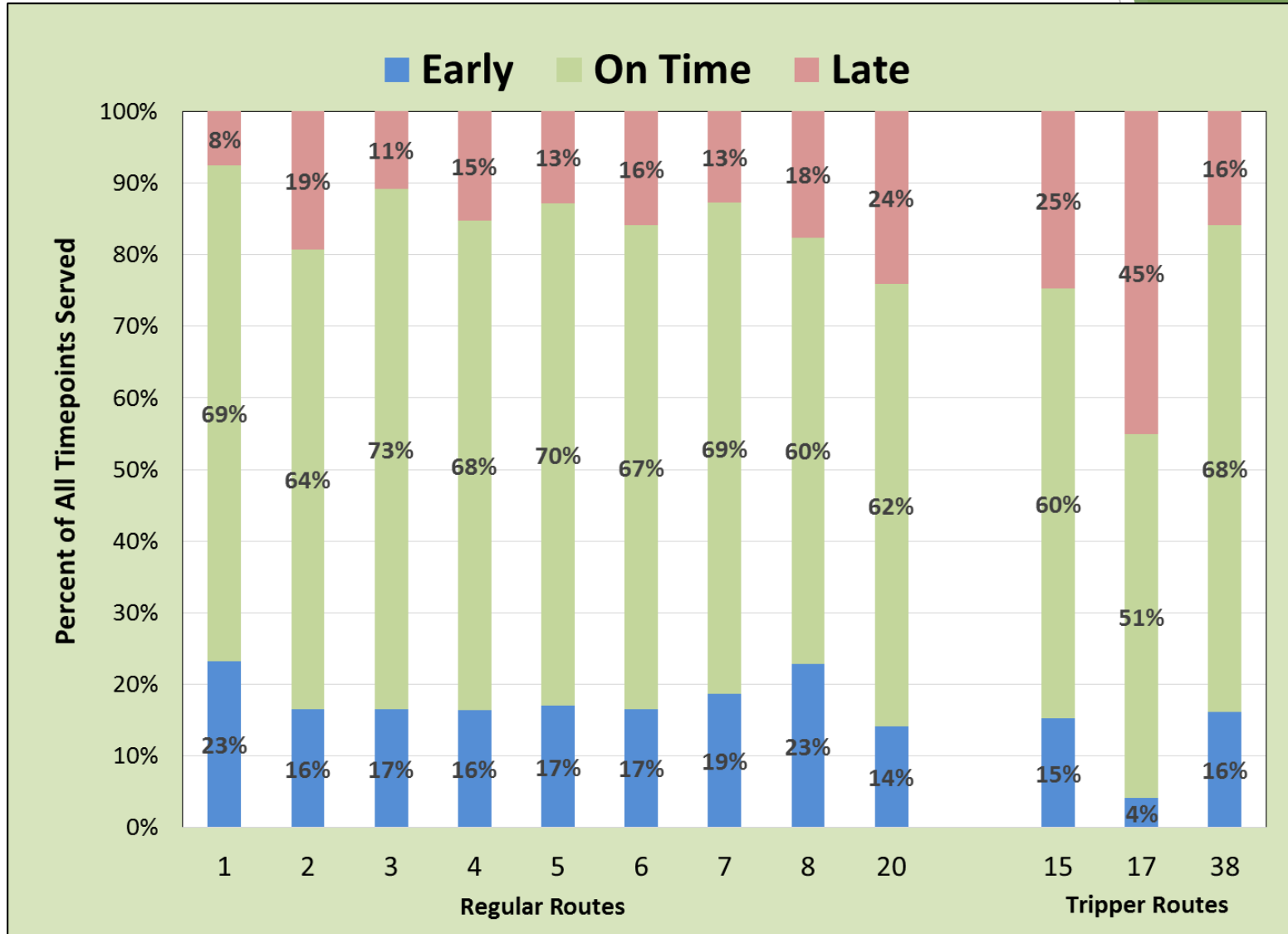




# Daily Ridership by Stop



# On-Time Performance

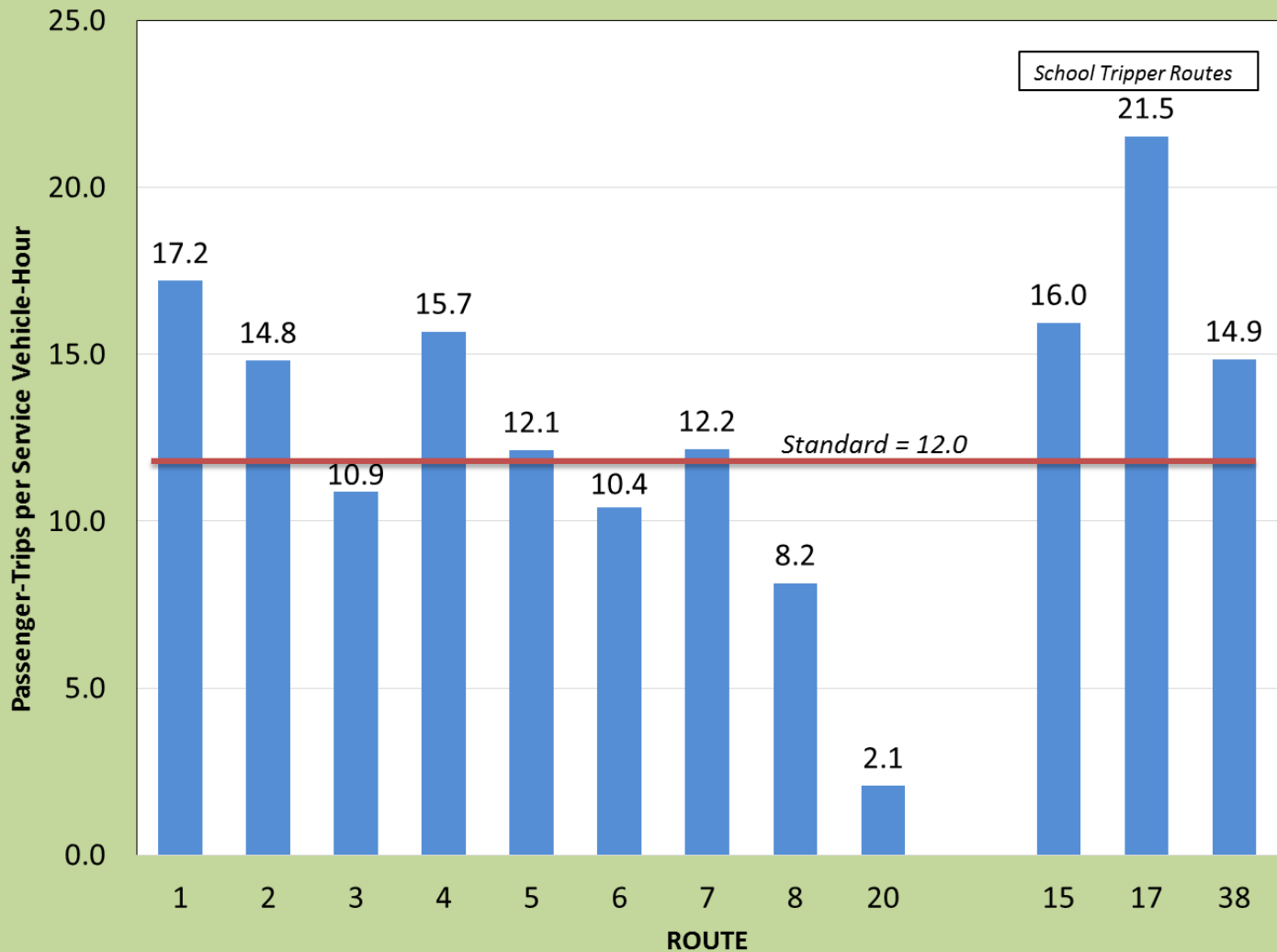


# Route Performance Analysis

- ▶ SolTrans has a series of performance measures:
  - ▶ **Productivity:** passengers per vehicle-hour of service
    - ▶ SolTrans standard: **12 or more**
    - ▶ Met for most local routes
    - ▶ Not met for Local Routes 3, 5, 6, 8 and 20
  - ▶ **Cost per Passenger**
    - ▶ SolTrans standard: **less or equal to \$8.00**
    - ▶ Met by Routes 1, 2 and 7
    - ▶ Not met by other local routes
  - ▶ **Farebox Ratio:** the proportion of operating costs that are covered by fare revenues
    - ▶ SolTrans standard: **20% or more**
    - ▶ Only met by Route 1

# Passengers per Vehicle-Hour

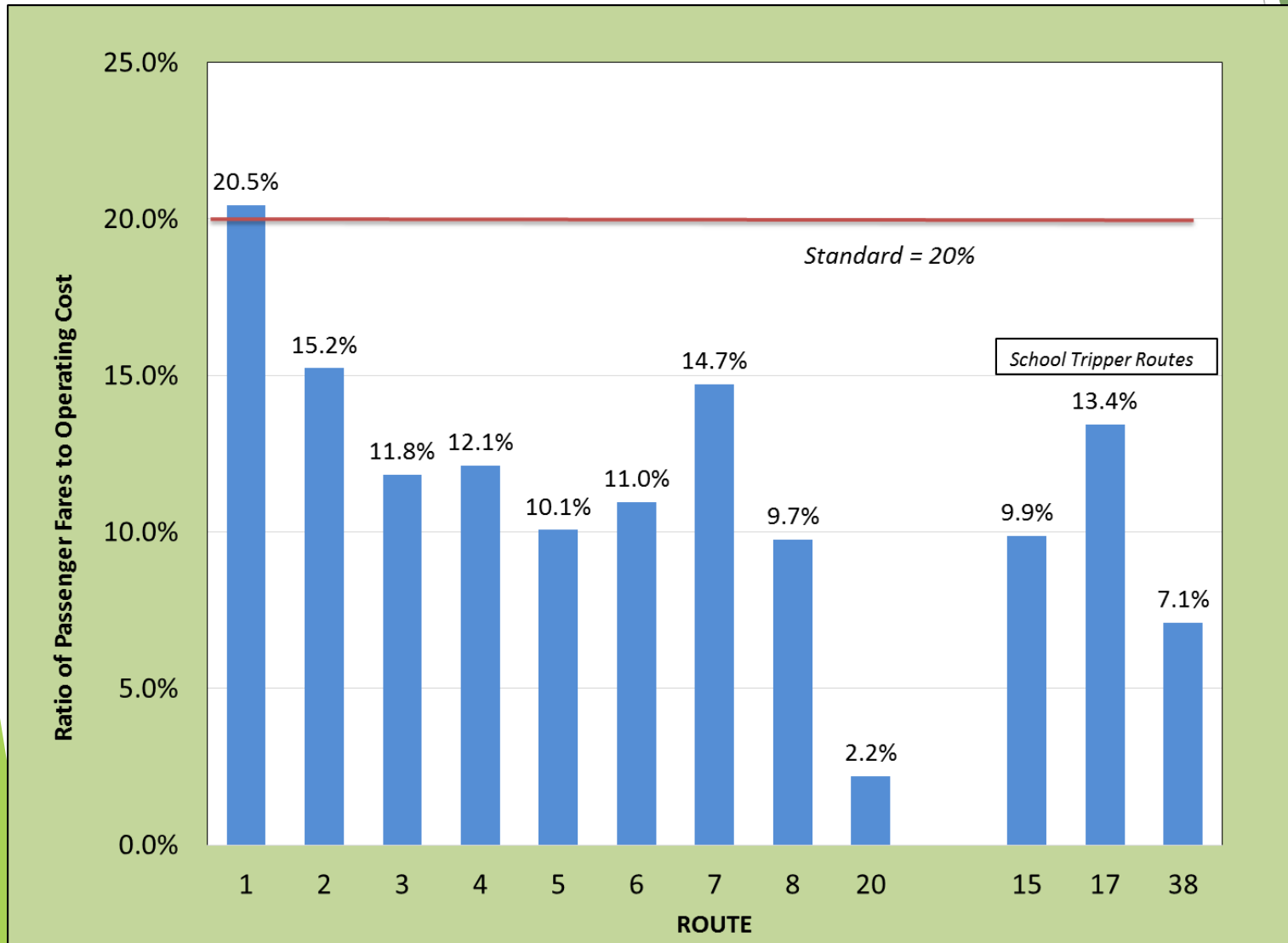
## Productivity





# Farebox Return Ratio

Passenger Fares Divided by Marginal Operating Costs



# General Public Dial-A-Ride

- ▶ Service in Benicia, Monday - Saturday
- ▶ \$2.00 fare for general public, \$1.00 fare for Seniors in mid-morning to mid-afternoon
- ▶ **Serves 4,500 passenger per year**
- ▶ Performance Measures:
  - ▶ Productivity = 1.9 passengers per vehicle-hour
  - ▶ **Costs \$35 per passenger**
  - ▶ **2% farebox ratio**
- ▶ proportion of missed trips, late cancellations and “no shows” are within industry standards

# Local Taxi Scrip Program

- ▶ Available to persons with disabilities, Seniors and Medicare cardholders, throughout Vallejo and Benicia
- ▶ Service provided by Veterans Corporation and Liberty Transit
  - ▶ Veterans Corp - 55%
  - ▶ Liberty Transit - 45%
  - ▶ **7,300 trips provided annually**
- ▶ Productivity = 10.6 per vehicle-hour
  - ▶ Subsidy provided per passenger = \$27.87
- ▶ 18% of passengers travel on Saturday, 11% on Sunday
- ▶ Service available 24 hours, but 89% of the trips occur between 8AM - 6PM
- ▶ Ridership is concentrated in downtown and neighborhoods just north and east of downtown areas



# Initial List of Alternatives for Evaluation

(In No Particular Order)

- ▶ Consider a north-south route east of I-80
- ▶ Develop a high-frequency/high-amenity corridor along North Broadway north from VTC
- ▶ Revise Route 1 to operate along Broadway Street in both directions, rather than Sonoma Boulevard
- ▶ Revise Route 2 to eliminate the one-direction segments north of SR 37 and improve running times
- ▶ Revise Route 8 to eliminate the second loop around Ascot Parkway and Georgia Street
- ▶ Eliminate/Revise Route 20



# Initial List of Alternatives for Evaluation

(In No Particular Order)

- ▶ Revise Route 3 to eliminate the long in-vehicle travel times, such as splitting route
- ▶ Revise schedules to provide better transfer opportunities at STC
- ▶ Provide weekday evening service until 9 PM
- ▶ Provide consistent Sunday service on Routes 1 and 7 (fill in the afternoon schedule gap)
- ▶ Eliminate Saturday Route 8 service
- ▶ Reduce Saturday Route 6 service to 8:30 AM – 4:30 PM
- ▶ Eliminate Sunday service
- ▶ Provide consistent hourly service frequency on Saturdays
- ▶ Reduce service frequency on Route 7 during mid-day

# Initial List of Alternatives for Evaluation

(In No Particular Order)

- ▶ Provision of subsidized Transportation Network Company (TNC) services (such as Lyft, Uber or local taxi) to address lower-demand public transit needs. Possible applications are:
  - ▶ *Replace the General Public DAR service with TNC service*
  - ▶ *Expand the Local Taxi Scrip program to also include TNC service*
  - ▶ *Serve Glen Cove/Beverly Hills with TNC service*
- ▶ Ensure passengers are aware that local fares apply to SolanoExpress trips which are wholly within the local route service area
- ▶ Consider other options to increase overall service by 25 percent
- ▶ In addition, a “clean slate” analysis will be conducted

**Other Alternatives?**

**Other Comments?**

**[www.soltransride.com/planning/coa/](http://www.soltransride.com/planning/coa/)**

***Thank You!***