



SOLTRANS COMPREHENSIVE OPERATIONAL ANALYSIS

Working Paper Two: Existing System Analysis

Prepared for
**SOLANO COUNTY TRANSIT
Vallejo, California**

SOLTRANS COMPREHENSIVE OPERATIONAL ANALYSIS

Working Paper 2: Existing System Analysis

Prepared for

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Chapter 1

Introduction

Solano County's SolTrans services are important to many residents of the Vallejo and Benicia area. To ensure that the SolTrans program can best serve the region in the future, SolTrans is conducting a thorough review and reassessment of the local transit program, including the fixed route services, Dial-A-Ride service and Local Taxi Scrip program. This document is the second of several "Working Papers" that provide interim information on the study. This Working Paper presents a detailed review of existing SolTrans services, performance, and passenger characteristics. Chapter 2 presents a review of the fixed route services, while Chapter 3 presents a review of the General Public Dial-A-Ride service and Local Taxi Scrip programs. Chapter 4 then identifies potential areas for future analysis that have high potential to improve the effectiveness or efficiency of the SolTrans services. Subsequent study documents will focus on the detailed analysis of service strategies. After public review, these documents will form the basis of the draft and final plan documents.

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Review of Existing Local Fixed Route Service

This chapter presents a detailed review and evaluation of the existing local fixed route SolTrans service. It includes a review of service structure, performance, ridership patterns, route analysis, and on-time performance.

Existing Service Description

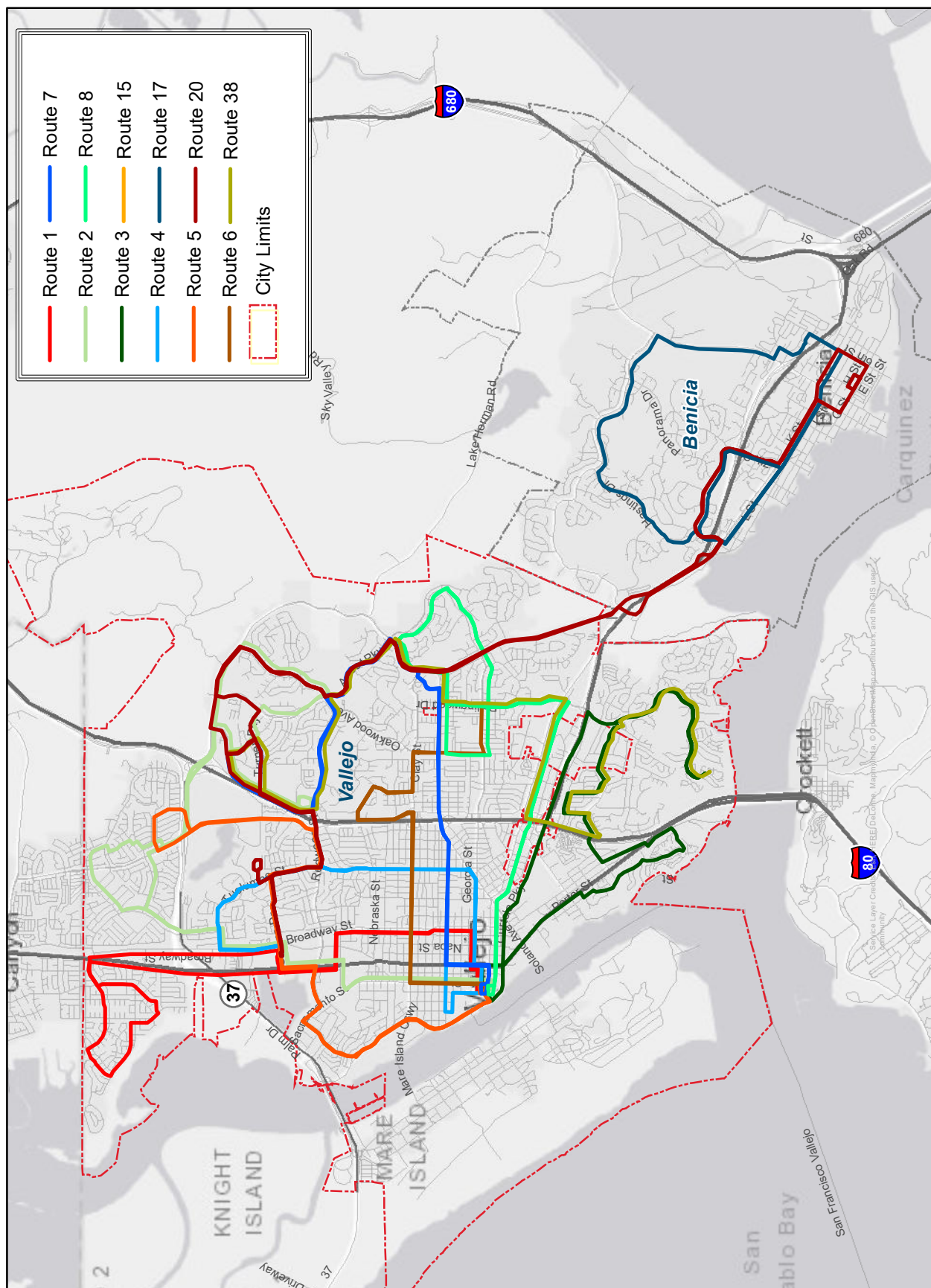
The SolTrans local fixed route transit services within the Vallejo / Benicia area consist of the following:

- Nine fixed routes operating throughout the service day (Routes 1 through 8, and Route 20). An additional route (Route 9) that served Mare Island was recently discontinued due to very low ridership.
- Three fixed routes providing limited services around school bell times (Routes 15, 17 and 38). Route 38 service was initiated in the fall of 2017.

Figure 1 depicts these existing routes. In addition, the regional express routes (SolanoExpress Routes 78, 80, 82 and 85) serve limited stops within the local service area, serving some local passenger-trips. In particular, Route 78 provides the only direct service between downtown Vallejo and Benicia, as part of the route to Walnut Creek.

The regular local routes can be summarized as follows:

- **Route 1 (Broadway)** extends northward from the Vallejo Transit Center (VTC) along Broadway and Sonoma Boulevard to the Sereno Transit Center (STC), then along Sonoma Boulevard northbound as far north as Mini Drive (just south of the city limits) before turning west to serve a loop through a large residential area. It then serves southbound Broadway to the STC before following the outbound route back to the VTC. Key activity centers served by this route include Vallejo High School and a wide range of commercial centers.
- **Route 2 (Northeast)** is a relatively long route that travels north from the VTC along Sacramento Street and Sonoma Boulevard to the STC, the route continues northward along Broadway and Mini Drive as far as Whitney Drive. At this point, the two directions split to create a one-way “bubble” in the route, with the outbound direction traveling east along Corcoran Drive and south through a residential neighborhood before traveling east on US 37 and Columbus Parkway. A large clockwise one-way loop is then operated via Redwood Parkway and Ascot Parkway to the Gateway Plaza and Target



Center. The return route travels north on Admiral Callaghan Lane, west on Columbus Parkway, north on Fairgrounds Drive and west on Whitney Drive to return south to STC and VTC via the outbound route. This route serves Solano Community College, Jesse Bethel High School, Solano Middle School and extensive commercial centers in the Gateway Plaza area.

- **Route 3 (Glen Cove)** is largely a one-way clockwise loop serving the Glen Cove area and southwest Vallejo. In addition to California State University Maritime Academy, this route serves a variety of elementary and charter schools as well as many residential areas. This is the only SolTrans local route which serves the Curtola Park-n-Ride.
- **Route 4 (Tuolumne)** connects VTC and STC via an indirect route using Georgia Street east of downtown, Tuolumne Street north and west to Broadway, and Broadway south to STC. It provides access to both Sutter Solano Medical Center and Kaiser Medical Center, a community center, as well as City and County offices.
- **Route 5 (Fairgrounds)** serves the Federal Terrace area northwest of downtown as part of a route between VTC and STC. It then extends east along Sereno Drive and Redwood Street, and then north along Fairgrounds Drive to a small terminal loop just north of SR 37, before returning along the outbound route. It serves the Fairgrounds/Six Flags area, the two major medical complexes, and a wide range of residential and commercial areas.
- **Route 6 (Tennessee)** travels north from VTC on Sacramento Street before heading east to largely serve the Tennessee Street corridor. Just east of I-80 it diverts to the north as far as Fleming Avenue for a few blocks, and then returns to Tennessee Street before serving a clockwise terminal loop comprised of Springs Road, Rollingwood Drive, Georgia Street and Oakwood Avenue before returning to the VTC on the outbound route. This route serves Hogan Middle School, a variety of smaller commercial centers, an aquatic center and residential areas.
- **Route 7 (Springs Road)** heads east from VTC along the Florida Street and Springs Road Corridor as far as Avian Drive, and then turns north and northwest via Columbus Parkway, Ascot Parkway, Redwood Parkway and Admiral Callaghan Lane to a small terminal loop in the Redwood Plaza area. It then returns to VTC along the outbound route. Key activity centers served by this route include Jesse Bethel High School, Vallejo Adult School, and several commercial (including Gateway Plaza) and social centers.
- **Route 8 (Benicia Road)** travels east from VTC along Maine Street and Benicia Road to Rollingwood Drive, and then north to Georgia Street. It then serves a large clockwise loop via Oakwood Avenue, Springs Road, Columbus Drive, Ascot Drive, and Georgia Street. This loop is operated twice, before the bus return to the VTC via Rollingwood

Drive, Benicia Road and Maine Street. It connects residential areas with Hogan Middle School and commercial centers in southeast Vallejo, as well as with downtown.

- **Route 20** is the only regular local route not serving the VTC. Instead, it connects STC with Benicia via a long route along the northern and eastern portions of Vallejo, focusing on Redwood Street/Parkway, Ascot Parkway and Columbus Parkway. Major activity centers served consist of the two medical centers, Redwood Plaza, Jesse Bethel High School, and the commercial centers in the Benicia core area. This is a demonstration route pending the results of this COA study, and currently funded through December 2018.

The routes as a whole form a “pulse” system focused on the VTC with a secondary pulse point at the STC. Routes pulse out of the VTC on an hourly or half-hourly basis. This provides a high level of service into and out of downtown Vallejo, but makes for complicated route choices for some trips in other portions of the service area.

The three tripper buses consist of the following:

- **Route 15** is a large one-way clockwise loop connecting northwest Benicia residential areas with Benicia Middle School and Benicia High School (along with the two elementary schools).
- **Route 17** is a similar route, serving northeast Benicia residential areas. Both Routes 15 and 17 have been established for many years.
- **Route 38** is a new route intended to connect the southern Glen Cove area with Jesse Bethel High School, in the morning only.

Table 1 presents a summary of existing spans of service (the hours and days that service is operated), service frequency, the daily operating parameters (vehicle-hours of service, vehicle-miles of service, and peak vehicles) as well as the route cycle length (the minutes needed to complete one route round trip, including layover/makeup time). Table 2 presents the span of service and frequency information in a more visual format. Key characteristics of the existing local fixed route service are as follows:

- Regular weekday services start as early as 5:30 AM (Route 1) and as late at 8:30 AM (Route 20), and end as early as 6:25 PM (Route 4) and as late as 8:43 PM (Route 7). A total of 20 buses are in operation at the peak time on weekdays (including the tripper routes).
- All regular routes operate on Saturdays, with the exception of Route 20. The first route starts at 6:30 AM (Route 2) and the last run ends at 7:38 PM (Route 7). Nine buses are required to operate Saturday service at the peak time.

| TABLE 1: Summary of SolTrans Local Fixed Route Services | | | | | | | | | | | | | | | | |
|---|------------------|----------|---------|---------|---------|---------|---------|----------|---------|------------|-------|-----|-----------|-----------|----------|-------|
| Excluding Express Routes | | | | | | | | | | | | | | | | |
| Regular Routes | | | | | | | | | | | | | | | | |
| 1234567820 ³ | | | | | | | | | | | | | | | | |
| BroadwayNortheastGlen CoveTuolumneFairgroundsTennesseeSprings RdBenicia RdColumbusSubtotal151738Total | | | | | | | | | | | | | | | | |
| Weekday | Start of Service | 5:30 AM | 5:59 AM | 6:00 AM | 6:53 AM | 6:30 AM | 6:25 AM | 6:20 AM | 6:31 AM | 8:30 AM | -- | -- | 7:05 AM | 7:02 AM | 7:00 AM | |
| | End of Service | 7:32 PM | 8:17 PM | 7:22 PM | 6:25 PM | 7:25 PM | 7:23 PM | 8:43 PM | 7:21 PM | 7:46 PM | -- | -- | 4:06 PM | 4:12 PM | 7:36 AM | |
| Saturday | Start of Service | 6:45 AM | 6:30 AM | 6:45 AM | 7:56 AM | 6:45 AM | 7:01 AM | 6:30 AM | 7:57 AM | -- | -- | -- | -- | -- | -- | |
| | End of Service | 7:09 PM | 6:45 PM | 6:22 PM | 6:52 PM | 6:25 PM | 6:17 PM | 7:38 PM | 6:19 PM | -- | -- | -- | -- | -- | -- | |
| Sunday | Start of Service | 8:30 AM | -- | -- | -- | -- | -- | 8:30 AM | -- | -- | -- | -- | -- | -- | -- | |
| | End of Service | 11:26 AM | -- | -- | -- | -- | -- | 2:13 PM | -- | -- | -- | -- | -- | -- | -- | |
| | Start of Service | 4:30 PM | -- | -- | -- | -- | -- | 5:00 PM | -- | -- | -- | -- | -- | -- | -- | |
| | End of Service | 7:26 PM | -- | -- | -- | -- | -- | 7:43 PM | -- | -- | -- | -- | -- | -- | -- | |
| Service Frequency (Minutes) | Weekday Peak | 30 | 30 | 30 | 30 | 30 | 60 | 30 | 60 | 6 Runs/Day | -- | -- | 2 AM Runs | 2 AM Runs | 1 AM Run | |
| | Weekday Offpeak | 30 | 30 | 60 | 60 | 60 | 60 | 30 | 60 | 60 | -- | -- | 3 PM Runs | 2 PM Runs | -- | |
| # Peak Buses in Operation | Saturday | 60 | 90 | 60 | 60 | 60 | 90 | 30 to 90 | 60 | -- | -- | -- | -- | -- | -- | |
| | Sunday | 60 | -- | -- | -- | -- | -- | 90 | -- | -- | -- | -- | -- | -- | -- | |
| | Weekday | 2 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 17 | 1 | 1 | 1 | 1 | |
| Daily Vehicle-Hours of Service ¹ | Saturday | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | -- | 9 | -- | -- | -- | -- | 9 |
| | Sunday | 1 | -- | -- | -- | -- | -- | 1 | -- | 2 | -- | -- | -- | -- | -- | 2 |
| | Weekday | 27.2 | 41.3 | 13.4 | 13.4 | 13.4 | 13.0 | 41.7 | 12.8 | 12.8 | 188.8 | 2.3 | 2.2 | 2.2 | 0.6 | 193.9 |
| Daily Vehicle-Miles of Service ² | Saturday | 24.4 | 24.3 | 11.6 | 10.9 | 11.7 | 10.8 | 18.5 | 10.4 | 0.0 | 122.5 | 0.0 | 0.0 | 0.0 | 0.0 | 122.5 |
| | Sunday | 5.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.4 | 0.0 | 0.0 | 14.3 | 0.0 | 0.0 | 0.0 | 0.0 | 14.3 |
| | Weekday | 350 | 495 | 173 | 159 | 184 | 164 | 438 | 200 | 223 | 2,386 | 28 | 33 | 33 | 10 | 2,456 |
| Cycle Length (Min) | Saturday | 315 | 290 | 150 | 130 | 160 | 137 | 195 | 162 | 0 | 1,538 | 0 | 0 | 0 | 0 | 1,538 |
| | Sunday | 76 | 0 | 0 | 0 | 0 | 0 | 89 | 0 | 0 | 164 | 0 | 0 | 0 | 0 | 164 |
| | | 60 | 75 | 60 | 60 | 60 | 60 | 75 | 60 | 60 | | 51 | 47 | 36 | | |
| Source: LSC Transportation Consultants, Inc. | | | | | | | | | | | | | | | | |
| Note 1: Revenue Hours. | | | | | | | | | | | | | | | | |
| Note 2: Revenue Miles. | | | | | | | | | | | | | | | | |
| Note 3: Start time was 7:24 AM in 2016-17, but moved to 8:30 AM in 2017-18. | | | | | | | | | | | | | | | | |

TABLE 2: SolTrans Route Frequency by Day/Time

Excludes Regional Routes

| | | Routes | | | | | | | | | | | |
|---------------------------|----------|--------|----|----|----|----|----|----|----|-----|--------|--------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 20 | 15 | 17 | 38 |
| Weekday (Hour Beginning) | 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 (Hour Beginning) | 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 (Hour Beginning) | 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 | | | | | |

Source: LSC Transportation Consultants, Inc.

- Only two routes (Routes 1 and 7) operate on Sundays, and both routes do not operate over a mid-afternoon break in service. Two buses operate on Sundays.
- On weekdays, three regular routes (Routes 1, 2 and 7) provide consistent 30-minute service frequency throughout the day. Three other routes (Routes 3, 4 and 5) provide 30-minute service during the morning and evening commute periods only, with hourly service at other times. Routes 6 and 8 provide service hourly throughout the day, while Route 20 only provides service every two hours (with a mid-day shift in schedule).
- Saturday service is hourly, except that Route 2 and Route 7 (mid-day only) provide service every 90 minutes.
- Routes 15 and 17 provide two morning runs and three afternoon runs, designed to serve school bell times in Benicia (though all passengers are accommodated). Route 38 consists of a single morning run serving the bell time at Jesse Bethel High School.

In addition, Napa VINE Transit's Route 11 provides local transit options within northern Vallejo as part of a longer route connecting Napa, American Canyon and the Vallejo Transit Center. Along the way, this route serves both the VTC and STC, Kaiser Hospital, and a stop at Mini Drive/Elliott Drive. 22 daily runs are operated on weekdays with an irregular schedule, from 4:52 AM to 8:50 PM. On Saturdays, 12 runs are operated on an hourly headway from 7:36 AM to 7:39 PM, while on Sundays 10 runs are operated on hourly headways from 9:38 AM to 7:40 PM. Base fares are \$1.60 per one way trip for adults, \$1.10 for youth age 6 to 18, and \$0.80 for seniors age 65 and above, Medicare card holders, and persons with disabilities.

Paratransit Service

Under the Americans with Disabilities Act (ADA), a public transit service such as SolTrans is responsible for providing mobility to all residents of the service area, regardless of disability. The ADA Paratransit bus service is available to persons with disabilities unable to board a regular SolTrans fixed route bus, access a SolTrans bus stop, or otherwise navigate the regular fixed route bus system. Riders must qualify and have a disabling condition as defined by the ADA. The Paratransit system provides origin to destination bus service by advance appointment, and rides may be shared with others. Same-day service is not available. The service operates parallel to the fixed route system, during the same hours and days. The Paratransit fares are \$3.00 for local routes and \$5.50 for regional connection trips to other transit agencies' paratransit services.

Transit Centers

The existing local route system focuses on two key transit centers: the Vallejo Transit Center in downtown Vallejo between Sacramento Street and Santa Clara Street just west of York Street, and the Sereno Transit Center along the north side of Sereno Drive between Sonoma Street and Broadway Street. A key factor in the current route schedules is the convenience of transfer

opportunities at these hubs. (While there are other locations around the route system with multiple transfer opportunities – such as Curtola Park-and-Ride and Gateway Plaza – it is largely the transfers at these two hubs that impact passenger travel times.) Table 3 presents a summary of the weekday service times over the course of an hour (excluding peak-period-only runs):

- At the Vallejo Transit Center, all eight routes serving this location (Routes 1 through 8) are on-site at the top of the hour, providing convenient bus-to-bus transfers between all of these routes. In addition, four routes (Routes 1, 2, 4 and 7) are on-site at 30 minutes after the hour to provide convenient transfers between these high-ridership routes.
- At the Sereno Transit Center, schedules are not currently well-coordinated. Routes 1 and 2 in the northbound direction are both on-site at the same time, but other routes are hit-or-miss. For example, Route 5 buses (in both directions) serve this hub just a few minutes after both southbound Route 1 and southbound Route 2 have departed. As a result, Route 5 passengers have long waits to complete trips to the northern portion of downtown Vallejo. Overall, the current schedule does not provide much benefit to passengers that could transfer between routes at this transit center.

Existing Route Interlining and Driver Schedules

Fixed route transit systems often benefit from “interlining” routes – using individual buses to operate different routes in succession. Interlining two routes that have a high proportion of passengers transferring between the routes is a convenience to the passengers in that they need not leave the bus to effectively complete the transfer, and they are assured that they inherently cannot miss their transfer due to a late arriving bus. This strategy can also benefit the transit operations by pairing a route with excess running time with one without excess running time, in order to create a driver schedule that allows the required driver break times and/or to allow late buses to recover the schedule.

The current operating plan interlines the following route pairs:

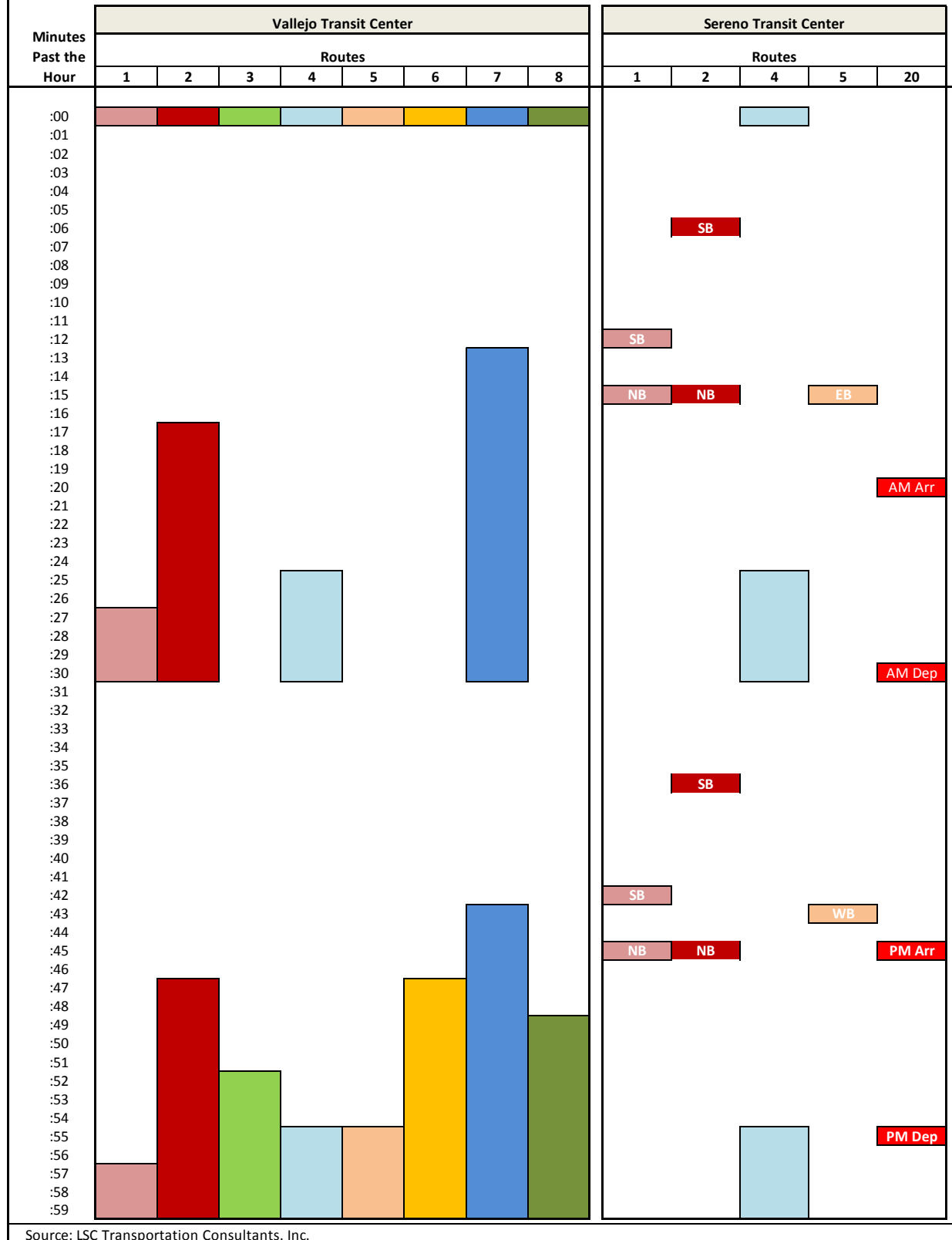
Route 1 and Route 7
Route 4 and Route 8
Route 5 and Route 6

Routes 2, 3 and 20 do not interline (individual buses continually operate only a single route, except that a single bus operating a Route 3 peak run also operates the morning-only Route 38 run).

Table 4 presents the existing weekday local fixed route driver “run blocks” (excluding Routes 15, 17 and 20, which all operate independently). This graphically depicts how individual drivers (and buses) alternate between routes, and how additional buses are used to provide higher frequency service in peak periods on some routes.

TABLE 3: Scheduled Weekday Local Route Transfer Opportunities at Transit Centers

Excluding Limited Peak Additional Runs



Source: LSC Transportation Consultants, Inc.

TABLE 4: Soltrans Local Fixed Route Weekday Block Scheduling

| 15 Min | Run Blocks | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Start Time | 101 | 102 | 103 | 104 | 105 | 201 | 202 | 203 | 204 | 205 | 301 | 302 | 303 | 304 | 305 | 401 | 402 | 403 | 404 | 405 | 406 | 501 | 502 | 503 | 504 |
| 5:30 AM | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5:45 AM | 1 | | | | | 2 | | | | | | | | | | | | | | | | | | | |
| 6:00 AM | 7 | | | | | 2 | 2 | | | | | | | | | | | | | | | | | | |
| 6:15 AM | 7 | 7 | 1 | | | 2 | 2 | | | | | | | | | | | | | | | 6 | | | |
| 6:30 AM | 7 | 7 | 1 | 7 | 1 | 2 | 2 | | | | | | 3 | | | 8 | | | | | | 6 | 5 | | |
| 6:45 AM | 7 | 7 | 1 | 7 | 1 | 2 | 2 | | | | | | 3 | | | 8 | 4 | | | | | 6 | 5 | | |
| 7:00 AM | 7 | 1 | 7 | 7 | 1 | 2 | 2 | 2 | | | | | 38 | | | 4 | 4 | 8 | | | | 5 | 5 | 6 | |
| 7:15 AM | 1 | 1 | 7 | 7 | 1 | 2 | 2 | 2 | | | | | 38 | | | 4 | 4 | 8 | | | | 5 | 5 | 6 | |
| 7:30 AM | 1 | 1 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | | | | 38 | | | 4 | 4 | 8 | | | | 5 | 5 | 6 | |
| 7:45 AM | 1 | 1 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | | | 3 | 38 | | | 4 | 4 | 8 | | | | 5 | 5 | 6 | |
| 8:00 AM | 1 | 7 | 7 | 1 | 7 | 2 | 2 | 2 | 2 | | 3 | 3 | | | | 8 | 4 | 4 | | | | 6 | 5 | 5 | |
| 8:15 AM | 1 | 7 | 7 | 1 | 7 | 2 | 2 | 2 | 2 | | 3 | 3 | | | | 8 | 4 | 4 | | | | 6 | 5 | 5 | |
| 8:30 AM | 7 | 7 | 1 | 1 | 7 | 2 | 2 | 2 | 2 | | 3 | | | | | 8 | | 4 | | | | 6 | | 5 | |
| 8:45 AM | 7 | 7 | 1 | 1 | 7 | 2 | | 2 | 2 | | 3 | | | | | 8 | | 4 | | | | 6 | | 5 | |
| 9:00 AM | 7 | 7 | 1 | 7 | 1 | 2 | | 2 | 2 | | 3 | | | | | 4 | | 8 | | | | 5 | | 6 | |
| 9:15 AM | 7 | 7 | 1 | 7 | 1 | 2 | | 2 | 2 | | 3 | | | | | 4 | | 8 | | | | 5 | | 6 | |
| 9:30 AM | 7 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | | 3 | | | | | 4 | | 8 | | | | 5 | | 6 | |
| 9:45 AM | 7 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | | 3 | | | | | 4 | | 8 | | | | 5 | | 6 | |
| 10:00 AM | 1 | 1 | 7 | 7 | 7 | 2 | | 2 | 2 | | 3 | | | | | 8 | | 4 | | | | 6 | | 5 | |
| 10:15 AM | 1 | 1 | 7 | 7 | 7 | 2 | | 2 | 2 | | 3 | | | | | 8 | | 4 | | | | 6 | | 5 | |
| 10:30 AM | 1 | 7 | 7 | 1 | 7 | 2 | | 2 | 2 | | 3 | | | | | 8 | | 4 | | | | 6 | | 5 | |
| 10:45 AM | 1 | 7 | 7 | 1 | 7 | 2 | | 2 | 2 | | 3 | | | | | 8 | | 4 | | | | 6 | | 5 | |
| 11:00 AM | 7 | 7 | 1 | 1 | 7 | 2 | | 2 | 2 | | 3 | | | | | 4 | | 8 | | | | 5 | | 6 | |
| 11:15 AM | 7 | 7 | 1 | 1 | 7 | 2 | | 2 | 2 | | 3 | | | | | 4 | | 8 | | | | 5 | | 6 | |
| 11:30 AM | 7 | 7 | 1 | 7 | 7 | 2 | | 2 | 2 | | 3 | | | | | 4 | | 8 | | | | 5 | | 6 | |
| 11:45 AM | 7 | 7 | 1 | 7 | 1 | 2 | | 2 | 2 | | 3 | | | | | 4 | | 8 | | | | 5 | | 6 | |
| 12:00 PM | 7 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | | 3 | | | | | 8 | | 4 | | | | 6 | | 5 | |
| 12:15 PM | 7 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | | 3 | | | | | 8 | | 4 | | | | 6 | | 5 | |
| 12:30 PM | 1 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | | 3 | | | | | 8 | | | | | 4 | 6 | 5 | | |
| 12:45 PM | 1 | 1 | 7 | 7 | 7 | 2 | | 2 | 2 | | 3 | | | | | 8 | | | | | 4 | 6 | 5 | | |
| 1:00 PM | 1 | 7 | 7 | 1 | 7 | 2 | | 2 | 2 | | | | | 3 | 4 | | | | | | 8 | 5 | 6 | | |
| 1:15 PM | 1 | 7 | 7 | 1 | 7 | 2 | | 2 | 2 | | | | | 3 | 4 | | | | | | 8 | 5 | 6 | | |
| 1:30 PM | 7 | 7 | 1 | 1 | 7 | 2 | | 2 | 2 | | | | | 3 | | | | | | 4 | 8 | 5 | 6 | | |
| 1:45 PM | 7 | 7 | 1 | 1 | 7 | 2 | | 2 | 2 | | | | | 3 | | | | | | 4 | 8 | 5 | 6 | | |
| 2:00 PM | 7 | 7 | 1 | 7 | 7 | 2 | | 2 | 2 | | | | | 3 | | | | | | 8 | 4 | 6 | 5 | | |
| 2:15 PM | 7 | 7 | 1 | 7 | 7 | 2 | | 2 | | 2 | | | | 3 | | | | | | 8 | 4 | 6 | 5 | | |
| 2:30 PM | 7 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | 2 | | | | 3 | | | | | | 8 | 4 | 6 | 5 | | |
| 2:45 PM | 7 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | 2 | | | | 3 | | | | | | 8 | 4 | 6 | 5 | | |
| 3:00 PM | 1 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | 2 | | | | 3 | | | | | | 4 | 8 | 5 | 6 | | |
| 3:15 PM | 1 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | 2 | | | | 3 | | | | | | 4 | 8 | 5 | 6 | | |
| 3:30 PM | 1 | 7 | 7 | 1 | 7 | 2 | | 2 | 2 | 2 | | | | 3 | | | | | | 4 | 8 | 5 | 6 | | |
| 3:45 PM | 1 | 7 | 7 | 1 | 7 | 2 | | 2 | 2 | 2 | | | | 3 | | | | | | 4 | 8 | 5 | 6 | | |
| 4:00 PM | 7 | 7 | 1 | 1 | 7 | 2 | | 2 | 2 | 2 | | | | 3 | | | | | | 8 | 4 | 6 | 5 | | |
| 4:15 PM | 7 | 7 | 1 | 1 | 7 | 2 | | 2 | 2 | 2 | | | | 3 | | | | | | 8 | 4 | 6 | 5 | | |
| 4:30 PM | 7 | 7 | 1 | 7 | 7 | 2 | | 2 | 2 | 2 | | | 3 | 3 | | | | | 4 | 8 | 4 | 6 | 5 | 5 | |
| 4:45 PM | 7 | 7 | 1 | 7 | 7 | 2 | | 2 | 2 | 2 | | | 3 | 3 | | | | | 4 | 8 | 4 | 6 | 5 | 5 | |
| 5:00 PM | 7 | 1 | 7 | 7 | 7 | 2 | | 2 | 2 | 2 | | | 3 | 3 | | | | | 4 | 4 | 8 | 5 | 6 | 5 | |
| 5:15 PM | 7 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | 2 | | | 3 | 3 | | | | | 4 | 4 | 8 | 5 | 6 | 5 | |
| 5:30 PM | 1 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | 2 | | | 3 | 3 | | | | | 4 | 4 | 8 | 5 | 6 | 5 | |
| 5:45 PM | 1 | 1 | 7 | 7 | 1 | 2 | | 2 | 2 | 2 | | | | 3 | | | | | 4 | 4 | 8 | 5 | 6 | 5 | |
| 6:00 PM | 1 | 7 | 7 | 1 | 1 | 2 | | 2 | 2 | 2 | | | 3 | | | | | | 8 | 4 | 6 | 5 | 5 | | |
| 6:15 PM | 1 | 7 | 7 | 1 | 7 | 2 | | 2 | 2 | 2 | | | 3 | | | | | | 8 | 4 | 6 | 5 | 5 | | |
| 6:30 PM | 7 | 7 | 1 | 1 | 7 | 2 | | 2 | 2 | 2 | | | 3 | | | | | | 8 | | 6 | 5 | 5 | | |
| 6:45 PM | 7 | 7 | 1 | 1 | 7 | 2 | | 2 | 2 | 2 | | | | 3 | | | | | 8 | | 6 | 5 | 5 | | |
| 7:00 PM | 7 | 7 | 1 | 7 | 7 | 2 | | 2 | 2 | 2 | | | | | | | | | 8 | | | 6 | 5 | 5 | |
| 7:15 PM | 7 | | 1 | 7 | 7 | 2 | | 2 | 2 | 2 | | | | | | | | | 8 | | | | 6 | 5 | |
| 7:30 PM | 7 | | 7 | 7 | 7 | 2 | | 2 | 2 | 2 | | | | | | | | | 8 | | | | 6 | 5 | |
| 7:45 PM | 7 | | 7 | 7 | 2 | | | 2 | 2 | 2 | | | | | | | | | 8 | | | | 6 | 5 | |
| 8:00 PM | | | 7 | 7 | | | | 2 | 2 | 2 | | | | | | | | | | | | | | | |
| 8:15 PM | | | 7 | 7 | | | | 2 | 2 | 2 | | | | | | | | | | | | | | | |
| 8:30 PM | | | 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8:45 PM | | | 7 | | | | | | | | | | | | | | | | | | | | | | |

Source: LSC Transportation Consultants, Inc.

Source: LSC Transportation Consultants, Inc.

Fares

SolTrans local route base fares are \$1.75 for adults, \$1.50 for youth age 6 to 18, \$0.85 for seniors (age 65 and above), Medicare card holders and persons with disabilities, and \$0.25 for persons that are ADA certified. Day passes are available for \$4.00 for adults, \$3.00 for youth, and \$2.00 for seniors/disabled/Medicare card holders. Ten-ride tickets are available for these three categories for \$15.00, \$12.00 and \$7.00, respectively, while 31-day passes are available for \$56.00, \$44.00 and \$28.00. SolanoExpress Route fares are substantially higher than the local fares. As an example, the adult one-way fare is \$5.00 (almost three times the cost of a local fare). However, passengers riding locally may request the local fare for a local trip, but this is not currently published information.

Existing Route Annual Service Quantities, Costs and Ridership

Table 5 presents the annual quantities of service, operating costs and ridership for the various local routes. These figures reflect the most recent full year of service (FY 2016/17), except that estimated FY 2017/18 figures are shown for the recently-inaugurated Route 38. A review of this data indicates the following:

- The revenue vehicle-hours of service total 57,786 per year. Of this, 56,714 are generated by the nine regular routes, while only 2 percent (1,072) is generated by the tripper routes. Figure 2 depicts the relative quantity of service by route.
- A total of 731,395 revenue vehicle-miles are operated over a year, consisting of 716,612 operated on the regular routes and 14,783 operated on the tripper routes. The overall average operating speed is 12.6 miles per hour on the regular routes and 13.8 on the tripper routes.
- SolTrans has a detailed cost allocation procedure that can be used to estimate the operating costs associated with each route. This procedure can be summarized into the following equation:

$$\begin{aligned}\text{Annual Operating Cost (FY 2016/17)} = & \$80.89 \times \text{Revenue Vehicle-Hours} + \\ & \$1.00 \times \text{Revenue Vehicle-Miles} + \\ & \$177,219 \times \text{Peak Buses in Service}\end{aligned}$$

Note that the first two factors (revenue vehicle-hours and revenue vehicle-miles) reflect the marginal operating costs specific to each individual route, such as driver wages/benefits, fuel costs and maintenance costs. The peak-bus factor is used to allocate overhead costs (such as management costs and facility operating costs) to the individual routes. The resulting costs therefore reflect both marginal operating costs as well as other ongoing costs. These costs total just under \$6.3 Million per year, of which

TABLE 5: Annual Routes Service Quantities and Performance Analysis

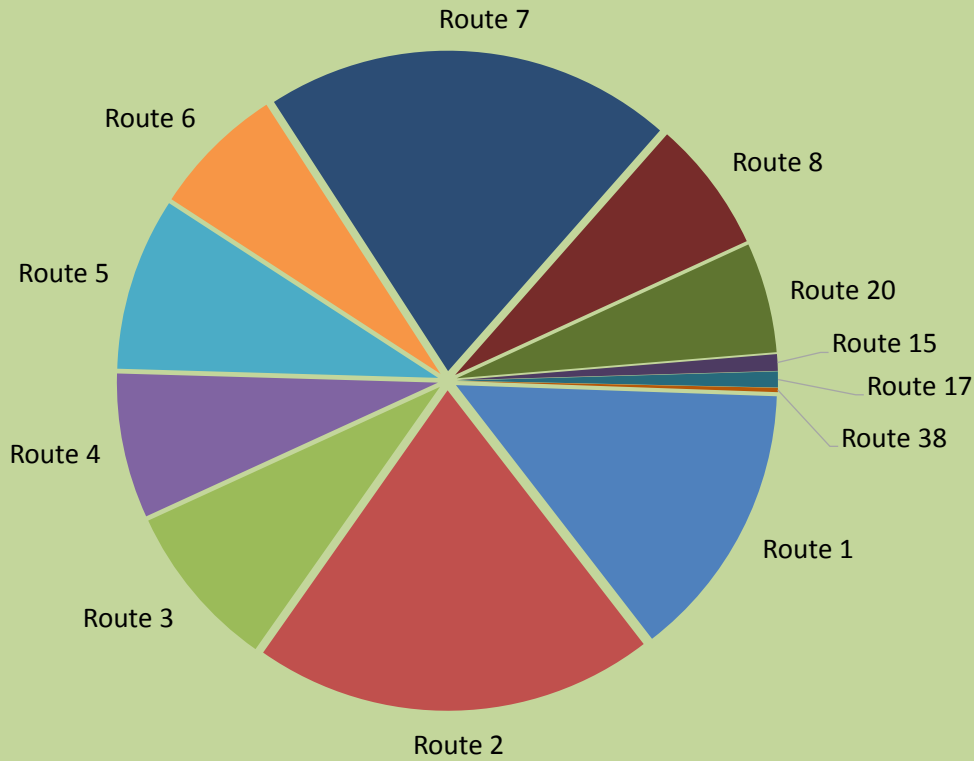
All Figures FY 2016/17, Except Route 38 is Estimated FY 2017/18

| Route | Annual Service Quantities | | | | | Performance Analysis | | | | |
|--|---------------------------|------------------|-------------|-----------|--------------------|----------------------|----------------------|------------------|---------------------|------------------|
| | Revenue Hours | Revenue Miles | Total Cost | Ridership | Farebox Revenue | Psgr per Rev. Hr | Psgr per Rev. Mi. | Cost per Psgr | Subsidy per Psgr | Farebox Ratio |
| Standard (1) -- Values Achieving Standard Shaded | | | | | | | | | | |
| | 12.0 | 1.00 | | | | | | \$8.00 | NA | 20.0% |
| 1 | 8,082 | 104,257 | \$788,227 | 135,409 | \$161,195 | 16.8 | 1.30 | \$5.82 | \$4.63 | 20.5% |
| 2 | 11,674 | 139,736 | \$1,230,653 | 168,443 | \$187,389 | 14.4 | 1.21 | \$7.31 | \$6.19 | 15.2% |
| 3 | 4,858 | 62,840 | \$526,829 | 51,463 | \$62,299 | 10.6 | 0.82 | \$10.24 | \$9.03 | 11.8% |
| 4 | 4,222 | 50,176 | \$574,671 | 64,509 | \$69,596 | 15.3 | 1.29 | \$8.91 | \$7.83 | 12.1% |
| 5 | 5,040 | 69,271 | \$631,300 | 59,559 | \$63,514 | 11.8 | 0.86 | \$10.60 | \$9.53 | 10.1% |
| 6 | 3,871 | 49,016 | \$383,610 | 39,239 | \$42,013 | 10.1 | 0.80 | \$9.78 | \$8.71 | 11.0% |
| 7 | 11,906 | 125,207 | \$1,128,344 | 141,076 | \$166,000 | 11.8 | 1.13 | \$8.00 | \$6.82 | 14.7% |
| 8 | 3,851 | 60,006 | \$399,341 | 30,580 | \$38,921 | 7.9 | 0.51 | \$13.06 | \$11.79 | 9.7% |
| 20 | 3,212 | 56,103 | \$371,521 | 6,496 | \$8,123 | 2.0 | 0.12 | \$57.19 | \$55.94 | 2.2% |
| Subtotal: Reg. Routes | 56,714 | 716,612 | \$6,034,495 | 696,774 | \$799,051 | 12.3 | 0.97 | \$8.66 | \$7.51 | 13.2% |
| 15 | 483 | 5,917 | \$114,067 | 7,505 | \$11,249 | 15.5 | 1.27 | \$15.20 | \$13.70 | 9.9% |
| 17 | 464 | 6,848 | \$114,800 | 9,733 | \$15,413 | 21.0 | 1.42 | \$11.79 | \$10.21 | 13.4% |
| 38 (2) | 125 | 2,018 | \$30,058 | 1,853 | \$2,131 | 14.9 | 0.92 | \$16.22 | \$15.07 | 7.1% |
| Subtotal: Tripper Routes | 1,072 | 14,783 | \$258,925 | 19,091 | \$28,793 | 17.8 | 1.29 | \$13.56 | \$12.05 | 11.1% |
| Total Local Routes | 57,786 | 731,395 | \$6,293,420 | 715,865 | \$827,844 | 12.4 | 0.98 | \$8.79 | \$7.63 | 13.2% |

Note 1: Source -- SolTrans 2016 SRTP, and SolTrans 2018 Mission, Values and Goals

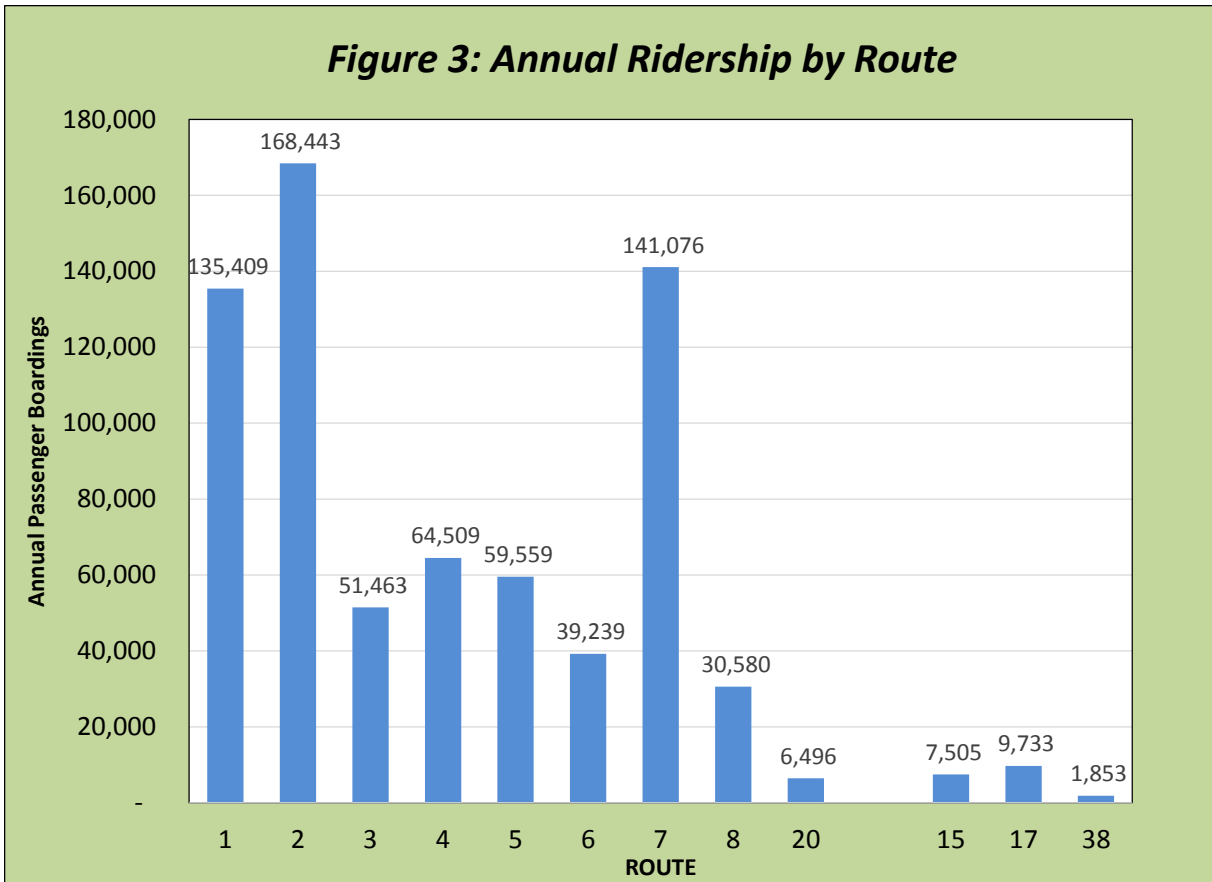
Note 2: Route 38 figures based on data through January 2018, factored to reflect a full school year.

Figure 2: Relative Annual Revenue Vehicle-Hours



96 percent (\$6.0 Million) are for the regular routes and the remaining \$0.3 Million are for the tripper routes.

- Total annual ridership equals 715,865, of which 696,774 (97 percent) is on the regular routes and the remaining 19,091 (3 percent) is on the tripper routes. As also shown in Figure 3, ridership is concentrated on three routes (Routes 1, 2 and 7) which together carry fully 62 percent of all local route ridership, all with ridership of at least 135,409 per year. Routes 3, 4, 5, 6 and 8 form a second tier, ranging between 30,580 to 64,509 passenger boardings per year, while the remaining routes all serve less than 10,000 per year.
- Farebox revenue (including pass revenue allocated by the proportion of pass use on each route) total \$827,844, and follows a pattern very similar to ridership. The average fare revenue per passenger ranges from a low of \$1.07 (on Routes 5 and 6) to a high of \$1.58 on Route 17. The tripper routes average a substantially higher fare per passenger (\$1.51) than the regular routes (\$1.15).



Existing Annual Route Performance Analysis

SolTrans has established a series of standard performance measures that are used to judge the performance effectiveness and cost efficiency of the various routes and services. The following local fixed route standards can be used to evaluate each of the existing routes, as shown in the right-hand portion of Table 5:

- Passenger-Trips per Revenue Vehicle-Hour (Standard = At Least 12.0)** – This is the key measure of the productivity of a fixed-route transit service, as most of the costs of service are associated with vehicle-hours rather than vehicle-miles. As also shown in Figure 4, the best routes by this measure are the tripper routes (ranging between 14.9 for Route 38 and 21.0 for Route 17) followed by Route 1 (16.8). In addition to these routes, two other routes also attain the standard: Route 2 at 14.4 and Route 4 and 15.3. The remaining routes fall below the standard, as low as 2.0 for Route 20.

Passenger-Trips per Revenue Vehicle-Mile (Standard = At Least 1.0) – The values for the individual routes range from a low of 0.12 for Route 20 to a high of 1.42 for Route 17, as shown in Figure 5. Among the regular routes, four achieve the standard (Route 1, 2, 4, and 7) and the remaining five do not. Of the tripper routes, the long-established Route 15 and 17 attain the standard, while the newer Route 38 falls just below (0.92).

Figure 4: Passenger-Trips per Service Vehicle-Hour

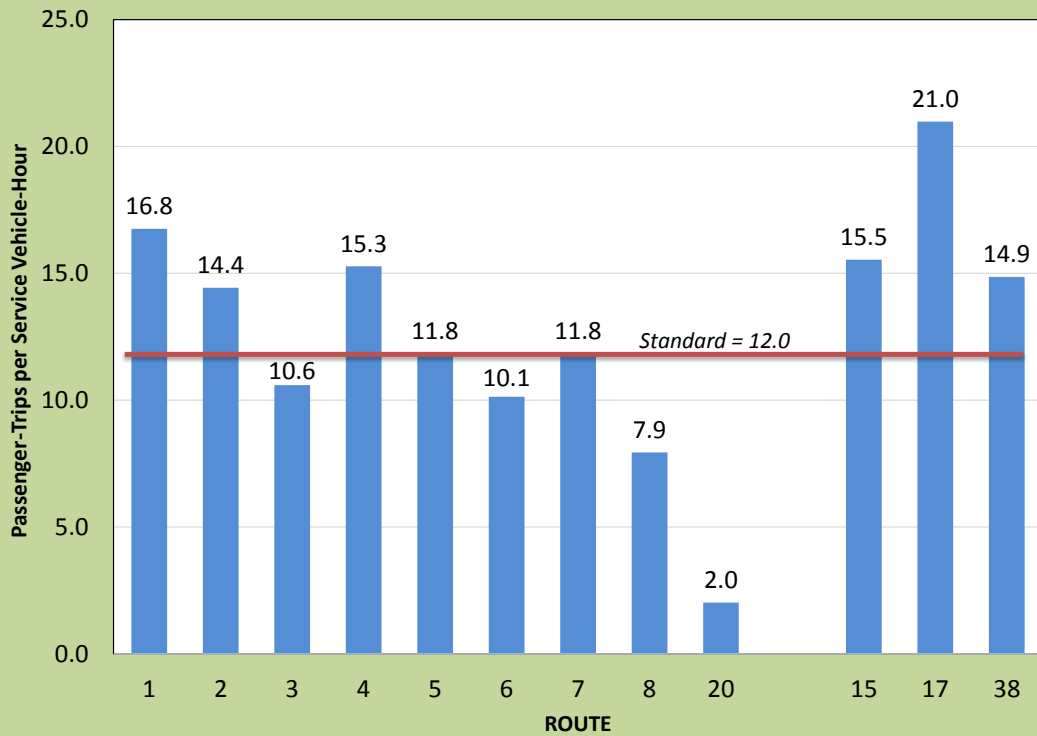
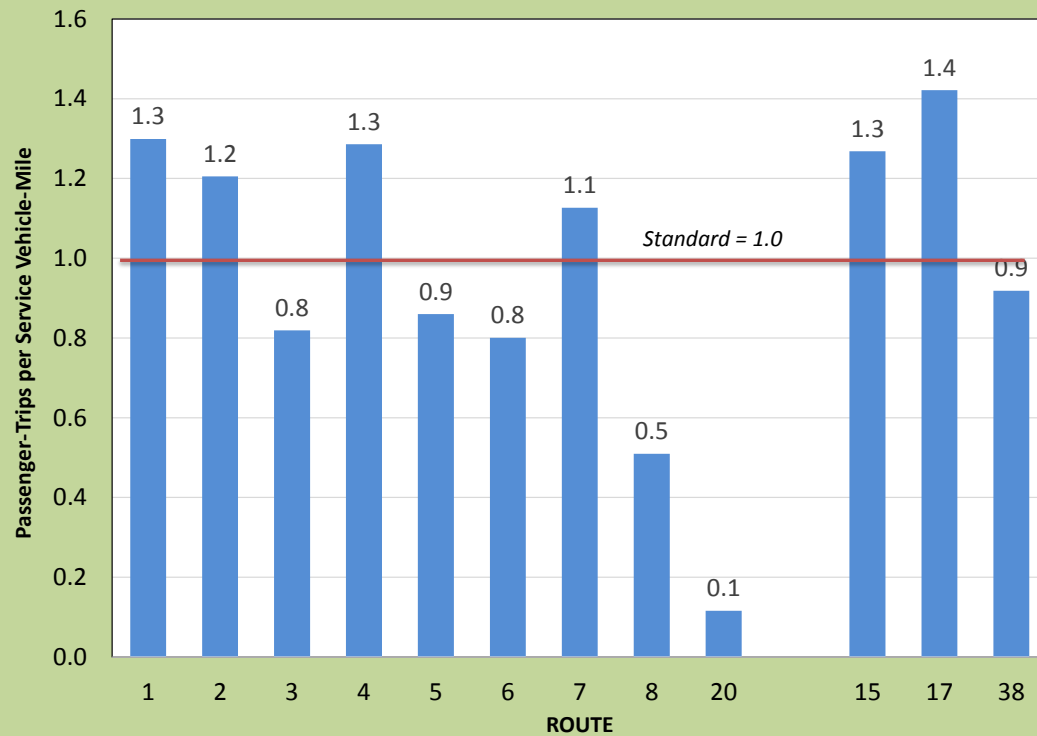
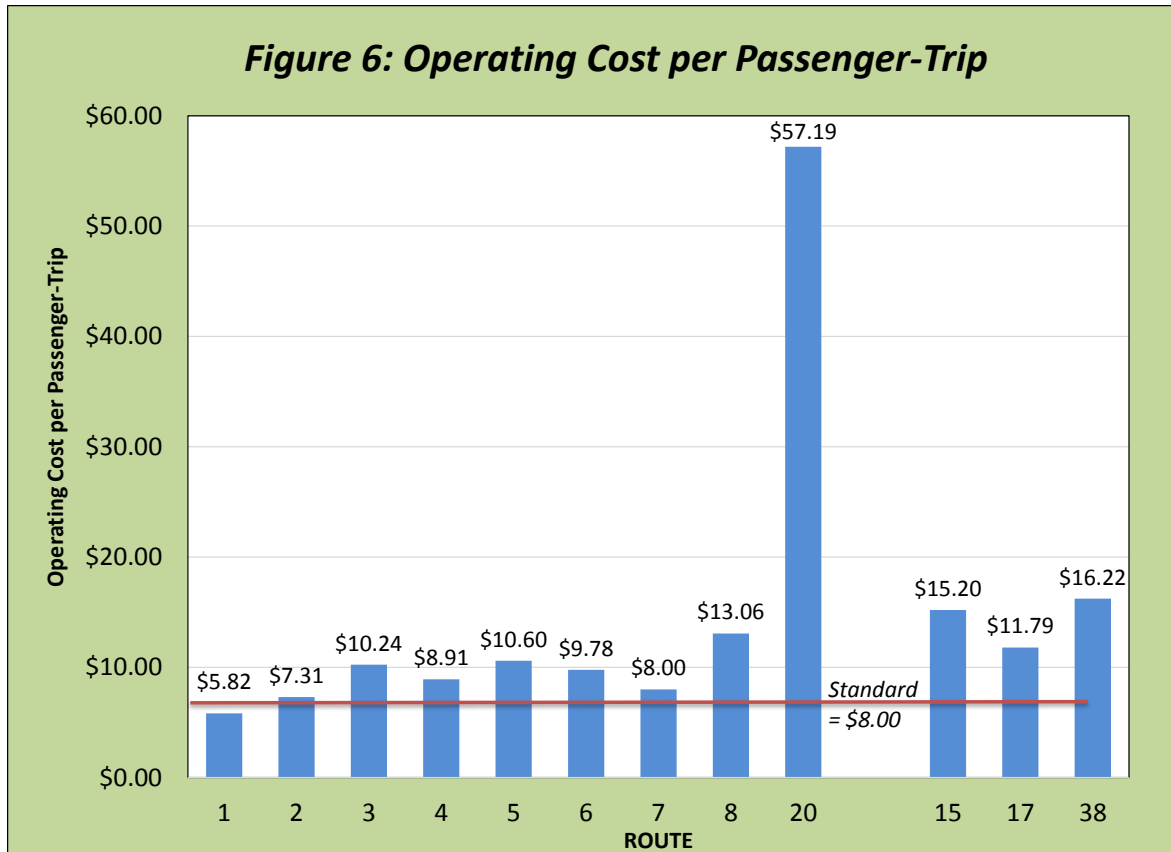


Figure 5: Passenger-Trips per Service Vehicle-Mile



- **Cost per Passenger-Trip (Standard = No More Than \$8.00)** – Values by this measure range from a low of \$5.82 (for Route 1) to a sobering high of \$57.19 (for Route 20). Only three of the regular routes meet the current standard: Route 1, Route 2 (at \$7.31) and Route 7 (at \$8.00). None of the tripper routes meet this standard, as shown in Figure 6.¹



- **Subsidy per Passenger-Trip (No Established Standard)** – This is a good measure of the effectiveness of the use of public funds (operating subsidy funding) in achieving a key goal of transit service (ridership). As shown in Figure 7, this value ranges from a low of \$4.63 for Route 1 up to a high of \$55.94 for Route 20. Overall, the regular routes (at an average of \$7.51) are substantially more effective in the use of public subsidy dollars than are the tripper routes (at an average of \$12.05).
- **Farebox Ratio (Standard = At Least 20 Percent)** – This is calculated as the fare revenues divided by the operating costs. It is an important measure in that the state's Transportation Development Act mandates a minimum of 20 percent for the overall transit system (including local as well as express routes) in order to fully access all available funding. On a route-by-route basis, this ranges from a low of 2.2 percent for Route 20 to a high of 20.5 percent for Route 1, as shown in Figure 8. This latter route is

¹ The allocation of overhead operating costs by peak vehicles tends to burden the tripper services with a relatively high proportion of these overhead costs.

Figure 7: Operating Subsidy per Passenger-Trip

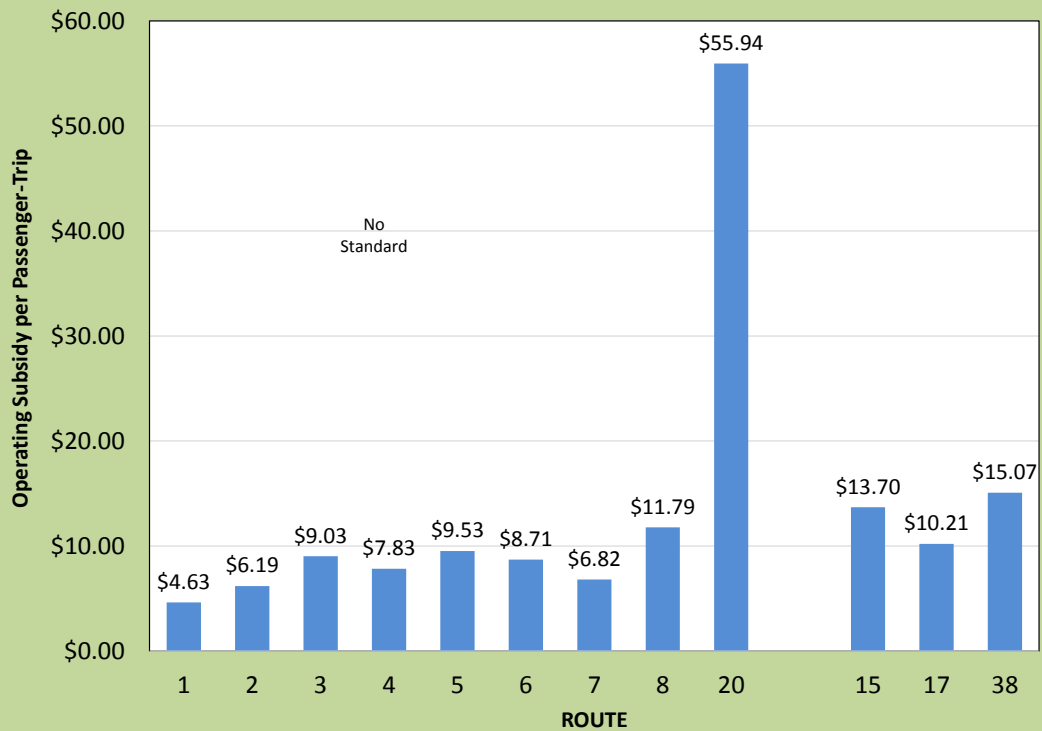
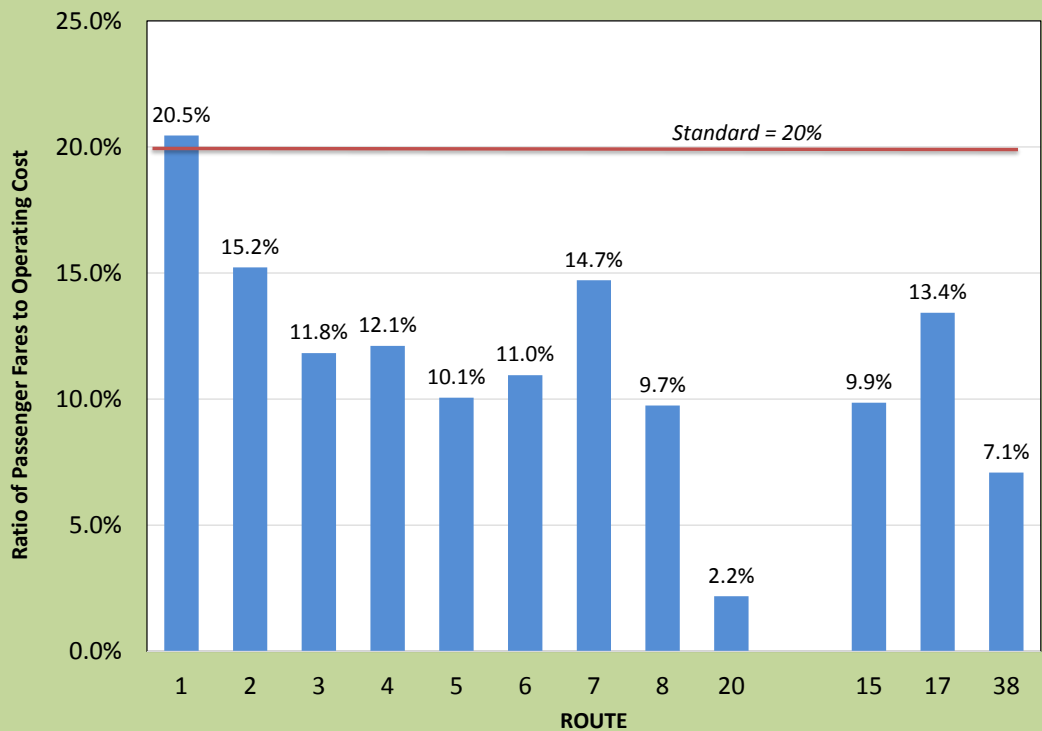


Figure 8: Farebox Ratio



the only individual route to meet the 20 percent performance standard. The relatively high fares per passenger-trip on the tripper routes yields an average farebox ratio for these routes (at 11.1 percent) not far below the average for the regular routes (13.2 percent).

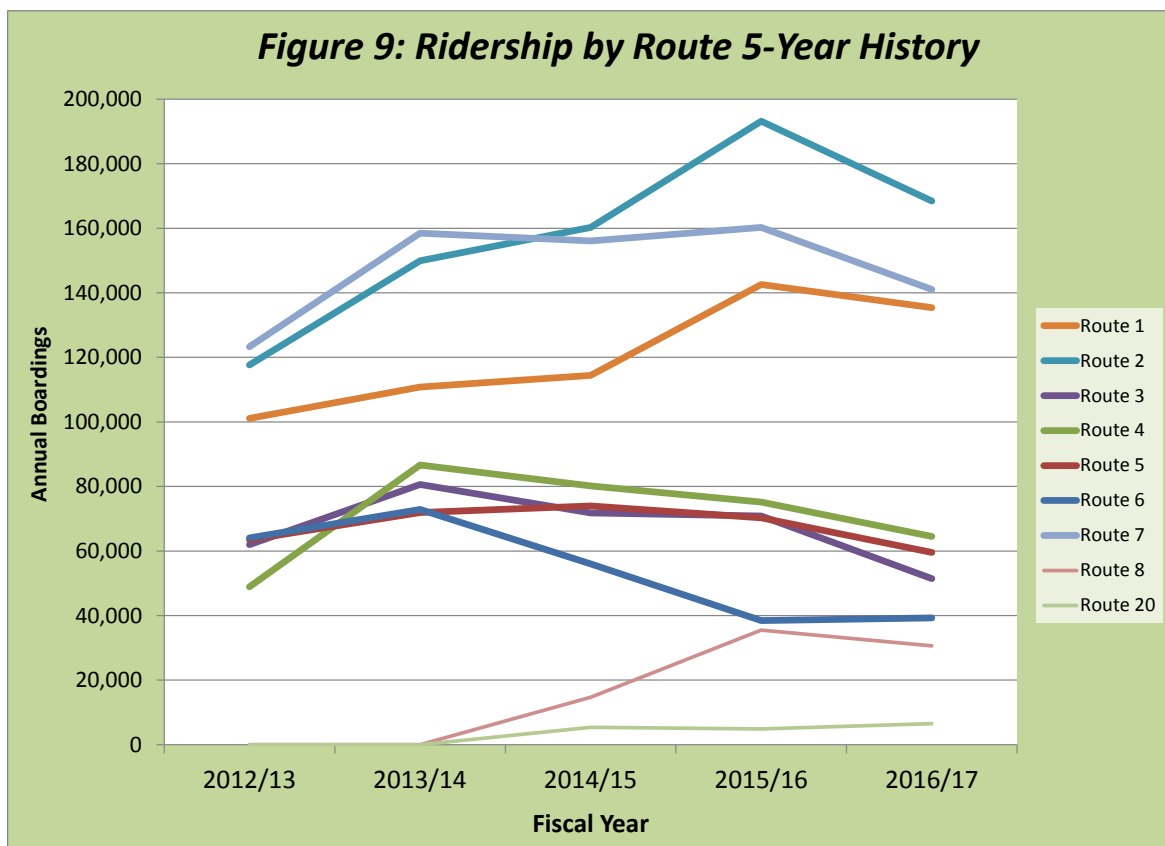
Recent Trends in Annual Ridership and Performance

Table 6 presents the annual ridership by route over the last five years. This focuses on those routes currently in operation (excluding Route 38, which has only been running in the current fiscal year). Also note that Route 6 was restructured into Routes 6 and 8 in 2015. Key trends are as follows:

- Overall local regular SolTrans fixed route ridership reached a high of 791,163 boardings in FY 2015/16, but declined by 12 percent in the following year. Over the five year period, however, overall ridership grew by 20 percent.

| TABLE 6: SolTrans Recent Route Ridership History | | | | | | | | | |
|---|----------------------------|-----------|-----------|-----------|-----------|----------------------|------|---------------------|------|
| Route | Annual Passenger Boardings | | | | | Change: Last 5 Years | | Change: Last 1 Year | |
| | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | # | % | # | % |
| 1 | 101,081 | 110,798 | 114,447 | 142,605 | 135,409 | 34,328 | 34% | -7,196 | -5% |
| 2 | 117,682 | 149,916 | 160,239 | 193,174 | 168,443 | 50,761 | 43% | -24,731 | -13% |
| 3 | 61,940 | 80,604 | 71,811 | 70,846 | 51,463 | -10,477 | -17% | -19,383 | -27% |
| 4 | 48,887 | 86,644 | 80,188 | 75,187 | 64,509 | 15,622 | 32% | -10,678 | -14% |
| 5 | 63,516 | 71,919 | 73,943 | 70,251 | 59,559 | -3,957 | -6% | -10,692 | -15% |
| 6 | 64,040 | 72,861 | 56,026 | 38,425 | 39,239 | -24,801 | -39% | 814 | 2% |
| 7 | 123,282 | 158,501 | 156,083 | 160,297 | 141,076 | 17,794 | 14% | -19,221 | -12% |
| 8 | -- | -- | 14,697 | 35,519 | 30,580 | -- | -- | -4,939 | -14% |
| 20 | -- | -- | 5,343 | 4,859 | 6,496 | -- | -- | 1,637 | 34% |
| Subtotal: Local | 580,428 | 731,243 | 732,777 | 791,163 | 696,774 | 116,346 | 20% | -94,389 | -12% |
| 15 | 8,809 | 6,551 | 7,253 | 4,926 | 7,505 | -1,304 | -15% | 2,579 | 52% |
| 17 | 21,204 | 19,240 | 14,585 | 11,671 | 9,733 | -11,471 | -54% | -1,938 | -17% |
| Subtotal: Tripper | 30,013 | 25,791 | 21,838 | 16,597 | 17,238 | -12,775 | -43% | 641 | 4% |
| 76 | 4,983 | 4,661 | 2,601 | | | | | | |
| 78 | 84,188 | 81,722 | 86,565 | 91,673 | 93,157 | 8,969 | 11% | 1,484 | 2% |
| 80 | 438,340 | 458,907 | 464,771 | 480,773 | 470,770 | 32,430 | 7% | -10,003 | -2% |
| 82 | -- | -- | -- | -- | 1,661 | -- | -- | -- | -- |
| 85 | 94,903 | 84,209 | 84,321 | 71,430 | 66,540 | -28,363 | -30% | -4,890 | -7% |
| 200 | 43,947 | 42,764 | 49,838 | 60,745 | 27,660 | -16,287 | -37% | -33,085 | -54% |
| Subtotal: Express | 666,361 | 672,263 | 688,096 | 704,621 | 659,788 | -6,573 | -1% | -44,833 | -6% |
| Totals | 1,276,802 | 1,429,297 | 1,442,711 | 1,512,381 | 1,373,800 | 96,998 | 8% | -138,581 | -9% |
| Source: SolTrans/Data/3 Operations/Cost Allocations Models. Excludes some express routes no longer operated | | | | | | | | | |

- Route 15 and 17 tripper service showed an opposite pattern: a decline of 45 percent between FY 2012/13 and FY 2015/16, followed by a 4 percent increase in the last year of the review period.
- Route 15 and 17 tripper service showed an opposite pattern: a decline of 45 percent between FY 2012/13 and FY 2015/16, followed by a 4 percent increase in the last year of the review period.
- This table also includes ridership data for the express routes, as some of the ridership on the local route system consists of passengers transferring to/from the express routes. The express routes as a whole were comparatively consistent in annual ridership, with a 2 percent growth over the five-year period and a 1 percent decline in the final year.
- Within the local regular fixed routes, all routes saw a decline between 2015/16 and 2016/17, with the exception of a small 2 percent increase on Route 6 and a 20 percent increase (on a very low base) on Route 20. These figures are also shown in Figure 9. The largest decline between 2015/16 and 2016/17 on a numerical basis was on Route 2 (a loss of 24,731 riders) but on a percentage basis the largest decline was on Route 3 (27 percent). Over the five-year period, five routes saw increases in ridership (Routes 1, 2, 4, 7 and 8) while three (Routes 3, 5, and 6) saw a decline. Much of the decline on Route 6 can be attributed to the splitting of the original Route 6 into the current Routes 6 and 8.



- Between the two long-established tripper routes, ridership on both Routes 15 and 17 declined over the five-year period, but Route 15 ridership rebounded substantially in the final year.

The “productivity” of a transit route is measured in the passenger-trips per revenue vehicle-hour of service. Table 7 presents trends in this key performance measure over the last five years. Paralleling the overall trend in ridership, the productivity of the overall regular route system reached a peak of 17.6 in FY 2013/14 and has since declined by 30 percent to a FY 2016/18 value of 12.3. The tripper routes have declined in productivity from 33.7 in FY 2012/13 to 18.2 in 2016/17, though Route 15 productivity has actually increased by 14 percent in the most recent year. By regular route, the largest five-year decline has been on Route 6, though the most recent year indicated a slight improvement. All of the regular routes showed a decline over the five-year period with the exception of Route 4, which increased in productivity by 32 percent. The shading in Table 7 indicates whether each route meets the standard of 12.0 passenger-trips per revenue vehicle-hour. This indicates three categories: many routes (1, 2, 15 and 17) attained the standards in all five years, one route (Route 4) first attained the standard over the course of the period, while three routes started the five-year period in attainment of the standard but subsequently fell below it. In addition, Routes 8 and 20 were initiated in this period and have yet to achieve the standard.

| TABLE 7: Trends in Productivity by Route | | | | | | | | | |
|---|--|---------|---------|---------|---------|----------------------|------|---------------------|------|
| Shaded Values Achieve Standard of 12.0 | | | | | | | | | |
| Route | Annual Passenger-Trips per Revenue Vehicle-Hour by Fiscal Year | | | | | Change: Last 5 Years | | Change: Last 1 Year | |
| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | # | % | # | % |
| 1 | 17.7 | 18.6 | 15.7 | 17.9 | 16.8 | -0.9 | -5% | -1.2 | -7% |
| 2 | 16.0 | 20.3 | 17.8 | 17.0 | 14.4 | -1.6 | -10% | -2.6 | -15% |
| 3 | 13.4 | 17.3 | 16.2 | 14.8 | 10.6 | -2.8 | -21% | -4.2 | -28% |
| 4 | 11.5 | 20.2 | 18.9 | 17.8 | 15.3 | 3.7 | 32% | -2.5 | -14% |
| 5 | 13.1 | 14.9 | 15.3 | 14.4 | 11.8 | -1.3 | -10% | -2.6 | -18% |
| 6 | 13.2 | 15.1 | 13.2 | 10.0 | 10.1 | -3.1 | -23% | 0.1 | 1% |
| 7 | 14.9 | 15.7 | 15.3 | 13.7 | 11.8 | -3.0 | -20% | -1.9 | -14% |
| 8 | -- | -- | 9.8 | 9.5 | 7.9 | -- | -- | -1.5 | -16% |
| 20 | -- | -- | 4.0 | 1.8 | 2.0 | -- | -- | 0.2 | 13% |
| Total: Regular Routes | 14.8 | 17.6 | 15.5 | 14.3 | 12.3 | -2.5 | -17% | -2.0 | -14% |
| 15 | 20.2 | 16.4 | 18.4 | 13.7 | 15.5 | -4.6 | -23% | 1.9 | 14% |
| 17 | 46.8 | 47.5 | 39.2 | 28.6 | 21.0 | -25.8 | -55% | -7.6 | -27% |
| Total: Tripper Routes | 33.7 | 32.0 | 28.5 | 21.6 | 18.2 | -15.5 | -46% | -3.4 | -16% |
| Source: LSC Transportation Consultants, Inc. | | | | | | | | | |

Passenger Characteristics

Surveys of SolTrans passengers were conducted in the spring of 2017 by the Redhill Group for the Metropolitan Transportation Commission. This included surveys of approximately 200

riders of local SolTrans routes, and an equal number of express route riders. As summarized in *Transit Passenger Surveying Services: SolTrans – Finding and Methodology*, these surveys provide useful information about the characteristics and trips of local route passengers:

- 62 percent are not employed, versus 38 percent that are.
- 69 percent of riders do not have a driver's license, versus 31 percent that do. 31 percent of riders also are not members of a household with a drivable vehicle.
- Local riders represent a wide range of ages. While 24 percent of riders are 60 or above, 23 percent are in their 20's and 16 percent are under 20.
- Only 17 percent have a household income over \$50,000.
- The largest proportion of trips (38 percent) are for shopping, compared with 19 percent for social/recreation purposes, 16 percent for work, 7 percent for school and for medical purposes, and 5 percent for college.
- Fully 95 percent of passengers walk to their boarding stop, and 96 percent walk from their alighting stop to their destination. This reflects the importance of providing transit routes within a convenient walk of passenger's origins and destinations. Only 10 percent of those walking from home report walking more than 10 minutes.

Overall, these surveys indicate that SolTrans local route passengers represent a wide range of local residents, but tend to have a high degree of dependency on transit services (as is typical in mid-sized cities).

Ridership by Day of Week

Registering farebox² data for two weeks were analyzed to identify the ridership by day of week for each route. Factored by the average annual ridership, this yielded the estimated average daily ridership by weekday vs. Saturday vs. Sunday, as shown in Table 8 and Figure 10. As shown, Saturday ridership is 40 percent of the weekday ridership for the local fixed routes as a whole (42 percent excluding the tripper runs). This proportion is relatively high for Route 5 (67 percent) and Route 3 (51 percent) and relatively low for Route 8 (29 percent) and Route 2 (34 percent). On the two routes operated on Sunday, ridership is only 10 percent of weekday ridership on Route 1, and 8 percent on Route 7.

² Electronic registering fareboxes on vehicles collect ridership and fare data automatically.

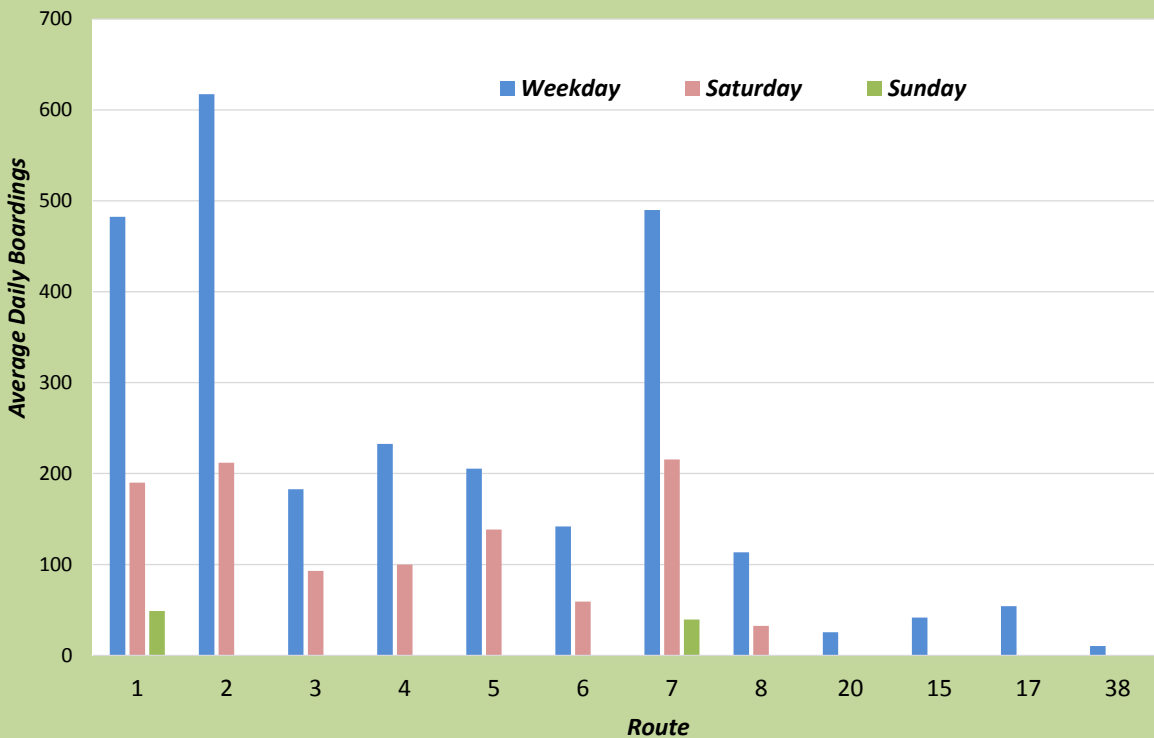
TABLE 8: Average Daily Ridership by Route by Day of Week

FY 2016/17

Attains Standard of 12.0

| Route | Daily Ridership | | | % of Avg Weekday | | Ridership per Revenue Veh-Hr | | |
|----------|-----------------|----------|--------|------------------|--------|------------------------------|----------|--------|
| | Weekday | Saturday | Sunday | Saturday | Sunday | Weekday | Saturday | Sunday |
| 1 | 483 | 190 | 49 | 39% | 10% | 17.8 | 7.8 | 8.3 |
| 2 | 617 | 212 | -- | 34% | -- | 14.9 | 8.7 | -- |
| 3 | 183 | 93 | -- | 51% | -- | 13.7 | 8.0 | -- |
| 4 | 233 | 100 | -- | 43% | -- | 17.4 | 9.1 | -- |
| 5 | 205 | 138 | -- | 67% | -- | 15.4 | 11.9 | -- |
| 6 | 142 | 59 | -- | 42% | -- | 10.9 | 5.5 | -- |
| 7 | 490 | 215 | 40 | 44% | 8% | 11.8 | 11.7 | 4.7 |
| 8 | 113 | 33 | -- | 29% | -- | 8.8 | 3.1 | -- |
| 20 | 25 | -- | -- | -- | -- | 2.0 | -- | -- |
| Subtotal | 2,491 | 1,040 | 88 | 42% | 4% | 13.2 | 8.5 | 6.2 |
| 15 | 42 | -- | -- | -- | -- | 18.3 | -- | -- |
| 17 | 54 | -- | -- | -- | -- | 24.3 | -- | -- |
| 38 | 10 | -- | -- | -- | -- | 17.2 | -- | -- |
| Subtotal | 106 | -- | -- | -- | -- | 20.8 | -- | -- |
| Total | 2,597 | 1,040 | 88 | 40% | 3% | 13.4 | 8.5 | 6.2 |

Source: SolTrans annual data, factored by % by day of week for Feb 1-14, 2018. Rt 38 data based upon ridership from 10/16 to 1/17.

Figure 10: Average Daily ridership by Route and Day of Week

Some of the reason for lower ridership on weekends is a result of the lower service levels. It is useful to factor the ridership by the vehicle-hours of service, in order to provide a comparison of the productivity (passenger-trips per revenue vehicle-hour) by day of week. As shown in the right portion of Table 8, overall weekday productivity is 13.4 passenger trips per hour compared with 9.1 (30 percent lower) on Saturdays and 6.2 (55 percent lower) on Sundays. None of the routes generate a productivity level attaining the 12.0 standard on Saturdays and Sundays, though Route 5 (at 11.9) and Route 7 (at 11.7) were just below the standard. It is also worth noting that Route 7 Saturday productivity is very close to the weekday level of 11.8.

Ridership by Route by Run

The registering farebox data were also used to estimate average weekday ridership by route and run and direction, as shown in Table 9. Figure 11 presents overall ridership by day of week, while Figures 12 and 13 provide details for the regular routes and Figure 14 for the tripper routes. This detailed data reflects high “peaks” in ridership, largely during the morning and mid-afternoon periods. Table 10 and Figures 15 and 16 present this data for average Saturday ridership, reflecting a concentration of relatively busy runs between 10 AM and 3 PM. Finally, Table 11 and Figure 17 provide the Sunday boarding by run. This shows a peak on the first runs (starting in the 8:30 AM half-hour, presumably when some passengers are heading to worship services) with lower ridership levels over the rest of the service day.

Weekday Ridership by Route by Stop

A review of ridership by stop provides useful information regarding the relatively productive and unproductive segments of the individual routes. Data for October through December 2017 were collected and analyzed to provide this information for the regular local fixed routes over the average weekday, as shown in Tables 12 through 20. This is also shown graphically in Figures 18 through 26. This information also yields the average passenger load between each successive stop (though passenger loads by run vary widely, as reflected in Table 9). Beyond the key role of the transit centers on all routes, a review of this data indicates the following:

- **Route 1** – The Broadway corridor between Tennessee and Ash Street is a relatively productive area for ridership. The fact that ridership generated on Broadway north of Sereno Transit Center (in the southbound direction only) is higher than that generated on Sonoma Avenue north of the Transit Center (in the northbound direction only) indicates that shifting the northbound route onto Broadway may generate an increase in overall ridership. While some stops in the one-way loop west of Sonoma Boulevard have low ridership, overall this loop generates ridership warranting service.
- **Route 2** – Beyond the transit centers, concentrations of ridership activity on Route 2 are seen around Sonoma/Valle Vista and at Gateway Center. The segment along Corcoran and Christopher (served only in the eastbound direction) has relatively low ridership.

- **Route 3** – Ridership is relatively light along Glen Cove Parkway south of Robles Way (only 10 percent of total route ridership activity). While there is a relatively high level of ridership in the central section between Fulton Avenue and Magazine Street, ridership is also low around the Cal Maritime Academy.
- **Route 4** – Ridership is relatively low on Georgia west of Monterey, and relatively high along the southern portion of Tuolumne, at Kaiser and along Broadway.
- **Route 5** – The ridership on Route 5 is concentrated around the Fairgrounds/Gateway Plaza area, and between Sonoma Boulevard (Seafood City Supermarket) and Kaiser. Ridership in the Federal Terrace area is relatively light.
- **Route 6** – There are no particularly strong areas of ridership generation along this route. Ridership between Tuolumne Street and Oakwood Avenue is relatively low, other than at Fleming/Admiral Callaghan Way.
- **Route 7** – Ridership is relatively strong in the Gateway area, as well as along Springs Road. There are only a few scattered stops with relatively low ridership.
- **Route 8** – Relatively high ridership areas on this route are around Georgia/Rosewood and Ascot/Hilary. There are low ridership areas served along Maine Street, the western portion of Benicia Road and the southern portion of Ascot Parkway.
- **Route 20** – Beyond the Sereno Transit Center, the only stop along this route generating more than 1 passenger-trip per day (total of boardings and alightings) is at Target.

Figures 27 through 29 show similar boarding/alighting maps for the three tripper routes. These reflect the concentration of activity at the schools (largely at the middle and high schools), with scattered activity at the stops in the residential areas.

Finally, Figure 30 presents total boarding/alighting by stop over all routes in the local service area. This reflects the concentration of the relatively busy stops in the downtown area and the north Broadway/Sonoma corridor and the Curtola Park-and-Ride, though there are also important stops in the Gateway Plaza area, eastern Vallejo, and along Military Way in Benicia.

| TABLE 9: SolTrans Average Daily Ridership by Run and Direction -- Weekday | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------------|----|---------|----|---------|-------|---------|----|---------|----|----------|-------|---------|----|---------|----|----------|-------|-----------------------|-------------|-------------|-------------|----------------|---------|----|-------|--|
| Half Hr Starting | Regular Routes | | | | | | | | | | Trippers | | | | | | | | | | | | | | | | |
| | Route 1 | | Route 2 | | Route 3 | | Route 4 | | Route 5 | | Route 6 | | Route 7 | | Route 8 | | Route 20 | | Subtotal: Regular Rts | Rt 15 Total | Rt 17 Total | Rt 38 Total | Total: All Rts | | | | |
| | NB | SB | Total | NB | SB | Total | NB | SB | Total | NB | SB | Total | NB | SB | Total | NB | SB | Total | | | | | | WB | EB | Total | |
| 5:30 | 4 | 5 | 9 | | 8 | | | | | | | | | | | | | | | | | | | 16 | | | |
| 6:00 | 4 | | 4 | 3 | 3 | | | | | | | | | | | | | | | | | | | 45 | | | |
| 6:30 | 9 | 6 | 15 | 5 | 6 | 11 | | | 5 | | | | | | | | | | | | | | | 48 | | | |
| 7:00 | 18 | 10 | 28 | 30 | 8 | 37 | 4 | 8 | 12 | 5 | 2 | 7 | 13 | 19 | 11 | 30 | | 9 | | 19 | 21 | | | 153 | | | |
| 7:30 | 10 | 6 | 16 | 1 | 8 | 9 | 6 | 8 | 14 | 3 | 5 | 8 | | 5 | 6 | 11 | | 4 | | 6 | | | | 63 | | | |
| 8:00 | 12 | 8 | 20 | 8 | 4 | 12 | 13 | 5 | 18 | 16 | 2 | 18 | 7 | 14 | 5 | 21 | | 1 | | | | | | 116 | | | |
| 8:30 | 6 | 5 | 11 | 15 | 6 | 21 | | 6 | 9 | | 5 | 5 | | | 10 | 7 | 17 | 20 | | | | | | 80 | | | |
| 9:00 | 10 | 3 | 13 | 13 | 12 | 24 | 5 | 8 | 13 | 9 | 11 | 11 | 7 | 4 | 8 | 5 | 13 | 2 | 8 | | | | | 105 | | | |
| 9:30 | 9 | 5 | 14 | 6 | 7 | 14 | | | 6 | | 6 | 6 | | | 6 | 7 | 12 | 15 | | | | | | 77 | | | |
| 10:00 | 8 | 6 | 14 | 17 | 7 | 24 | 4 | 7 | 11 | 16 | 16 | 16 | 10 | 7 | 12 | 6 | 18 | 1 | | | | | | 111 | | | |
| 10:30 | 11 | 5 | 17 | 18 | 11 | 29 | | | 11 | 11 | | 9 | 9 | | 8 | 17 | 1 | 1 | 1 | | | | | 84 | | | |
| 11:00 | 13 | 6 | 19 | 12 | 14 | 27 | 5 | 6 | 11 | 6 | 5 | 5 | 5 | 3 | 8 | 5 | 13 | 4 | 3 | | | | | 96 | | | |
| 11:30 | 11 | 4 | 15 | 15 | 12 | 27 | | 3 | 3 | | 3 | 3 | | | 7 | 6 | 12 | 4 | | | | | | 65 | | | |
| 12:00 | 11 | 4 | 15 | 15 | 15 | 30 | 5 | 8 | 13 | | 6 | 6 | 7 | 4 | 10 | 7 | 17 | 2 | | | | | | 113 | | | |
| 12:30 | 10 | 6 | 16 | 12 | 20 | 32 | | | | 13 | 13 | | | | 7 | 6 | 13 | | 5 | 2 | | | | 80 | | | |
| 13:00 | 12 | 9 | 21 | 13 | 7 | 20 | 6 | 5 | 11 | 4 | 10 | 10 | 9 | 4 | 13 | 9 | 16 | 6 | | 8 | | | | 107 | | | |
| 13:30 | 10 | 28 | 38 | 18 | 13 | 31 | | | | | 5 | 5 | | | 9 | 8 | 17 | 3 | | | | | | 97 | | | |
| 14:00 | 12 | 9 | 20 | 20 | 14 | 34 | 10 | 6 | 16 | 29 | 9 | 9 | 8 | 5 | 13 | 17 | 28 | 2 | | | | | | 151 | | | |
| 14:30 | 12 | 20 | 32 | 22 | 18 | 40 | | 13 | 13 | | 6 | 6 | | | 10 | 15 | 25 | 1 | 1 | | | | | 118 | | | |
| 15:00 | 25 | 12 | 36 | 18 | 16 | 34 | 8 | | 24 | 8 | 10 | 10 | 6 | 5 | 11 | 15 | 26 | 4 | | | | | | 229 | | | |
| 15:30 | 13 | 6 | 18 | 17 | 15 | 32 | | | | | 4 | 4 | | | | 10 | 13 | 2 | | 39 | 21 | | | 168 | | | |
| 16:00 | 10 | 6 | 16 | 11 | 34 | 45 | 12 | 3 | 15 | 10 | 13 | 13 | 4 | 7 | 11 | 13 | 12 | 6 | 1 | | | | | 86 | | | |
| 16:30 | 5 | 13 | 18 | 8 | 7 | 15 | 5 | 1 | 5 | | 5 | 11 | | | | 11 | 7 | 19 | 1 | | | | | 142 | | | |
| 17:00 | 10 | 3 | 13 | 3 | 6 | 9 | 4 | 1 | 6 | 6 | 8 | 12 | 3 | 5 | 8 | 9 | 8 | 17 | 3 | 1 | | | | 74 | | | |
| 17:30 | 11 | 4 | 15 | 9 | 2 | 11 | 5 | 1 | 5 | 1 | 8 | 2 | 11 | | | 5 | 6 | 11 | 16 | 2 | | | | 77 | | | |
| 18:00 | 11 | 3 | 14 | 12 | 4 | 16 | 5 | 1 | 6 | 2 | 7 | 2 | 9 | 1 | 4 | 5 | 3 | 11 | 2 | | | | | 66 | | | |
| 18:30 | 7 | 3 | 10 | 4 | 4 | 8 | 2 | 3 | 5 | | 4 | 2 | 6 | | 0 | 10 | 4 | 13 | 1 | | | | | 42 | | | |
| 19:00 | 3 | 2 | 5 | 6 | | 6 | | | | 1 | | | 2 | | 2 | 7 | 2 | 9 | 1 | | | | | 24 | | | |
| 19:30 | | | | 5 | 3 | 8 | | | | | | | | | | 6 | 1 | 7 | | | | | | 15 | | | |
| Colors represent lowest ridership (green) to highest (red) | | | | | | | | | | | | | | | | | | | | lowest | | | | highest | | | |
| Source: SolTrans FY 2016/17 total annual ridership data by route, and daily ridership by route by run data for Feb 1-14 2018. | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Figure 11: Total Route Boardings by Time of Day -- Weekdays

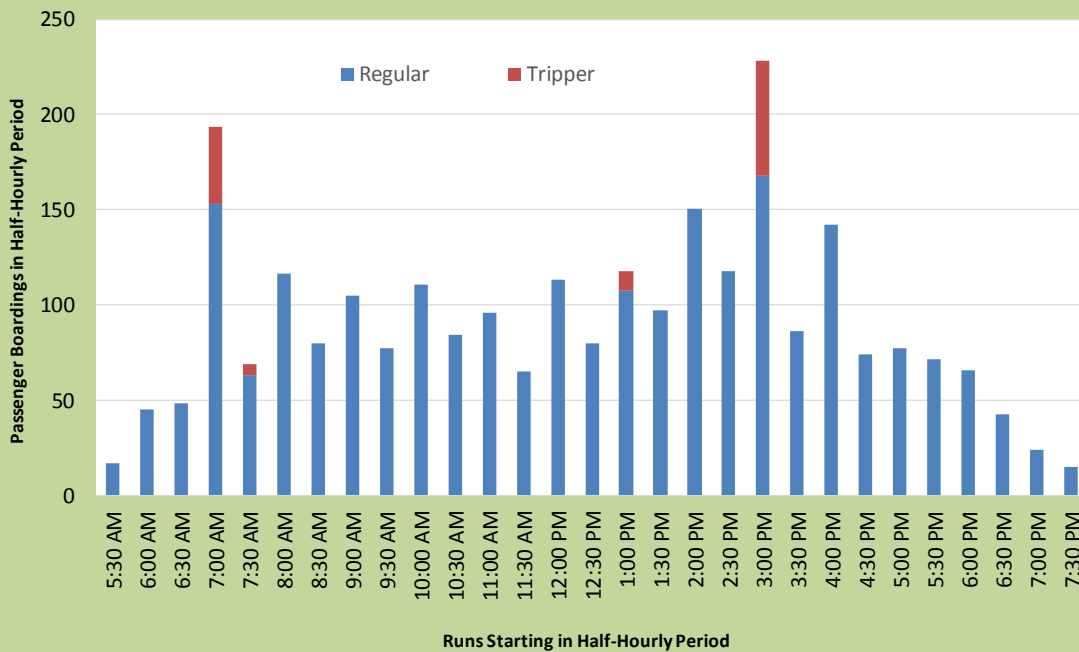
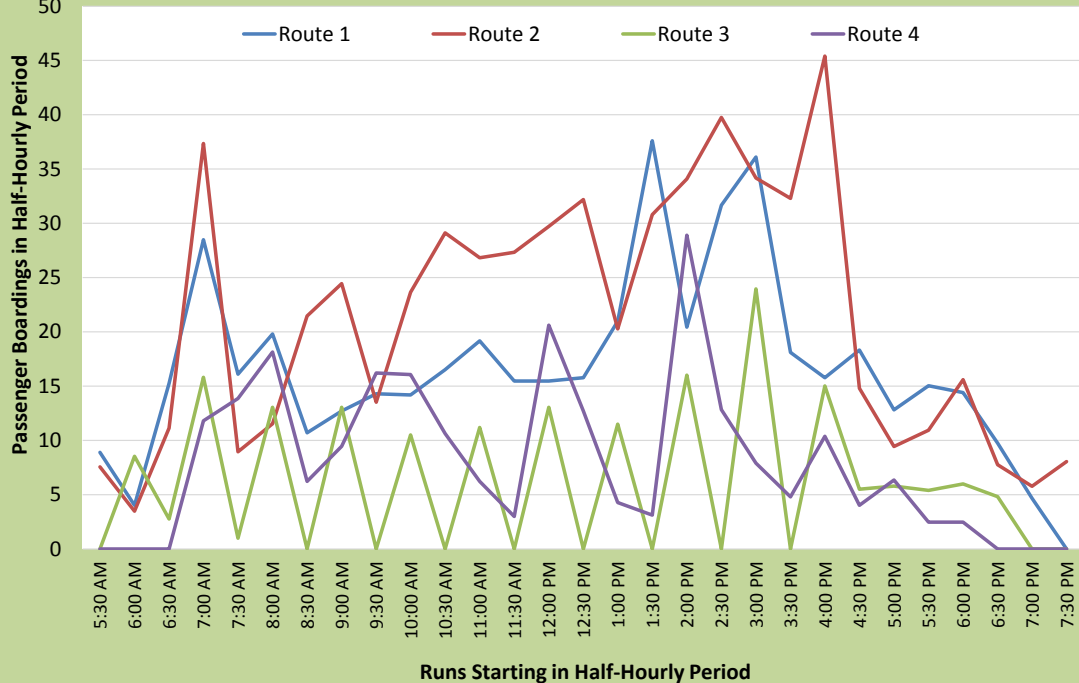
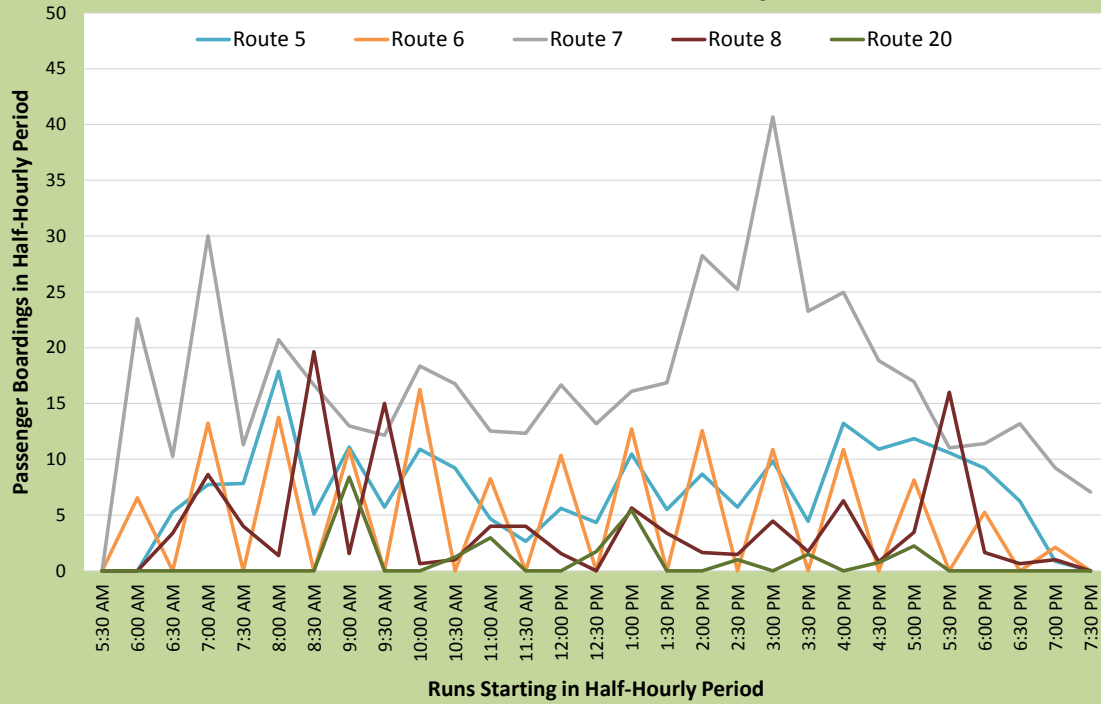


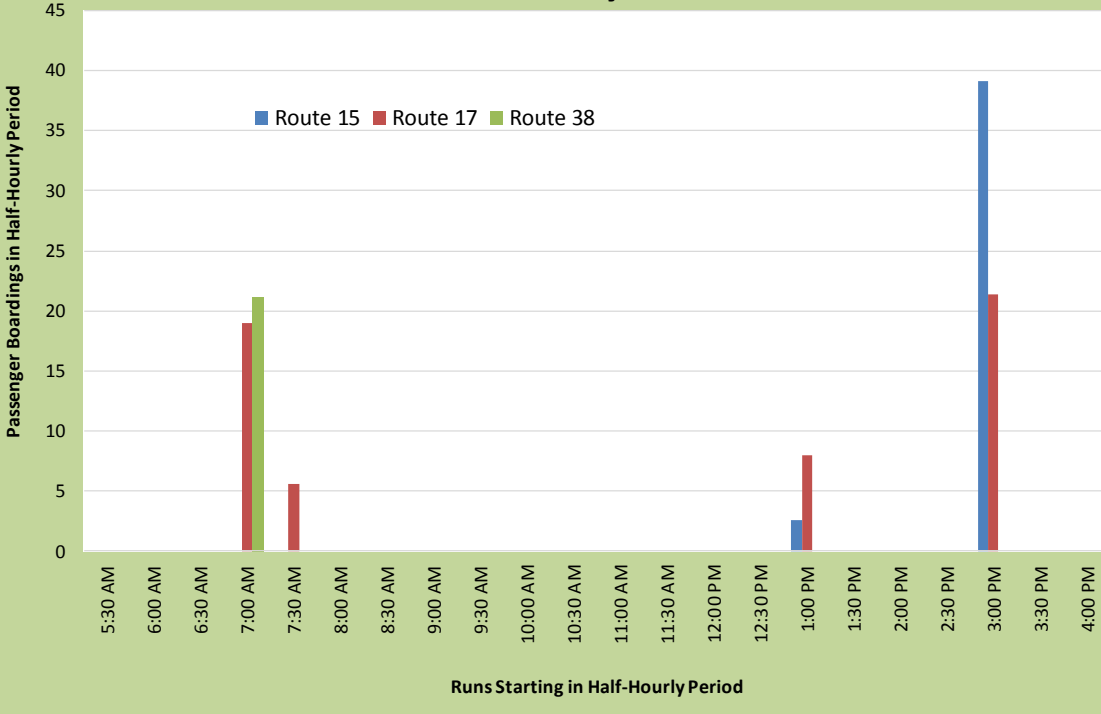
Figure 12: Regular Route Boardings by Time of Day -- Routes 1-4 Weekdays



**Figure 13: Regular Route Boardings by Time of Day --
Routes 5-8 and 20 Weekdays**

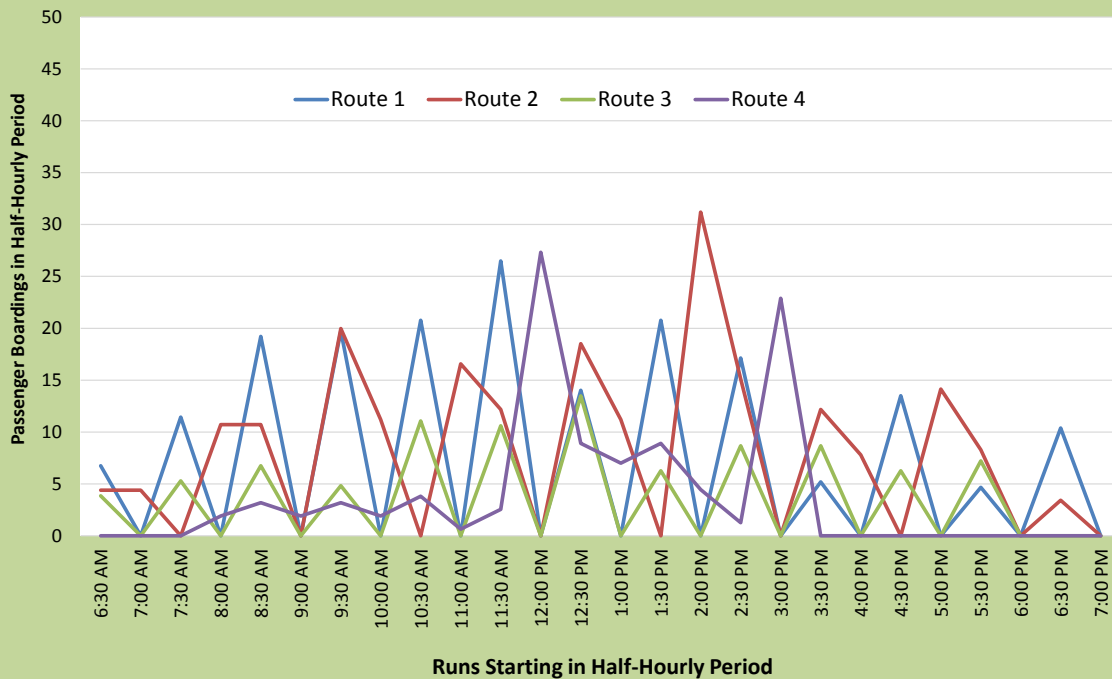


**Figure 14: Tripper Route Boardings by Time of Day --
Weekdays**



| TABLE 10: SolTrans Average Daily Ridership by Half Hour and Route/Direction -- Saturday | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------|----|-------|---------|----|-------|---------|----|-------|---------|----|-------|---------|----|-------|---------|----|-------|---------|-----|-------|---------|----|-------|-------|--------------|
| Half Hr Starting | Route 1 | | | Route 2 | | | Route 3 | | | Route 4 | | | Route 5 | | | Route 6 | | | Route 7 | | | Route 8 | | | Total | % of Wkdy |
| | NB | SB | Total | NB | SB | Total | EB | WB | Total | NB | SB | Total | NB | SB | Total | WB | EB | Total | NB | SB | Total | WB | EB | Total | | |
| 6:30 | 4 | 3 | 7 | 4 | | 4 | 4 | 4 | | | | 1 | 2 | 1 | 1 | | | 3 | | 7 | | | | | 19 | 39% |
| 7:00 | 6 | 5 | 11 | | 4 | 4 | | | | | | 5 | | 1 | 1 | | | 6 | | 6 | 1 | | | | 14 | 9% |
| 7:30 | | | | | | | | | | | | | | | | | | | 4 | 12 | 16 | | | 1 | 30 | 47% |
| 8:00 | | | | 11 | | 11 | | 5 | | | | 1 | 1 | | | | | 4 | 5 | 5 | | | | | 29 | 25% |
| 8:30 | 14 | 6 | 19 | | 11 | 11 | | 6 | 7 | | | 3 | 3 | 3 | 4 | 1 | 4 | | 9 | | 9 | 3 | 1 | 4 | 55 | 69% |
| 9:00 | | | | | | | | | | | | | | | | | | | | | | | | | 13 | 12% |
| 9:30 | 13 | 7 | 20 | | | | | | | | | | | | | | | | 8 | 8 | 16 | 1 | 1 | 3 | 83 | 108% |
| 10:00 | | | | | | | | | | | | | | | | | | | | | | | | | 24 | 21% |
| 10:30 | 15 | 6 | 21 | | | | | | | | | | | | | | | | | | | | | | 50 | 60% |
| 11:00 | | | | | | | | | | | | | | | | | | | | | | | | | 42 | 43% |
| 11:30 | 21 | 6 | 26 | 12 | 17 | 12 | 1 | 9 | 11 | 3 | 1 | 3 | 12 | 8 | 12 | 1 | 1 | 2 | 17 | | 13 | 1 | 1 | 2 | 81 | 125% |
| 12:00 | | | | | | | | | | | | | | | | | | | | | | | | | 37 | 32% |
| 12:30 | 9 | 5 | 14 | | 19 | 19 | 8 | 5 | 13 | 9 | 7 | 9 | 9 | 7 | 9 | 6 | 1 | 8 | 16 | | 8 | 2 | 3 | 5 | 93 | 116% |
| 13:00 | | | | | | | | | | | | | | | | | | | | | | | | | 33 | 31% |
| 13:30 | 17 | 4 | 21 | | | | 4 | 2 | 6 | 9 | 9 | 10 | 5 | 7 | 10 | 1 | 4 | 6 | | | | 1 | 3 | 4 | 56 | 58% |
| 14:00 | | | | | | | | | | | | | | | | | | | | | | | | | 53 | 35% |
| 14:30 | 10 | 7 | 17 | 15 | 31 | 15 | 4 | 5 | 9 | 1 | 4 | 4 | 4 | 5 | 4 | 3 | 4 | 7 | 12 | | 31 | 2 | 2 | 4 | 89 | 75% |
| 15:00 | | | | | | | | | | | | | | | | | | | | | | | | | 30 | 18% |
| 15:30 | 4 | 1 | 5 | 12 | | 12 | 8 | 1 | 9 | 23 | | 13 | 7 | 7 | 13 | 2 | 6 | 8 | 13 | | | 2 | | 2 | 61 | 71% |
| 16:00 | | | | | | | | | | | | | | | | | | | | | | | | | 25 | 18% |
| 16:30 | 8 | 6 | 14 | | 8 | 8 | 4 | 2 | 6 | | | 6 | 6 | | 6 | 1 | 1 | 1 | 9 | 3 | 12 | | | | 31 | 42% |
| 17:00 | | | | | | | | | | | | | | | | | | | | | | | | | 25 | 32% |
| 17:30 | 4 | 1 | 5 | | 8 | 8 | 6 | 1 | 7 | | | 3 | 2 | | 2 | 1 | 3 | 4 | 2 | | 5 | 2 | 3 | 3 | 35 | 49% |
| 18:00 | | | | | | | | | | | | | | | | | | | | | | | | | 9 | 14% |
| 18:30 | 10 | 1 | 10 | 3 | | 3 | | | | | | | | | | | | | 9 | | 4 | | | | 23 | 54% |
| 19:00 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 6% |
| Total | 133 | 57 | 190 | 115 | 97 | 212 | 40 | 52 | 93 | 32 | 68 | 100 | 78 | 61 | 138 | 30 | 30 | 59 | 114 | 101 | 215 | 16 | 16 | 33 | 1,040 | |
| Colors represent lowest ridership (green) to highest (red) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Source: SolTrans FY 2016/17 total annual ridership data by route, and daily ridership by route by run data for Feb 1-14 2018. | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Figure 15: Regular Route Boardings by Time of Day --
Routes 1-4 Saturday**



**Figure 16: Regular Route Boardings by Time of Day --
Routes 5-8 Saturday**

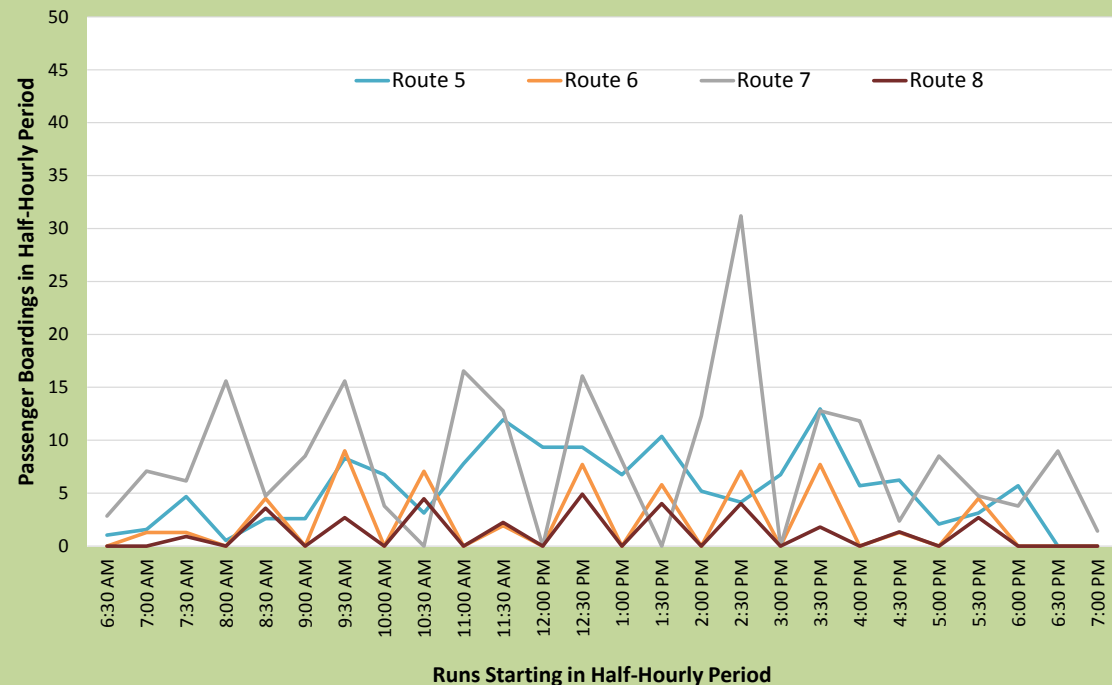


TABLE 11: SolTrans Average Daily Ridership by Half Hour and Route/Direction -- Sunday

| Half Hr Starting | Route 1 | | | Route 7 | | | Total |
|------------------|---------|----|-------|---------|----|-------|-------|
| | NB | SB | Total | NB | SB | Total | |
| 8:30 | 10 | 17 | 26 | 17 | | 17 | 43 |
| 9:00 | | | | | 8 | 8 | 8 |
| 9:30 | 12 | 5 | 17 | | | | 17 |
| 10:00 | | | | 26 | | 26 | 26 |
| 10:30 | 8 | 5 | 13 | | 8 | 8 | 21 |
| 11:00 | | | | | | | |
| 11:30 | | | | 13 | | 13 | 13 |
| 12:00 | | | | | 2 | 2 | 2 |
| 12:30 | | | | | | | |
| 13:00 | | | | 9 | | 9 | 9 |
| 13:30 | | | | | 5 | 5 | 5 |
| 14:00 | | | | | | | |
| 14:30 | | | | | | | |
| 15:00 | | | | | | | |
| 15:30 | | | | | | | |
| 16:00 | | | | | | | |
| 16:30 | 12 | 6 | 18 | | | | 18 |
| 17:00 | | | | 20 | | 20 | 20 |
| 17:30 | 7 | 9 | 16 | | 7 | 7 | 22 |
| 18:00 | | | | | | | |
| 18:30 | 11 | 3 | 14 | 5 | | 5 | 19 |
| 19:00 | | | | | 4 | 4 | 4 |
| Total | 59 | 44 | 103 | 89 | 34 | 123 | 226 |

Source: SolTrans FY 2016/17 total annual ridership data by route, and daily ridership by route by run data for Feb 1-14 2018.

Figure 17: Regular Route Boardings by Time of Day -- Sunday

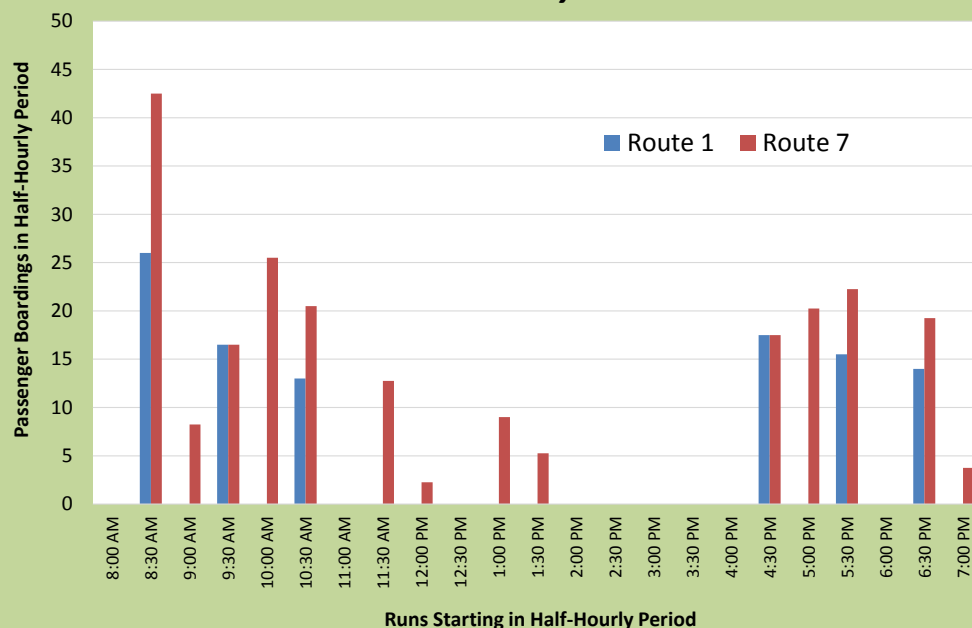


TABLE 12: Average Weekday Boarding/Alighting and Passenger Load by Stop -- Route 1

| StopID | Name | Direction | Average Daily | | Avg Psgr Load After Stop |
|------------|--|------------|---------------|--------|--------------------------|
| | | | Board | Alight | |
| Northbound | 1001 Vallejo Transit Center | | 59.1 | | 2.3 |
| | 1002 Georgia & Sonoma | Eastbound | 2.6 | 0.3 | 2.4 |
| | 1003 Georgia & Napa | Eastbound | 0.4 | 0.4 | 2.4 |
| | 1004 Georgia & El Dorado | Eastbound | 1.0 | 1.4 | 2.3 |
| | 1005 Alameda & Virginia | Northbound | 1.8 | 0.8 | 2.4 |
| | 1006 Alameda & Florida | Northbound | 2.4 | 0.6 | 2.5 |
| | 1007 Broadway & Louisiana | Northbound | 1.3 | 2.0 | 2.4 |
| | 3001 Broadway & Tennessee | Northbound | 11.7 | 5.2 | 2.7 |
| | 3002 Broadway & Illinois | Northbound | 2.0 | 7.4 | 2.5 |
| | 3003 Broadway & Nebraska (Vallejo High School) | Northbound | 11.5 | 2.6 | 2.8 |
| | 3004 Broadway & Oregon | Northbound | 0.2 | 0.6 | 2.8 |
| | 3005 Valle Vista & Broadway | Westbound | 0.3 | 2.8 | 2.7 |
| | 3146 Valle Vista & Couch (opp Post Office) | Westbound | 0.6 | 2.9 | 2.6 |
| | 3006 Valle Vista & Sonoma | Westbound | 1.1 | 3.7 | 2.5 |
| | 3007 Sonoma & Redwood (opp Vallejo Plaza) | Northbound | 2.5 | 5.4 | 2.4 |
| | 3008 Sonoma & Redwood (CVS) | Northbound | 9.2 | 8.9 | 2.4 |
| | 3111 Sereno Transit Center (STC) | | 15.7 | 12.4 | 2.5 |
| | 3010 Sonoma & Yolano Dr (Park Place) | Northbound | 2.0 | 3.2 | 2.5 |
| | 5001 Sonoma & Highway 37 | Northbound | 1.0 | 3.2 | 2.4 |
| | 5002 Sonoma & Meadows | Northbound | 0.5 | 2.7 | 2.3 |
| | 5003 Mini & Sonoma | Westbound | 7.4 | 12.6 | 2.1 |
| | 5004 Mini & Elliott | Westbound | 1.5 | 1.9 | 2.1 |
| | 5005 Mini & Roleen | Westbound | 2.3 | 3.6 | 2.1 |
| | 5006 Mini & Coloma | Westbound | 4.0 | 5.5 | 2.0 |
| | 5007 Mini & Severus | Westbound | 5.0 | 4.2 | 2.0 |
| | 5008 Severus & Catalina Way | Westbound | 2.6 | 2.2 | 2.1 |
| | 5009 Meadows & Severus | Eastbound | 1.6 | 1.1 | 2.1 |
| | 5010 Meadows & Old River | Eastbound | 0.3 | 0.4 | 2.1 |
| | 5011 Meadows & Sandpiper | Eastbound | 3.2 | 1.7 | 2.1 |
| | 5012 Jack London & Susan | Eastbound | 4.0 | 3.7 | 2.1 |
| | 5013 Jack London & Echo Summit | Eastbound | 3.9 | 2.7 | 2.2 |
| | 5014 Tobin & Donnor Pass | Northbound | 2.5 | 1.9 | 2.2 |
| | 5015 Elliott & Meadows | Northbound | 2.8 | 1.7 | 2.2 |
| | 5016 Elliott & Lorenzo | Northbound | 1.1 | 0.9 | 2.3 |
| | 5017 Elliott & Dillon | Northbound | 1.0 | 0.5 | 2.3 |
| Southbound | 5019 Mini & Elliott | Eastbound | 4.3 | 1.1 | 2.4 |
| | 5018 Broadway & Mini | Southbound | 10.1 | 1.7 | 2.7 |
| | 5020 Broadway & Meadows (Meadows Plaza) | Southbound | 1.2 | 0.5 | 2.7 |
| | 3011 Broadway & Commercial | Southbound | 1.5 | 0.5 | 2.7 |
| | 3012 Broadway & Ash St (SolTrans Office & Busyard) | Southbound | 11.3 | 8.2 | 2.9 |
| | 3013 Broadway & Garibaldi (Park Place) | Southbound | 3.0 | 2.3 | 2.9 |
| | 3128 Sereno & Sereno Transit Center | | 15.3 | 14.1 | 2.9 |
| | 3015 Sonoma & Redwood (opp CVS) | Southbound | 3.0 | 2.5 | 2.9 |
| | 3016 Sonoma & Redwood (Vallejo Plaza) | Southbound | 14.0 | 6.7 | 3.2 |
| | 3017 Valle Vista & Sonoma | Eastbound | 3.3 | 0.7 | 3.3 |
| | 3145 Valle Vista & Napa (Post Office) | Eastbound | 1.9 | 1.3 | 3.3 |
| | 3018 Valle Vista & Broadway | Eastbound | 0.2 | 0.2 | 3.3 |
| | 3019 Broadway & Oregon | Southbound | 1.6 | 0.4 | 3.4 |
| | 3020 Broadway & Nebraska | Eastbound | 4.2 | 10.3 | 3.2 |
| | 3021 Broadway & Illinois | Southbound | 3.5 | 3.3 | 3.2 |
| | 3022 Broadway & Tennessee | Southbound | 3.7 | 5.9 | 3.1 |
| | 1008 Broadway & Louisiana | Southbound | 0.9 | 1.0 | 3.1 |
| | 1009 Alameda & Ohio | Southbound | 1.2 | 2.0 | 3.0 |
| | 1010 Alameda & Virginia | Southbound | 0.3 | 3.4 | 2.9 |
| | 1011 Georgia & El Dorado | Westbound | 0.3 | 1.8 | 2.9 |
| | 1012 Georgia & Napa | Westbound | 0.1 | 1.8 | 2.8 |
| | 1001 Vallejo Transit Center | | | 46.8 | |

Source: Avail Datapoint for October - December 2017

TABLE 13: Average Weekday Boarding/Alighting and Passenger Load by Stop -- Route 2

| StopID | Name | Direction | Average Daily | | Avg Psgr Load After Stop |
|------------|---|------------|---------------|--------|--------------------------|
| | | | Board | Alight | |
| Northbound | 1001 Vallejo Transit Center | | 72.8 | | 2.5 |
| | 1032 Sacramento & Virginia | Northbound | 13.1 | 0.8 | 2.9 |
| | 1102 Sacramento & Florida (St Vincent Ferrer) | Northbound | 2.7 | 1.1 | 3.0 |
| | 1033 Sacramento & Ohio | Northbound | 1.1 | 1.1 | 3.0 |
| | 1034 Sacramento & Alabama | Northbound | 6.1 | 3.4 | 3.1 |
| | 3023 Sacramento & Indiana | Northbound | 3.6 | 4.6 | 3.0 |
| | 3024 Sacramento & Mississippi | Northbound | 2.6 | 1.7 | 3.1 |
| | 3025 Sacramento & Valle Vista | Northbound | 2.7 | 4.6 | 3.0 |
| | 3124 Valle Vista & Sacramento | Eastbound | 0.0 | 0.0 | 3.0 |
| | 3115 Valle Vista & Sonoma | Eastbound | 18.7 | 30.3 | 2.6 |
| | 3007 Sonoma & Redwood (opp Vallejo Plaza) | Northbound | 1.2 | 2.6 | 2.6 |
| | 3008 Sonoma & Redwood (CVS) | Northbound | 9.1 | 8.8 | 2.6 |
| | 3111 Sereno Transit Center (STC) | | 28.6 | 22.8 | 2.8 |
| | 3026 Broadway & Sereno | Northbound | 1.9 | 1.2 | 2.8 |
| | 3027 Broadway & Garibaldi | Northbound | 2.5 | 2.9 | 2.8 |
| | 3028 Broadway & Ash St (SolTrans Office & Busyard) | Northbound | 4.0 | 5.4 | 2.7 |
| | 3029 Tuolumne & Broadway | Eastbound | 0.7 | 3.9 | 2.6 |
| | 3139 Tuolumne & Almond | Eastbound | 0.3 | 0.0 | 2.6 |
| | 3030 BW Williams & Tuolumne | Northbound | 7.7 | 2.3 | 2.8 |
| | 3031 BW Williams & Walnut Ct | Northbound | 0.8 | 1.7 | 2.8 |
| | 3032 BW Williams & Lewis Brown | Southbound | 0.6 | 0.8 | 2.8 |
| | 5021 Mini & Violet | Northbound | 1.0 | 4.5 | 2.7 |
| | 5022 Mini & Stanford | Northbound | 0.8 | 3.1 | 2.6 |
| | 5023 Mini & Whitney | Northbound | 1.7 | 6.1 | 2.4 |
| | 5024 Mini & Corcoran | Northbound | 3.5 | 8.4 | 2.3 |
| | 5025 Corcoran & Rainier | Eastbound | 2.8 | 4.5 | 2.2 |
| | 5026 Corcoran & Cobblestone Ln (Solano Middle School) | Eastbound | 4.6 | 4.0 | 2.2 |
| | 5027 Corcoran & Erin | Eastbound | 0.4 | 0.6 | 2.2 |
| | 5028 Corcoran & Belfast | Southbound | 1.7 | 1.9 | 2.2 |
| | 5029 Christopher & Lillian | Southbound | 1.4 | 1.8 | 2.2 |
| | 5030 Christopher & Evelyn | Southbound | 1.9 | 3.4 | 2.1 |
| | 5031 Griffin & Taper | Westbound | 1.7 | 6.6 | 2.0 |
| | 5036 Gateway & Fairgrounds | Westbound | 8.8 | 6.7 | 2.0 |
| | 4032 Columbus Pkwy & College Entrance (Solano College) | Eastbound | 4.3 | 3.1 | 2.1 |
| | 4034 Redwood & Bonnie | Southbound | 0.8 | 2.5 | 2.0 |
| | 4035 Redwood & Headwater | Southbound | 3.9 | 2.5 | 2.1 |
| | 4041 RedwoodSB&Ascot (824041) | Southbound | 8.5 | 9.1 | 2.0 |
| | 4024 Ascot north of Redwood | Northbound | 1.2 | 0.4 | 2.1 |
| | 4025 Turner & North Ascot | Westbound | 2.5 | 4.4 | 2.0 |
| | 4026 Plaza Dr & Turner (Gateway Plaza/Costco) | Northbound | 2.4 | 9.7 | 1.7 |
| | 4027 Plaza Dr & Admiral Callaghan (Gateway Plaza North) | Northbound | 8.0 | 8.1 | 1.7 |
| Southbound | 4005 Admiral Callaghan & Vallejo Corners (Target) | Southbound | 26.7 | 27.5 | 1.7 |
| | 5037 Whitney & De Paul | Westbound | 11.4 | 8.0 | 1.8 |
| | 5038 Whitney & Olympic | Westbound | 8.4 | 2.1 | 2.1 |
| | 5023 Mini & Whitney | Northbound | 1.7 | 6.1 | 1.9 |
| | 5024 Mini & Corcoran | Northbound | 3.5 | 8.4 | 1.7 |
| | 5025 Corcoran & Rainier | Eastbound | 2.8 | 4.5 | 1.7 |
| | 5026 Corcoran & Cobblestone Ln (Solano Middle School) | Eastbound | 4.6 | 4.0 | 1.7 |
| | 5039 Mini & Stanford | Southbound | 13.8 | 2.9 | 2.1 |
| | 5040 Mini & Hwy 37 | Southbound | 5.2 | 0.7 | 2.2 |
| | 3033 BW Williams & Pecan | Southbound | 1.9 | 2.4 | 2.2 |
| | 3034 Tuolumne & Lofas | Westbound | 3.7 | 4.6 | 2.2 |
| | 3012 Broadway & Ash St (SolTrans Office & Busyard) | Southbound | 2.7 | 2.0 | 2.2 |
| | 3013 Broadway & Garibaldi (Park Place) | Southbound | 5.5 | 4.1 | 2.3 |
| | 3128 Sereno & Sereno Transit Center | | 21.7 | 20.1 | 2.3 |
| | 3015 Sonoma & Redwood (opp CVS) | Southbound | 4.7 | 4.0 | 2.3 |
| | 3016 Sonoma & Redwood (Vallejo Plaza) | Southbound | 20.2 | 9.6 | 2.7 |
| | 3035 Valle Vista & Sonoma | Westbound | 25.8 | 8.6 | 3.3 |
| | 3036 Sacramento & Valle Vista | Southbound | 4.8 | 1.9 | 3.4 |
| | 3037 Sacramento & Denio | Southbound | 2.4 | 1.6 | 3.4 |
| | 3038 Sacramento & Hichborn | Southbound | 1.3 | 3.8 | 3.3 |
| | 3039 Sacramento & Tennessee | Southbound | 2.6 | 6.5 | 3.2 |
| | 1035 Sacramento & Alabama | Southbound | 3.9 | 4.1 | 3.2 |
| | 1036 Sacramento & Florida (St Vincent Ferrer) | Southbound | 0.4 | 6.5 | 3.0 |
| | 1037 Sacramento & Virginia | Southbound | 0.6 | 21.2 | 2.3 |
| | 1001 Vallejo Transit Center | | | 57.7 | 0.3 |

Source: Avail Datapoint for October - December 2017

TABLE 14: Average Weekday Boarding/Alighting and Passenger Load by Stop -- Route 3

| StopID | Name | Direction | Average Daily | | Avg Psgr Load After Stop |
|-----------|---|------------|---------------|--------|-----------------------------|
| | | | Board | Alight | |
| Eastbound | 1001 Vallejo Transit Center | | 46.6 | | 2.7 |
| | 1014 Curtola Parkway & Napa | Eastbound | 0.6 | 0.1 | 2.8 |
| | 1017 Curtola Park & Ride Hub | Loop | 3.7 | 4.4 | 2.7 |
| | 2016 Glen Cove Pkwy & Robles | Southbound | 2.3 | 4.5 | 2.6 |
| | 2017 Glen Cove Pkwy & Wellfleet | Southbound | 0.0 | 0.9 | 2.6 |
| | 2019 Glen Cove Pkwy & Glen Cove Elem School (N Regatta) | Southbound | 1.7 | 1.7 | 2.6 |
| | 2020 Glen Cove Pkwy & Antigua | Westbound | 0.0 | 0.1 | 2.6 |
| | 2021 Glen Cove Pkwy & Glen Cove Marina | Westbound | 0.5 | 1.0 | 2.5 |
| | 2022 Glen Cove Pkwy & Mistral | Westbound | 0.1 | 0.7 | 2.5 |
| | 2023 Glen Cove Pkwy & James River | Westbound | 0.9 | 0.5 | 2.5 |
| | 2024 Glen Cove Pkwy & Sea Lion | Southbound | 0.4 | 1.2 | 2.5 |
| Westbound | 2025 Glen Cove Pkwy & Bayside (End of Line) | Southbound | 1.4 | 1.5 | 2.5 |
| | 2026 Glen Cove Pkwy & Sea Lion | Northbound | 0.1 | 0.0 | 2.5 |
| | 2027 Glen Cove Pkwy & James River | Eastbound | 0.7 | 0.3 | 2.5 |
| | 2029 Glen Cove Pkwy & Glen Cove Marina | Eastbound | 0.6 | 0.2 | 2.5 |
| | 2031 Glen Cove Pkwy & S Regatta | Northbound | 0.6 | 0.2 | 2.5 |
| | 2032 Glen Cove Pkwy & Glen Cove Elem School (N Regatta) | Northbound | 1.3 | 1.2 | 2.6 |
| | 2034 Glen Cove Pkwy & Wellfleet | Northbound | 0.1 | 0.1 | 2.6 |
| | 2083 Fulton Ave & Old Glen Cove Rd | Westbound | 1.8 | 0.6 | 2.6 |
| | 2084 Fulton Ave & Ladera Dr | Westbound | 2.5 | 2.5 | 2.6 |
| | 2066 Coronel & Fulton | Northbound | 3.4 | 4.8 | 2.5 |
| | 2067 Beverly Hills Elementary (Coronel & Alhambra) | Northbound | 4.9 | 1.7 | 2.7 |
| | 2068 Alhambra & Laurel | Westbound | 1.3 | 1.5 | 2.7 |
| | 2063 Laurel & Denton | Southbound | 1.5 | 0.9 | 2.7 |
| | 2085 Magazine & Gary | Westbound | 5.3 | 4.0 | 2.8 |
| | 1020 Magazine & Sheridan (Lincoln Rd W) | Southbound | 3.6 | 2.0 | 2.9 |
| | 1021 5th St & Magazine | Southbound | 0.4 | 0.7 | 2.9 |
| | 1022 5th St & Grant St | Southbound | 0.3 | 0.2 | 2.9 |
| | 1023 Maritime Academy Dr & Sonoma Blvd | Southbound | 0.2 | 0.3 | 2.9 |
| | 1097 Country Ln Dr & Cal Maritime Academy | Westbound | 1.7 | 0.9 | 2.9 |
| | 1099 Seaport Dr & Country Ln Dr | Northbound | 0.7 | 1.1 | 2.9 |
| | 1098 Seaport Dr & Sandy Dr | Northbound | 0.4 | 0.3 | 2.9 |
| | 1024 Seaport Dr & Sandy Beach Rd | Northbound | 1.7 | 0.6 | 3.0 |
| | 1025 Porter & Adams (Patterson Elementary) | Northbound | 0.2 | 1.0 | 2.9 |
| | 1026 Porter & Magazine (Norman King CommCtr) | Northbound | 2.5 | 0.6 | 3.0 |
| | 1027 Porter & Larissa Ln | Northbound | 1.5 | 1.4 | 3.1 |
| | 1028 Sonoma & Winchester | Northbound | 0.0 | 0.0 | 3.1 |
| | 1128 Winchester & Sonoma | Eastbound | 2.0 | 1.6 | 3.1 |
| | 1029 Sonoma & McLane | Northbound | 1.4 | 0.5 | 3.1 |
| | 1030 Sonoma & Chestnut | Northbound | 0.1 | 0.1 | 3.1 |
| | 1031 Sonoma & Solano | Northbound | 0.7 | 0.2 | 3.2 |
| | 1001 Vallejo Transit Center | | | 36.9 | 1.0 |

Source: Avail Datapoint for October - December 2017

TABLE 15: Average Weekday Boarding/Alighting and Passenger Load by Stop -- Route 4

| StopID | Name | Direction | Average Daily | | Avg Psgr Load After Stop |
|------------|--|------------|---------------|--------|--------------------------|
| | | | Board | Alight | |
| Northbound | 1001 Vallejo Transit Center | | 29.9 | | 2.0 |
| | 1002 Georgia & Sonoma | Eastbound | 0.0 | 0.0 | 2.0 |
| | 1003 Georgia & Napa | Eastbound | 0.2 | 0.2 | 2.0 |
| | 1004 Georgia & El Dorado | Eastbound | 0.2 | 0.3 | 2.0 |
| | 1052 Georgia & Alameda | Eastbound | 0.2 | 0.1 | 2.0 |
| | 1053 Georgia & Monterey | Eastbound | 0.5 | 0.1 | 2.0 |
| | 1054 Georgia & Amador (Florence Douglas Senior Center) | Eastbound | 0.7 | 2.0 | 1.9 |
| | 1041 Georgia & Contra Costa | Eastbound | 0.8 | 0.9 | 1.9 |
| | 1055 Tuolumne & Carolina (Solano County Courthouse) | Northbound | 5.7 | 7.1 | 1.8 |
| | 1056 Tuolumne & Ohio | Northbound | 1.4 | 1.0 | 1.9 |
| | 3040 Tuolumne & Tennessee | Northbound | 6.0 | 2.7 | 2.1 |
| | 3041 Tuolumne & Nebraska | Northbound | 3.1 | 1.3 | 2.2 |
| | 3042 Tuolumne & Fleming | Northbound | 0.4 | 0.2 | 2.2 |
| | 3043 Tuolumne & Greenfield | Northbound | 0.1 | 0.2 | 2.2 |
| | 3044 Tuolumne & Valle Vista | Northbound | 0.0 | 0.0 | 2.2 |
| | 3045 Tuolumne & Redwood (Redwood Tuolumne Center) | Northbound | 4.2 | 3.8 | 2.2 |
| | 3046 Tuolumne & Del Mar | Northbound | 0.5 | 2.0 | 2.1 |
| | 3047 Tuolumne & Sereno | Northbound | 0.1 | 0.5 | 2.1 |
| | 3048 Tuolumne & Hospital Dr | Northbound | 3.8 | 4.3 | 2.1 |
| | 3049 Hospital Dr & Tuolumne | Eastbound | 3.5 | 5.7 | 1.9 |
| | 3050 Sutter Solano Medical Center & Rear of Sutter Solano Hospital | Southbound | 0.8 | 0.6 | 1.9 |
| | 3138 Hospital Dr & Tuolumne | Westbound | 1.4 | 1.7 | 1.9 |
| | 3052 Tuolumne & Parkview Terrace | Northbound | 0.6 | 1.2 | 1.9 |
| | 3053 Tuolumne & Phoenix | Northbound | 0.6 | 0.4 | 1.9 |
| | 3054 Tuolumne & Peach | Westbound | 0.7 | 2.7 | 1.8 |
| | 3034 Tuolumne & Lofas | Westbound | 1.6 | 2.0 | 1.8 |
| | 3012 Broadway & Ash St (SolTrans Office & Busyard) | Southbound | 1.6 | 1.2 | 1.8 |
| | 3013 Broadway & Garibaldi (Park Place) | Southbound | 14.5 | 11.0 | 2.0 |
| | 3111 Sereno Transit Center (STC) | | | 1.1 | 1.9 |
| Southbound | 3111 Sereno Transit Center (STC) | | 1.4 | | 2.0 |
| | 3026 Broadway & Sereno | Northbound | 1.2 | 0.8 | 2.1 |
| | 3027 Broadway & Garibaldi | Northbound | 0.7 | 0.8 | 2.0 |
| | 3028 Broadway & Ash St (SolTrans Office & Busyard) | Northbound | 2.6 | 3.5 | 2.0 |
| | 3029 Tuolumne & Broadway | Eastbound | 0.0 | 0.2 | 2.0 |
| | 3139 Tuolumne & Almond | Eastbound | 2.2 | 0.3 | 2.1 |
| | 3140 Tuolumne & Peach | Southbound | 1.6 | 0.4 | 2.2 |
| | 3141 Tuolumne & Mitchell Ct | Southbound | 0.4 | 0.6 | 2.2 |
| | 3142 Tuolumne & Parkview Terrace | Southbound | 0.4 | 0.6 | 2.2 |
| | 3143 Tuolumne & Hospital Dr | Southbound | 4.9 | 2.6 | 2.3 |
| | 3129 Tuolumne & Sereno Dr | Southbound | 0.0 | 0.0 | 2.3 |
| | 3058 Tuolumne & Del Mar | Southbound | 1.5 | 1.9 | 2.3 |
| | 3059 Tuolumne & Los Santos | Southbound | 1.7 | 0.3 | 2.4 |
| | 3060 Tuolumne & Valle Vista | Southbound | 0.2 | 0.1 | 2.4 |
| | 3062 Tuolumne & Loma Vista | Southbound | 0.0 | 0.0 | 2.4 |
| | 3063 Tuolumne & Nebraska | Eastbound | 0.7 | 2.7 | 2.3 |
| | 3064 Tuolumne & Tennessee | Southbound | 1.9 | 5.0 | 2.1 |
| | 1057 Tuolumne & Springs | Southbound | 0.7 | 1.4 | 2.0 |
| | 1058 Tuolumne & Capitol (Solano County Court House) | Southbound | 8.3 | 4.3 | 2.3 |
| | 1048 Georgia & Contra Costa | Westbound | 1.2 | 0.6 | 2.3 |
| | 1049 Georgia & Amador (Florence Douglas Senior Center) | Westbound | 1.7 | 0.9 | 2.4 |
| | 1050 Georgia & Monterey | Westbound | 0.1 | 0.3 | 2.4 |
| | 1051 Georgia & Alameda | Westbound | 0.1 | 0.2 | 2.4 |
| | 1011 Georgia & El Dorado | Westbound | 0.1 | 0.7 | 2.3 |
| | 1012 Georgia & Napa | Westbound | 0.0 | 0.6 | 2.3 |
| | 1060 Sonoma & Florida (Lincoln Elem School) | Northbound | 1.2 | 0.6 | 2.3 |
| | 1061 Florida & Santa Clara (St Vincent Ferrer) | Westbound | 0.1 | 1.3 | 2.2 |
| | 1063 Butte & Florida | Southbound | 1.1 | 1.4 | 2.2 |
| | 1064 Carolina & Branciforte | Eastbound | 0.0 | 0.5 | 2.2 |
| | 1065 Santa Clara & City Hall & JFK Library | Southbound | 0.2 | 2.7 | 2.0 |
| | 1001 Vallejo Transit Center | | | 23.7 | 0.3 |

Source: Avail Datapoint for October - December 2017

TABLE 16: Average Weekday Boarding/Alighting and Passenger Load by Stop -- Route 5

| StopID | Name | Direction | Average Daily | | Avg Psgr Load After Stop |
|------------|---|------------|---------------|--------|-----------------------------|
| | | | Board | Alight | |
| Inbound | 1001 Vallejo Transit Center | | 31.9 | | 1.9 |
| | 1068 Mare Island Way & Georgia (Ferry) | Northbound | 1.2 | 0.3 | 1.9 |
| | 1069 Mare Island Way & Florida | Northbound | 1.4 | 0.5 | 2.0 |
| | 1070 Mare Island Way & Harbor | Northbound | 0.3 | 0.3 | 2.0 |
| | 3065 Mare Island Way & Tennessee | Northbound | 0.9 | 0.8 | 2.0 |
| | 3118 Wilson & B St | Northbound | 0.4 | 0.3 | 2.0 |
| | 3067 Wilson & Benson | Northbound | 0.2 | 0.3 | 2.0 |
| | 3068 Daniels & B St | Eastbound | 0.9 | 1.2 | 2.0 |
| | 3069 Daniels & Rodgers | Eastbound | 2.5 | 3.4 | 1.9 |
| | 3071 Sacramento & Baldwin | Southbound | 0.9 | 0.5 | 1.9 |
| | 3072 Redwood & Sacramento | Eastbound | 0.3 | 1.4 | 1.9 |
| | 3073 Redwood & Sonoma (Seafood City) | Eastbound | 5.7 | 7.6 | 1.8 |
| | 3008 Sonoma & Redwood (CVS) | Northbound | 1.8 | 1.7 | 1.8 |
| | 3111 Sereno Transit Center (STC) | | 6.8 | 5.4 | 1.8 |
| | 3056 Sereno & Kaiser Entrance (Kaiser Medical Center) | Eastbound | 3.6 | 4.8 | 1.8 |
| | 3057 Sereno & Mesa Verde | Eastbound | 0.1 | 1.0 | 1.7 |
| | 3129 Tuolumne & Sereno Dr | Southbound | 0.2 | 0.7 | 1.7 |
| | 3058 Tuolumne & Del Mar | Southbound | 1.1 | 1.4 | 1.7 |
| | 3076 Redwood & Tuolumne | Eastbound | 0.9 | 1.2 | 1.7 |
| | 3113 Fairgrounds Dr & Sereno | Northbound | 2.6 | 3.7 | 1.6 |
| Southbound | 3107 Fairgrounds Dr & Fairgrounds (Six Flags Discovery Kingdom) | Northbound | 3.3 | 3.9 | 1.6 |
| | 5034 Sage & Griffin | Northbound | 1.0 | 1.4 | 1.5 |
| | 5035 Gateway & Sage | Eastbound | 5.9 | 4.1 | 1.6 |
| | 5036 Gateway & Fairgrounds | Westbound | 3.6 | 2.8 | 1.7 |
| | 3108 Fairgrounds Dr & Fairgrounds (Six Flags Discovery Kingdom) | Southbound | 1.1 | 1.3 | 1.7 |
| | 3114 Fairgrounds Dr & Sereno | Southbound | 2.2 | 0.5 | 1.8 |
| | 3045 Tuolumne & Redwood (Redwood Tuolumne Center) | Northbound | 2.5 | 2.3 | 1.8 |
| | 3046 Tuolumne & Del Mar | Northbound | 0.0 | 0.0 | 1.8 |
| | 3130 Tuolumne & Sereno Dr | Northbound | 0.5 | 0.3 | 1.8 |
| | 3123 Sereno & San Marino | Westbound | 0.1 | 0.0 | 1.8 |
| | 3117 Sereno opp Kaiser Entrance (Kaiser Medical Center) | Westbound | 1.7 | 2.0 | 1.8 |
| | 3128 Sereno & Sereno Transit Center | | 5.6 | 5.1 | 1.8 |
| | 3015 Sonoma & Redwood (opp CVS) | Southbound | 2.2 | 1.9 | 1.8 |
| | 3092 Redwood between Sonoma & Sacramento (opp Seafood City) | Westbound | 5.6 | 3.4 | 2.0 |
| | 3093 Sacramento & Redwood | Northbound | 0.2 | 0.3 | 2.0 |
| | 3094 Daniels & Rodgers | Westbound | 3.7 | 3.0 | 2.0 |
| | 3095 Daniels & B St | Westbound | 1.4 | 1.0 | 2.0 |
| | 3096 Wilson & Benson | Southbound | 0.1 | 0.1 | 2.0 |
| | 3097 Wilson & Hichborn | Southbound | 0.5 | 0.5 | 2.0 |
| | 3099 Mare Island Way & Tennessee | Southbound | 0.3 | 0.7 | 2.0 |
| | 1088 Mare Island Way & Harbor Way | Southbound | 0.3 | 0.3 | 2.0 |
| | 1089 Mare Island Way & Florida St | Southbound | 0.2 | 1.1 | 2.0 |
| | 1090 Mare Island Way opp Georgia (Ferry) | Southbound | 0.2 | 1.6 | 1.9 |
| | 1001 Vallejo Transit Center | | | 25.3 | |

Source: Avail Datapoint for October - December 2017

TABLE 17: Average Weekday Boarding/Alighting and Passenger Load by Stop -- Route 6

| StopID | Name | Direction | Average Daily | | Avg Psgr Load After Stop |
|-----------|---|------------|---------------|--------|-----------------------------|
| | | | Board | Alight | |
| Eastbound | 1001 Vallejo Transit Center | | 26.2 | | 2.0 |
| | 1032 Sacramento & Virginia | Northbound | 0.8 | 0.1 | 2.1 |
| | 1102 Sacramento & Florida (St Vincent Ferrer) | Northbound | 1.1 | 0.4 | 2.1 |
| | 1033 Sacramento & Ohio | Northbound | 0.1 | 0.1 | 2.1 |
| | 1034 Sacramento & Alabama | Northbound | 1.0 | 0.6 | 2.2 |
| | 3131 Tennessee & Sutter | Eastbound | 1.0 | 1.2 | 2.1 |
| | 3132 Tennessee & El Dorado | Eastbound | 0.5 | 0.4 | 2.2 |
| | 3133 Tennessee & Monterey | Eastbound | 0.9 | 1.4 | 2.1 |
| | 3134 Tennessee & Amador | Eastbound | 1.2 | 2.0 | 2.0 |
| | 3135 Tennessee & Tuolumne | Eastbound | 1.4 | 3.9 | 1.9 |
| | 3147 Tennessee & Shasta | Eastbound | 0.2 | 0.6 | 1.8 |
| | 3136 Tennessee & Mariposa | Eastbound | 0.1 | 0.4 | 1.8 |
| | 4068 Admiral Callaghan & Henry | Northbound | 1.3 | 2.1 | 1.7 |
| | 3137 Fleming & Adm Callahan Way | Eastbound | 2.8 | 4.5 | 1.6 |
| | 4046 Fleming & Vervais | Eastbound | 0.1 | 0.4 | 1.6 |
| | 4047 Vervais & Henry | Eastbound | 0.3 | 0.5 | 1.6 |
| | 4048 Tennessee & Maple | Eastbound | 0.0 | 0.5 | 1.5 |
| | 4049 Tennessee & Oakwood | Eastbound | 0.4 | 0.5 | 1.5 |
| | 2080 Springs & Oakwood (Springstowne Center) | Eastbound | 2.0 | 2.6 | 1.5 |
| | 2081 Springs & Heartwood | Eastbound | 1.0 | 1.6 | 1.4 |
| Westbound | 8004 Rollingwood Dr & Cottonwood | Southbound | 0.0 | 0.1 | 1.4 |
| | 2005 Georgia & Rosewood | Eastbound | 5.9 | 3.9 | 1.6 |
| | 8005 Oakwood Ave & Westwood | Northbound | 3.1 | 1.4 | 1.7 |
| | 8006 Tennessee St & Oakwood | Westbound | 0.9 | 0.0 | 1.8 |
| | 4014 Tennessee & Maple | Westbound | 0.3 | 0.1 | 1.8 |
| | 4015 Tennessee & Vervais | Westbound | 0.0 | 0.0 | 1.8 |
| | 4016 Vervais & Henry | Northbound | 0.7 | 0.1 | 1.8 |
| | 4017 Fleming & Skyway | Westbound | 0.5 | 0.1 | 1.9 |
| | 4018 Fleming & Adm Callaghan Way | Westbound | 4.9 | 2.0 | 2.1 |
| | 4019 Adm Callaghan Ln & Tennessee | Southbound | 2.6 | 0.9 | 2.2 |
| | 3077 Tennessee & Mariposa | Westbound | 0.5 | 0.2 | 2.3 |
| | 3078 Tennessee & Shasta | Westbound | 0.6 | 0.3 | 2.3 |
| | 3079 Tennessee & Tuolumne | Westbound | 6.9 | 1.7 | 2.7 |
| | 3081 Tennessee & Amador | Westbound | 2.9 | 1.3 | 2.8 |
| | 3082 Tennessee & Monterey | Westbound | 0.6 | 0.5 | 2.8 |
| | 3083 Tennessee & Broadway | Westbound | 2.0 | 0.9 | 2.9 |
| | 3084 Tennessee & Fern Place | Westbound | 0.2 | 0.2 | 2.9 |
| | 3085 Tennessee & Sutter | Westbound | 1.6 | 0.9 | 2.9 |
| | 1035 Sacramento & Alabama | Southbound | 1.8 | 1.9 | 2.9 |
| | 1036 Sacramento & Florida (St Vincent Ferrer) | Southbound | 0.0 | 0.7 | 2.9 |
| | 1037 Sacramento & Virginia | Southbound | 0.0 | 1.7 | 2.8 |
| | 1001 Vallejo Transit Center | | | 20.8 | 1.2 |

Source: Avail Datapoint for October - December 2017

TABLE 18: Average Weekday Boarding/Alighting and Passenger Load by Stop -- Route 7

| StopID | Name | Direction | Average Daily | | Avg Psgr Load After Stop |
|-----------|---|------------|---------------|--------|-----------------------------|
| | | | Board | Alight | |
| Eastbound | 1001 Vallejo Transit Center | | 66.5 | | 2.4 |
| | 1060 Sonoma & Florida (Lincoln Elem School) | Northbound | 5.7 | 2.7 | 2.5 |
| | 1092 Florida & Napa | Eastbound | 1.6 | 0.9 | 2.5 |
| | 1093 Florida & El Dorado | Eastbound | 0.8 | 0.3 | 2.5 |
| | 1038 Florida & Alameda | Eastbound | 3.5 | 0.8 | 2.6 |
| | 1039 Florida & Amador | Eastbound | 3.2 | 1.9 | 2.7 |
| | 1094 Florida & Wolfe St | Eastbound | 3.3 | 3.3 | 2.7 |
| | 1095 Florida & Calaveras | Eastbound | 1.2 | 1.4 | 2.7 |
| | 1096 Florida & Solano | Eastbound | 4.6 | 6.6 | 2.6 |
| | 2077 Springs & Hilton | Eastbound | 2.9 | 2.9 | 2.6 |
| | 2078 Springs & Vervais | Eastbound | 0.9 | 2.4 | 2.5 |
| | 2079 Springs & Thelma | Eastbound | 4.1 | 5.0 | 2.5 |
| | 2080 Springs & Oakwood (Springstowne Center) | Eastbound | 6.5 | 8.4 | 2.4 |
| | 2081 Springs & Heartwood | Eastbound | 1.9 | 3.0 | 2.4 |
| | 2082 Springs & Rollingwood (Springhill Shopping Center) | Eastbound | 5.9 | 4.1 | 2.5 |
| | 2086 Avian & Tennessee | Eastbound | 1.1 | 3.4 | 2.4 |
| | 4020 Columbus Parkway & Ascot | Northbound | 3.7 | 3.1 | 2.4 |
| | 4022 Ascot & Sunrise | Northbound | 0.4 | 1.0 | 2.4 |
| | 4023 Ascot opp Wardlaw Park East | Northbound | 2.1 | 12.0 | 2.0 |
| | 4037 Redwood & Oakwood | Westbound | 2.3 | 1.7 | 2.0 |
| | 4042 Redwood & Foothill | Westbound | 0.7 | 1.9 | 2.0 |
| | 4040 Redwood & Adm Callaghan | Westbound | 1.9 | 7.9 | 1.8 |
| | 4044 Admiral Callaghan & Rotary | Northbound | 2.4 | 6.2 | 1.6 |
| | 4005 Admiral Callaghan & Vallejo Corners (Target) | Southbound | 19.2 | 19.8 | 1.6 |
| | 4045 Plaza Dr & Admiral Callaghan (Gateway Plaza North) | Southbound | 0.2 | 2.7 | 1.5 |
| Westbound | 4006 Plaza Dr & Turner Pkwy (Gateway Plaza/Costco) | Southbound | 27.7 | 16.0 | 1.9 |
| | 4001 Redwood & Adm Callaghan Ln | Eastbound | 13.6 | 2.2 | 2.3 |
| | 4043 Redwood & Foothill | Eastbound | 1.9 | 0.6 | 2.4 |
| | 4036 Redwood & Oakwood | Eastbound | 7.7 | 3.6 | 2.5 |
| | 4009 Ascot & Wardlaw Park East | Southbound | 5.2 | 0.4 | 2.7 |
| | 4010 Ascot & Sunrise | Southbound | 0.9 | 0.3 | 2.7 |
| | 4011 Ascot & Locust | Southbound | 0.7 | 0.5 | 2.7 |
| | 4050 Columbus Parkway & Ascot | Southbound | 5.1 | 2.8 | 2.8 |
| | 2087 Avian & Tennessee | Eastbound | 2.1 | 1.7 | 2.8 |
| | 2054 Springs & Avian (Spring Hills Shopping Center) | Westbound | 7.6 | 4.9 | 2.9 |
| | 2055 Springs & Heartwood | Westbound | 3.7 | 1.7 | 3.0 |
| | 2056 Springs & Mosswood | Westbound | 3.2 | 3.4 | 3.0 |
| | 2057 Springs & Oakwood | Westbound | 6.8 | 3.0 | 3.1 |
| | 2058 Springs & Maple | Westbound | 2.9 | 1.6 | 3.1 |
| | 2059 Springs & Vervais | Westbound | 4.3 | 1.7 | 3.2 |
| | 2060 Springs & Humboldt | Westbound | 0.6 | 0.8 | 3.2 |
| | 1071 Florida & Solano | Westbound | 7.0 | 4.8 | 3.3 |
| | 1072 Florida & Tuolumne | Westbound | 3.5 | 4.4 | 3.3 |
| | 1073 Florida & Yuba | Westbound | 0.4 | 0.6 | 3.3 |
| | 1074 Florida & Amador (Florence Douglas Senior Center) | Westbound | 1.5 | 1.8 | 3.2 |
| | 1075 Florida & Alameda | Westbound | 0.9 | 5.1 | 3.1 |
| | 1077 Florida & Sonoma | Westbound | 0.4 | 5.4 | 2.9 |
| | 1127 Sonoma Blvd & Capitol | Southbound | 0.2 | 4.9 | 2.8 |
| | 1001 Vallejo Transit Center | | | 52.7 | 0.9 |

Source: Avail Datapoint for October - December 2017

TABLE 19: Average Weekday Boarding/Alighting and Passenger Load by Stop -- Route 8

| StopID | Name | Direction | Average Daily | | Avg Psgr Load After Stop |
|-----------|---|------------|---------------|--------|-----------------------------|
| | | | Board | Alight | |
| Eastbound | 1001 Vallejo Transit Center | | 25.7 | | 2.0 |
| | 1079 Maine & Sutter | Eastbound | 0.1 | 0.0 | 2.0 |
| | 1080 Maine & Napa | Eastbound | 0.0 | 0.0 | 2.0 |
| | 1081 Maine & El Dorado | Eastbound | 0.1 | 0.0 | 2.0 |
| | 1116 Maine & Alameda | Eastbound | 0.4 | 0.8 | 2.0 |
| | 1083 Benicia & Solano/Rice | Eastbound | 0.5 | 0.8 | 1.9 |
| | 1084 Benicia & Beach | Eastbound | 0.2 | 0.6 | 1.9 |
| | 1085 Benicia & Starr | Eastbound | 1.0 | 2.4 | 1.8 |
| | 1086 Benicia & Carquinez | Eastbound | 0.3 | 1.4 | 1.7 |
| | 2070 Benicia & Cedar | Eastbound | 0.9 | 1.8 | 1.6 |
| | 2071 Benicia & Maple | Eastbound | 0.3 | 2.1 | 1.5 |
| | 2072 Benicia & Home Acres | Eastbound | 0.5 | 1.0 | 1.5 |
| | 2073 Benicia & Taylor | Eastbound | 0.5 | 0.8 | 1.4 |
| | 2074 Benicia & Rollingwood Dr | Eastbound | 0.0 | 0.2 | 1.4 |
| | 2036 Rollingwood & Benicia | Northbound | 0.4 | 0.2 | 1.4 |
| | 2038 Rollingwood & Keats | Northbound | 0.4 | 1.5 | 1.3 |
| | 2098 Rollingwood & Baywood | Northbound | 0.1 | 0.8 | 1.4 |
| | 2089 Rollingwood & Cottonwood | Northbound | 0.1 | 0.2 | 1.3 |
| | 2088 Rollingwood & Springs (Vallejo Adult School) | Northbound | 0.2 | 0.9 | 1.4 |
| | 2082 Springs & Rollingwood (Springhill Shopping Center) | Eastbound | 2.8 | 1.9 | 1.4 |
| | 4020 Columbus Parkway & Ascot | Northbound | 0.7 | 0.6 | 1.4 |
| | 2048 Ascot & Hilary | Southbound | 3.2 | 3.9 | 1.4 |
| | 2049 Ascot & Southport | Southbound | 1.5 | 1.3 | 1.4 |
| | 2050 Ascot & Hawkins | Southbound | 0.1 | 0.2 | 1.4 |
| | 2051 Ascot & Georgia | Southbound | 0.1 | 0.3 | 1.4 |
| | 2052 Georgia & Southport | Westbound | 0.2 | 0.2 | 1.4 |
| | 2053 Georgia & Norfolk | Westbound | 0.8 | 0.5 | 1.4 |
| | 8007 Georgia St & Columbus | Westbound | 0.5 | 0.3 | 1.4 |
| | 2041 Georgia & Corkwood | Westbound | 0.6 | 0.3 | 1.4 |
| Westbound | 2005 Georgia & Rosewood | Eastbound | 3.3 | 2.2 | 1.5 |
| | 8005 Oakwood Ave & Westwood | Northbound | 2.1 | 0.9 | 1.6 |
| | 2080 Springs & Oakwood (Springstowne Center) | Eastbound | 0.4 | 0.5 | 1.6 |
| | 2081 Springs & Heartwood | Eastbound | 0.1 | 0.2 | 1.6 |
| | 2082 Springs & Rollingwood (Springhill Shopping Center) | Eastbound | 2.8 | 1.9 | 1.7 |
| | 4020 Columbus Parkway & Ascot | Northbound | 0.7 | 0.6 | 1.7 |
| | 2048 Ascot & Hilary | Southbound | 3.2 | 3.9 | 1.6 |
| | 2049 Ascot & Southport | Southbound | 1.5 | 1.3 | 1.6 |
| | 2050 Ascot & Hawkins | Southbound | 0.1 | 0.2 | 1.6 |
| | 2051 Ascot & Georgia | Southbound | 0.1 | 0.3 | 1.6 |
| | 2052 Georgia & Southport | Westbound | 0.2 | 0.2 | 1.6 |
| | 2053 Georgia & Norfolk | Westbound | 0.8 | 0.5 | 1.6 |
| | 8007 Georgia St & Columbus | Westbound | 0.5 | 0.3 | 1.6 |
| | 2041 Georgia & Corkwood | Westbound | 0.6 | 0.3 | 1.7 |
| | 2092 Rollingwood & Baywood | Southbound | 0.4 | 0.1 | 1.7 |
| | 2093 Rollingwood & Dryden | Westbound | 2.1 | 0.6 | 1.8 |
| | 2094 Benicia & Banning | Westbound | 1.6 | 0.3 | 1.9 |
| | 2095 Benicia & Home Acres | Westbound | 0.0 | 0.0 | 1.9 |
| | 2096 Benicia & Maple | Westbound | 1.1 | 0.5 | 1.9 |
| | 2097 Benicia & Cedar | Westbound | 1.9 | 0.2 | 2.1 |
| | 1118 Benicia & Carquinez | Westbound | 2.8 | 0.5 | 2.2 |
| | 1119 Benicia & Beach | Westbound | 1.0 | 0.5 | 2.3 |
| | 1120 Benicia & Rice/Solano | Westbound | 0.7 | 0.3 | 2.3 |
| | 1121 Maine & Alameda | Westbound | 0.9 | 0.1 | 2.4 |
| | 1122 Maine & Sonoma | Westbound | 0.0 | 0.2 | 2.4 |
| | 1001 Vallejo Transit Center | | | 20.3 | -1.6 |

Source: Avail Datapoint for October - December 2017

TABLE 20: Average Weekday Boarding/Alighting and Passenger Load by Stop -- Route 20

| | StopID | Name | Direction | Average Daily | | Avg Psgr Load After Stop |
|-----------|--------|---|------------|---------------|--------|--------------------------|
| | | | | Board | Alight | |
| Eastbound | 3111 | Sereno Transit Center (STC) | | 7.3 | | 1.0 |
| | 3056 | Sereno & Kaiser Entrance (Kaiser Medical Center) | Eastbound | 0.1 | 0.1 | 1.0 |
| | 3057 | Sereno & Mesa Verde | Eastbound | 0.0 | 0.0 | 1.0 |
| | 3047 | Tuolumne & Sereno | Northbound | 0.0 | 0.0 | 1.0 |
| | 3048 | Tuolumne & Hospital Dr | Northbound | 0.2 | 0.2 | 1.0 |
| | 3050 | Sutter Solano Medical Center & Rear of Sutter Solano Hospital | Southbound | 0.2 | 0.2 | 1.0 |
| | 3138 | Hospital Dr & Tuolumne | Westbound | 0.0 | 0.1 | 1.0 |
| | 3058 | Tuolumne & Del Mar | Southbound | 0.1 | 0.1 | 1.0 |
| | 3076 | Redwood & Tuolumne | Eastbound | 0.1 | 0.1 | 1.0 |
| | 4044 | Admiral Callaghan & Rotary | Northbound | 0.0 | 0.0 | 1.0 |
| | 4005 | Admiral Callaghan & Vallejo Corners (Target) | Southbound | 0.5 | 0.5 | 1.0 |
| | 4045 | Plaza Dr & Admiral Callaghan (Gateway Plaza North) | Southbound | 0.0 | 0.3 | 1.0 |
| | 4006 | Plaza Dr & Turner Pkwy (Gateway Plaza/Costco) | Southbound | 0.6 | 0.4 | 1.0 |
| | 4032 | Columbus Pkwy & College Entrance (Solano College) | Eastbound | 0.4 | 0.3 | 1.1 |
| | 4034 | Redwood & Bonnie | Southbound | 0.0 | 0.0 | 1.1 |
| | 4041 | RedwoodSB&Ascot (824041) | Southbound | 0.0 | 0.0 | 1.1 |
| | 4009 | Ascot & Wardlaw Park East | Southbound | 0.1 | 0.0 | 1.1 |
| | 4010 | Ascot & Sunrise | Southbound | 0.0 | 0.0 | 1.1 |
| | 4011 | Ascot & Locust | Southbound | 0.0 | 0.0 | 1.1 |
| | 4050 | Columbus Parkway & Ascot | Southbound | 0.1 | 0.0 | 1.1 |
| | 4053 | Columbus Pkwy & Tennessee St | Southbound | 0.0 | 0.0 | 1.1 |
| | 4054 | Columbus Pkwy & Springs Rd | Southbound | 0.0 | 0.1 | 1.1 |
| | 4055 | Columbus Pkwy & Georgia St | Southbound | 0.0 | 0.1 | 1.0 |
| | 6056 | Columbus Pkwy & Rose Dr (CVS) | Eastbound | 0.0 | 0.0 | 1.0 |
| | 6002 | Military West & West 14th | Eastbound | 0.1 | 0.0 | 1.0 |
| | 6010 | Southhampton & Hastings | Eastbound | 0.0 | 0.0 | 1.0 |
| | 6011 | Southhampton & Turner (Benicia Middle School) | Eastbound | 0.0 | 0.0 | 1.0 |
| | 6012 | Southhampton & Chelsea Hills (Raley's) | Eastbound | 0.6 | 0.4 | 1.1 |
| | 6004 | Military West & West 7th | Eastbound | 0.1 | 0.0 | 1.1 |
| | 6005 | Military West & 1st St (Benicia City Park) | Eastbound | 0.5 | 0.4 | 1.1 |
| | 6062 | East H St & 1st St | Eastbound | 0.0 | 0.0 | 1.1 |
| | 6039 | H St & 3rd St (Rancho Benicia) | Southbound | 0.0 | 0.0 | 1.1 |
| Westbound | 6038 | E I St & 4th St (Casa de Vilarrasa) | Westbound | 0.0 | 0.0 | 1.1 |
| | 6039 | H St & 3rd St (Rancho Benicia) | Southbound | 0.0 | 0.0 | 1.1 |
| | 6058 | Military East & East 5th St | Westbound | 0.0 | 0.0 | 1.1 |
| | 6008 | Military West & 1st St (Benicia City Park) | Westbound | 0.6 | 0.7 | 1.1 |
| | 6059 | Military West & West 3rd St | Westbound | 0.0 | 0.0 | 1.1 |
| | 6003 | Military West & West 7th | Westbound | 0.1 | 0.3 | 1.1 |
| | 6013 | Southhampton & Chelsea Hills (Raley's) | Westbound | 0.0 | 0.0 | 1.1 |
| | 6014 | Southhampton & O'Farrell (Benicia M.S.) | Westbound | 0.0 | 0.0 | 1.1 |
| | 6009 | Southhampton & Hastings | Westbound | 0.0 | 0.0 | 1.1 |
| | 6001 | Military West & West 14th | Westbound | 0.1 | 0.1 | 1.1 |
| | 6060 | Columbus Pkwy & Rose Dr | Westbound | 0.1 | 0.0 | 1.1 |
| | 4061 | Columbus Pkwy & Georgia St | Northbound | 0.2 | 0.0 | 1.1 |
| | 4062 | Columbus Pkwy & Springs Rd | Northbound | 0.0 | 0.0 | 1.1 |
| | 4020 | Columbus Parkway & Ascot | Northbound | 0.3 | 0.2 | 1.1 |
| | 4022 | Ascot & Sunrise | Northbound | 0.0 | 0.0 | 1.1 |
| | 4023 | Ascot opp Wardlaw Park East | Northbound | 0.0 | 0.1 | 1.1 |
| | 4064 | Redwood Pkwy b/t Claret & Eagle Ridge | Northbound | 0.0 | 0.1 | 1.1 |
| | 4066 | Redwood Pkwy & Cabernet Dr | Northbound | 0.0 | 0.0 | 1.1 |
| | 4051 | Columbus Pkwy & St Johns Mine Rd (Solano College) | Westbound | 0.0 | 0.3 | 1.1 |
| | 4045 | Plaza Dr & Admiral Callaghan (Gateway Plaza North) | Southbound | 0.0 | 0.3 | 1.0 |
| | 4006 | Plaza Dr & Turner Pkwy (Gateway Plaza/Costco) | Southbound | 0.6 | 0.4 | 1.1 |
| | 4067 | Vallejo Corners & Target (opp McDs) | Northbound | 0.6 | 0.7 | 1.0 |
| | 3045 | Tuolumne & Redwood (Redwood Tuolumne Center) | Northbound | 0.2 | 0.1 | 1.0 |
| | 3046 | Tuolumne & Del Mar | Northbound | 0.0 | 0.1 | 1.0 |
| | 3047 | Tuolumne & Sereno | Northbound | 0.0 | 0.0 | 1.0 |
| | 3048 | Tuolumne & Hospital Dr | Northbound | 0.2 | 0.2 | 1.0 |
| | 3050 | Sutter Solano Medical Center & Rear of Sutter Solano Hospital | Southbound | 0.2 | 0.2 | 1.0 |
| | 3138 | Hospital Dr & Tuolumne | Westbound | 0.0 | 0.1 | 1.0 |
| | 3123 | Sereno & San Marino | Westbound | 0.0 | 0.0 | 1.0 |
| | 3117 | Sereno opp Kaiser Entrance (Kaiser Medical Center) | Westbound | 0.0 | 0.1 | 1.0 |
| | 3111 | Sereno Transit Center (STC) | | | 5.8 | -0.8 |

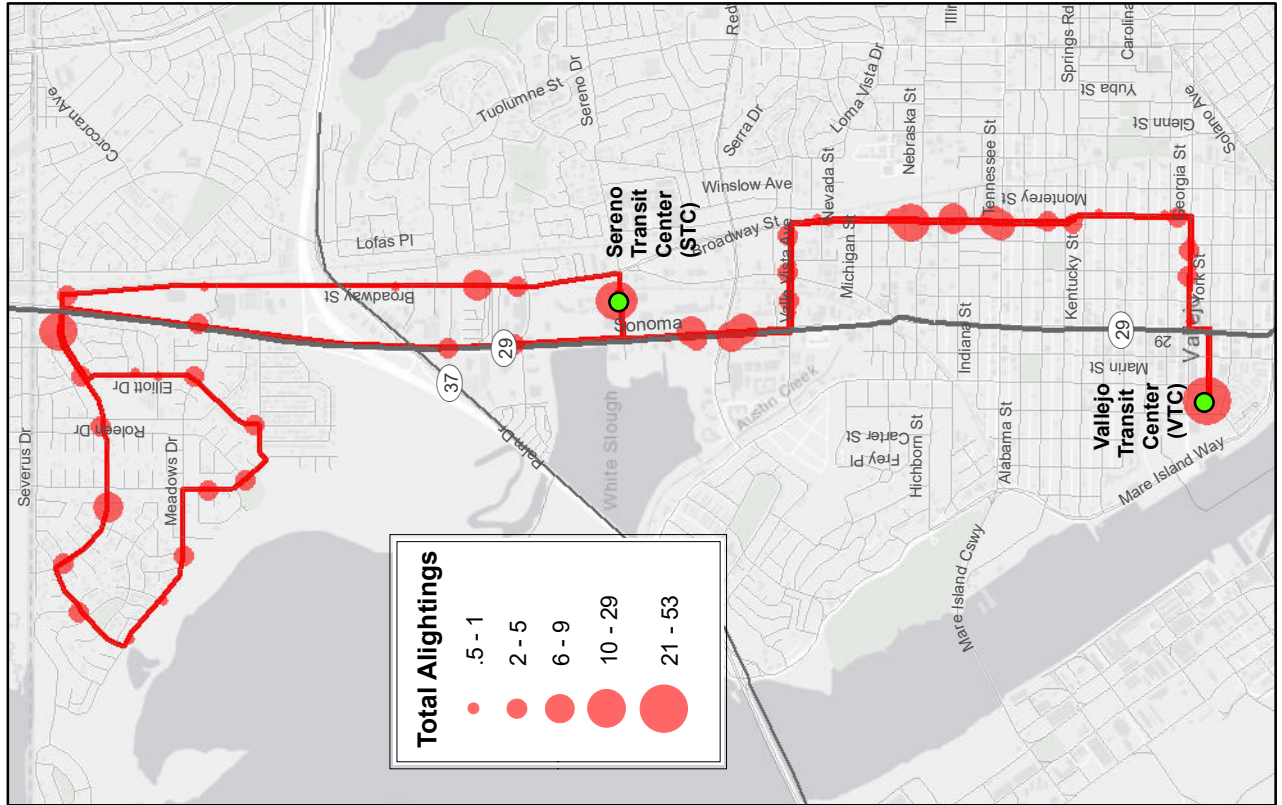
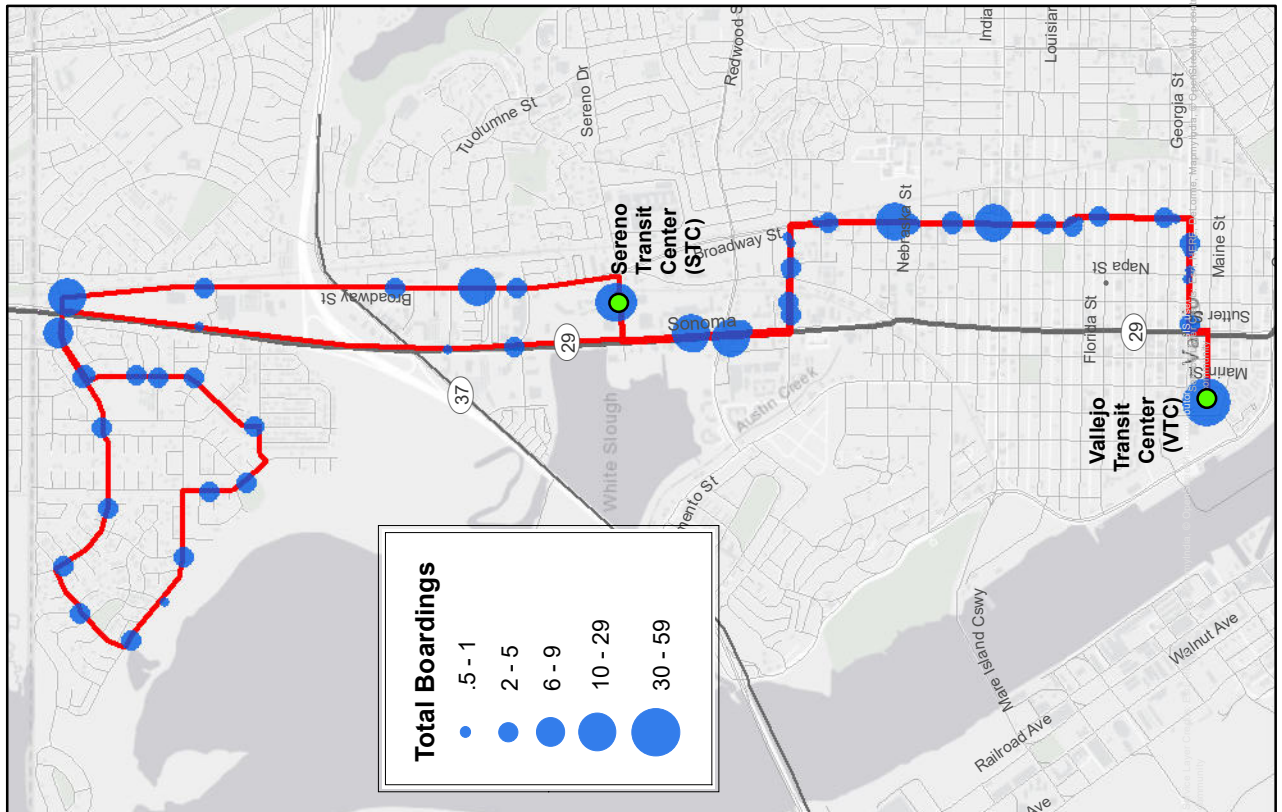
Source: Avail Datapoint for October - December 2017



0 0.25 0.5 1 Miles



Figure 18
Route 1 Average Weekday Bus Stop Activity





0 0.4 0.8 1.6 Miles



Figure 19
Route 2 Average Weekday Bus Stop Activity

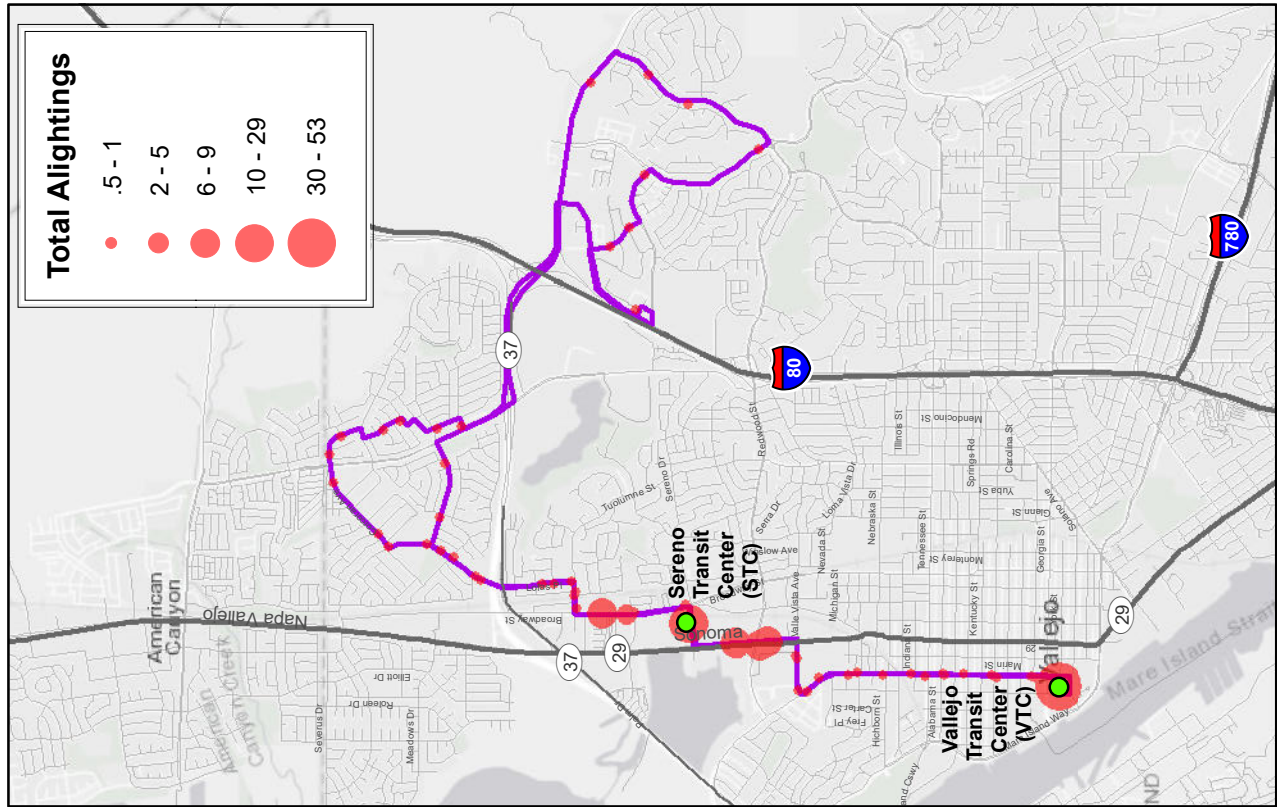
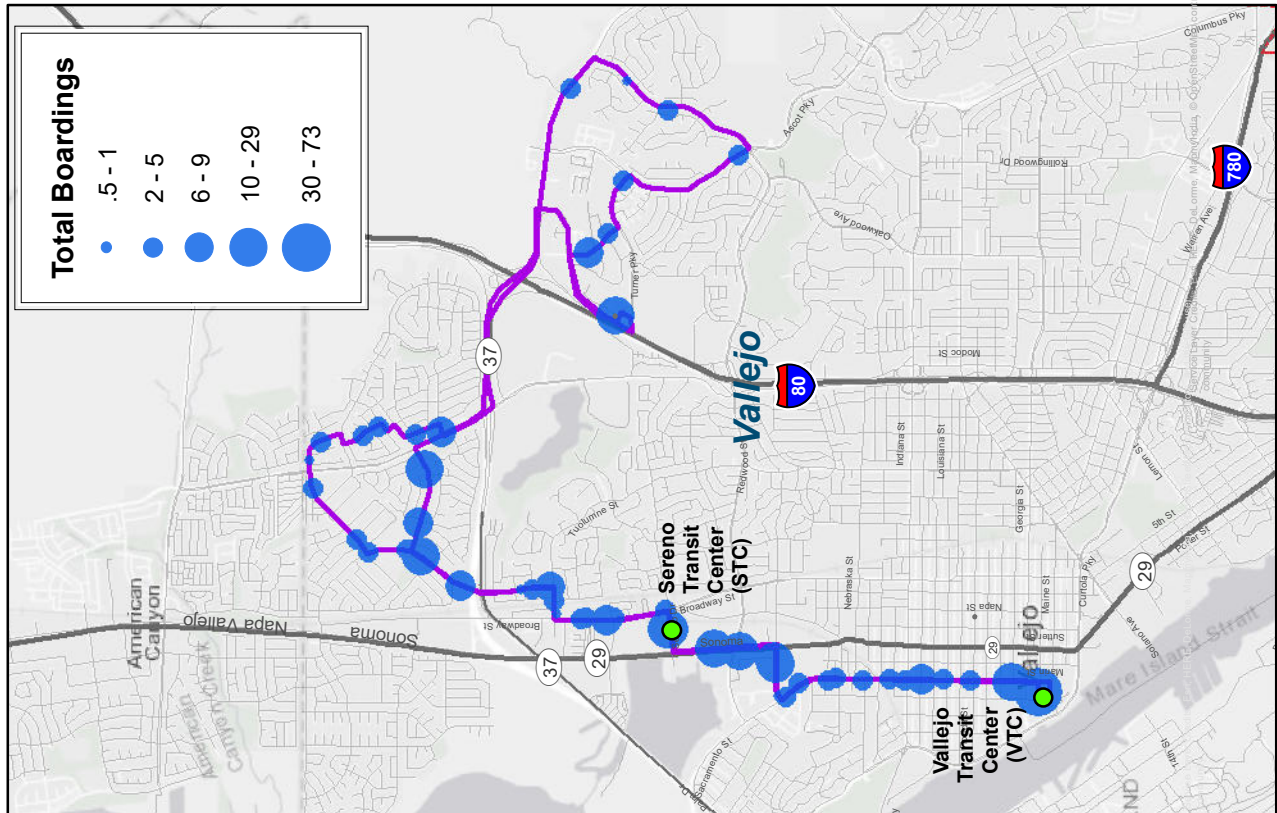


Figure 20
Route 3 Average Weekday Bus Stop Activity



0 0.375 0.75 1.5 Miles

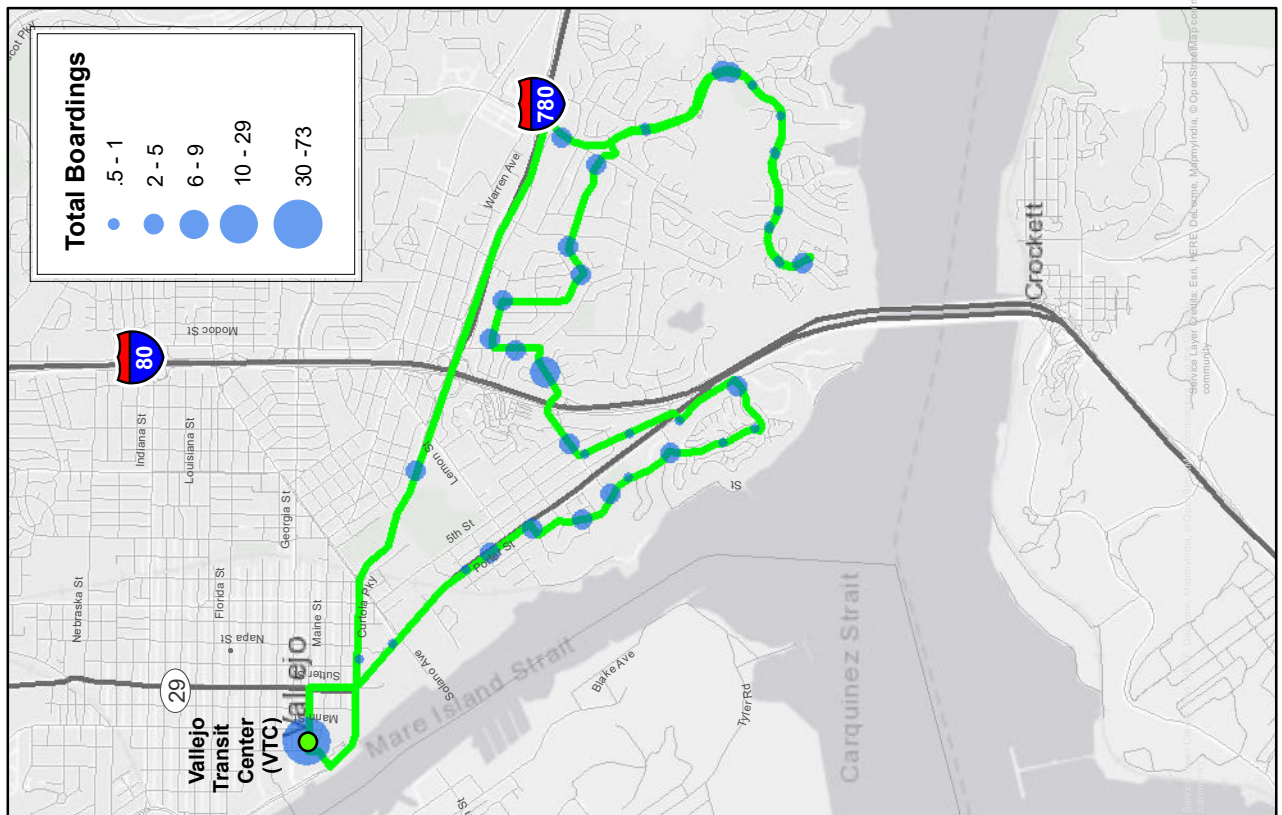
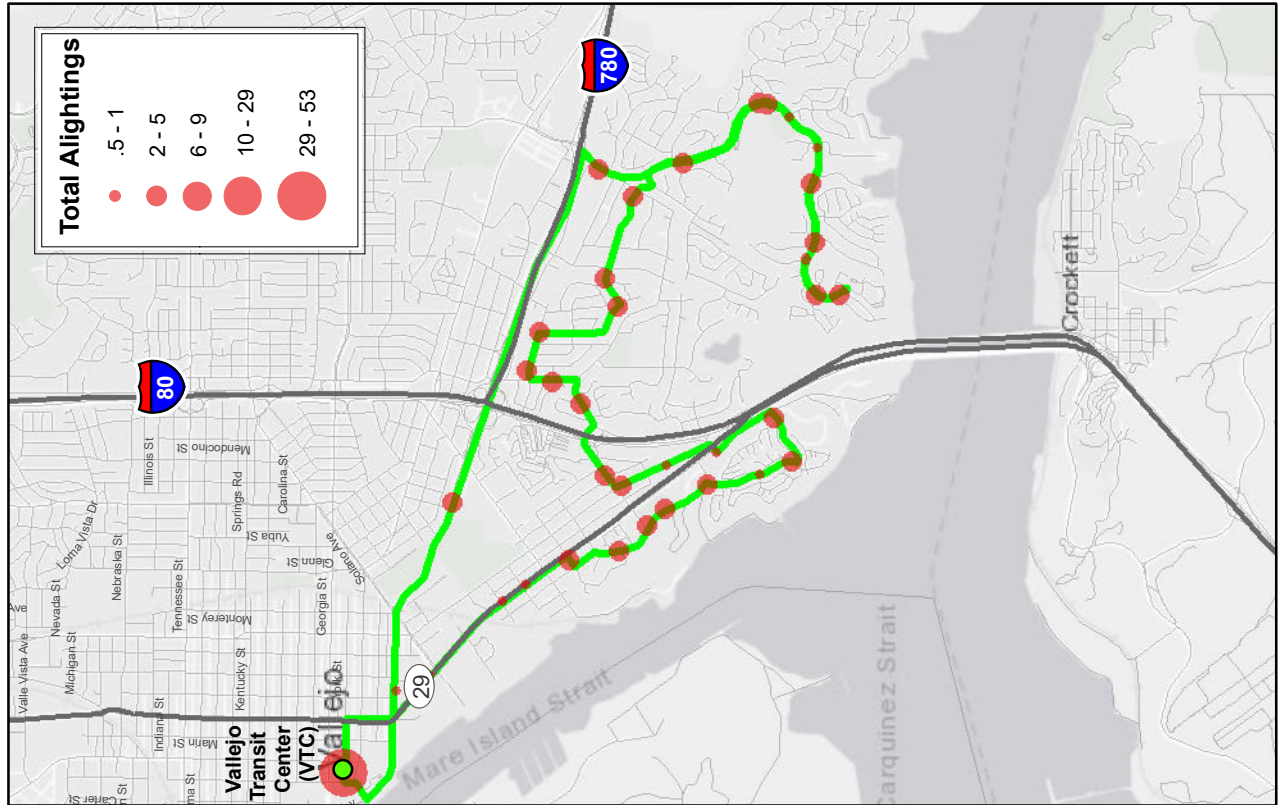
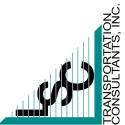
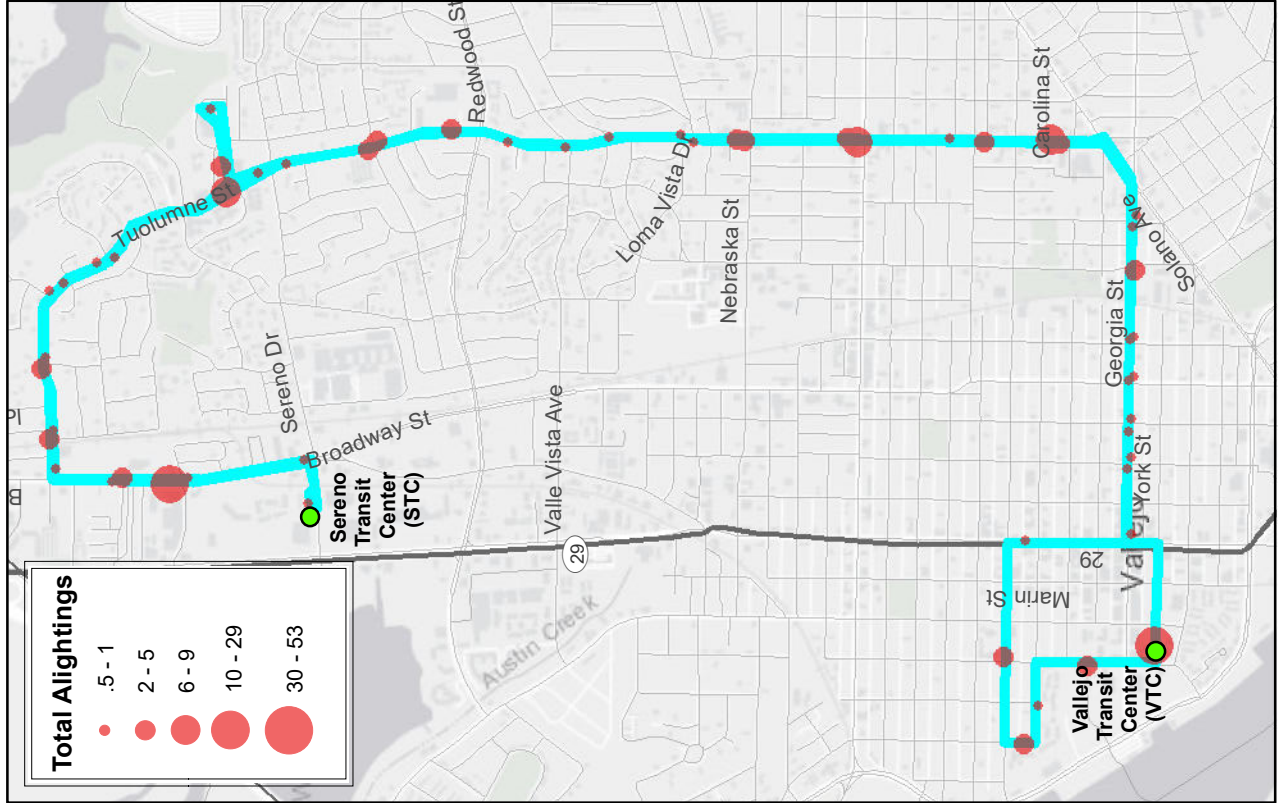


Figure 21
Route 4 Average Weekday Bus Stop Activity



0.8 Miles

0 0.2 0.4

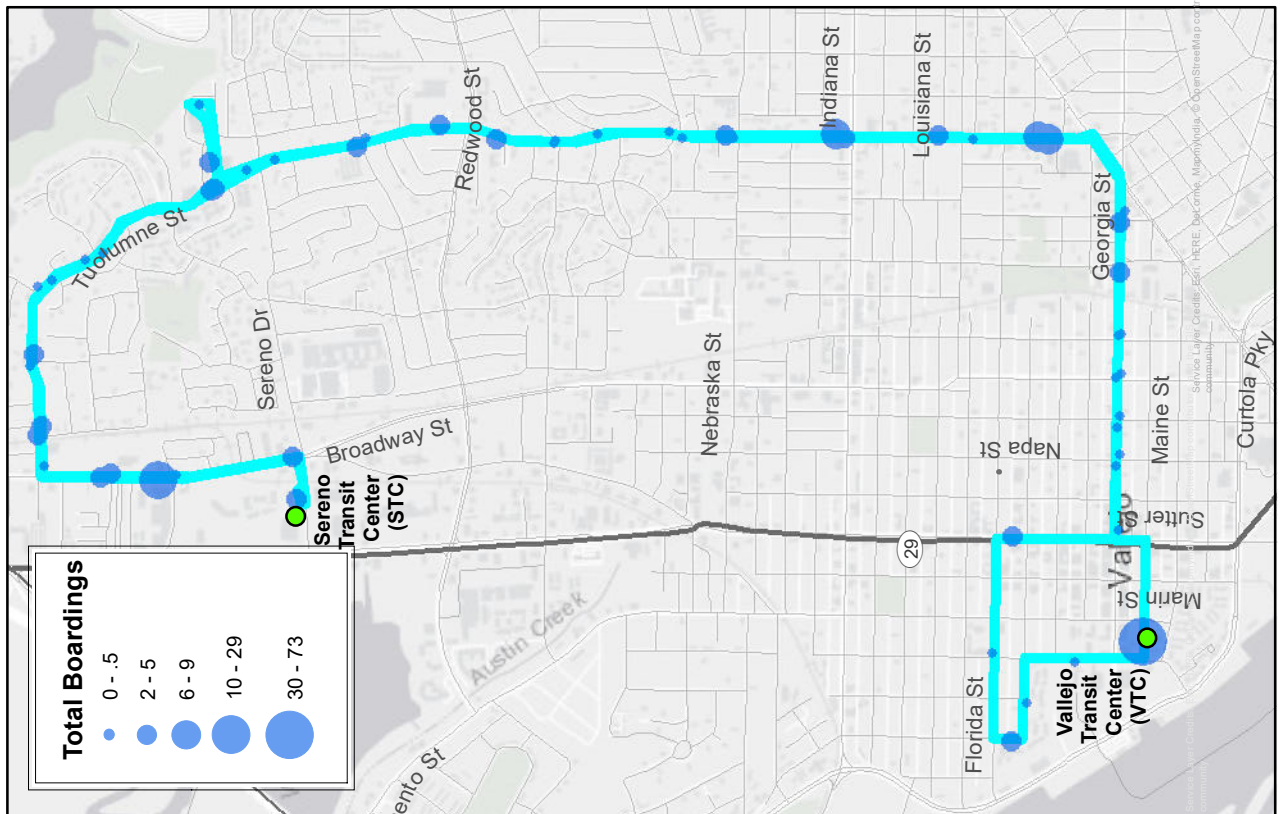


Figure 22
Route 5 Average Weekday Bus Stop Activity

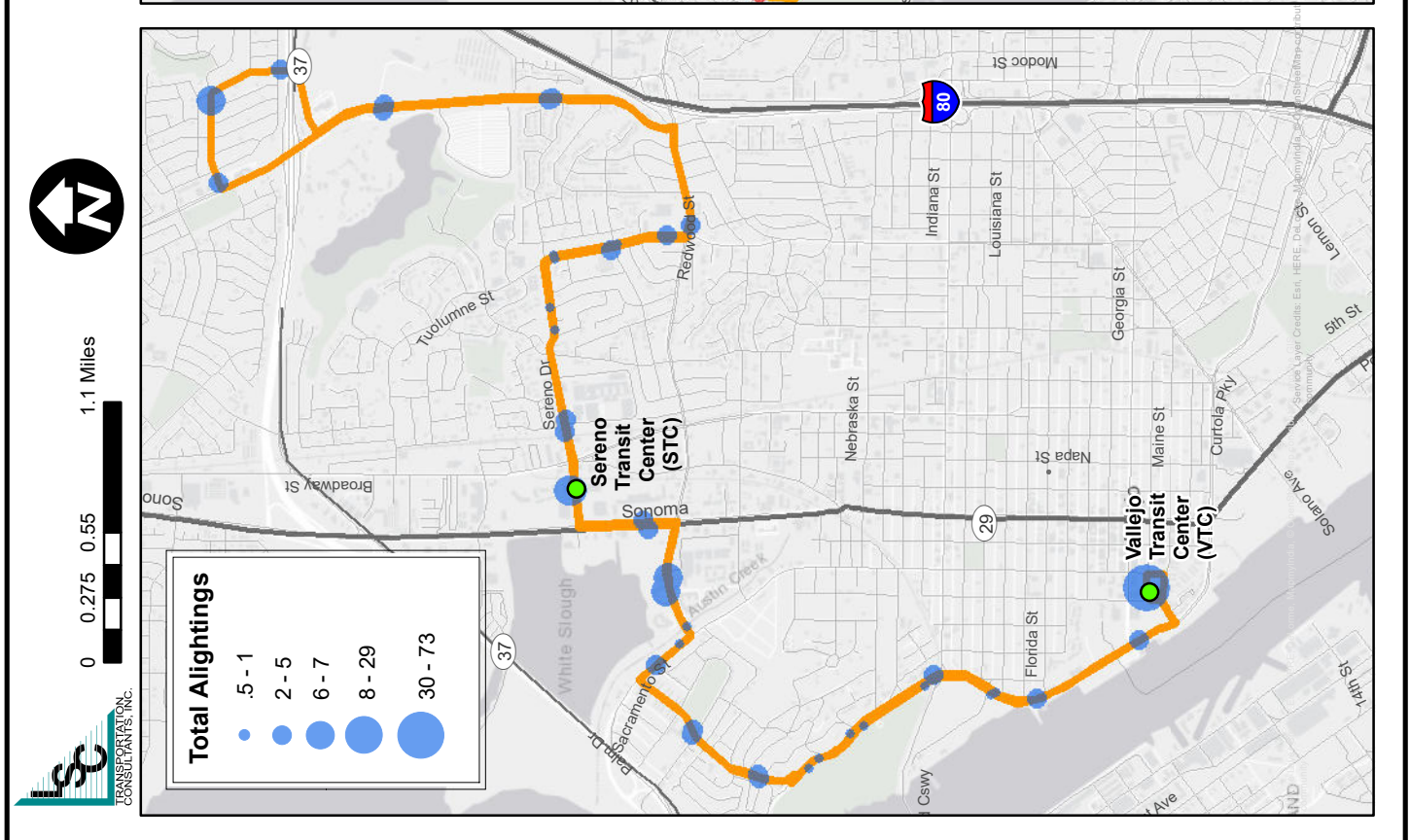
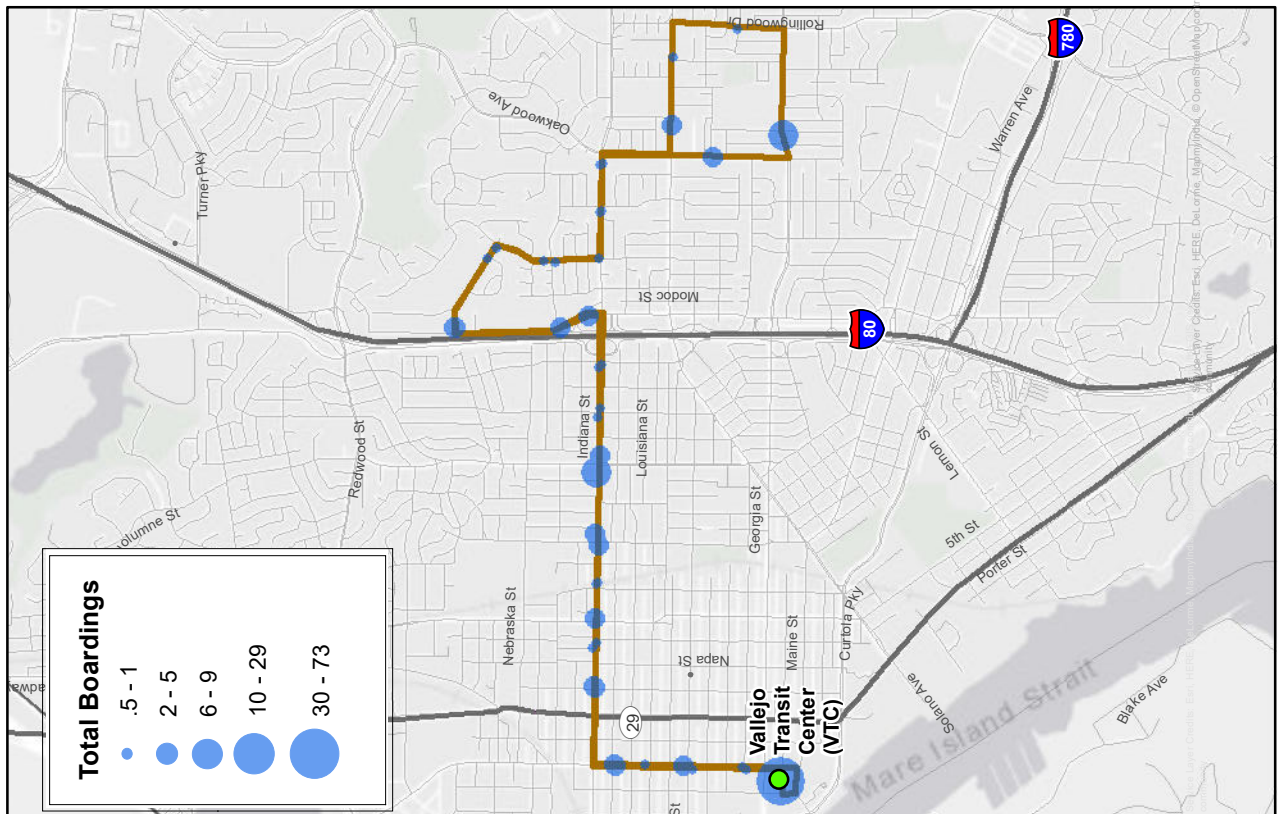
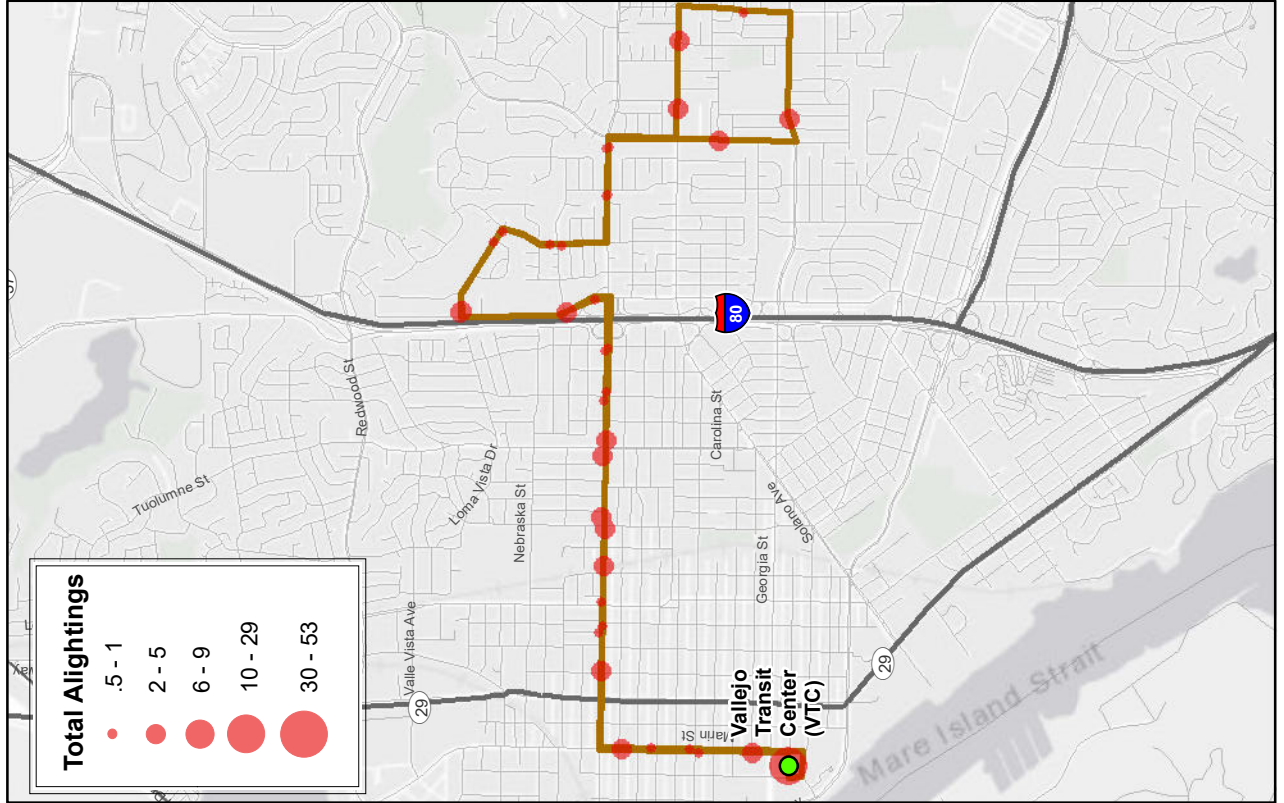


Figure 23
Route 6 Average Weekday Bus Stop Activity



1.3 Miles

0.65

0.325

0

LSC
TRANSPORTATION
CONSULTANTS, INC.

Figure 24
Route 7 Average Weekday Bus Stop Activity

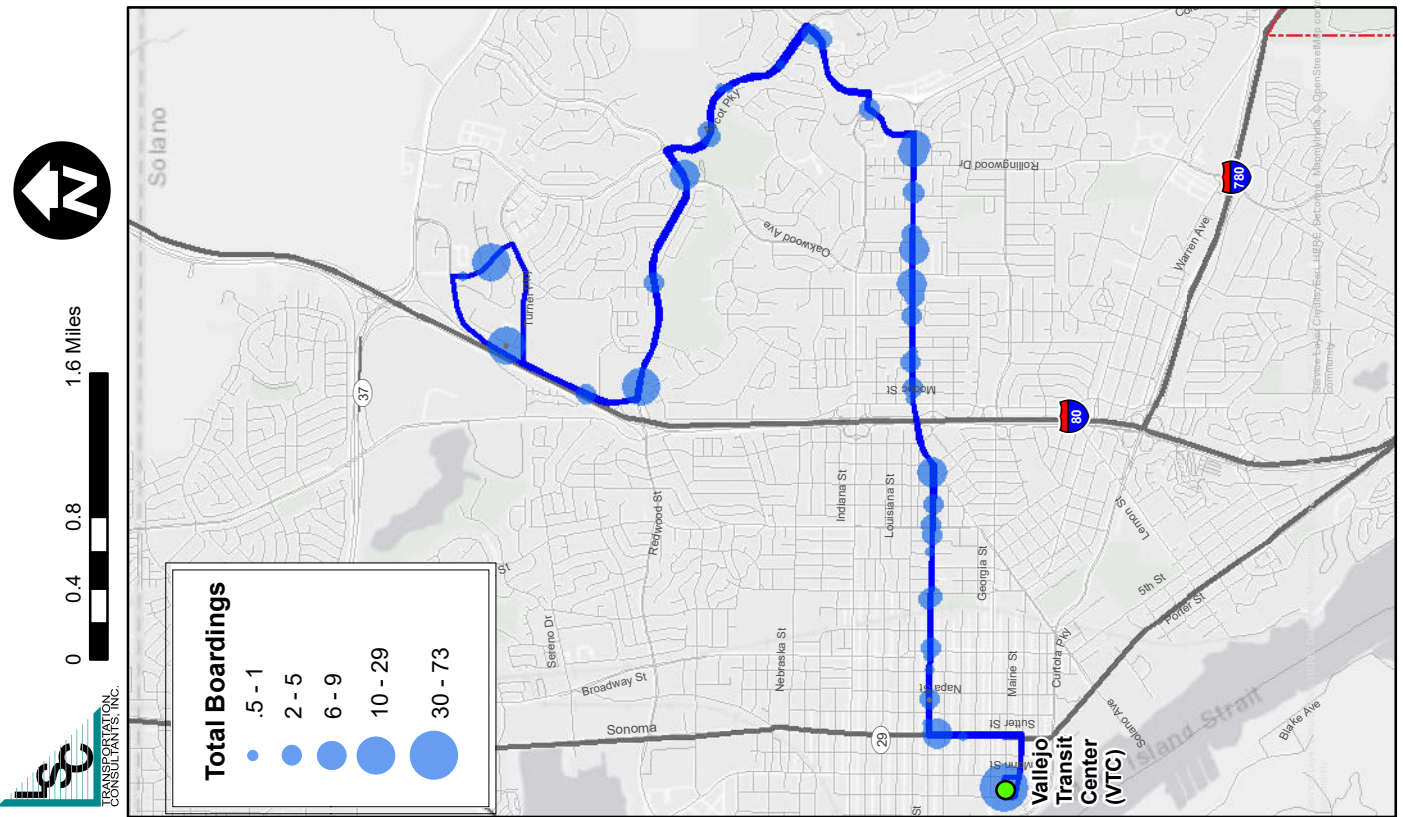


Figure 25
Route 8 Average Weekday Bus Stop Activity

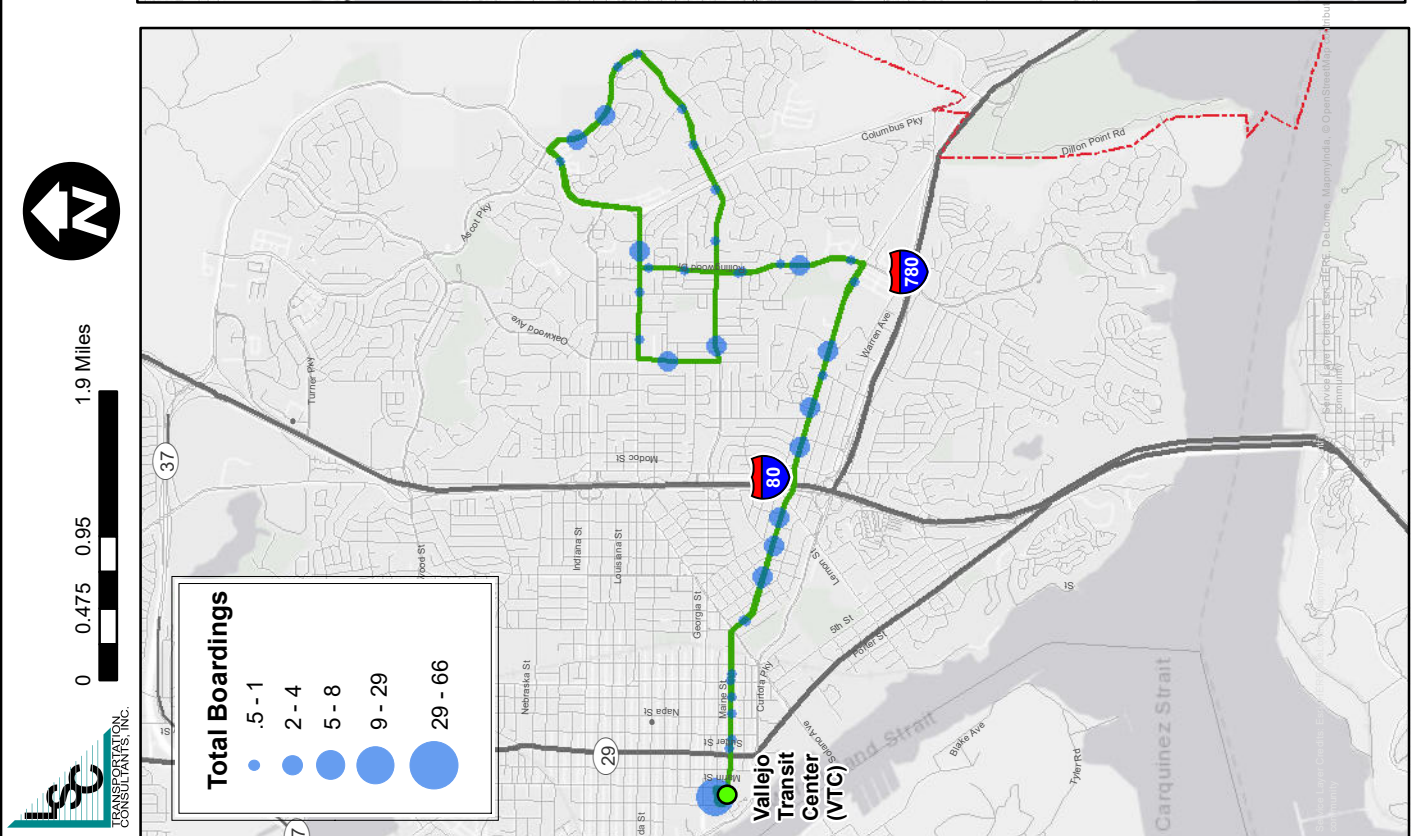




Figure 26
Route 20 Average Weekday Bus Stop Activity

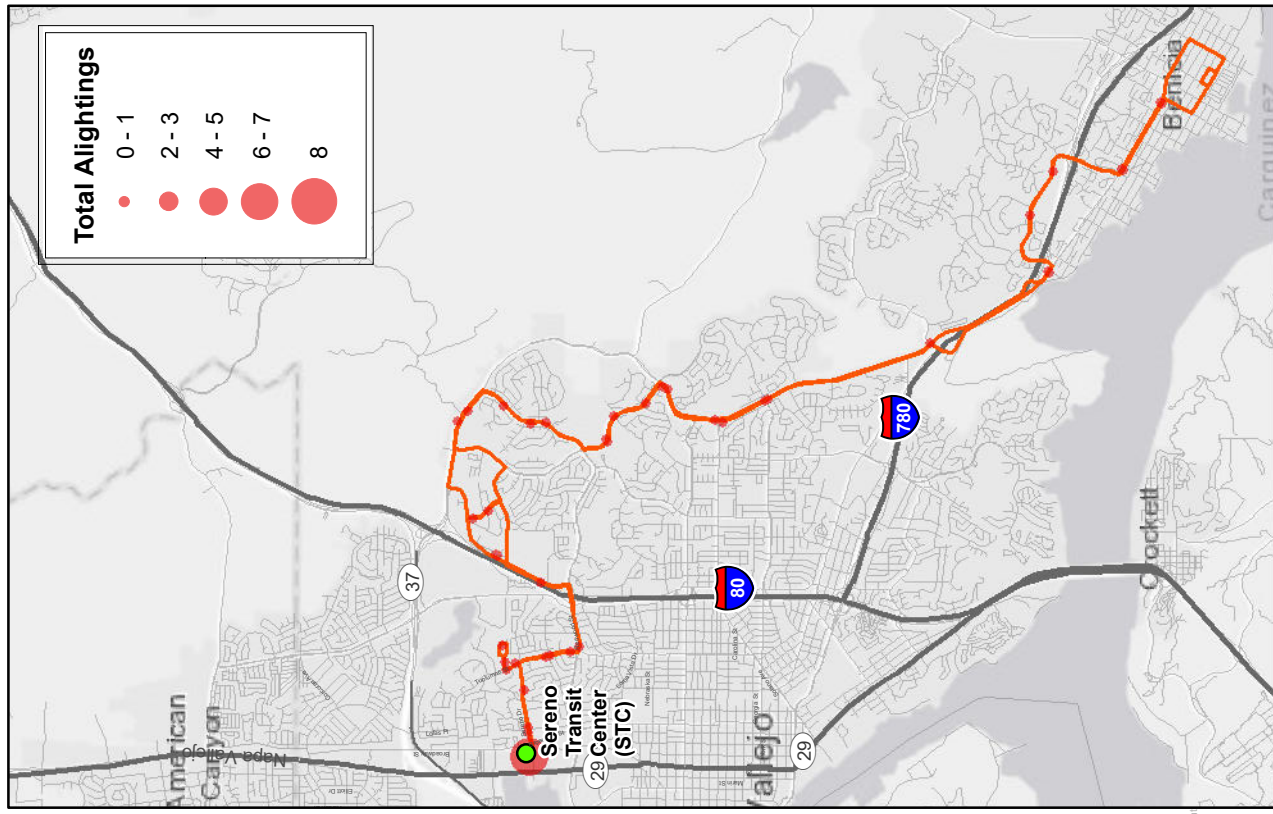
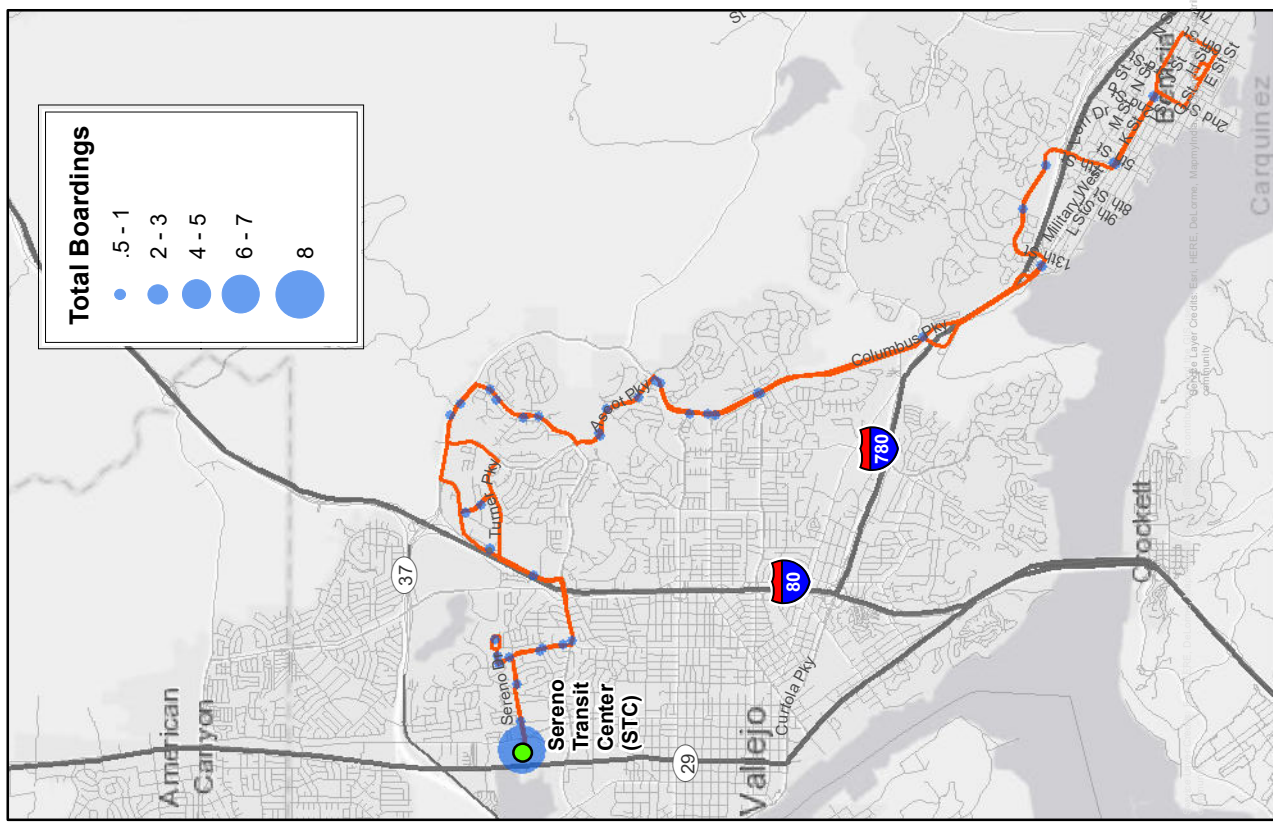


Figure 27
Route 15 Average Weekday Bus Stop Activity

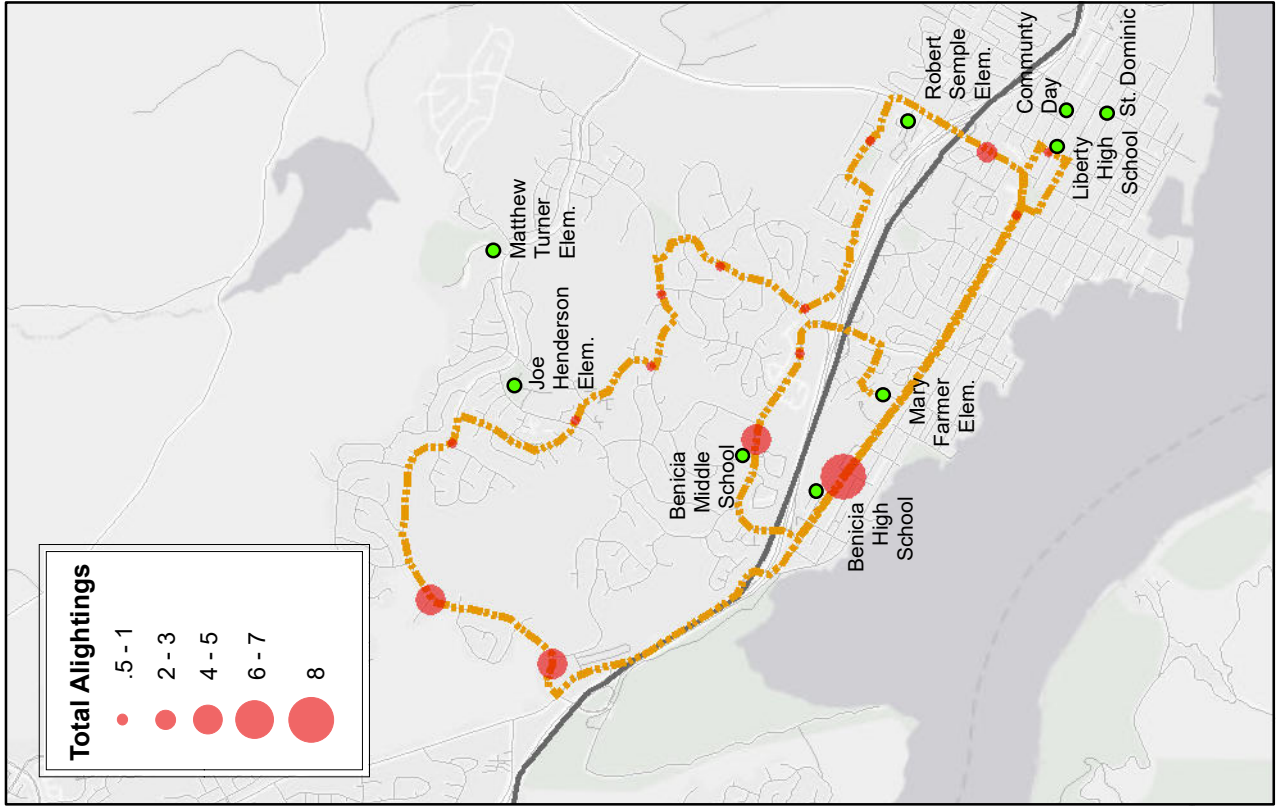
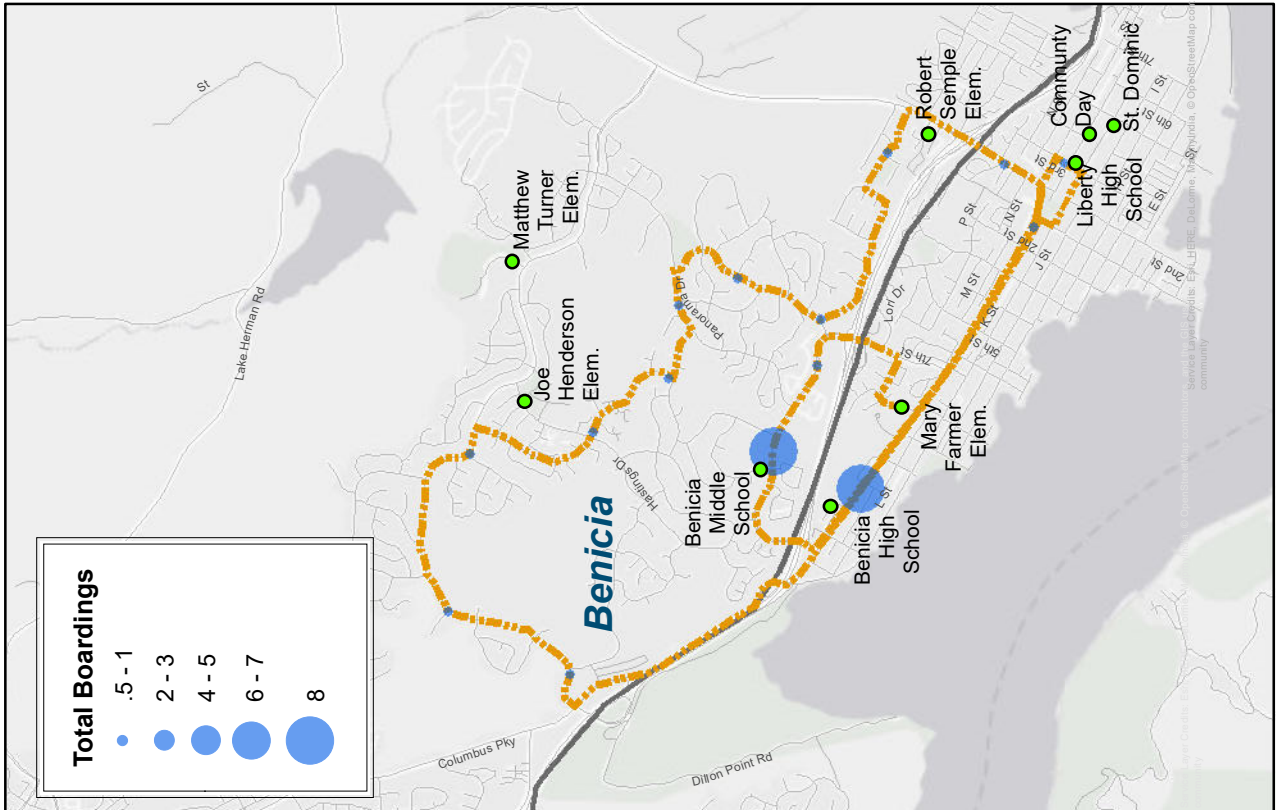


1.5 Miles

0.75

0

0.375





0 0.225 0.45 0.9 Miles

Figure 28
Route 17 Average Weekday Bus Stop Activity

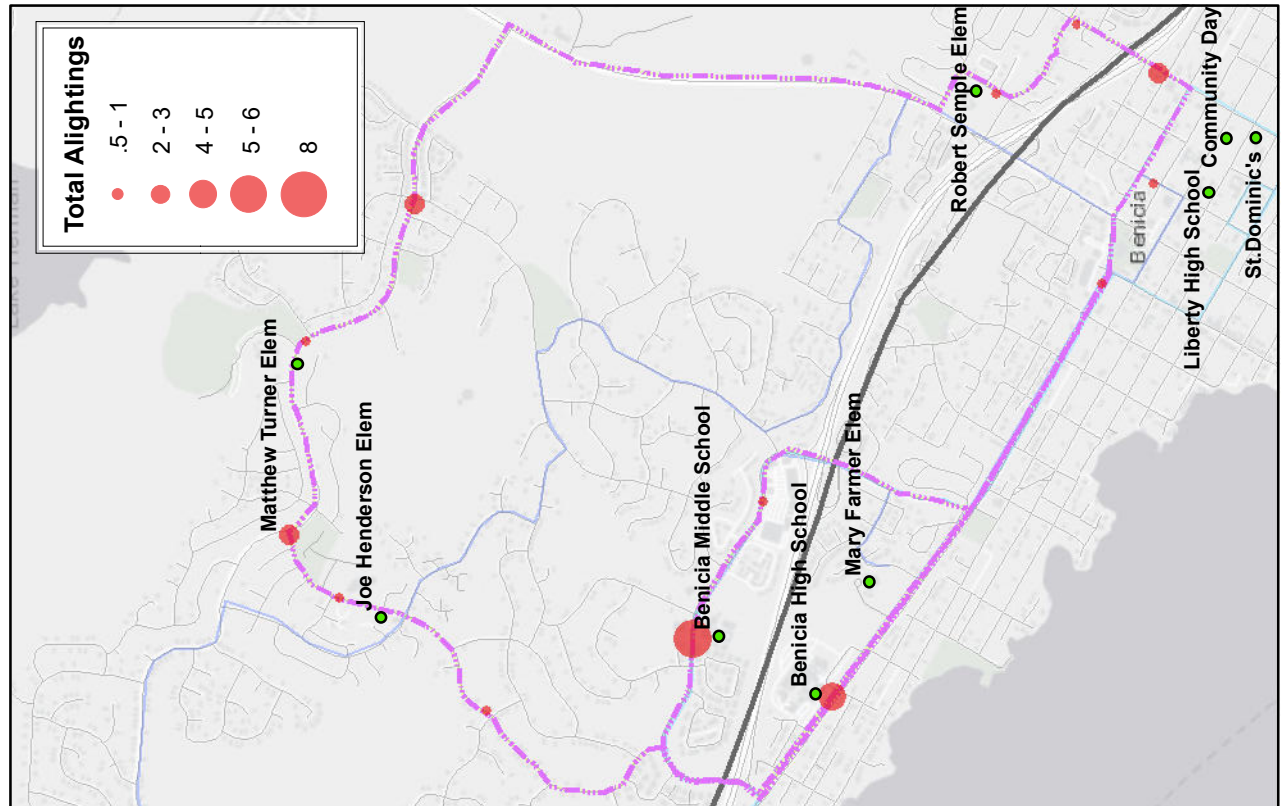
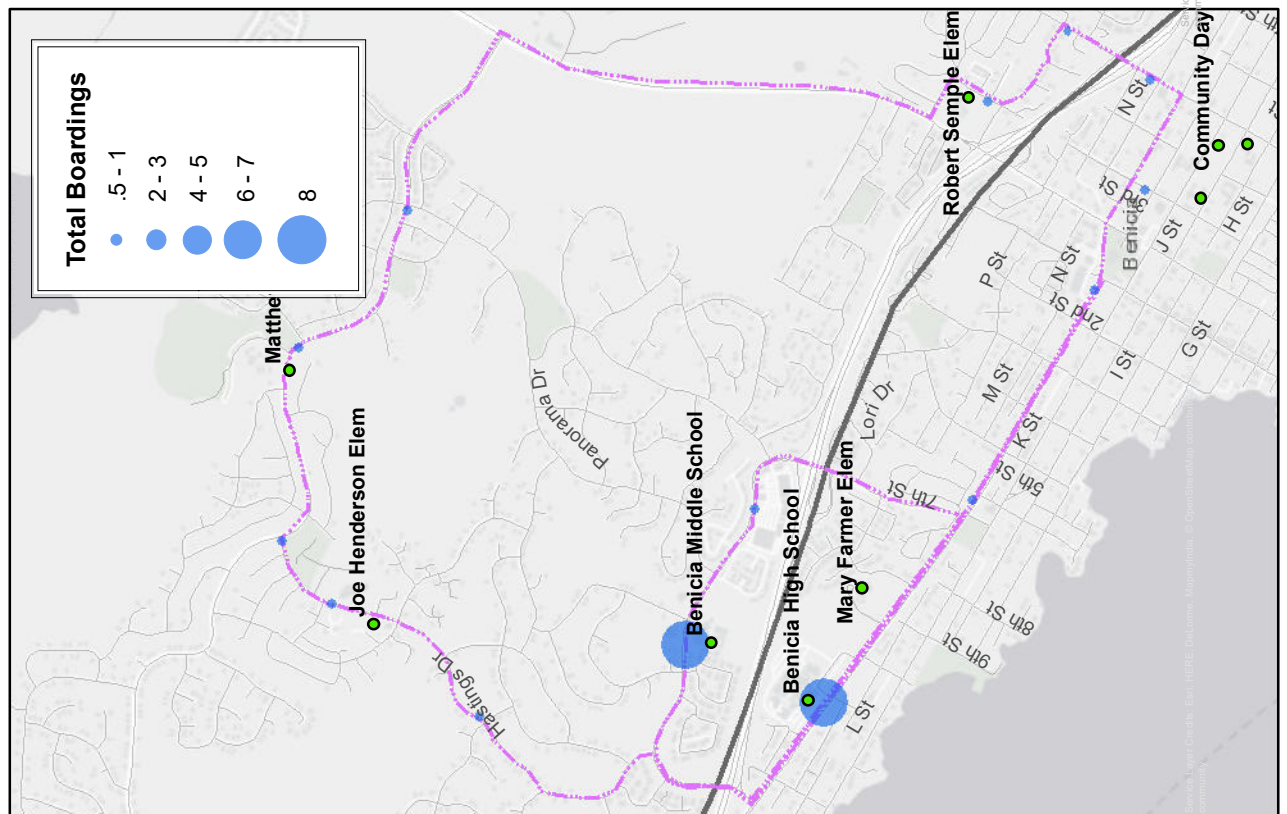


Figure 29
Route 38 Average Weekday Bus Stop Activity

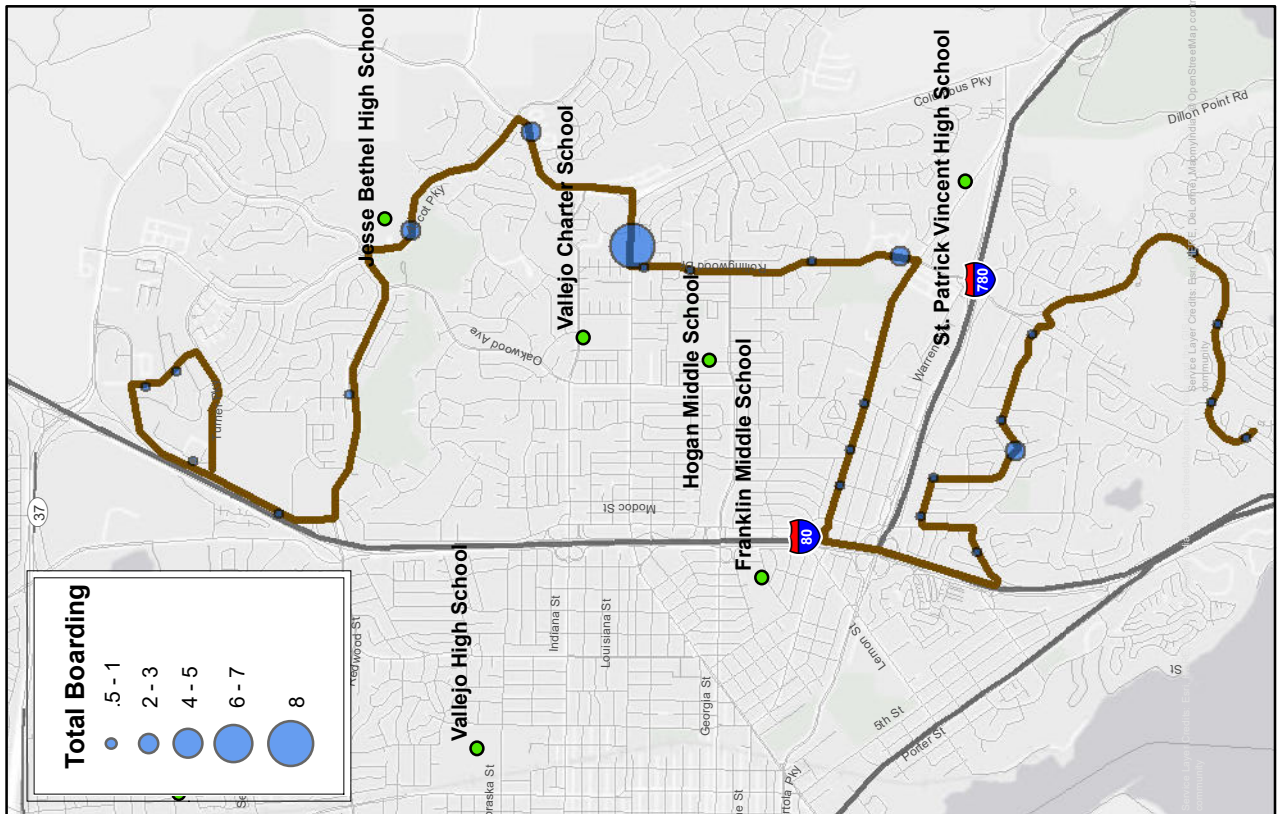
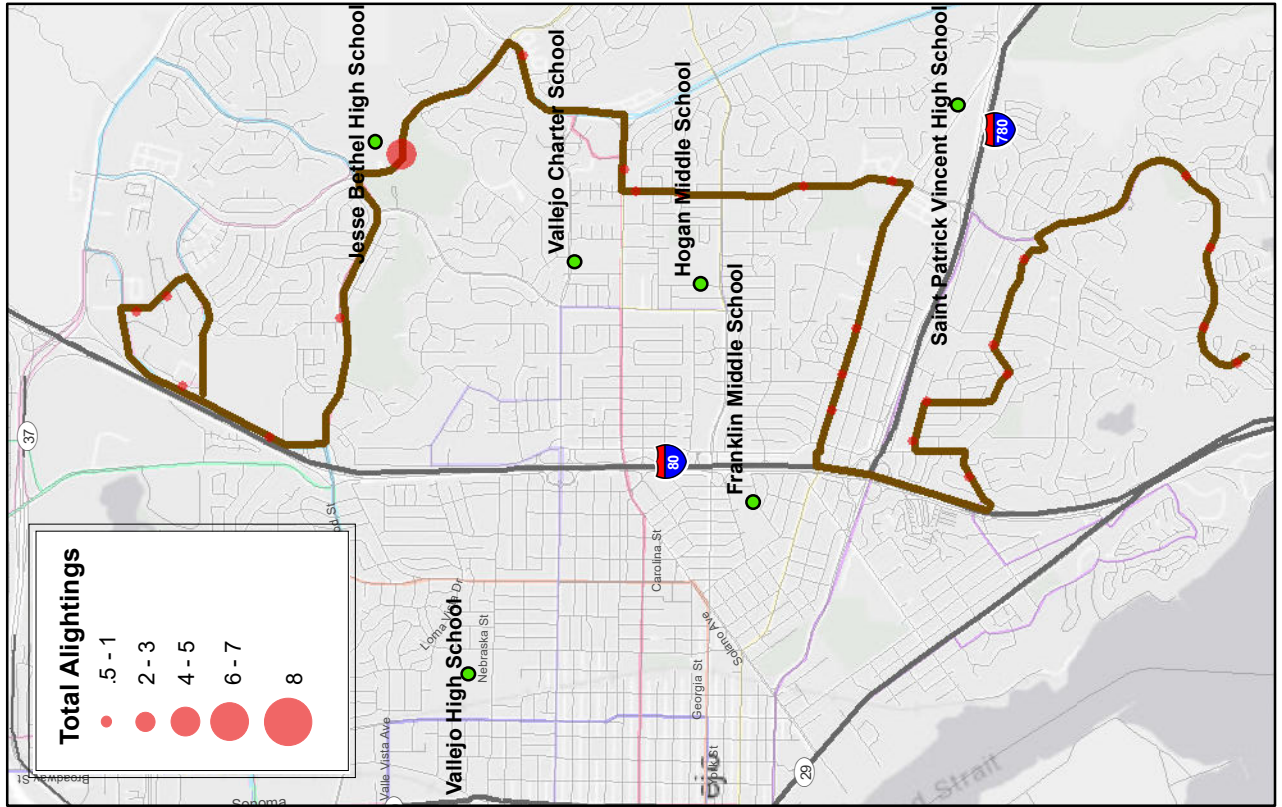
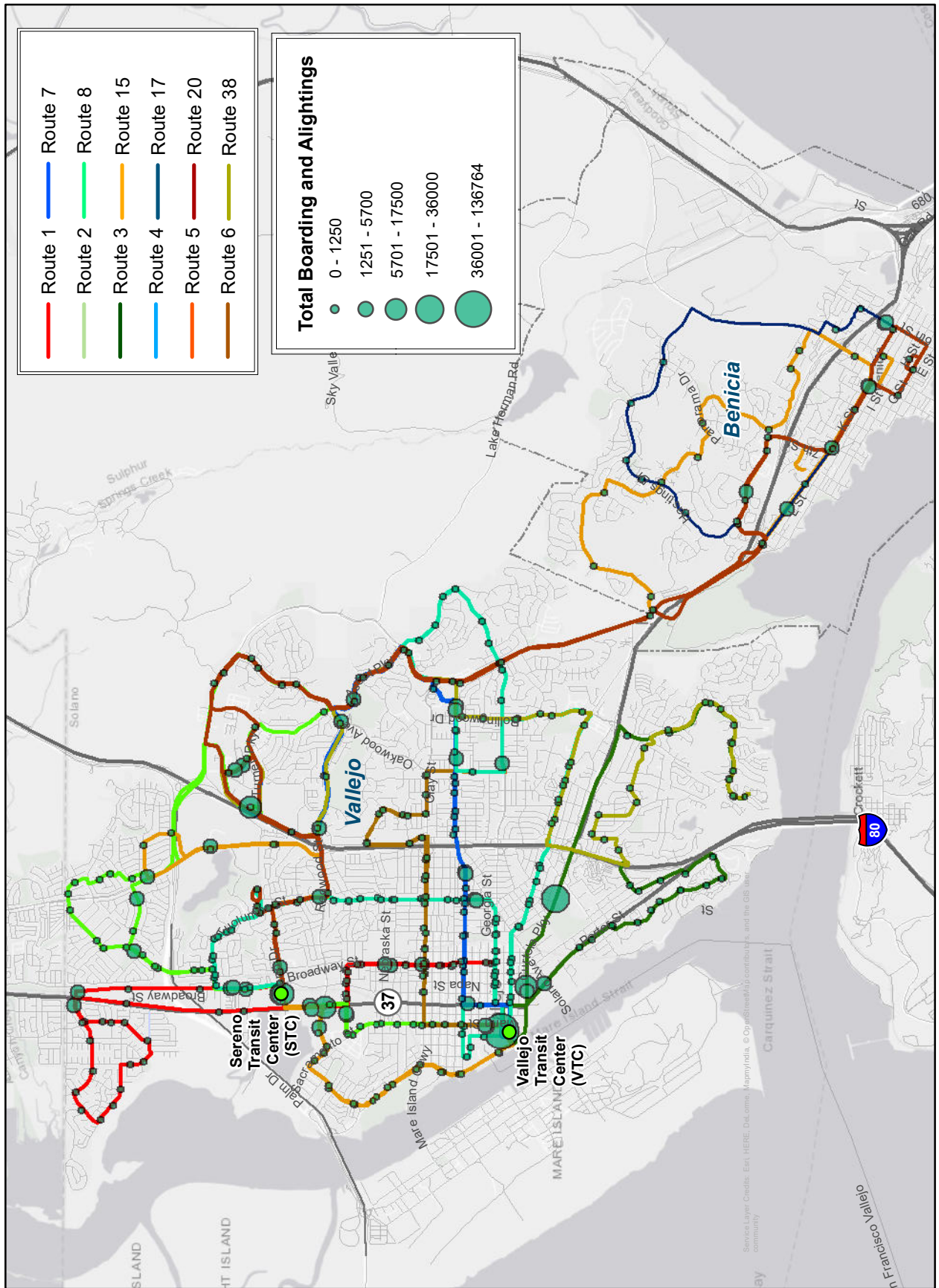
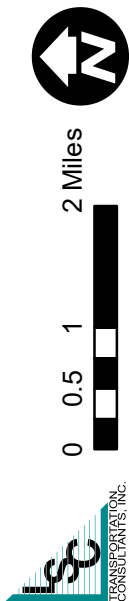


Figure 30
SolTrans Fixed Routes Average Weekday Bus Stop Activity



Passenger Transfer Patterns


The surveys of SolTrans passengers conducted in the spring of 2017 can be used to identify the respondents on each route indicating that they transferred to/from other SolTrans routes. These proportions were then factored by the average daily ridership on each route to yield the estimated number of riders on each route transferring to/from the other routes, as shown in Table 21. This analysis reflects the strong pattern of transfers between Routes 1 and 7 (total of 108 in both directions). Beyond that, between 40 and 50 passengers per day transfer between the following route pairs:

1 and 2
2 and 4

2 and 6
2 and 8

3 and 7

Routes with a relatively low proportion of passengers transferring are Route 20, 5 and 6.

| Transfer To/From (both directions) | | | | | | | | | | | | | | Did Not Transfer | Total Riders |
|---|----|-----|-----|-----|-----|-----|----|-----|----|-----|-----|-----|----|------------------|--------------|
| Rt. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 20 | 78 | 80 | 85 | | | |
| Surveyed Route | 1 | 0 | 24 | 8 | 16 | 24 | 16 | 40 | 0 | 0 | 0 | 32 | 8 | 316 | 483 |
| | 2 | 23 | 0 | 0 | 12 | 0 | 47 | 23 | 23 | 0 | 0 | 0 | 0 | 489 | 617 |
| | 3 | 18 | 9 | 0 | 0 | 9 | 0 | 46 | 9 | 0 | 0 | 0 | 9 | 82 | 183 |
| | 4 | 5 | 37 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 32 | 0 | 0 | 148 | 233 |
| | 5 | 0 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 181 | 205 |
| | 6 | 0 | 0 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 142 |
| | 7 | 68 | 7 | 0 | 0 | 20 | 0 | 0 | 7 | 7 | 0 | 7 | 7 | 367 | 490 |
| | 8 | 11 | 23 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 57 | 113 |
| | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 25 |
| | 78 | 20 | 20 | 0 | 0 | 20 | 3 | 20 | 0 | 0 | 0 | 0 | 0 | 251 | 332 |
| | 80 | 44 | 60 | 0 | 0 | 12 | 0 | 60 | 0 | 0 | 48 | 0 | 85 | 1314 | 1625 |
| | 85 | 12 | 0 | 0 | 24 | 0 | 0 | 12 | 0 | 35 | 0 | 6 | 0 | 153 | 241 |
| Percent of Daily Riders on Each Route Transferring to Other Route | | | | | | | | | | | | | | | |
| Rt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 20 | 78 | 80 | 85 | | | |
| Surveyed Route | 1 | 0% | 5% | 2% | 3% | 5% | 3% | 8% | 0% | 0% | 0% | 7% | 2% | 66% | 100% |
| | 2 | 4% | 0% | 0% | 2% | 0% | 8% | 4% | 4% | 0% | 0% | 0% | 0% | 79% | 100% |
| | 3 | 10% | 5% | 0% | 0% | 5% | 0% | 25% | 5% | 0% | 0% | 0% | 5% | 45% | 100% |
| | 4 | 2% | 16% | 0% | 0% | 0% | 0% | 5% | 0% | 0% | 14% | 0% | 0% | 64% | 100% |
| | 5 | 0% | 4% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 6% | 0% | 88% | 100% |
| | 6 | 0% | 0% | 0% | 0% | 21% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 79% | 100% |
| | 7 | 14% | 1% | 0% | 0% | 4% | 0% | 0% | 1% | 1% | 0% | 1% | 1% | 75% | 100% |
| | 8 | 10% | 20% | 10% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 10% | 0% | 50% | 100% |
| | 20 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 100% |
| | 78 | 6% | 6% | 0% | 0% | 6% | 1% | 6% | 0% | 0% | 0% | 0% | 0% | 75% | 100% |
| | 80 | 3% | 4% | 0% | 0% | 1% | 0% | 4% | 0% | 0% | 3% | 0% | 5% | 81% | 100% |
| | 85 | 5% | 0% | 0% | 10% | 0% | 0% | 5% | 0% | 15% | 0% | 2% | 0% | 63% | 100% |
| Colors represent lowest ridership (green) to highest (red) lowest  highest | | | | | | | | | | | | | | | |
| Source: <i>Transit Passenger Surveying Services - SolTrans</i> (Redhill Group, 2017). Represents surveys of 281 SolTrans riders. Tripper routes not surveyed. Data by direction not available. Results factored to estimate average weekday ridership totals. | | | | | | | | | | | | | | | |

Passenger Origin/Destination Pattern

The survey data were also evaluated to identify key travel patterns. LSC obtained the data and grouped origins and destinations into a total of twelve specific zones, along with four external roadway connections (reflecting the SolanoExpress routes and the VINE Transit Route 11). These results were then factored by average total weekday ridership figures to estimate the weekday one-way passenger-trips between (and within) the zones. Table 22 presents these results, which are also depicted graphically in Figure 31:

- The greatest concentration in passenger-trips is between the Downtown area and the “Central West” zone (along the Broadway Corridor between downtown and SR 37), with an estimated 310 daily passenger-trips. This is followed by trips within Downtown (225) and trips between Downtown and the East zone (generally east of I-80, between Georgia Street and Redwood Parkway) with 155 passenger-trips.
- While none of the largest origin/destination pairs included the Northeast zone (Gateway Plaza and environs), there were four zones that generated between 75 and 125 passenger-trips to/from this zone (North, Central West, Downtown and East of Downtown).

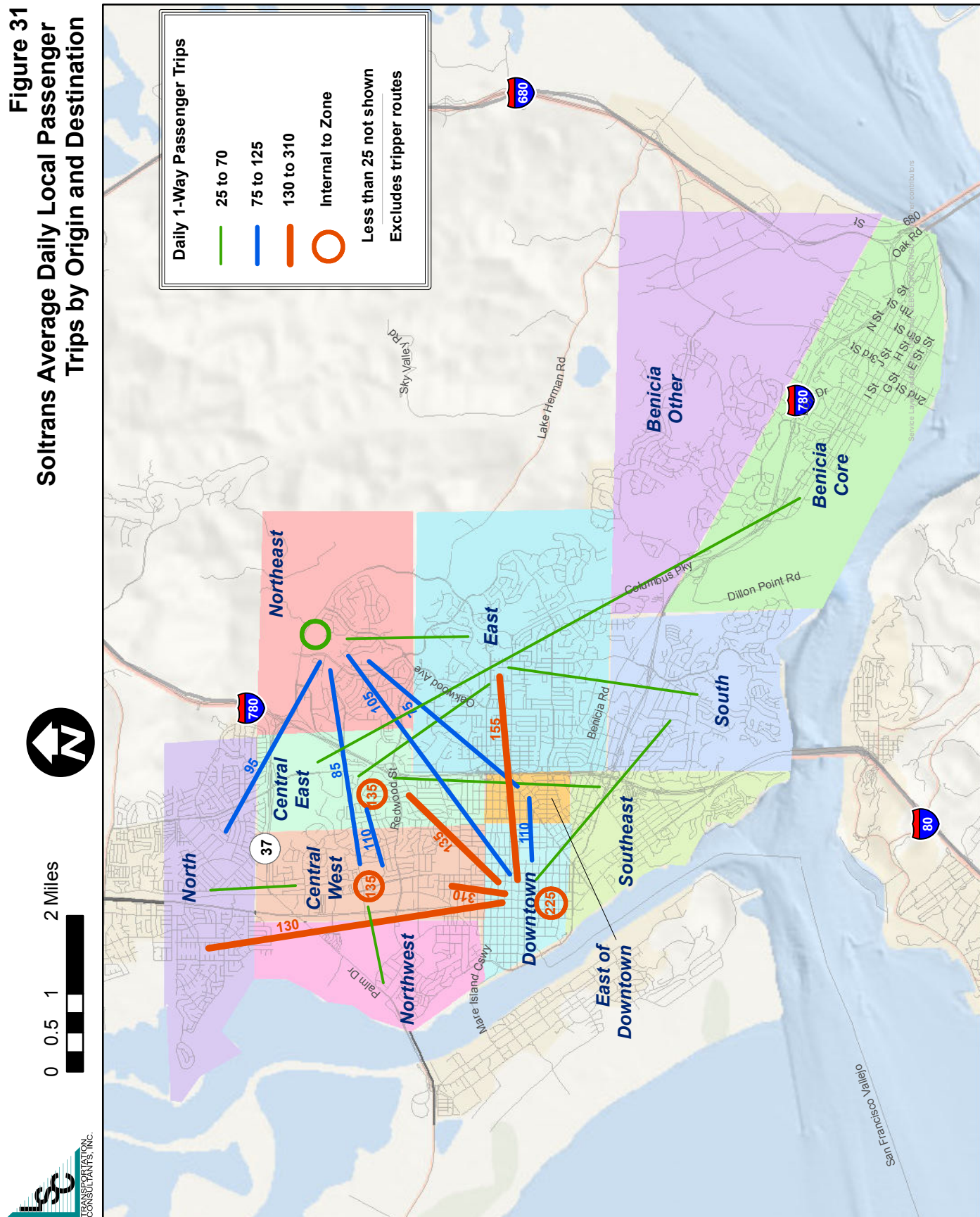
TABLE 22: SolTrans Average Weekday Passenger Trips by Origin/Destination Zone

| | | Local Service Area | | | | | | | | | | | | External | | | | Daily Trip-Ends | | | |
|--------------------|------------------|--------------------|-----------|--------------|--------------|-----------|----------|------------------|------|-----------|-------|---------------|--------------|------------|-------|------------|-------|------------------------|------------------------|---------------|--------------------------|
| | | North | Northwest | Central West | Central East | Northeast | Downtown | East of Downtown | East | Southwest | South | Benicia Other | Benicia Core | I-80 North | SR 29 | I-80 South | I-680 | Total Internal by Zone | Total External by Zone | Total by Zone | % Total Internal by Zone |
| Local Service Area | North | 0 | 0 | 25 | 25 | 95 | 130 | 10 | 75 | 10 | 15 | 0 | 0 | 5 | 50 | 70 | 30 | 385 | 155 | 540 | 8% |
| | Northwest | | 0 | 35 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 10 | 5 | 45 | 30 | 75 | 1% |
| | Central West | | | 135 | 110 | 85 | 310 | 75 | 110 | 15 | 15 | 0 | 10 | 25 | 15 | 140 | 45 | 925 | 225 | 1150 | 19% |
| | Central East | | | | 135 | 0 | 135 | 70 | 25 | 70 | 0 | 0 | 60 | 5 | 35 | 115 | 15 | 630 | 170 | 800 | 13% |
| | Northeast | | | | | 35 | 105 | 75 | 50 | 15 | 0 | 0 | 0 | 5 | 0 | 25 | 0 | 460 | 30 | 490 | 9% |
| | Downtown | | | | | | 225 | 110 | 155 | 10 | 45 | 0 | 15 | 50 | 50 | 510 | 65 | 1250 | 675 | 1925 | 25% |
| | East of Downtown | | | | | | | 0 | 10 | 0 | 10 | 0 | 10 | 15 | 0 | 40 | 0 | 370 | 55 | 425 | 7% |
| | East | | | | | | | | 50 | 10 | 35 | 0 | 10 | 5 | 10 | 230 | 5 | 530 | 250 | 780 | 11% |
| | Southwest | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 125 | 10 | 130 | 135 | 265 | 3% |
| | South | | | | | | | | | | 15 | 0 | 10 | 5 | 0 | 40 | 0 | 145 | 45 | 190 | 3% |
| | Benicia Other | | | | | | | | | | | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 25 | 25 | 0% |
| | Benicia Core | | | | | | | | | | | | 0 | 5 | 15 | 55 | 70 | 115 | 145 | 260 | 2% |

Colors represent lowest ridership (green) to highest (red) lowest highest

Source: *Transit Passenger Surveying Services - SolTrans* (Redhill Group, 2017). Represents surveys of 281 SolTrans riders. Tripper routes not surveyed. Results factored to estimate average weekday ridership totals.

Figure 31
Soltrans Average Daily Local Passenger
Trips by Origin and Destination



- The Northwest Zone (Federal Terrace) and Benicia Core Zone had only weak ridership pairs with any other zone, while the surveys did not identify any passengers traveling to or from the outlying portions of Benicia.
- Summing both ends of each passenger-trip, the relative passenger trip generation of each of the 12 internal zones can be identified, as shown in the right-most column. This indicates that 25 percent of trip activity is generated by the Downtown zone, followed by 19 percent in the Central West Zone and 13 percent in the Central East zone (which includes the two hospitals and fairgrounds area).
- This data also includes passenger-trips to/from the “external” points – the transit connections beyond the local service area. The greatest single pattern is between downtown and I-80 to the south (510 passenger-trips per day), though this is in part a reflection of passengers that drive to parking areas near the VTC.

Overall, this data indicates a dispersed pattern of ridership through the local service area, with a concentration along a north-south corridor focusing on Broadway and Sonoma, and other important ridership patterns to the east and northeast of downtown.

Comparison of Existing Ridership Patterns with Transit Service Quality

A useful analysis to identify how well the current service plan “fits” with ridership patterns is to compare the origin/destination data presented above with an analysis of the quality of transit service provided by the current routes and schedules. As shown in Table 23, the relative quality of service between the various zones was based on (1) the minimum weekday travel time between each zone was identified based upon a review of the existing schedules, (2) the frequency of service (indicated by the colored shading) and (3) the need to transfer (indicated by a “T”). This table reflects the wide range of quality of service currently provided, with some trips taking less than 10 minutes provided every half hour while others take 1 hour 25 minutes, are available only every two hours and require a transfer.

An overall numeric measure of service quality can be defined in effective minutes of perceived travel time, as follows:

- The scheduled travel time between each zone was first identified.
- A 10-minute “penalty” was applied if the trip requires a transfer. This reflects transit demand research that indicates passengers find the inconvenience of a transfer equivalent to an additional 10 minutes of travel time.
- A “penalty” was also applied for trips depending on the frequency between service times, based upon the observed value of travel time versus wait time. For example, a

TABLE 23: SolTrans Travel Times, Transfer Requirements, and Service Headways

Travel Time in Minutes

T = Transfer Required

30 Minute
Frequency60 Minute
FrequencyMore Than 60
Minute Frequency

| | | ZONE TO | | | | | | | | | | |
|-----------|---------------------------|---------|------------|--------------|--------------|------------|-----------|--------------|---------|------------|---------|---------------------------|
| | | North | North-west | Central West | Central East | North-east | Down-town | East of Dntn | East | South-west | South | Benicia Core ¹ |
| ZONE FROM | North | | 55 T | 10 | 35 T | 43 T | 25 | 35 T | 43 T | 72 T | 43 T | 71 T |
| | Northwest | 37 T | | 5 | 11 | 40 T | 8 | 20 T | 35 T | 64 T | 35 T | 96 T |
| | Central West | 17 | 4 | | 7 T | 30 | 15 | 18 | 33 T | 62 T | 33 T | 46 T |
| | Central East | 33 T | 10 | 8 | | 38 T | 17 | 7 | 38 T | 67 T | 38 T | 42 |
| | Northeast | 25 | 27 T | 16 | 31 | | 27 | 22 | 15 | 69 T | 30 T | 31 |
| | Downtown | 35 T | 10 | 15 | 18 | 33 | | 7 | 15 | 44 | 15 | 16 |
| | East of Downtown | 43 T | 26 T | 18 | 10 | 26 | 6 | | 8 | 67 T | 38 T | 39 T |
| | East | 50 T | 33 T | 45 T | 47 T | 18 | 13 | 6 | | 74 T | 45 T | 31 |
| | Southwest | 36 T | 26 T | 31 T | 33 T | 49 T | 8 | 23 T | 31 T | | 31 | 32 T |
| | South | 65 T | 52 T | 60 T | 62 T | 78 T | 27 | 52 T | 60 T | 29 | | 61 T |
| | Benicia Core ¹ | 80 T | 97 T | 50 T | 43 | 28 | 16 | 37 T | 30 T | 85 T | 56 T | |

Note 1: Some trips to/from Benicia can be completed quicker via Route 78, but at a higher fare.

trip only provided every hour has a penalty time of 8 minutes compared to a trip provided every half-hour.

The resulting values provide a relative measure of quality of service, with a lower figure reflecting a better quality of service. These values are shown in the top portion of Table 24. The overall range of values was then split into three levels with equal number of OD pairs: relatively good service (less than 15 effective minutes), average service (15 to 56) and relatively poor service (above 56), as shown in the next lower portion of Table 24.

The average daily ridership between each zone (from Table 22) was also divided into three categories: low (less than 15 passenger-trips per day), medium (15 to 49) and high (more than 50). Finally, the relative quality of service can be compared with the ridership demand, as shown in the bottom portion of Table 24. These values reflect the level of ridership demand minus the level of service quality. A trip origin/destination pair with a high level of ridership but a medium level of service quality is one level of difference, and indicated with a positive 1. A negative value, on the other hand, reflects a level of service quality higher than the relative ridership.

In general, a positive value indicates the potential need to improve service quality, as the relative ridership is higher than the relative service level. In the opposite direction, a negative value indicates that the relative ridership is less than the relative quality of service, which may indicate that a reduction in service quality would have a relatively small impact on ridership. In

TABLE 24: Comparison of Relative Existing SolTrans Service Quality with Ridership Demand by Origin/Destination Zone

| Between V and > | North-West | Central West | Central East | North-East | Down-Down | East of Dntn | East | South-West | South | Benicia Core |
|---|------------|--------------|--------------|------------|-----------|--------------|--------|------------|--------|--------------|
| Total Effective Average Travel Time (Minutes) | | | | | | | | | | |
| North | 67 | 21 | 55 | 47 | 38 | 52 | 59 | 75 | 75 | 112 |
| Northwest | | 20 | 26 | 59 | 25 | 49 | 60 | 71 | 69 | 138 |
| Central West | | | 28 | 31 | 23 | 34 | 65 | 72 | 72 | 89 |
| Central East | | | | 55 | 33 | 24 | 68 | 76 | 76 | 74 |
| Northeast | | | | | 38 | 32 | 24 | 85 | 80 | 61 |
| Downtown | | | | | | 14 | 22 | 42 | 37 | 47 |
| East of Downtown | | | | | | | 15 | 71 | 71 | 79 |
| East | | | | | | | | 78 | 78 | 67 |
| Southwest | | | | | | | | | 46 | 100 |
| South | | | | | | | | | | 100 |
| Relative Service Quality | | | | | | | | | | |
| North | Medium | High | Medium | Medium | High | Medium | Medium | Low | Low | Low |
| Northwest | | High | High | Medium | High | Medium | Medium | Medium | Medium | Low |
| Central West | | | High | High | High | High | Medium | Low | Low | Low |
| Central East | | | | Medium | High | High | Medium | Low | Low | Low |
| Northeast | | | | | High | High | High | Low | Low | Medium |
| Downtown | | | | | | High | High | Medium | High | Medium |
| East of Downtown | | | | | | | High | Medium | Medium | Low |
| East | | | | | | | | Low | Low | Medium |
| Southwest | | | | | | | | | Medium | Low |
| South | | | | | | | | | | Low |
| Relative Ridership | | | | | | | | | | |
| North | Low | Medium | Medium | High | High | Low | High | Medium | Medium | Low |
| Northwest | | Medium | Low | Low | Low | Low | Low | Low | Low | Low |
| Central West | | | High | High | High | High | High | Medium | Medium | Low |
| Central East | | | | Low | High | High | Medium | High | Low | Low |
| Northeast | | | | | High | High | High | Medium | Low | Low |
| Downtown | | | | | | High | High | Medium | Medium | Low |
| East of Downtown | | | | | | | Medium | Low | Medium | Low |
| East | | | | | | | | Medium | Medium | Low |
| Southwest | | | | | | | | | Low | Low |
| South | | | | | | | | | | Low |
| Mismatch -- Positive # Indicates Ridership Level Above Service Quality Level | | | | | | | | | | |
| North | -1 | -1 | 0 | 1 | 0 | -1 | 1 | 1 | 1 | 0 |
| Northwest | | -1 | -2 | -1 | -2 | -1 | -1 | -1 | -1 | 0 |
| Central West | | | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Central East | | | | -1 | 0 | 0 | 0 | 2 | 0 | 0 |
| Northeast | | | | | 0 | 0 | 0 | 1 | 0 | -1 |
| Downtown | | | | | | 0 | 0 | 0 | -1 | -1 |
| East of Downtown | | | | | | | -1 | -1 | 0 | 0 |
| East | | | | | | | | 1 | 1 | -1 |
| Southwest | | | | | | | | | -1 | 0 |
| South | | | | | | | | | | 0 |

Source: LSC Transportation Consultants, Inc.

reality, some of the results are a matter of simple geography – for example service quality to and from the Northwest Zone benefits from the fact that this area is located conveniently close to both downtown and the Sereno Transit Center. These results should also be used with a degree of caution given the limited survey used to identify the ridership origin/destination patterns. However, some general conclusions can be drawn:

- As shown by the many cells indicating “0”, overall the transit quality of service is generally well matched with the ridership demand.
- The ridership demand in the north-south direction east of downtown that is not currently well-served. A north-south route east of downtown (and not serving the VTC) warrants consideration.
- This analysis reflects the low ridership between Benicia and eastern portions of Vallejo.
- The provision of north-south routes through downtown (and VTC) that avoid the need to transfer may provide ridership benefits.
- While the Northwest zone warrants service to VTC and the Broadway corridor, there is not a strong need for direct service between this zone and the eastern portion of Vallejo.

On-Time Performance

Table 25 and Figure 32 present a summary of on-time performance by route, based on data for all of calendar year 2017. As shown, overall 66.4 percent of local SolTrans route timepoints were served on time (not early and not more than 5 minutes behind the published schedule). 18.1 percent of timepoints were served early, while 15.5 percent were served late. Of the regular routes, Route 3 had the best on-time performance (72.7 percent) followed by Route 5 (70.1 percent), while Route 8 had the poorest performance at 59.6 percent on-time. The regular route with the highest proportion of late runs, however, was Route 20 (24.1 percent).

As a whole, the on time performance of the three tripper routes was similar to the regular route average. However, fully 45 percent of Route 17 timepoints were served late, compared with 24.7 percent on Route 15 and 15.8 percent on Route 38.

Express Routes had relatively poor on-time performance, with 58.3 percent of timepoints served on time. In particular, Route 80 service was on time for only 52.0 percent, reflecting traffic congestion on I-80.

Tables 26 through 34 present detailed running times between timepoints on each route and run. This is based on data for a total of 14 weekdays in March 2018. For each route, segment and run, the average running time is reported, and the deviation from the scheduled running

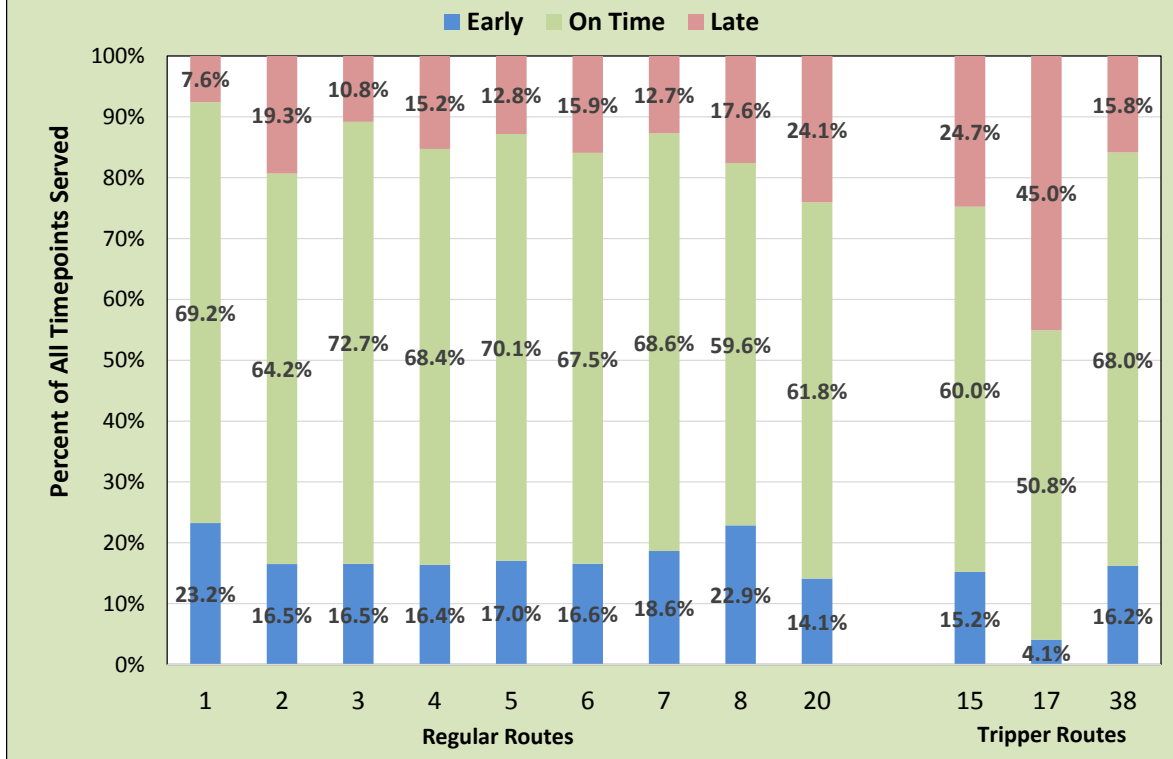
TABLE 25: SolTrans On Time Performance by Route*Note: On Time Defined as 0 to 5 Minutes Past Scheduled Time*

| Route | Percent of Annual Timepoints Served | | |
|---|-------------------------------------|--------------|--------------|
| | Early | On Time | Late |
| 1 Broadway | 23.2% | 69.2% | 7.6% |
| 2 Northeast | 16.5% | 64.2% | 19.3% |
| 3 Glen Cove | 16.5% | 72.7% | 10.8% |
| 4 Tuolumne | 16.4% | 68.4% | 15.2% |
| 5 Fairgrounds | 17.0% | 70.1% | 12.8% |
| 6 Tennessee | 16.6% | 67.5% | 15.9% |
| 7 Springs Road | 18.6% | 68.6% | 12.7% |
| 8 Benicia Road | 22.9% | 59.6% | 17.6% |
| 20 Columbus | 14.1% | 61.8% | 24.1% |
| <i>Subtotal: Regular Routes</i> | <i>18.3%</i> | <i>66.5%</i> | <i>15.1%</i> |
| 15 Benicia Rose | 15.2% | 60.0% | 24.7% |
| 17 Benicia Hast | 4.1% | 50.8% | 45.0% |
| 38 Jesse Bethel | 16.2% | 68.0% | 15.8% |
| <i>Subtotal: Tripper Routes</i> | <i>14.2%</i> | <i>64.1%</i> | <i>21.7%</i> |
| Total: Local Routes | 18.1% | 66.4% | 15.5% |
| 78 I-680 Express | 27.7% | 63.9% | 8.4% |
| 80 I-80 Express | 17.5% | 52.0% | 30.5% |
| 82 S.F. Express | 20.6% | 57.9% | 21.4% |
| 85 Fairfield Express | 15.9% | 59.4% | 24.6% |
| Total: Express Routes | 21.0% | 58.3% | 20.6% |
| Source: Avail Datapoint reports for June 2016 through July 2017 | | | |

time is calculated. The average over all runs, along with the maximum deviation both early and late and the 90th percentile running time (the time that is only exceeded by 10 percent of the runs) is presented at the bottom of each table. In addition, Table 35 and 36 present a summary of the average and 90th percentile deviation from the scheduled times. A review of this data indicates the following:

- **Route 1** operates largely close to the scheduled running times. The northern segments typically have 1 to 2 minutes of available running time.
- **Route 2** running time is less than the scheduled time in the northbound direction, but slightly more than the scheduled time southbound. There are some specific morning runs with travel times substantially longer than the scheduled times for the final segment entering downtown Vallejo.

FIGURE 32: On-Time Performance by Route



- The **Route 3** schedule is relatively lax, allowing average running times to be less than scheduled times for most segments.
- **Route 4** falls behind schedule on the northbound segment between Sutter Medical Center and Broadway/Tall Trees, which takes on average 5 minutes more than the scheduled time. (This probably reflects time spent serving the loop around the Medical Center.) The segment between Broadway/Tall Trees and the STC also takes almost 2 more minutes than shown on the schedule, on average.
- **Route 5** schedules are generally in line with the running times.
- Running times on **Route 6** indicate that a few minutes of the 10 minutes of running time between Hogan Middle School and Admiral Callaghan Way can be shifted to route segments on either side of this route segment.
- The scheduled running times for the first two segments of **Route 7** (between VTC and Ascot/Columbus) provide two to three minutes of running time that could better be allocated to the sections north of Ascot/Columbus (which operate behind the scheduled times). This route is also impacted by mid-afternoon delays on several route segments.

TABLE 26: Route 1 Average Travel Time

| Northbound | | | | Southbound | | | |
|--------------------------|--------------------------------|----------------------------|--------------------------|--------------------------|-------------------------------|---------------------------------|--------------------------------|
| From To Scheduled Time | Vallejo Transit Sereno Transit | Sereno Transit Mini/Sonoma | Mini/Sonoma Mini/Elliott | From To Scheduled Time | Mini/Elliott Bldwv/Tall Trees | Brdwv/Tall Trees Sereno Transit | Sereno Transit Vallejo Transit |
| Scheduled Run Start Time | Run Time | Dev-iation | Run Time | Scheduled Run Start Time | Run Time | Dev-iation | Run Time |
| | 0:15:00 | 0:05:00 | 0:12:00 | | 0:07:00 | 0:03:00 | 0:15:00 |
| 05:30:00AM | -- | -- | 0:10:50 -0:01:10 | 05:42:00AM | 0:04:56 -0:02:04 | 0:02:03 -0:00:57 | 0:11:44 -0:03:16 |
| 06:20:00AM | -- | -- | 0:10:52 -0:01:07 | 06:32:00AM | 0:05:48 -0:01:12 | 0:02:37 -0:00:23 | 0:12:33 -0:02:27 |
| 06:30:00AM | 0:12:59 -0:02:01 | 0:05:13 0:00:13 | 0:12:12 0:00:13 | 07:02:00AM | 0:05:08 -0:01:51 | 0:02:33 -0:00:27 | 0:13:46 -0:01:14 |
| 07:00:00AM | 0:12:09 -0:02:51 | 0:05:14 0:00:14 | 0:11:31 -0:00:29 | 07:32:00AM | 0:05:02 -0:01:58 | 0:02:16 -0:00:44 | 0:12:48 -0:02:12 |
| 07:30:00AM | 0:13:53 -0:01:07 | 0:04:59 -0:00:01 | 0:11:27 -0:00:33 | 08:02:00AM | 0:05:40 -0:01:20 | 0:02:28 -0:00:32 | 0:13:38 -0:01:38 |
| 08:00:00AM | 0:13:04 -0:01:56 | 0:05:27 0:00:27 | 0:10:53 -0:01:07 | 08:32:00AM | 0:05:08 -0:01:52 | 0:02:23 -0:00:37 | 0:13:10 -0:01:51 |
| 08:30:00AM | 0:13:53 -0:01:07 | 0:05:36 0:00:36 | 0:11:07 -0:00:53 | 09:02:00AM | 0:05:18 -0:01:42 | 0:02:41 -0:00:19 | 0:13:01 -0:01:59 |
| 09:00:00AM | 0:13:59 -0:01:01 | 0:05:51 0:00:51 | 0:11:03 -0:00:57 | 09:32:00AM | 0:05:20 -0:01:40 | 0:06:20 0:03:20 | 0:13:33 -0:01:27 |
| 09:30:00AM | 0:13:53 -0:01:07 | 0:05:41 0:00:41 | 0:11:23 -0:00:37 | 10:02:00AM | 0:04:05 -0:02:55 | 0:02:16 -0:00:44 | 0:13:54 -0:01:06 |
| 10:00:00AM | 0:14:32 -0:00:28 | 0:06:04 0:01:04 | 0:10:45 -0:01:15 | 10:32:00AM | 0:05:17 -0:01:43 | 0:02:50 -0:00:10 | 0:14:21 -0:00:40 |
| 10:30:00AM | 0:13:29 -0:01:31 | 0:05:29 0:00:29 | 0:09:50 -0:02:10 | 11:02:00AM | 0:05:03 -0:01:57 | 0:03:27 0:00:27 | 0:13:10 -0:01:51 |
| 11:00:00AM | 0:15:45 0:00:45 | 0:06:01 0:01:01 | 0:10:51 -0:01:08 | 11:32:00AM | 0:06:26 -0:00:34 | 0:03:09 0:00:09 | 0:13:42 -0:01:18 |
| 11:30:00AM | 0:14:48 -0:00:12 | 0:05:57 0:00:57 | 0:10:04 -0:01:56 | 12:02:00PM | 0:04:35 -0:02:25 | 0:02:28 -0:00:32 | 0:13:39 -0:01:22 |
| 12:00:00PM | 0:14:51 -0:00:09 | 0:06:18 0:01:18 | 0:09:05 -0:02:55 | 12:32:00PM | 0:04:31 -0:02:29 | 0:03:00 0:00:00 | 0:13:40 -0:01:20 |
| 12:30:00PM | 0:15:51 0:00:51 | 0:05:21 0:00:21 | 0:09:53 -0:02:07 | 01:02:00PM | 0:05:40 -0:01:20 | 0:05:42 0:02:42 | 0:14:50 -0:00:10 |
| 01:00:00PM | 0:13:57 -0:01:03 | 0:05:36 0:00:36 | 0:09:09 -0:02:51 | 01:32:00PM | 0:06:08 -0:00:52 | 0:03:41 0:00:41 | 0:13:54 -0:01:06 |
| 01:30:00PM | 0:16:31 0:01:31 | 0:05:09 0:00:09 | 0:10:38 -0:01:21 | 02:02:00PM | 0:05:56 -0:01:04 | 0:07:08 0:04:08 | 0:14:48 -0:00:12 |
| 02:00:00PM | 0:15:40 0:00:40 | 0:06:05 0:01:05 | 0:09:40 -0:02:20 | 02:32:00PM | 0:05:35 -0:01:24 | 0:05:30 0:02:30 | 0:13:52 -0:01:08 |
| 02:30:00PM | 0:15:47 0:00:47 | 0:06:41 0:01:41 | 0:10:38 -0:01:22 | 03:02:00PM | 0:07:34 0:00:34 | 0:05:58 0:02:59 | 0:16:35 0:01:35 |
| 03:00:00PM | 0:18:41 0:03:41 | 0:06:53 0:01:53 | 0:10:20 -0:01:40 | 03:32:00PM | 0:05:58 -0:01:02 | 0:04:21 0:01:21 | 0:15:19 0:00:19 |
| 03:30:00PM | 0:15:52 0:00:52 | 0:05:55 0:00:55 | 0:09:23 -0:02:37 | 03:32:00PM | 0:05:58 -0:01:02 | 0:04:21 0:01:21 | 0:15:19 0:00:19 |
| 04:00:00PM | 0:14:32 -0:00:28 | 0:06:02 0:01:02 | 0:09:30 -0:02:30 | 04:32:00PM | 0:05:27 -0:01:33 | 0:07:14 0:04:14 | 0:14:01 -0:00:59 |
| 04:30:00PM | 0:16:15 0:01:15 | 0:05:57 0:00:57 | 0:09:14 -0:02:46 | 05:02:00PM | 0:05:14 -0:01:46 | 0:03:02 0:00:02 | 0:13:54 -0:01:06 |
| 05:00:00PM | 0:15:46 0:00:46 | 0:06:00 0:01:00 | 0:09:44 -0:02:15 | 05:32:00PM | 0:05:32 -0:01:28 | 0:02:38 0:00:22 | 0:15:16 0:00:16 |
| 05:30:00PM | 0:14:55 -0:00:05 | 0:06:03 0:01:03 | 0:09:07 -0:02:53 | 06:02:00PM | 0:05:05 -0:01:55 | 0:03:03 0:00:03 | 0:12:50 -0:02:10 |
| 06:00:00PM | 0:14:26 -0:00:34 | 0:05:41 0:00:41 | 0:09:37 -0:02:22 | 06:32:00PM | 0:05:21 -0:01:38 | 0:02:33 -0:00:27 | 0:13:16 -0:01:45 |
| 06:30:00PM | 0:14:07 -0:00:53 | 0:05:08 0:00:08 | 0:10:07 -0:01:53 | 07:02:00PM | 0:04:33 -0:02:27 | 0:02:35 -0:00:25 | 0:12:41 -0:02:19 |
| 07:00:00PM | 0:13:58 -0:01:02 | 0:05:11 0:00:11 | 0:10:01 -0:01:59 | | | | |
| Max Early | 0:12:09 -0:02:51 | 0:04:59 -0:00:01 | 0:09:05 -0:02:55 | Max Early | 0:04:05 -0:02:55 | 0:02:16 -0:00:44 | 0:12:41 -0:02:19 |
| Average | 0:14:45 -0:00:15 | 0:05:45 0:00:45 | 0:10:17 -0:01:43 | Average | 0:05:25 -0:01:35 | 0:03:45 0:00:45 | 0:13:57 -0:01:03 |
| Max Late | 0:18:41 0:03:41 | 0:06:53 0:01:53 | 0:12:12 0:00:13 | Max Late | 0:07:34 0:00:34 | 0:07:14 0:04:14 | 0:16:35 0:01:35 |
| 90th Percentile | 0:16:03 0:01:03 | 0:06:12 0:01:12 | 0:11:25 -0:00:35 | 90th Percentile | 0:06:04 -0:00:56 | 0:06:11 0:03:11 | 0:15:18 0:00:18 |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

| TABLE 27: Route 2 Average Travel Time | | | | | | | | | | | | | | | | |
|---------------------------------------|----------------------|----------------------|-------------|----------------|-------------|----------|-----------------|----------------|-----------------|----------|---------|----------------------|----------------------|---------------------|---------|----------|
| Northbound | | | | | | | Southbound | | | | | | | | | |
| From | Vallejo Transit Ctr | Serenito Transit Ctr | Raley's | | Fairgrounds | | From | Target Vallejo | Mini & Stanford | Raley's | | Serenito Transit Ctr | Serenito Transit Ctr | Sacramento & Tenn. | | |
| To | Serenito Transit Ctr | | Fairgrounds | Solano College | | | Mini & Stanford | | | | | | Sacramento & Tenn. | Vallejo Transit Ctr | | |
| Scheduled Time | 0:15:00 | 0:03:00 | 0:12:00 | 0:06:00 | | | Run | Dev- | | Run | Dev- | Run | Dev- | Run | | |
| Scheduled Run Start Time | Time | Time | Time | Time | Time | Time | Time | iation | Time | Time | iation | Time | Time | Time | | |
| 6:00 AM | 0:10:59 | -0:04:01 | 0:00:44 | -0:02:16 | 0:03:53 | -0:02:07 | -- | -- | 0:03:20 | -0:01:40 | 0:01:38 | -0:00:23 | 0:05:14 | 0:00:14 | 0:03:37 | -0:02:23 |
| 6:30 AM | 0:08:36 | -0:06:25 | 0:00:45 | -0:02:14 | 0:03:40 | -0:02:20 | 0:09:18 | 0:00:18 | 0:04:45 | -0:00:15 | 0:01:52 | -0:00:08 | 0:05:07 | 0:00:07 | 0:06:08 | 0:00:07 |
| 7:00 AM | 0:09:42 | -0:05:18 | 0:00:48 | -0:02:12 | 0:03:43 | -0:02:18 | 0:10:23 | 0:01:23 | 0:04:28 | -0:00:32 | 0:01:49 | -0:00:11 | 0:06:31 | 0:01:31 | 0:04:47 | -0:01:13 |
| 7:15 AM | 0:11:34 | -0:03:26 | 0:00:45 | -0:02:14 | 0:03:59 | -0:02:01 | 0:09:48 | 0:00:48 | 0:04:41 | -0:00:18 | 0:01:48 | -0:00:12 | 0:05:38 | 0:00:38 | 0:16:11 | 0:10:11 |
| 7:30 AM | 0:11:54 | -0:03:06 | 0:00:44 | -0:02:16 | 0:03:50 | -0:02:10 | 0:09:16 | 0:00:16 | 0:04:12 | -0:00:48 | 0:02:13 | 0:00:13 | 0:04:53 | -0:00:07 | 0:04:35 | -0:01:25 |
| 8:00 AM | 0:10:38 | -0:04:22 | 0:00:49 | -0:02:11 | 0:03:43 | -0:02:18 | 0:09:37 | 0:00:37 | 0:04:08 | -0:00:51 | 0:01:43 | -0:00:17 | 0:04:58 | -0:00:02 | 0:06:22 | 0:00:22 |
| 8:30 AM | 0:10:59 | -0:04:01 | 0:00:44 | -0:02:16 | 0:04:05 | -0:01:56 | 0:09:33 | 0:00:33 | 0:04:04 | -0:00:56 | 0:02:05 | 0:00:05 | 0:05:54 | 0:00:54 | 0:12:53 | 0:06:52 |
| 9:00 AM | 0:12:35 | -0:02:25 | 0:00:34 | -0:02:26 | 0:04:00 | -0:02:01 | 0:08:36 | -0:00:24 | 0:04:03 | -0:00:57 | 0:02:13 | 0:00:13 | 0:06:11 | 0:01:11 | 0:04:14 | -0:01:46 |
| 9:30 AM | 0:11:18 | -0:03:42 | 0:00:54 | -0:02:06 | 0:04:02 | -0:01:58 | 0:09:03 | 0:00:03 | 0:04:18 | -0:00:42 | 0:01:50 | -0:00:10 | 0:06:15 | 0:01:15 | 0:04:23 | -0:01:37 |
| 10:00 AM | 0:11:14 | -0:03:46 | 0:00:44 | -0:02:15 | 0:04:10 | -0:01:50 | 0:08:25 | -0:00:35 | 0:04:30 | -0:00:30 | 0:02:05 | 0:00:04 | 0:06:37 | 0:01:37 | 0:04:13 | -0:01:47 |
| 10:30 AM | 0:10:42 | -0:03:18 | 0:00:40 | -0:02:19 | 0:04:03 | -0:01:57 | 0:08:56 | -0:00:04 | 0:03:55 | -0:01:04 | 0:02:10 | 0:00:10 | 0:06:13 | 0:01:13 | 0:06:20 | 0:00:20 |
| 11:00 AM | 0:12:26 | -0:02:34 | 0:00:43 | -0:02:17 | 0:04:02 | -0:01:58 | 0:09:37 | 0:00:37 | 0:04:24 | -0:00:36 | 0:01:53 | -0:00:07 | 0:06:51 | 0:01:51 | 0:10:36 | 0:04:35 |
| 11:30 AM | 0:13:32 | -0:01:29 | 0:00:51 | -0:02:09 | 0:04:21 | -0:01:39 | 0:11:50 | 0:00:24 | 0:04:13 | -0:00:47 | 0:02:18 | 0:00:18 | 0:06:28 | 0:01:29 | 0:04:55 | -0:01:05 |
| 12:00 PM | 0:12:52 | -0:02:08 | 0:00:55 | -0:02:05 | 0:04:14 | -0:01:46 | 0:12:20 | 0:01:40 | 0:04:24 | -0:00:36 | 0:02:28 | 0:00:28 | 0:07:39 | 0:02:39 | 0:04:50 | -0:01:10 |
| 12:30 PM | 0:12:40 | -0:02:20 | 0:00:47 | -0:02:13 | 0:04:33 | -0:01:27 | 12:47 | PM | 0:04:29 | -0:00:31 | 0:02:27 | 0:00:27 | 0:06:49 | 0:01:49 | 0:04:35 | -0:01:25 |
| 1:00 PM | 0:12:42 | -0:02:18 | 0:00:50 | -0:02:10 | 0:04:12 | -0:01:48 | 1:20 | PM | 0:04:35 | -0:00:25 | 0:02:23 | 0:00:23 | 0:07:19 | 0:02:19 | 0:05:09 | -0:00:51 |
| 1:30 PM | 0:13:07 | -0:01:53 | 0:00:51 | -0:02:09 | 0:04:34 | -0:01:26 | 1:50 | PM | 0:04:16 | -0:00:44 | 0:02:13 | 0:00:13 | 0:07:29 | 0:02:30 | 0:04:33 | -0:01:28 |
| 2:00 PM | 0:13:02 | -0:01:58 | 0:00:57 | -0:02:03 | 0:04:28 | -0:01:37 | 2:17 | PM | 0:04:27 | -0:00:33 | 0:02:25 | 0:00:25 | 0:07:52 | 0:02:52 | 0:04:27 | -0:01:33 |
| 2:30 PM | 0:12:07 | -0:02:53 | 0:00:51 | -0:02:09 | 0:04:36 | -0:01:24 | 2:50 | PM | 0:04:29 | -0:00:31 | 0:02:27 | 0:00:27 | 0:07:10 | 0:02:10 | 0:05:05 | -0:00:55 |
| 3:00 PM | 0:11:38 | -0:03:22 | 0:00:45 | -0:02:14 | 0:04:16 | -0:01:44 | 3:20 | PM | 0:04:40 | -0:00:20 | 0:02:32 | 0:00:32 | 0:07:56 | 0:02:56 | 0:05:38 | -0:00:23 |
| 3:30 PM | 0:13:55 | -0:01:05 | 0:00:54 | -0:02:06 | 0:04:16 | -0:01:44 | 3:50 | PM | 0:04:27 | -0:00:33 | 0:02:29 | 0:00:29 | 0:06:42 | 0:01:42 | 0:05:32 | -0:00:28 |
| 4:00 PM | 0:13:36 | -0:01:24 | 0:00:39 | -0:02:20 | 0:04:18 | -0:01:42 | 4:20 | PM | 0:04:20 | -0:00:39 | 0:02:22 | 0:00:22 | 0:06:59 | 0:01:59 | 0:04:46 | -0:01:14 |
| 4:30 PM | 0:12:48 | -0:02:12 | 0:00:49 | -0:02:11 | 0:04:18 | -0:01:43 | 4:50 | PM | 0:04:07 | -0:00:52 | 0:02:37 | 0:00:37 | 0:06:10 | 0:01:11 | 0:04:17 | -0:01:43 |
| 5:00 PM | 0:14:39 | -0:00:21 | 0:00:48 | -0:02:12 | 0:04:20 | -0:01:40 | 5:20 | PM | 0:04:00 | -0:01:00 | 0:02:13 | 0:00:13 | 0:06:51 | 0:01:51 | 0:04:38 | -0:01:22 |
| 5:30 PM | 0:12:20 | -0:02:40 | 0:00:53 | -0:02:07 | 0:04:28 | -0:01:32 | 5:50 | PM | 0:04:06 | -0:00:53 | 0:02:14 | 0:00:14 | 0:06:13 | 0:01:13 | 0:04:27 | -0:01:34 |
| 6:00 PM | 0:13:11 | -0:01:50 | 0:00:48 | -0:02:12 | 0:04:13 | -0:01:47 | 6:20 | PM | 0:03:47 | -0:01:12 | 0:02:03 | 0:00:03 | 0:05:40 | 0:00:40 | 0:03:59 | -0:02:01 |
| 6:30 PM | 0:11:54 | -0:03:06 | 0:00:51 | -0:02:09 | 0:04:19 | -0:01:42 | 6:50 | PM | 0:04:08 | -0:00:51 | 0:01:58 | -0:00:02 | 0:04:56 | -0:00:03 | 0:04:14 | -0:01:46 |
| 7:00 PM | 0:11:18 | -0:03:42 | 0:00:50 | -0:02:10 | 0:04:16 | -0:01:44 | 7:20 | PM | 0:03:58 | -0:01:02 | 0:02:01 | 0:00:01 | 0:05:43 | 0:00:43 | 0:03:28 | -0:02:32 |
| 7:30 PM | 0:10:29 | -0:04:31 | 0:00:47 | -0:02:13 | 0:04:00 | -0:02:00 | 7:50 | PM | 0:03:18 | 0:00:18 | 0:01:49 | -0:00:11 | 0:05:59 | 0:00:59 | 0:03:41 | -0:02:19 |
| Max Early | 0:08:36 | -0:05:18 | 0:00:34 | -0:02:26 | 0:03:40 | -0:02:18 | Max | Early | 0:08:25 | -0:00:35 | 0:01:38 | -0:00:23 | 0:04:53 | -0:00:07 | 0:03:28 | -0:02:32 |
| Average | 0:12:04 | -0:02:44 | 0:00:47 | -0:02:12 | 0:04:10 | -0:01:48 | Average | | 0:09:49 | 0:00:49 | 0:02:09 | 0:00:09 | 0:06:21 | 0:01:21 | 0:05:36 | -0:00:24 |
| Max Late | 0:14:39 | -0:00:21 | 0:00:57 | -0:02:03 | 0:04:36 | -0:01:24 | Max | Late | 0:10:40 | 0:01:40 | 0:02:37 | 0:00:37 | 0:07:56 | 0:02:56 | 0:16:11 | 0:10:11 |
| 90th Percentile | 0:13:34 | -0:01:25 | 0:00:54 | -0:02:06 | 0:04:31 | -0:01:28 | 90th | Percentile | 0:10:32 | 0:01:32 | 0:02:28 | 0:00:28 | 0:07:31 | 0:02:31 | 0:07:13 | 0:01:13 |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

TABLE 28: Route 3 Average Travel Time

| Eastbound | | | | Westbound | | | |
|--------------------------|-----------------------------|------------------------|---------|--------------------------|--|-------------------------------------|--|
| From | Vallejo Transit Ctr Ride | Curtola Park & Ride | | From | Glen Cove Elem. Beverly Hills Elem. | Beverly Hills Elem. Cal Maritime | Cal Maritime Winchester & Sonoma |
| To | Curtola Park & Ride | Glen Cove Elem. | | To | Beverly Hills Elem. Dev-iation | Cal Maritime Run Time | Winchester & Sonoma Dev-iation |
| Scheduled Time | 0:05:00 | 0:10:00 | | Scheduled Time | 0:10:00 | 0:09:00 | 0:08:00 |
| Scheduled Run Start Time | Run Time | Dev-iation | | Scheduled Run Start Time | Run Time | Dev-iation | Run Time |
| 6:00 AM | 0:05:22 | 0:00:23 | 0:07:10 | 6:15 AM | 0:09:30 | -0:00:29 | 0:06:52 |
| 6:30 AM | 0:05:20 | 0:00:20 | 0:07:49 | -- | -- | -- | -- |
| 7:00 AM | 0:05:37 | 0:00:37 | 0:07:35 | 7:15 AM | 0:08:51 | -0:01:09 | 0:06:47 |
| 7:30 AM | 0:04:47 | -0:00:13 | 0:08:30 | 7:45 AM | 0:11:27 | 0:01:27 | 0:08:03 |
| 8:00 AM | 0:05:48 | 0:00:48 | 0:09:06 | 8:15 AM | 0:10:01 | 0:00:01 | 0:08:21 |
| 9:00 AM | 0:05:32 | 0:00:32 | 0:07:56 | 9:15 AM | 0:09:28 | -0:00:32 | 0:07:42 |
| 10:00 AM | 0:05:03 | 0:00:03 | 0:08:01 | 10:15 AM | 0:10:29 | 0:00:29 | 0:07:06 |
| 11:00 AM | 0:05:07 | 0:00:07 | 0:07:46 | 11:15 AM | 0:09:32 | -0:00:28 | 0:07:30 |
| 12:00 PM | 0:05:11 | 0:00:11 | 0:07:38 | 12:15 PM | 0:09:29 | -0:00:31 | 0:07:40 |
| 1:00 PM | 0:05:21 | 0:00:22 | 0:08:10 | 1:15 PM | 0:10:02 | 0:00:02 | 0:07:37 |
| 2:00 PM | 0:05:15 | 0:00:15 | 0:07:49 | 2:15 PM | 0:08:58 | -0:01:02 | 0:07:06 |
| 3:00 PM | 0:05:43 | 0:00:43 | 0:07:57 | 3:15 PM | 0:09:17 | -0:00:42 | 0:07:04 |
| 4:00 PM | 0:05:38 | 0:00:38 | 0:07:50 | 4:15 PM | 0:08:46 | -0:01:14 | 0:07:41 |
| 4:30 PM | 0:06:01 | 0:01:01 | 0:07:15 | 4:45 PM | 0:07:49 | -0:02:11 | 0:06:26 |
| 5:00 PM | 0:05:44 | 0:00:44 | 0:07:56 | 5:15 PM | 0:08:51 | -0:01:09 | 0:06:25 |
| 5:30 PM | 0:04:59 | -0:00:01 | 0:06:58 | 5:45 PM | 0:07:39 | -0:02:21 | 0:06:55 |
| 6:00 PM | 0:05:46 | 0:00:46 | 0:07:36 | 6:15 PM | 0:08:24 | -0:01:36 | 0:07:01 |
| 6:30 PM | 0:05:00 | 0:00:01 | 0:06:55 | 6:45 PM | 0:07:45 | -0:02:15 | 0:06:04 |
| Max Early | 0:04:47 | -0:00:13 | 0:06:55 | Max Early | 0:07:39 | -0:02:21 | 0:06:04 |
| Average | 0:05:24 | 0:00:24 | 0:07:46 | Average | 0:09:12 | -0:00:48 | 0:07:12 |
| Max Late | 0:06:01 | 0:01:01 | 0:09:06 | Max Late | 0:11:27 | 0:01:27 | 0:08:21 |
| 90th Percentile | 0:05:47 | 0:00:47 | 0:08:16 | 90th Percentile | 0:10:13 | 0:00:13 | 0:07:51 |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

TABLE 29: Route 4 Average Travel Time

| Northbound | | | | | | | | | |
|-----------------|---------------------|----------|---------------------|----------|-----------------------|---------|-----------------------|---------|--|
| From | Vallejo Transit Ctr | | Solono County Court | | Sutter Med Ctr | | Broadway & Tall Trees | | |
| To | Solono County Court | | Sutter Med Ctr | | Broadway & Tall Trees | | Sereno Transit Ctr | | |
| Scheduled Time | 0:07:00 | | 0:10:00 | | 0:05:00 | | 0:03:00 | | |
| Scheduled Run | Dev- | | Dev- | | Dev- | | Dev- | | |
| Start Time | Run Time | iation | Run Time | iation | Run Time | iation | Run Time | iation | |
| 6:53 AM | - | - | - | - | - | - | 0:03:35 | 0:00:44 | |
| 7:00 AM | 0:05:43 | -0:01:17 | 0:08:50 | -0:01:10 | 0:08:50 | 0:03:50 | 0:04:58 | 0:01:58 | |
| 7:30 AM | 0:05:59 | -0:01:01 | 0:09:36 | -0:00:24 | 0:09:36 | 0:04:36 | 0:05:34 | 0:02:34 | |
| 8:00 AM | 0:05:30 | -0:01:30 | 0:10:00 | 0:00:00 | 0:10:00 | 0:05:00 | 0:05:57 | 0:02:57 | |
| 9:00 AM | 0:07:09 | 0:00:10 | 0:09:07 | -0:00:53 | 0:09:07 | 0:04:07 | 0:04:28 | 0:01:28 | |
| 10:00 AM | 0:05:25 | -0:01:35 | - | - | - | - | - | - | |
| 11:00 AM | 0:05:40 | -0:01:20 | 0:12:07 | 0:02:07 | 0:12:07 | 0:07:07 | 0:05:43 | 0:02:43 | |
| 12:00 PM | 0:06:12 | -0:00:48 | 0:10:31 | 0:00:31 | 0:10:31 | 0:05:31 | 0:04:21 | 0:01:22 | |
| 1:00 PM | 0:06:36 | -0:00:24 | 0:10:33 | 0:00:33 | 0:10:33 | 0:05:33 | 0:04:01 | 0:01:01 | |
| 2:00 PM | 0:05:46 | -0:01:14 | 0:11:36 | 0:01:36 | 0:11:36 | 0:06:36 | 0:04:59 | 0:01:59 | |
| 3:00 PM | 0:05:37 | -0:01:23 | 0:12:02 | 0:02:02 | 0:12:02 | 0:07:02 | 0:05:22 | 0:02:22 | |
| 4:00 PM | 0:06:00 | -0:01:00 | - | - | - | - | - | - | |
| 4:30 PM | 0:06:32 | -0:00:28 | 0:08:57 | -0:01:03 | 0:08:57 | 0:03:57 | 0:04:36 | 0:01:36 | |
| 5:00 PM | 0:05:31 | -0:01:29 | 0:09:02 | -0:00:58 | 0:09:02 | 0:04:02 | 0:04:09 | 0:01:09 | |
| 5:30 PM | 0:05:09 | -0:01:51 | 0:08:11 | -0:01:49 | 0:08:11 | 0:03:11 | 0:04:21 | 0:01:22 | |
| 6:00 PM | 0:05:25 | -0:01:35 | - | - | - | - | - | - | |
| Max Early | 0:05:09 | -0:01:51 | 0:08:11 | -0:01:49 | 0:08:11 | 0:03:11 | 0:03:35 | 0:00:44 | |
| Average | 0:05:53 | -0:01:07 | 0:10:02 | 0:00:03 | 0:10:02 | 0:05:03 | 0:04:46 | 0:01:47 | |
| Max Late | 0:07:09 | 0:00:10 | 0:12:07 | 0:02:07 | 0:12:07 | 0:07:07 | 0:05:57 | 0:02:57 | |
| 90th Percentile | 0:06:35 | -0:00:25 | 0:11:59 | 0:01:59 | 0:11:59 | 0:06:59 | 0:05:41 | 0:02:41 | |

| Southbound | | | | | | | | | |
|-----------------|-----------------------|----------|-----------------------|----------|---------------------|----------|---------------------|----------|---------------------|
| From | Sereno Transit Ctr | | Broadway & Tall Trees | | Sutter Med Ctr | | Solono County Court | | Butte & Florida |
| To | Broadway & Tall Trees | | Sutter Med Ctr | | Solono County Court | | Butte & Florida | | Vallejo Transit Ctr |
| Scheduled Time | 0:03:00 | | 0:04:00 | | 0:07:00 | | 0:09:00 | | 0:02:00 |
| Scheduled Run | Dev- | | Dev- | | Dev- | | Dev- | | Dev- |
| Start Time | Run Time | iation | Run Time | iation | Run Time | iation | Run Time | iation | Run Time |
| 7:00 AM | 0:01:16 | -0:01:44 | 0:03:47 | -0:00:13 | 0:06:45 | -0:00:15 | 0:06:52 | -0:02:08 | 0:02:12 |
| 7:30 AM | 0:01:09 | -0:01:51 | 0:04:27 | 0:00:27 | 0:08:02 | 0:01:02 | 0:08:02 | -0:00:58 | 0:02:36 |
| 8:00 AM | 0:01:24 | -0:01:35 | 0:03:37 | -0:00:23 | 0:07:02 | 0:00:03 | 0:07:02 | -0:01:58 | 0:02:07 |
| 8:30 AM | 0:01:06 | -0:01:54 | 0:03:33 | -0:00:28 | 0:07:04 | 0:00:04 | 0:07:04 | -0:01:56 | 0:02:45 |
| 9:30 AM | 0:01:16 | -0:01:44 | 0:03:18 | -0:00:43 | 0:07:10 | 0:00:10 | 0:07:10 | -0:01:50 | 0:04:00 |
| 10:30 AM | 0:01:21 | -0:01:39 | 0:03:09 | -0:00:51 | 0:06:13 | -0:00:47 | 0:06:13 | -0:02:47 | 0:02:30 |
| 11:30 AM | 0:01:15 | -0:01:45 | 0:03:31 | -0:00:29 | 0:06:48 | -0:00:11 | 0:06:48 | -0:02:12 | 0:03:01 |
| 12:30 PM | 0:01:08 | -0:01:52 | 0:03:25 | -0:00:36 | 0:07:00 | 0:00:00 | 0:07:00 | -0:02:00 | 0:02:52 |
| 1:30 PM | 0:01:12 | -0:01:47 | 0:03:24 | -0:00:37 | 0:07:08 | 0:00:08 | 0:07:08 | -0:01:52 | 0:03:01 |
| 2:30 PM | 0:01:32 | -0:01:28 | 0:07:02 | 0:03:01 | 0:07:32 | 0:00:32 | 0:07:32 | -0:01:28 | 0:02:52 |
| 3:30 PM | - | - | 0:09:21 | 0:05:21 | 0:07:10 | 0:00:10 | 0:07:10 | -0:01:50 | 0:03:04 |
| 4:30 PM | 0:01:17 | -0:01:43 | 0:03:15 | -0:00:45 | 0:06:26 | -0:00:34 | 0:06:26 | -0:02:34 | 0:02:44 |
| 5:00 PM | 0:01:10 | -0:01:50 | 0:03:11 | -0:00:50 | 0:06:14 | -0:00:46 | 0:06:14 | -0:02:46 | 0:03:26 |
| 5:30 PM | 0:01:05 | -0:01:55 | 0:03:01 | -0:00:59 | 0:06:40 | -0:00:20 | 0:06:40 | -0:02:20 | 0:02:42 |
| - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - |
| Max Early | 0:01:05 | -0:01:55 | 0:03:01 | -0:00:59 | 0:06:13 | -0:00:47 | 0:06:13 | -0:02:47 | 0:02:07 |
| Average | 0:01:15 | -0:01:45 | 0:04:09 | 0:00:09 | 0:06:57 | -0:00:03 | 0:06:57 | -0:02:03 | 0:02:51 |
| Max Late | 0:01:32 | -0:01:28 | 0:09:21 | 0:05:21 | 0:08:02 | 0:01:02 | 0:08:02 | -0:00:58 | 0:04:00 |
| 90th Percentile | 0:01:24 | -0:01:36 | 0:06:15 | 0:02:15 | 0:07:25 | 0:00:25 | 0:07:25 | -0:01:35 | 0:03:20 |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

TABLE 30: Route 5 Average Travel Time

| Northbound | | | | | | | | | | |
|--------------------------|---------------------|------------|-----------------------|------------|-----------------------|------------|--------------------|------------|--------------------|------------|
| From | Vallejo Transit Ctr | | Vallejo Ferry Term | | Sereno Transit Center | | Kaiser | | Redwood & Tuolumne | |
| To | Vallejo Ferry Term | | Sereno Transit Center | | Kaiser | | Redwood & Tuolumne | | Fairgrounds | |
| Scheduled Time | 0:02:00 | | 0:13:00 | | 0:02:00 | | 0:04:00 | | 0:07:00 | |
| Scheduled Run Start Time | Run Time | Dev-iation | Run Time | Dev-iation | Run Time | Dev-iation | Run Time | Dev-iation | Run Time | Dev-iation |
| 6:30 AM | 0:01:49 | -0:00:11 | 0:10:56 | -0:02:04 | 0:00:45 | -0:01:15 | 0:03:11 | -0:00:49 | 0:07:49 | 0:00:49 |
| 7:00 AM | 0:01:27 | -0:00:33 | 0:11:34 | -0:01:26 | 0:00:55 | -0:01:05 | 0:03:28 | -0:00:32 | 0:08:37 | 0:01:37 |
| 7:30 AM | 0:01:33 | -0:00:27 | 0:10:58 | -0:02:02 | 0:00:50 | -0:01:10 | 0:04:10 | 0:00:10 | 0:07:21 | 0:00:21 |
| 8:00 AM | 0:01:28 | -0:00:32 | 0:14:27 | 0:01:27 | 0:01:03 | -0:00:57 | 0:04:44 | 0:00:44 | 0:07:35 | 0:00:35 |
| 9:00 AM | 0:01:17 | -0:00:43 | 0:12:49 | -0:00:11 | 0:00:54 | -0:01:06 | 0:03:33 | -0:00:27 | 0:07:47 | 0:00:47 |
| 10:00 AM | 0:01:24 | -0:00:36 | 0:13:49 | 0:00:49 | 0:00:56 | -0:01:04 | 0:03:28 | -0:00:32 | 0:07:48 | 0:00:48 |
| 11:00 AM | 0:01:31 | -0:00:29 | 0:13:24 | 0:00:24 | 0:01:03 | -0:00:57 | 0:03:35 | -0:00:25 | 0:07:42 | 0:00:42 |
| 12:00 PM | 0:01:20 | -0:00:40 | 0:13:51 | 0:00:51 | 0:01:14 | -0:00:46 | 0:04:08 | 0:00:08 | 0:08:00 | 0:01:00 |
| 1:00 PM | 0:01:18 | -0:00:42 | 0:14:26 | 0:01:26 | 0:01:03 | -0:00:57 | 0:03:57 | -0:00:03 | 0:07:50 | 0:00:50 |
| 2:00 PM | 0:01:26 | -0:00:34 | 0:13:16 | 0:00:16 | 0:01:11 | -0:00:49 | 0:04:05 | 0:00:05 | 0:08:03 | 0:01:03 |
| 3:00 PM | 0:01:30 | -0:00:30 | 0:13:46 | 0:00:46 | 0:01:09 | -0:00:51 | 0:04:34 | 0:00:34 | 0:08:12 | 0:01:12 |
| 4:00 PM | 0:01:22 | -0:00:38 | 0:13:03 | 0:00:03 | 0:00:50 | -0:01:10 | 0:04:05 | 0:00:05 | 0:07:57 | 0:00:57 |
| 4:30 PM | 0:01:30 | -0:00:30 | 0:12:05 | -0:00:55 | 0:00:59 | -0:01:01 | 0:04:40 | 0:00:40 | 0:07:18 | 0:00:18 |
| 5:00 PM | 0:01:29 | -0:00:31 | 0:12:28 | -0:00:32 | 0:00:58 | -0:01:02 | 0:04:43 | 0:00:43 | 0:07:48 | 0:00:48 |
| 5:30 PM | 0:01:34 | -0:00:26 | 0:11:48 | -0:01:12 | 0:00:56 | -0:01:04 | 0:03:35 | -0:00:25 | 0:07:56 | 0:00:56 |
| 6:00 PM | 0:01:25 | -0:00:35 | 0:11:45 | -0:01:15 | 0:00:48 | -0:01:12 | 0:03:32 | -0:00:28 | 0:07:27 | 0:00:27 |
| 6:30 PM | 0:01:38 | -0:00:22 | 0:11:56 | -0:01:04 | 0:00:53 | -0:01:07 | 0:03:54 | -0:00:06 | 0:07:33 | 0:00:33 |
| Max Early | 0:01:17 | -0:00:43 | 0:10:56 | -0:02:04 | 0:00:45 | -0:01:15 | 0:03:11 | -0:00:49 | 0:07:18 | 0:00:18 |
| Average | 0:01:28 | -0:00:32 | 0:12:51 | -0:00:09 | 0:00:59 | -0:01:01 | 0:04:00 | -0:00:00 | 0:07:51 | 0:00:51 |
| Max Late | 0:01:49 | -0:00:11 | 0:14:27 | 0:01:27 | 0:01:14 | -0:00:46 | 0:04:44 | 0:00:44 | 0:08:37 | 0:01:37 |
| 90th Percentile | 0:01:34 | -0:00:26 | 0:14:12 | 0:01:12 | 0:01:10 | -0:00:50 | 0:04:42 | 0:00:42 | 0:08:08 | 0:01:08 |

| Southbound | | | | | | | | | | |
|--------------------------|--------------------|------------|--------------------|------------|-----------------------|------------|-----------------------|------------|---------------------|------------|
| From | Fairgrounds | | Redwood & Tuolumne | | Kaiser | | Sereno Transit Center | | Vallejo Ferry Term | |
| To | Redwood & Tuolumne | | Kaiser | | Sereno Transit Center | | Vallejo Ferry Term | | Vallejo Transit Ctr | |
| Scheduled Time | 0:07:00 | | 0:04:00 | | 0:02:00 | | 0:10:00 | | 0:02:00 | |
| Scheduled Run Start Time | Run Time | Dev-iation | Run Time | Dev-iation | Run Time | Dev-iation | Run Time | Dev-iation | Run Time | Dev-iation |
| 7:00 AM | 0:05:01 | -0:01:59 | 0:03:14 | -0:00:46 | 0:01:24 | -0:00:36 | 0:09:01 | -0:00:59 | 0:02:18 | 0:00:18 |
| 7:30 AM | 0:05:39 | -0:01:21 | 0:03:18 | -0:00:42 | 0:01:24 | -0:00:36 | 0:08:53 | -0:01:07 | 0:03:04 | 0:01:04 |
| 8:00 AM | 0:06:00 | -0:01:00 | 0:03:08 | -0:00:52 | 0:01:51 | -0:00:09 | 0:10:06 | 0:00:06 | 0:02:52 | 0:00:52 |
| 8:30 AM | 0:06:01 | -0:00:59 | 0:03:33 | -0:00:27 | 0:01:25 | -0:00:35 | 0:10:22 | 0:00:22 | 0:07:02 | 0:05:02 |
| 9:30 AM | 0:05:31 | -0:01:29 | 0:03:06 | -0:00:54 | 0:01:51 | -0:00:09 | 0:09:41 | -0:00:19 | 0:03:18 | 0:01:18 |
| 10:30 AM | 0:05:32 | -0:01:28 | 0:03:10 | -0:00:50 | 0:01:43 | -0:00:17 | 0:10:01 | 0:00:01 | 0:03:35 | 0:01:35 |
| 11:30 AM | 0:05:16 | -0:01:44 | 0:03:12 | -0:00:48 | 0:02:07 | 0:00:07 | 0:10:03 | 0:00:03 | 0:02:35 | 0:00:35 |
| 12:30 PM | 0:05:51 | -0:01:09 | 0:03:26 | -0:00:34 | 0:01:54 | -0:00:06 | 0:10:04 | 0:00:04 | 0:03:15 | 0:01:15 |
| 1:30 PM | 0:06:02 | -0:00:58 | 0:03:29 | -0:00:31 | 0:01:50 | -0:00:10 | 0:10:42 | 0:00:42 | 0:02:33 | 0:00:33 |
| 2:30 PM | 0:05:57 | -0:01:03 | 0:03:37 | -0:00:23 | 0:02:01 | 0:00:01 | 0:10:20 | 0:00:20 | 0:02:38 | 0:00:38 |
| 3:30 PM | 0:05:36 | -0:01:24 | 0:03:38 | -0:00:22 | 0:01:55 | -0:00:05 | 0:10:04 | 0:00:04 | 0:03:23 | 0:01:23 |
| 4:30 PM | 0:05:18 | -0:01:42 | 0:03:12 | -0:00:48 | 0:01:49 | -0:00:11 | 0:09:58 | -0:00:02 | 0:04:09 | 0:02:09 |
| 5:00 PM | 0:06:01 | -0:00:59 | 0:03:25 | -0:00:35 | 0:01:54 | -0:00:06 | 0:09:25 | -0:00:35 | 0:03:39 | 0:01:39 |
| 5:30 PM | 0:05:45 | -0:01:15 | 0:03:12 | -0:00:48 | 0:01:51 | -0:00:09 | 0:09:12 | -0:00:48 | 0:03:20 | 0:01:20 |
| 6:00 PM | 0:06:14 | -0:00:46 | 0:03:06 | -0:00:54 | 0:01:58 | -0:00:02 | 0:10:00 | 0:00:00 | 0:03:34 | 0:01:34 |
| 6:30 PM | 0:05:29 | -0:01:31 | 0:03:11 | -0:00:49 | 0:02:17 | 0:00:17 | 0:09:25 | -0:00:35 | 0:03:13 | 0:01:13 |
| 7:00 PM | 0:05:59 | -0:01:01 | 0:03:11 | -0:00:49 | 0:01:23 | -0:00:37 | 0:09:10 | -0:00:50 | 0:03:29 | 0:01:29 |
| Max Early | 0:05:01 | -0:01:59 | 0:03:06 | -0:00:54 | 0:01:24 | -0:00:36 | 0:08:53 | -0:01:07 | 0:02:18 | 0:00:18 |
| Average | 0:05:43 | -0:01:17 | 0:03:19 | -0:00:41 | 0:01:48 | -0:00:12 | 0:09:51 | -0:00:09 | 0:03:25 | 0:01:25 |
| Max Late | 0:06:14 | -0:00:46 | 0:03:38 | -0:00:22 | 0:02:07 | 0:00:07 | 0:10:42 | 0:00:42 | 0:07:02 | 0:05:02 |
| 90th Percentile | 0:06:02 | -0:00:58 | 0:03:35 | -0:00:25 | 0:02:00 | 0:00:00 | 0:10:21 | 0:00:21 | 0:03:57 | 0:01:57 |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

TABLE 31: Route 6 Average Travel Time

| Eastbound | | | | | | | | |
|--------------------------|---------------------|------------|------------------|------------|-------------------|------------|--------------------|------------|
| From | Vallejo Transit Ctr | | Tenn. & Sutter | | Tenn. & Tuolumne | | Admiral Callaghan | |
| To | Tenn. & Sutter | | Tenn. & Tuolumne | | Admiral Callaghan | | Georgia @ Hogan MS | |
| Scheduled Time | 0:06:00 | | 0:04:00 | | 0:03:00 | | 0:10:00 | |
| Scheduled Run Start Time | Run Time | Dev-iation | Run Time | Dev-iation | Run Time | Dev-iation | Run Time | Dev-iation |
| - | - | - | - | - | - | - | - | - |
| 7:00 AM | 0:05:27 | -0:00:33 | 0:02:57 | -0:01:03 | 0:02:09 | -0:00:51 | 0:11:05 | 0:01:05 |
| 8:00 AM | 0:03:56 | -0:02:04 | 0:03:13 | -0:00:47 | 0:02:47 | -0:00:13 | 0:11:18 | 0:01:18 |
| 9:00 AM | 0:03:59 | -0:02:01 | 0:03:07 | -0:00:53 | 0:02:06 | -0:00:54 | 0:09:56 | -0:00:04 |
| 10:00 AM | 0:03:49 | -0:02:11 | 0:03:11 | -0:00:49 | 0:02:25 | -0:00:35 | 0:10:20 | 0:00:20 |
| 11:00 AM | 0:04:13 | -0:01:47 | 0:03:57 | -0:00:03 | 0:02:08 | -0:00:52 | 0:10:18 | 0:00:18 |
| 12:00 PM | 0:04:27 | -0:01:33 | 0:03:31 | -0:00:29 | 0:02:21 | -0:00:39 | 0:10:46 | 0:00:46 |
| 1:00 PM | 0:03:59 | -0:02:01 | 0:03:48 | -0:00:12 | 0:02:52 | -0:00:08 | 0:10:42 | 0:00:42 |
| 2:00 PM | 0:04:17 | -0:01:43 | 0:03:28 | -0:00:32 | 0:02:37 | -0:00:23 | 0:11:25 | 0:01:25 |
| 3:00 PM | 0:03:38 | -0:02:22 | 0:03:34 | -0:00:26 | 0:03:42 | 0:00:42 | 0:10:41 | 0:00:41 |
| 4:00 PM | 0:03:53 | -0:02:07 | 0:03:33 | -0:00:27 | 0:02:28 | -0:00:32 | 0:11:56 | 0:01:56 |
| 5:00 PM | 0:04:11 | -0:01:49 | 0:03:07 | -0:00:53 | 0:02:34 | -0:00:26 | 0:10:49 | 0:00:49 |
| 6:00 PM | 0:03:58 | -0:02:02 | 0:03:19 | -0:00:41 | 0:02:20 | -0:00:40 | 0:11:15 | 0:01:15 |
| 7:00 PM | 0:03:44 | -0:02:16 | 0:03:03 | -0:00:57 | 0:02:25 | -0:00:35 | 0:09:47 | -0:00:13 |
| Max Early | 0:03:38 | -0:02:22 | 0:02:57 | -0:01:03 | 0:02:06 | -0:00:54 | 0:09:47 | -0:00:13 |
| Average | 0:04:07 | -0:01:53 | 0:03:22 | -0:00:38 | 0:02:32 | -0:00:28 | 0:10:48 | 0:00:48 |
| Max Late | 0:05:27 | -0:00:33 | 0:03:57 | -0:00:03 | 0:03:42 | 0:00:42 | 0:11:56 | 0:01:56 |
| 90th Percentile | 0:04:25 | -0:01:35 | 0:03:45 | -0:00:15 | 0:02:51 | -0:00:09 | 0:11:24 | 0:01:24 |

| Westbound | | | | | | | | |
|--------------------------|--------------------|------------|-------------------|------------|------------------|------------|---------------------|------------|
| From | Georgia @ Hogan MS | | Admiral Callaghan | | Tenn. & Tuolumne | | Tenn. & Sutter | |
| To | Admiral Callaghan | | Tenn. & Tuolumne | | Tenn. & Sutter | | Vallejo Transit Ctr | |
| Scheduled Time | 0:10:00 | | 0:02:00 | | 0:04:00 | | 0:06:00 | |
| Scheduled Run Start Time | Run Time | Dev-iation | Run Time | Dev-iation | Run Time | Dev-iation | Run Time | Dev-iation |
| 6:25 AM | 0:06:27 | -0:03:33 | 0:02:58 | 0:00:58 | 0:02:40 | -0:01:20 | 0:04:48 | -0:01:12 |
| 7:25 AM | 0:06:42 | -0:03:18 | 0:03:39 | 0:01:39 | 0:03:42 | -0:00:18 | 0:05:35 | -0:00:25 |
| 8:25 AM | 0:06:37 | -0:03:23 | 0:03:43 | 0:01:43 | 0:02:54 | -0:01:06 | 0:05:28 | -0:00:32 |
| 9:25 AM | 0:06:24 | -0:03:36 | 0:03:37 | 0:01:37 | 0:02:45 | -0:01:15 | 0:05:17 | -0:00:43 |
| 10:25 AM | 0:07:00 | -0:03:00 | 0:03:39 | 0:01:39 | 0:02:32 | -0:01:28 | 0:08:50 | 0:02:50 |
| 11:25 AM | 0:06:49 | -0:03:11 | 0:04:03 | 0:02:03 | 0:03:14 | -0:00:46 | 0:06:06 | 0:00:06 |
| 12:25 PM | 0:06:13 | -0:03:47 | 0:03:50 | 0:01:50 | 0:03:05 | -0:00:55 | 0:06:33 | 0:00:33 |
| 1:25 PM | 0:06:58 | -0:03:02 | 0:03:46 | 0:01:46 | 0:02:49 | -0:01:11 | 0:05:45 | -0:00:15 |
| 2:25 PM | 0:06:26 | -0:03:34 | 0:03:48 | 0:01:48 | 0:03:12 | -0:00:48 | 0:07:27 | 0:01:27 |
| 3:25 PM | 0:06:16 | -0:03:44 | 0:03:43 | 0:01:43 | 0:03:13 | -0:00:47 | 0:06:53 | 0:00:53 |
| 4:25 PM | 0:07:32 | -0:02:28 | 0:03:35 | 0:01:35 | 0:03:03 | -0:00:57 | 0:05:39 | -0:00:21 |
| 5:25 PM | 0:07:03 | -0:02:57 | 0:03:33 | 0:01:33 | 0:02:30 | -0:01:30 | 0:05:39 | -0:00:21 |
| 6:25 PM | 0:08:15 | -0:01:45 | 0:03:23 | 0:01:23 | 0:03:04 | -0:00:56 | 0:05:26 | -0:00:34 |
| - | - | - | - | - | - | - | - | - |
| Max Early | 0:06:13 | -0:03:47 | 0:02:58 | 0:00:58 | 0:02:30 | -0:01:30 | 0:04:48 | -0:01:12 |
| Average | 0:06:49 | -0:03:11 | 0:03:38 | 0:01:38 | 0:02:59 | -0:01:01 | 0:06:07 | 0:00:07 |
| Max Late | 0:08:15 | -0:01:45 | 0:04:03 | 0:02:03 | 0:03:42 | -0:00:18 | 0:08:50 | 0:02:50 |
| 90th Percentile | 0:07:27 | -0:02:33 | 0:03:50 | 0:01:50 | 0:03:14 | -0:00:46 | 0:07:20 | 0:01:20 |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

TABLE 32: Route 7 Average Travel Time

| Northbound | | | | | | | | | | Southbound | | | | | | | | | |
|--------------------------|---------------------|-----------|-----------------------|-----------|-----------------------|-----------|--|--|--|--------------------------|-----------------------|-----------|-----------------------|-----------|---------------------|-----------|--|--|--|
| From | Vallejo Transit Ctr | | Springs & Oakwood | | Ascot Pkwy & Columbus | | | | | From | Gateway Plaza | | Ascot Pkwy & Columbus | | Springs & Oakwood | | | | |
| To | Springs & Oakwood | | Ascot Pkwy & Columbus | | Gateway Plaza | | | | | To | Ascot Pkwy & Columbus | | Springs & Oakwood | | Vallejo Transit Ctr | | | | |
| Scheduled Time | 0:15:00 | | 0:07:00 | | 0:11:00 | | | | | Scheduled Time | 0:08:00 | | 0:07:00 | | 0:13:00 | | | | |
| Scheduled Run Start Time | Run Time | Deviation | Run Time | Deviation | Run Time | Deviation | | | | Scheduled Run Start Time | Run Time | Deviation | Run Time | Deviation | Run Time | Deviation | | | |
| 6:10 AM | 0:10:20 | -0:04:40 | 0:04:47 | -0:02:13 | 0:12:38 | 0:01:38 | | | | 6:20 AM | 0:08:10 | 0:00:10 | 0:04:34 | -0:02:26 | 0:09:52 | -0:03:08 | | | |
| 6:30 AM | 0:10:32 | -0:04:28 | 0:05:37 | -0:01:23 | 0:13:29 | 0:02:29 | | | | 6:50 AM | 0:09:24 | 0:01:24 | 0:04:45 | -0:02:15 | 0:09:57 | -0:03:03 | | | |
| 7:10 AM | 0:15:03 | 0:00:03 | 0:04:55 | -0:02:05 | 0:15:21 | 0:04:21 | | | | 7:15 AM | 0:09:48 | 0:01:48 | 0:05:07 | -0:01:53 | 0:11:37 | -0:01:23 | | | |
| 7:30 AM | 0:11:55 | -0:03:05 | 0:05:42 | -0:01:18 | 0:13:43 | 0:02:43 | | | | 7:52 AM | 0:10:46 | 0:02:46 | 0:06:26 | -0:00:34 | 0:11:27 | -0:01:33 | | | |
| 8:00 AM | 0:11:15 | -0:03:45 | 0:04:41 | -0:02:19 | 0:13:20 | 0:02:20 | | | | 8:15 AM | 0:11:24 | 0:03:24 | 0:04:53 | -0:02:07 | 0:11:47 | -0:01:13 | | | |
| 8:30 AM | 0:11:39 | -0:03:21 | 0:04:44 | -0:02:16 | 0:12:36 | 0:01:36 | | | | 8:45 AM | 0:09:03 | 0:01:03 | 0:04:40 | -0:02:20 | 0:11:15 | -0:01:45 | | | |
| 9:00 AM | 0:12:02 | -0:02:58 | 0:05:36 | -0:01:24 | 0:12:41 | 0:01:41 | | | | 9:15 AM | 0:09:15 | 0:01:15 | 0:05:54 | -0:01:06 | - | - | | | |
| 9:30 AM | 0:11:54 | -0:03:06 | 0:05:18 | -0:01:42 | 0:14:12 | 0:03:12 | | | | 9:45 AM | 0:09:00 | 0:01:00 | 0:05:07 | -0:01:53 | 0:13:17 | 0:00:17 | | | |
| 10:00 AM | 0:12:23 | -0:02:37 | 0:04:49 | -0:02:11 | 0:13:00 | 0:02:00 | | | | 10:15 AM | 0:09:37 | 0:01:37 | 0:05:07 | -0:01:53 | 0:14:40 | 0:01:40 | | | |
| 10:30 AM | 0:10:49 | -0:04:11 | 0:04:22 | -0:02:38 | 0:13:03 | 0:02:03 | | | | 10:45 AM | 0:09:28 | 0:01:28 | 0:05:05 | -0:01:55 | 0:13:35 | 0:00:35 | | | |
| 11:00 AM | 0:11:37 | -0:03:23 | 0:04:22 | -0:02:38 | 0:14:33 | 0:03:33 | | | | 11:15 AM | 0:08:51 | 0:00:51 | 0:05:32 | -0:01:28 | 0:11:52 | -0:01:08 | | | |
| 11:30 AM | 0:12:05 | -0:02:55 | 0:04:30 | -0:02:30 | 0:12:49 | 0:01:49 | | | | 11:45 AM | 0:08:39 | 0:00:39 | 0:04:39 | -0:02:21 | 0:11:04 | -0:01:56 | | | |
| 12:00 PM | 0:12:06 | -0:02:54 | 0:04:53 | -0:02:07 | 0:13:40 | 0:02:40 | | | | 12:15 PM | 0:09:02 | 0:01:02 | 0:04:56 | -0:02:04 | 0:11:26 | -0:01:34 | | | |
| 12:30 PM | 0:11:20 | -0:03:40 | 0:04:41 | -0:02:19 | 0:13:06 | 0:02:06 | | | | 12:45 PM | 0:09:50 | 0:01:50 | 0:05:29 | -0:01:31 | 0:12:29 | -0:00:31 | | | |
| 1:00 PM | 0:12:03 | -0:02:57 | 0:04:45 | -0:02:15 | 0:14:05 | 0:03:05 | | | | 1:15 PM | 0:09:59 | 0:01:59 | 0:04:58 | -0:02:02 | 0:11:25 | -0:01:35 | | | |
| 1:30 PM | 0:12:00 | -0:03:00 | 0:04:52 | -0:02:08 | 0:14:21 | 0:03:21 | | | | 1:45 PM | 0:10:42 | 0:02:42 | 0:04:54 | -0:02:06 | 0:12:03 | -0:00:57 | | | |
| 2:00 PM | 0:13:05 | -0:01:55 | 0:05:14 | -0:01:46 | 0:14:41 | 0:03:41 | | | | 2:15 PM | 0:10:22 | 0:02:22 | 0:05:47 | -0:01:13 | 0:12:35 | -0:00:25 | | | |
| 2:30 PM | 0:12:21 | -0:02:39 | 0:06:02 | -0:00:58 | 0:17:45 | 0:06:45 | | | | 2:45 PM | 0:11:14 | 0:03:14 | 0:05:34 | -0:01:26 | 0:18:09 | 0:05:09 | | | |
| 3:00 PM | 0:12:31 | -0:02:29 | 0:05:12 | -0:01:48 | 0:17:10 | 0:06:10 | | | | 3:15 PM | 0:12:19 | 0:04:19 | 0:05:34 | -0:01:26 | 0:12:31 | -0:00:29 | | | |
| 3:30 PM | 0:12:46 | -0:02:14 | 0:05:10 | -0:01:50 | 0:14:11 | 0:03:11 | | | | 3:45 PM | - | - | 0:05:15 | -0:01:45 | 0:14:38 | 0:01:38 | | | |
| 4:00 PM | 0:12:42 | -0:02:18 | 0:05:08 | -0:01:52 | 0:14:13 | 0:03:13 | | | | 4:15 PM | 0:10:44 | 0:02:44 | 0:05:16 | -0:01:44 | 0:12:58 | -0:00:02 | | | |
| 4:30 PM | 0:11:28 | -0:03:32 | 0:05:27 | -0:01:33 | 0:15:59 | 0:04:59 | | | | 4:45 PM | 0:09:51 | 0:01:51 | 0:04:58 | -0:02:02 | 0:11:56 | -0:01:04 | | | |
| 5:00 PM | 0:11:01 | -0:03:59 | 0:05:20 | -0:01:40 | 0:14:21 | 0:03:21 | | | | 5:15 PM | 0:09:35 | 0:01:35 | 0:04:56 | -0:02:04 | 0:11:50 | -0:01:10 | | | |
| 5:30 PM | 0:11:10 | -0:03:50 | 0:04:53 | -0:02:07 | 0:14:49 | 0:03:49 | | | | 5:45 PM | 0:09:57 | 0:01:57 | 0:04:39 | -0:02:21 | 0:11:35 | -0:01:25 | | | |
| 6:00 PM | 0:11:47 | -0:03:13 | 0:05:30 | -0:01:30 | 0:14:23 | 0:03:23 | | | | 6:15 PM | 0:09:54 | 0:01:54 | 0:05:04 | -0:01:56 | 0:14:46 | 0:01:46 | | | |
| 6:30 PM | 0:11:12 | -0:03:48 | 0:04:54 | -0:02:06 | 0:13:24 | 0:02:24 | | | | 6:45 PM | 0:10:01 | 0:02:01 | 0:04:52 | -0:02:08 | 0:10:30 | -0:02:30 | | | |
| 7:00 PM | 0:11:55 | -0:03:05 | 0:05:02 | -0:01:58 | 0:10:11 | -0:00:49 | | | | 7:15 PM | 0:08:22 | 0:00:22 | 0:04:14 | -0:02:46 | 0:09:14 | -0:03:46 | | | |
| 7:30 PM | 0:10:34 | -0:04:26 | 0:04:27 | -0:02:33 | 0:13:32 | 0:02:32 | | | | 7:45 PM | 0:08:21 | 0:00:21 | 0:05:00 | -0:02:00 | 0:09:42 | -0:03:18 | | | |
| - | - | - | - | - | - | - | | | | 8:15 PM | 0:08:36 | 0:00:36 | 0:04:26 | -0:02:34 | 0:11:03 | -0:01:57 | | | |
| Max Early | 0:10:20 | -0:04:40 | 0:04:22 | -0:02:38 | 0:12:36 | 0:01:36 | | | | Max Early | 0:08:39 | 0:00:39 | 0:04:39 | -0:02:21 | 0:09:57 | -0:03:03 | | | |
| Average | 0:11:48 | -0:03:12 | 0:04:55 | -0:02:05 | 0:13:29 | 0:02:29 | | | | Average | 0:09:39 | 0:01:39 | 0:05:10 | -0:01:50 | 0:11:59 | -0:01:01 | | | |
| Max Late | 0:15:03 | 0:00:03 | 0:05:42 | -0:01:18 | 0:15:21 | 0:04:21 | | | | Max Late | 0:11:24 | 0:03:24 | 0:06:26 | -0:00:34 | 0:14:40 | 0:01:40 | | | |
| 90th Percentile | 0:12:16 | -0:02:44 | 0:05:37 | -0:01:23 | 0:14:25 | 0:03:25 | | | | 90th Percentile | 0:10:44 | 0:02:44 | 0:05:45 | -0:01:15 | 0:13:29 | 0:00:29 | | | |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

TABLE 33: Route 8 Average Travel Time

| Eastbound | | | | | | | | |
|--------------------------|---------------------|------------|-----------------------|------------|-----------------------|------------|--------------------|------------|
| From | Vallejo Transit Ctr | | Benicia & Solano | | Benicia & Rollingwood | | Ascot & Southport | |
| To | Benicia & Solano | | Benicia & Rollingwood | | Ascot & Southport | | Georgia @ Hogan MS | |
| Scheduled Time | 0:03:00 | | 0:06:00 | | 0:06:00 | | 0:06:00 | |
| Scheduled Run Start Time | Run Time | Devi-ation | Run Time | Devi-ation | Run Time | Devi-ation | Run Time | Devi-ation |
| - | - | - | - | - | - | - | - | - |
| 7:10 AM | 0:03:10 | 0:00:10 | 0:04:47 | -0:01:13 | 0:09:24 | 0:03:24 | 0:05:26 | -0:00:34 |
| 8:00 AM | 0:03:28 | 0:00:28 | 0:04:54 | -0:01:06 | 0:07:49 | 0:01:49 | 0:06:12 | 0:00:12 |
| 9:00 AM | 0:03:21 | 0:00:21 | 0:04:04 | -0:01:56 | 0:07:27 | 0:01:27 | 0:06:56 | 0:00:56 |
| 10:00 AM | 0:03:27 | 0:00:27 | 0:04:17 | -0:01:43 | 0:08:14 | 0:02:14 | 0:06:36 | 0:00:36 |
| 11:00 AM | 0:03:24 | 0:00:24 | 0:04:36 | -0:01:24 | 0:07:44 | 0:01:44 | 0:05:52 | -0:00:08 |
| 12:00 PM | 0:03:25 | 0:00:25 | 0:04:23 | -0:01:37 | 0:08:35 | 0:02:35 | 0:06:05 | 0:00:05 |
| 1:00 PM | 0:03:16 | 0:00:16 | 0:04:38 | -0:01:22 | 0:08:19 | 0:02:19 | 0:05:54 | -0:00:06 |
| 2:00 PM | 0:03:39 | 0:00:39 | 0:05:06 | -0:00:54 | 0:09:06 | 0:03:06 | 0:06:23 | 0:00:23 |
| 3:00 PM | 0:04:01 | 0:01:01 | 0:05:53 | -0:00:07 | 0:08:46 | 0:02:46 | 0:05:41 | -0:00:19 |
| 4:00 PM | 0:03:36 | 0:00:36 | 0:05:38 | -0:00:22 | 0:09:13 | 0:03:13 | 0:06:40 | 0:00:40 |
| 5:00 PM | 0:03:43 | 0:00:43 | 0:05:25 | -0:00:35 | 0:09:00 | 0:03:00 | 0:05:38 | -0:00:22 |
| 6:00 PM | 0:03:17 | 0:00:17 | 0:04:46 | -0:01:14 | 0:07:51 | 0:01:51 | 0:05:52 | -0:00:08 |
| 7:00 PM | 0:03:11 | 0:00:11 | 0:05:00 | -0:01:00 | 0:07:34 | 0:01:34 | 0:06:09 | 0:00:09 |
| Max Early | 0:03:10 | 0:00:10 | 0:04:04 | -0:01:56 | 0:07:27 | 0:01:27 | 0:05:26 | -0:00:34 |
| Average | 0:03:28 | 0:00:28 | 0:04:53 | -0:01:07 | 0:08:23 | 0:02:23 | 0:06:07 | 0:00:07 |
| Max Late | 0:04:01 | 0:01:01 | 0:05:53 | -0:00:07 | 0:09:24 | 0:03:24 | 0:06:56 | 0:00:56 |
| 90th Percentile | 0:03:42 | 0:00:42 | 0:05:36 | -0:00:24 | 0:09:12 | 0:03:12 | 0:06:39 | 0:00:39 |

| Westbound | | | | | | | | |
|--------------------------|-----------------|------------|------------------|------------|------------------|------------|------------------|------------|
| From | Georgia @ Hogan | | Ascot & | | Benicia & | | Benicia & Solano | |
| To | Benicia & | | Benicia & Solano | | Benicia & Solano | | Vallejo Transit | |
| Scheduled Time | 0:07:00 | | 0:05:00 | | 0:06:00 | | 0:04:00 | |
| Scheduled Run Start Time | Run Time | Devi-ation | Run Time | Devi-ation | Run Time | Devi-ation | Run Time | Devi-ation |
| 6:31 AM | 0:06:01 | -0:00:59 | 0:08:23 | 0:03:23 | 0:05:10 | -0:00:50 | 0:04:27 | 0:00:27 |
| 7:31 AM | 0:07:04 | 0:00:04 | 0:07:11 | 0:02:11 | 0:03:43 | -0:02:17 | 0:04:49 | 0:00:49 |
| 8:27 AM | 0:06:59 | -0:00:01 | 0:08:13 | 0:03:13 | 0:04:24 | -0:01:36 | 0:04:49 | 0:00:49 |
| 9:27 AM | 0:05:54 | -0:01:06 | 0:07:28 | 0:02:28 | 0:04:35 | -0:01:25 | 0:04:14 | 0:00:14 |
| 10:27 AM | 0:07:00 | -0:00:00 | 0:08:09 | 0:03:09 | 0:04:20 | -0:01:40 | 0:04:27 | 0:00:27 |
| 11:27 AM | 0:06:52 | -0:00:08 | 0:07:56 | 0:02:56 | 0:04:24 | -0:01:36 | 0:05:53 | 0:01:53 |
| 12:27 PM | 0:07:08 | 0:00:08 | 0:08:01 | 0:03:01 | 0:04:09 | -0:01:51 | 0:04:48 | 0:00:48 |
| 1:27 PM | 0:06:25 | -0:00:35 | 0:07:34 | 0:02:34 | 0:03:49 | -0:02:11 | 0:04:29 | 0:00:29 |
| 2:27 PM | 0:07:30 | 0:00:30 | 0:07:48 | 0:02:48 | 0:05:05 | -0:00:55 | 0:05:25 | 0:01:25 |
| 3:27 PM | 0:06:45 | -0:00:15 | 0:08:02 | 0:03:02 | 0:03:49 | -0:02:11 | 0:04:49 | 0:00:49 |
| 4:27 PM | 0:07:15 | 0:00:15 | 0:08:47 | 0:03:47 | 0:03:51 | -0:02:09 | 0:04:40 | 0:00:40 |
| 5:27 PM | 0:07:51 | 0:00:51 | 0:07:38 | 0:02:38 | 0:03:35 | -0:02:25 | 0:04:38 | 0:00:38 |
| 6:27 PM | 0:07:09 | 0:00:09 | 0:07:57 | 0:02:57 | 0:03:38 | -0:02:22 | 0:07:48 | 0:03:48 |
| - | - | - | - | - | - | - | - | - |
| Max Early | 0:05:54 | -0:01:06 | 0:07:11 | 0:02:11 | 0:03:35 | -0:02:25 | 0:04:14 | 0:00:14 |
| Average | 0:06:55 | -0:00:05 | 0:07:56 | 0:02:56 | 0:04:12 | -0:01:48 | 0:05:01 | 0:01:01 |
| Max Late | 0:07:51 | 0:00:51 | 0:08:47 | 0:03:47 | 0:05:10 | -0:00:50 | 0:07:48 | 0:03:48 |
| 90th Percentile | 0:07:27 | 0:00:27 | 0:08:21 | 0:03:21 | 0:04:59 | -0:01:01 | 0:05:47 | 0:01:47 |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

TABLE 34: Route 20 Average Travel Time

| Eastbound | | | | | | | | | | | | | | | | | | | | | |
|-----------------|----------------|-----------------------|----------------|--------------------|----------------|--------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------|
| From | To | Sereno Transit Center | | Redwood & Tuolumne | | Target Vallejo | | Plaza Dr & Gateway | | Solano Clig Vallejo | | Ascot & Columbus | | Raley's Center | | City Park Military & 1st | | 3rd & H | | | |
| | | Redwood & Tuolumne | Target Vallejo | Target Vallejo | Target Vallejo | Solano Clig Vallejo | Solano Clig Vallejo | Plaza Dr & Gateway | Plaza Dr & Gateway | Ascot & Columbus | Ascot & Columbus | City Park Military & 1st | City Park Military & 1st | City Park Military & 1st | City Park Military & 1st | City Park Military & 1st | City Park Military & 1st | City Park Military & 1st | City Park Military & 1st | City Park Military & 1st | |
| Scheduled Time | Scheduled Time | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation |
| 8:30 AM | 0:05:11 | -0:02:49 | | 0:04:38 | -0:00:22 | 0:02:17 | -0:01:43 | 0:03:25 | -0:00:35 | 0:04:53 | -0:01:07 | 0:08:50 | -0:03:10 | 0:05:38 | 0:01:38 | 0:01:48 | -0:02:12 | 0:03:53 | 0:02:53 | 0:03:53 | 0:02:53 |
| 10:30 AM | 0:09:08 | 0:01:08 | | 0:07:05 | 0:02:05 | 0:02:35 | -0:01:25 | 0:03:33 | -0:00:27 | 0:05:58 | -0:00:02 | 0:09:06 | -0:02:54 | 0:04:32 | 0:00:32 | 0:03:46 | -0:00:14 | 0:00:58 | -0:00:02 | 0:00:58 | -0:00:02 |
| 12:30 PM | 0:04:11 | -0:03:49 | | 0:06:33 | 0:01:33 | 0:03:02 | -0:00:58 | 0:03:58 | -0:00:02 | 0:04:49 | -0:01:11 | 0:10:29 | -0:01:31 | 0:05:31 | 0:01:31 | 0:02:25 | -0:01:35 | 0:01:00 | 0:00:00 | 0:01:00 | 0:00:00 |
| 1:55 PM | - | - | | 0:05:12 | 0:00:12 | 0:02:57 | -0:01:03 | 0:03:34 | -0:00:26 | 0:04:15 | -0:01:45 | 0:09:09 | -0:02:51 | 0:05:02 | 0:01:02 | 0:01:55 | -0:02:05 | 0:02:53 | 0:01:53 | 0:02:53 | 0:01:53 |
| 3:55 PM | - | - | | 0:05:27 | 0:00:27 | 0:02:54 | -0:01:06 | 0:03:38 | -0:00:22 | 0:04:47 | -0:01:13 | 0:09:09 | -0:02:51 | 0:04:42 | 0:00:42 | 0:02:05 | -0:01:55 | 0:02:34 | 0:01:34 | 0:02:34 | 0:01:34 |
| 5:55 PM | - | - | | 0:05:20 | 0:00:20 | 0:02:34 | -0:01:26 | 0:04:15 | 0:00:15 | 0:04:38 | -0:01:22 | 0:10:01 | -0:01:59 | 0:06:42 | 0:02:42 | 0:02:18 | -0:01:42 | 0:03:42 | 0:02:42 | 0:03:42 | 0:02:42 |
| Max Early | 0:04:11 | -0:03:49 | | 0:04:38 | -0:00:22 | 0:02:17 | -0:01:43 | 0:03:25 | -0:00:35 | 0:04:15 | -0:01:45 | 0:08:50 | -0:03:10 | 0:04:32 | 0:00:32 | 0:01:48 | -0:02:12 | 0:00:58 | -0:00:02 | 0:00:58 | -0:00:02 |
| Average | 0:06:10 | -0:01:50 | | 0:05:42 | 0:00:42 | 0:02:43 | -0:01:17 | 0:03:44 | -0:00:16 | 0:04:53 | -0:01:07 | 0:09:27 | -0:02:33 | 0:05:21 | 0:01:21 | 0:02:23 | -0:01:37 | 0:02:30 | 0:01:30 | 0:02:30 | 0:01:30 |
| Max Late | 0:09:08 | 0:01:08 | | 0:07:05 | 0:02:05 | 0:03:02 | -0:00:58 | 0:04:15 | 0:00:15 | 0:05:58 | -0:00:02 | 0:10:29 | -0:01:31 | 0:06:42 | 0:02:42 | 0:03:46 | -0:00:14 | 0:03:53 | 0:02:53 | 0:03:53 | 0:02:53 |
| 90th Percentile | 0:08:20 | 0:00:20 | | 0:06:49 | 0:01:49 | 0:03:00 | -0:01:00 | 0:04:06 | 0:00:06 | 0:05:25 | -0:00:35 | 0:10:15 | -0:01:45 | 0:06:10 | 0:02:10 | 0:03:05 | -0:00:55 | 0:03:48 | 0:02:48 | 0:03:48 | 0:02:48 |
| Westbound | | | | | | | | | | | | | | | | | | | | | |
| From | To | Casa de Villarassa | | 3rd & H | | City Park Military & 1st | | Raley's Center | | Ascot & Columbus | | Solano Clig Vallejo | | Plaza Dr & Gateway | | Target Vallejo | | Redwood & Tuolumne | | Sereno Transit Center | |
| | | Redwood & Tuolumne | Target Vallejo | Target Vallejo | Target Vallejo | Solano Clig Vallejo | Solano Clig Vallejo | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway | Plaza Dr & Gateway |
| Scheduled Time | Scheduled Time | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation | Run | Deviation |
| 7:24 AM | 0:00:44 | -0:00:16 | | 0:03:34 | -0:01:26 | 0:03:12 | -0:00:48 | 0:13:46 | -0:00:14 | 0:05:21 | 0:00:21 | 0:03:24 | -0:01:36 | 0:02:47 | -0:00:13 | 0:04:54 | -0:01:06 | - | - | - | - |
| 9:24 AM | 0:00:44 | -0:00:16 | | 0:03:41 | -0:01:19 | 0:03:17 | -0:00:43 | 0:13:19 | -0:00:41 | 0:04:45 | -0:00:15 | 0:03:28 | -0:01:32 | 0:02:42 | -0:00:18 | 0:04:26 | -0:01:34 | - | - | - | - |
| 11:24 AM | 0:00:56 | -0:00:04 | | 0:04:33 | -0:00:27 | 0:03:44 | -0:00:16 | 0:09:58 | -0:04:02 | 0:04:56 | -0:00:04 | 0:04:30 | -0:00:30 | 0:05:46 | 0:02:46 | 0:04:31 | -0:01:29 | - | - | - | - |
| 1:24 PM | 0:01:04 | 0:00:04 | | 0:04:08 | -0:00:52 | 0:03:51 | -0:00:09 | 0:10:37 | -0:03:23 | 0:05:08 | 0:00:08 | 0:03:52 | -0:01:08 | 0:04:03 | 0:01:03 | 0:05:08 | -0:00:52 | 0:06:32 | -0:00:28 | 0:06:32 | -0:00:28 |
| 2:55 PM | 0:00:44 | -0:00:16 | | 0:04:18 | -0:00:42 | 0:04:16 | 0:00:16 | 0:12:53 | -0:01:07 | 0:04:39 | -0:00:21 | 0:04:43 | -0:00:17 | 0:03:27 | 0:00:27 | 0:04:55 | -0:01:05 | 0:22:57 | 0:15:57 | 0:22:57 | 0:15:57 |
| 4:55 PM | 0:00:48 | -0:00:12 | | 0:03:43 | -0:01:17 | 0:03:50 | -0:00:10 | 0:13:13 | -0:00:47 | 0:04:45 | -0:00:15 | 0:04:14 | -0:00:46 | 0:02:54 | -0:00:06 | 0:05:04 | -0:00:56 | 0:08:32 | 0:01:32 | 0:08:32 | 0:01:32 |
| 6:55 PM | - | - | | - | - | 0:03:26 | -0:00:34 | 0:12:11 | -0:01:49 | 0:05:10 | 0:00:10 | 0:03:54 | -0:01:06 | 0:03:30 | 0:00:30 | 0:04:07 | -0:01:53 | 0:05:07 | -0:01:53 | 0:05:07 | -0:01:53 |
| Max Early | 0:00:44 | -0:00:16 | | 0:03:34 | -0:01:26 | 0:03:12 | -0:00:48 | 0:09:58 | -0:04:02 | 0:04:39 | -0:00:21 | 0:03:24 | -0:01:36 | 0:02:42 | -0:00:18 | 0:04:26 | -0:01:34 | 0:06:32 | -0:01:53 | 0:06:32 | -0:01:53 |
| Average | 0:00:50 | -0:00:10 | | 0:04:03 | -0:00:57 | 0:03:40 | -0:00:20 | 0:12:06 | -0:01:54 | 0:04:58 | -0:00:02 | 0:03:59 | -0:01:01 | 0:03:45 | 0:00:45 | 0:04:47 | -0:01:13 | 0:14:45 | 0:03:47 | 0:14:45 | 0:03:47 |
| Max Late | 0:01:04 | 0:00:04 | | 0:04:33 | -0:00:27 | 0:04:16 | 0:00:16 | 0:13:46 | -0:00:14 | 0:05:21 | 0:00:21 | 0:04:43 | -0:00:17 | 0:05:46 | 0:02:46 | 0:05:08 | -0:00:52 | 0:22:57 | 0:15:57 | 0:22:57 | 0:15:57 |
| 90th Percentile | 0:01:01 | 0:00:01 | | 0:04:27 | -0:00:33 | 0:04:06 | 0:00:06 | 0:13:35 | -0:00:25 | 0:05:16 | 0:00:16 | 0:04:38 | -0:00:22 | 0:05:05 | 0:02:05 | 0:05:03 | -0:00:57 | 0:21:19 | 0:11:38 | 0:21:19 | 0:11:38 |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

TABLE 35: Summary of Observed Deviation from Scheduled Running Time, Routes 1-5

| | | | | | | | |
|---|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|---------------------|
| Route 1 | From To | Northbound | | | | | |
| | | Vallejo Transit Ctr | Sereno Transit Ctr | Mini/Sonoma | | | |
| | Scheduled Time | 0:15 | 0:05 | 0:12 | | | |
| | Average Deviation | -0:00 | 0:00 | -0:01 | | | |
| | 90th % Deviation | 0:01:03 | 0:01:12 | -0:00:35 | | | |
| | Southbound | | | | | | |
| | From To | Mini/Elliott | Brdwy/Tall Trees | Sereno Transit Ctr | | | |
| | | Brdwy/Tall Trees | Sereno Transit Ctr | Vallejo Transit Ctr | | | |
| | Scheduled Time | 0:07 | 0:03 | 0:15 | | | |
| | Average Deviation | -0:01 | 0:00 | -0:01 | | | |
| 90th % Deviation | -0:00:56 | 0:03:11 | 0:00:18 | | | | |
| Route 2 | From To | Northbound | | | | | |
| | | Vallejo Transit Ctr | Sereno Transit Ctr | Raley's | Fairgrounds | | |
| | Scheduled Time | 0:15:00 | 0:03:00 | 0:12:00 | 0:06:00 | | |
| | Average Deviation | -0:02:44 | -0:02:12 | 0:00:19 | -0:01:48 | | |
| | 90th % Deviation | -0:01:25 | -0:02:06 | 0:01:36 | -0:01:28 | | |
| | Southbound | | | | | | |
| | From To | Target Vallejo | Mini & Stanford | Raley's | Sereno Transit Ctr | | Sacramento & Tenn. |
| | | Mini & Stanford | Raley's | Sereno Transit Ctr | Sacramento & Tenn. | | Vallejo Transit Ctr |
| | Scheduled Time | 0:09:00 | 0:05:00 | 0:02:00 | 0:05:00 | | 0:06:00 |
| | Average Deviation | 0:00:49 | -0:00:45 | 0:00:09 | 0:01:21 | | -0:00:24 |
| 90th % Deviation | 0:01:32 | -0:00:24 | 0:00:28 | 0:02:31 | 0:01:13 | | |
| Route 3 | From To | Eastbound | | | | | |
| | | Vallejo Transit Ctr | Curtola Park & Ride | | | | |
| | Scheduled Time | 0:05:00 | 0:10:00 | | | | |
| | Average Deviation | 0:00:24 | -0:02:13 | | | | |
| | 90th % Deviation | 0:00:47 | -0:01:44 | | | | |
| | From To | Westbound | | | | | |
| | | Glen Cove Elem. | Beverly Hille Elem. | Cal Maritime | Winchester & Sonoma | | |
| | Scheduled Time | 0:10:00 | 0:09:00 | 0:08:00 | 0:08:00 | | |
| | Average Deviation | -0:00:48 | -0:00:48 | -0:01:40 | -0:01:30 | | |
| | 90th % Deviation | 0:00:13 | 0:00:13 | -0:01:10 | 0:01:19 | | |
| Route 4 | From To | Northbound | | | | | |
| | | Vallejo Transit Ctr | Solono County Court | Sutter Med Ctr | Broadway & Tall Trees | | |
| | Scheduled Time | 0:07:00 | 0:10:00 | 0:05:00 | 0:03:00 | | |
| | Average Deviation | -0:01:07 | 0:00:03 | 0:05:03 | 0:01:47 | | |
| | 90th % Deviation | -0:00:25 | 0:01:59 | 0:06:59 | 0:02:41 | | |
| | Southbound | | | | | | |
| | From To | Sereno Transit Ctr | Broadway & Tall Trees | Sutter Med Ctr | Solono County Court | | Butte & Florida |
| | | Broadway & Tall Trees | Sutter Med Ctr | Solono County Court | Butte & Florida | | Vallejo Transit Ctr |
| | Scheduled Time | 0:03:00 | 0:04:00 | 0:07:00 | 0:09:00 | | 0:02:00 |
| | Average Deviation | -0:01:45 | 0:00:09 | -0:00:03 | -0:02:03 | | 0:00:51 |
| 90th % Deviation | -0:01:36 | 0:02:15 | 0:00:25 | -0:01:35 | 0:01:20 | | |
| Route 5 | From To | Northbound | | | | | |
| | | Vallejo Transit Ctr | Vallejo Ferry Term | Sereno Transit Center | Sereno Kaiser | | Redwood & Tuolumne |
| | Scheduled Time | 0:02:00 | 0:13:00 | 0:02:00 | 0:04:00 | | 0:07:00 |
| | Average Deviation | -0:00:32 | -0:00:09 | -0:01:01 | -0:00:00 | | 0:00:51 |
| | 90th % Deviation | -0:00:26 | 0:01:12 | -0:00:50 | 0:00:42 | | 0:01:08 |
| | Southbound | | | | | | |
| | From To | Fairgrounds | Redwood & Tuolumne | Sereno Kaiser | Sereno Transit Center | | Vallejo Ferry Term |
| | | Redwood & Tuolumne | Sereno Kaiser | Sereno Transit Center | Vallejo Ferry Term | | Vallejo Transit Ctr |
| | Scheduled Time | 0:07:00 | 0:04:00 | 0:02:00 | 0:10:00 | | 0:02:00 |
| | Average Deviation | -0:01:17 | -0:00:41 | -0:00:12 | -0:00:09 | | 0:01:25 |
| 90th % Deviation | -0:00:58 | -0:00:25 | 0:00:00 | 0:00:21 | 0:01:57 | | |
| Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18 | | | | | | | |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

TABLE 36: Summary of Observed Deviation from Scheduled Running Time, Routes 6-8 and 20

| From To | Eastbound | | | | Westbound | | | |
|------------|---|--|--|--|--|--|--|---|
| | Vallejo Transit Ctr Tenn. & Sutter | Tenn. & Sutter Tenn. & Tuolumne | Admiral Callaghan Georgia @ Hogan MS | Admiral Callaghan Georgia @ Hogan MS | Georgia @ Hogan MS Admiral Callaghan | Admiral Callaghan Tenn. & Tuolumne | Tenn. & Tuolumne Tenn. & Sutter | Tenn. & Sutter Vallejo Transit Ctr |
| Route 6 | Scheduled Time Average Deviation 90th % Deviation | 0:06:00 -0:01:53 -0:01:35 | 0:04:00 -0:00:38 -0:00:15 | 0:10:00 0:00:48 0:01:24 | 0:10:00 0:00:48 0:01:24 | 0:02:00 0:01:38 0:01:50 | 0:04:00 -0:01:01 -0:00:46 | 0:06:00 0:00:07 0:01:20 |
| From To | Northbound | | | | Southbound | | | |
| | Vallejo Transit Ctr Springs & Oakwood | Springs & Oakwood Ascot Pkwy & Columbus | Ascot Pkwy & Columbus Gateway Plaza | Gateway Plaza | Gateway Plaza Ascot Pkwy & Columbus | Ascot Pkwy & Columbus Springs & Oakwood | Springs & Oakwood Vallejo Transit Ctr | Vallejo Transit Ctr |
| Route 7 | Scheduled Time Average Deviation 90th % Deviation | 0:15:00 -0:03:12 -0:02:44 | 0:07:00 -0:02:05 -0:01:23 | 0:11:00 0:02:29 0:03:25 | 0:08:00 0:01:39 0:02:44 | 0:07:00 -0:01:50 -0:01:15 | 0:13:00 -0:01:01 0:00:29 | 0:13:00 -0:01:01 0:00:29 |
| From To | Eastbound | | | | Westbound | | | |
| | Vallejo Transit Ctr Marels & Georgia | Marels & Georgia Serenito Transit Center | Serenito Transit Center Serenito Kaiser | Serenito Kaiser Redwood & Tuolumne | Serenito Transit Ctr Broadway & Tall Trees | Broadway & Tall Trees Sutter Hospital | Sutter Hospital Solano County Court | Solano County Court Butte & Florida |
| Route 8 | Scheduled Time Average Deviation 90th % Deviation | 0:03:00 0:00:28 0:00:42 | 0:06:00 -0:01:07 -0:00:24 | 0:06:00 0:02:23 0:03:12 | 0:06:00 0:00:07 0:00:39 | 0:05:00 0:02:56 0:03:21 | 0:06:00 -0:01:48 -0:01:01 | 0:04:00 0:01:01 0:01:47 |
| From To | Eastbound | | | | Westbound | | | |
| | Serenito Transit Center Redwood & Tuolumne | Redwood & Tuolumne Target Vallejo Corners | Target Vallejo Corners Plaza Dr / Gateway Plaza | Plaza Dr / Gateway Plaza Solano Cig Vallejo | Ascot & Columbus Raley's Center | Raley's Center City Park Military & 1st | City Park Military & 1st 3rd & H | 3rd & H Casa de Vilarassa |
| Route 20 | Scheduled Time Average Deviation 90th % Deviation | 0:08:00 -0:01:50 0:00:20 | 0:05:00 0:00:42 0:01:49 | 0:04:00 -0:01:17 -0:01:00 | 0:06:00 -0:00:16 0:00:06 | 0:12:00 -0:02:33 -0:01:45 | 0:04:00 -0:01:37 -0:00:55 | 0:01:00 0:01:30 0:02:48 |
| From To | Westbound | | | | Eastbound | | | |
| | Casa de Vilarassa 3rd & H | 3rd & H City Park Military & 1st | City Park Military & 1st Raley's Center | Raley's Center Ascot & Columbus | Solano Cig Vallejo Plaza Dr / Gateway Plaza | Plaza Dr / Gateway Plaza Target Vallejo Corners | Target Vallejo Corners Redwood & Tuolumne | Redwood & Tuolumne Serenito Transit Center |
| Route 20 | Scheduled Time Average Deviation 90th % Deviation | 0:01:00 -0:00:10 0:00:01 | 0:05:00 -0:00:57 -0:00:33 | 0:04:00 -0:00:20 0:00:06 | 0:05:00 -0:01:54 -0:00:25 | 0:03:00 0:00:45 0:02:05 | 0:06:00 -0:01:13 -0:00:57 | 0:07:00 0:03:47 0:11:38 |

Source: Avail Datapoint for weekdays from 3/1/18 to 3/20/18

- The section of **Route 8** along Benicia Street operates slightly faster than scheduled time, which offsets slightly slower running times on the westernmost segments.
- **Route 20** running times are generally in line with the scheduled time, deviating by only up to approximately 2 minutes on average. The data indicates a consistent substantial delay on final westbound route segment between Redwood/Tuolumne and STC.

This information can be used to adjust schedules of the existing routes, as well as to time potential route modifications.

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Review of Existing General Public Dial-A-Ride and Local Taxi Scrip Program

In addition to the local fixed routes (and complementary ADA paratransit service), SolTrans provides two other services in the local service area: a General Public Dial-A-Ride in Benicia, and a Local Taxi Scrip program.

General Public Dial-A-Ride

SolTrans operates a General Public Dial-A-Ride (DAR) service Monday through Saturday. The DAR offers local origin to destination shared ride service within Benicia only. Reservations are required and may be made one to three days in advance. Same-day reservations are accommodated with a minimum of two hours of advance notice if the schedule permits. The DAR also serves ADA-eligible residents within Benicia city limits. Service hours are Monday through Friday, 5:50 AM to 8:20 PM, and Saturday from 7:00 AM to 7:00 PM. The fare is \$2.00 for general passengers. During the off-peak hours (10:00 AM to 3:00 PM on weekdays and all day Saturday) a \$1.00 fare is available for passengers aged 65 and over. A 10-ride ticket is also offered for \$20.

DAR Operating Data and Performance Measures

Table 37 shows operating data and performance measures for the DAR. Annually DAR serves approximately 4,500 passengers, at an average rate of 1.9 passengers per vehicle revenue hour and 0.3 passengers per revenue mile. The DAR service is effectively meeting the SolTrans performance standard for passengers per vehicle revenue hour, which is 2.0. However it does not meet the performance standard for passengers per revenue mile, which is 1.0. Actual vehicle hours are significantly higher than vehicle revenue hours – on both weekdays and Saturdays vehicle revenue hours make up only about 70 percent of total vehicle hours.

Table 37 also shows the annual operating cost and associated cost-related performance measures, including operating cost per vehicle revenue hour, operating cost per passenger trip, and farebox recovery ratio. The annual operating cost for the Dial-A-Ride system as projected by SolTrans for FY 17/18 is \$323,714. This equates to a cost of \$132 per vehicle revenue hour and \$71 per passenger trip. These costs are considerably higher than SolTrans' published performance standards of \$78 per vehicle revenue hour and \$35 per passenger trip. The farebox recovery ratio for FY 17/18 is estimated at 2 percent, compared to the performance standard of 10 percent.

As noted above, the DAR has two different fare categories – general fares and reduced fares for passengers aged 65 or older. Table 38 shows the breakdown of fare by category for the time

**Table 37: SolTrans General Public Dial-A-Ride
Operating Data and Performance Measures**

| | Average Weekday | Average Saturday | Annual | SolTrans Performance Standard |
|--|--------------------|---------------------|-----------|-------------------------------------|
| Operating Data | | | | |
| Vehicle Revenue Miles | 60 | 22 | 16,484 | |
| Actual Vehicle Miles | 94 | 44 | 26,143 | |
| Vehicle Revenue Hours | 9 | 4 | 2,453 | |
| Actual Vehicle Hours | 12 | 6 | 3,455 | |
| Passenger Trips | 17 | 6 | 4,545 | |
| Annual Operating Cost | -- | -- | \$323,714 | |
| Annual Fare Revenue ¹ | -- | -- | \$5,300 | |
| Operating Performance | | | | |
| Passengers per Revenue Mile | 0.3 | 0.3 | 0.3 | 1.0 |
| Passengers per Revenue Hour | 1.9 | 1.4 | 1.9 | 2.0 |
| Cost per Revenue Hour | -- | -- | \$131.96 | \$78 |
| Cost per Passenger Trip | -- | -- | \$71.23 | \$35 |
| Farebox Recovery Ratio | -- | -- | 2% | 10% |
| <p>Note 1: Annual fare revenue is an estimate based on ticket sales and GFI reports. Estimate may not fully reflect actual revenues due to aging reporting technology.</p> <p>Source: SolTrans; Trapeze Reporting for the period Jan. 1-31, 2018; SolTrans Performance Standards are from the SolTrans 2016 Short Range Transit Plan</p> | | | | |

**Table 38: SolTrans Dial-A-Ride Fare Revenue
and Fare Categories**

April 26-27, 2018

| | General - \$2.00 | Reduced - \$1.00 | Free |
|---|---------------------|---------------------|--------|
| Total Rides (April 26-27, 2018) | 36 | 0 | 2 |
| Total Revenue Collected (April 26-27, 2018) | \$72.00 | \$0.00 | \$0.00 |
| Percent of Overall Fares | 95% | 0% | 5% |
| Average Daily Fares | \$36.00 | \$0.00 | \$0.00 |
| <p>Note: Based on data evaluated for a limited time period (two days).</p> <p>Source: SolTrans Trapeze Reporting, Reconciliation Manifest, Thursday, April 26 and Friday, April 27, 2018; Routes #401 and #402.</p> | | | |

period of April 26-27. During that time, nearly all fares recorded were the general fare (95 percent of fares). The average daily revenue during this time period was \$36.00, although annual fare revenues, as shown in Table 38, indicate lower average daily revenues (on the order of \$17 per day).

DAR Ridership by Hour

Based on data collected April 26-27, 2018, higher ridership times are in the early morning (during the 6:00 AM hour), between 10:00 AM and Noon, and at 5:00 PM (Table 39 and Figure 33). Based on this limited data, about half of trips on the DAR are to and from Benicia's downtown core. Another 47 percent are to or from the downtown core to the non-downtown area. Only three percent of trips are between origins and destinations both outside the downtown area. The DAR has only one bus in service at any given time.

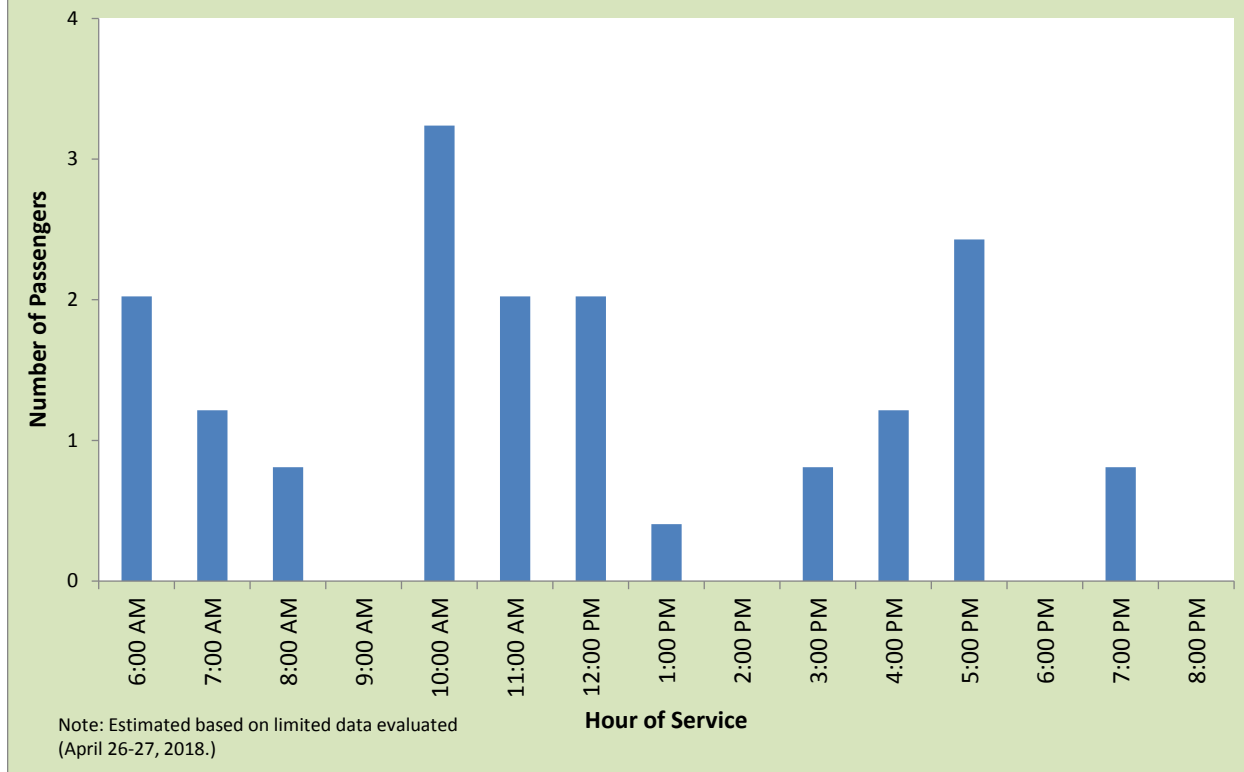
Table 39: General Public Dial-a-Ride Ridership by Hour

Average Weekday

| Hour | Number of Riders | Percentage of Riders | Hour | Number of Riders | Percentage of Riders |
|----------|------------------|----------------------|--------------------------|------------------|----------------------|
| 6:00 AM | 2 | 12% | 2:00 PM | 0 | 0% |
| 7:00 AM | 1 | 7% | 3:00 PM | 1 | 5% |
| 8:00 AM | 1 | 5% | 4:00 PM | 1 | 7% |
| 9:00 AM | 0 | 0% | 5:00 PM | 2 | 14% |
| 10:00 AM | 3 | 19% | 6:00 PM | 0 | 0% |
| 11:00 AM | 2 | 12% | 7:00 PM | 1 | 5% |
| 12:00 PM | 2 | 12% | 8:00 PM | 0 | 0% |
| 1:00 PM | 0 | 2% | Total¹ | 17 | |

Source: SolTrans Trapeze Reporting, Reconciliation Manifest, Thursday, April 26 and Friday, April 27, 2018; Routes #401 and #402. Factored to Average Day based on Average Daily Weekday Ridership from the NTD Report for the period Jan. 1- Note 1: Total is not exact due to rounding and is estimated based on a limited time frame (two days).

**Figure 33: Dial-A-Ride Average Weekday
Ridership By Hour**



DAR Cancelled, Missed, and No Show Trips

SolTrans tracks the number of cancelled trips by type, as well as missed trips and trips for which the client failed to appear. Table 40 shows the number and an estimated percentage of total trips for each of these unserved trip types for the time period between July 1, 2017 and May 15, 2018.

- Missed trips made up only 0.02 percent of all scheduled trips. Missed trips are not generally considered to be cause for concern unless they exceed 0.05 percent of trips.
- Late cancellations and cancellations at the door made up two percent of scheduled trips. Total cancellations, including late and at the door, advance cancelled, same day cancelled, user error and “other” cancelled made up 10.5 percent of scheduled trips. The percentage of total cancellations is generally considered to be high if over 15 percent.
- “No Shows,” in which the passenger is not at the pickup location made up 1.6 percent of total scheduled trips. The industry standard for this metric is no more than five percent.

Table 40: Missed, Cancelled and No Show Trips*July 1, 2017 - May 15, 2018 (10.5 months)*

| | Number | Percent |
|--|--------|---------|
| Total Passenger Trips ¹ | 4520 | |
| Missed Trips | 1 | 0.0% |
| No Show | 71 | 1.6% |
| Cancelled | | |
| Cancelled at Door | 16 | 0.4% |
| Advance Cancelled | 144 | 3.2% |
| Late Cancelled | 71 | 1.6% |
| Same Day Cancelled | 67 | 1.5% |
| User Error + Other Cancelled | 106 | 2.3% |
| Total Missed, No Show, Cancelled | 476 | 10.5% |
| Note 1: Including Missed, No Show, Cancelled (estimated) | | |

Local Taxi Scrip Program

The SolTrans Local Taxi Scrip Program was established to provide alternative transportation at a reduced cost to additional groups of people that are not served by the ADA Paratransit program. Eligible participants of the Local Taxi Scrip are Medicare cardholders, seniors 65 and over, and persons with disabilities living in the cities of Vallejo and Benicia. The Local Taxi Scrip Program provides same-day service (in contrast to the ADA Paratransit, which does not). As the taxis operate round-the-clock, seven days a week, riders may use the service at any time. Scrip booklets cost \$5.00 and contain \$10.00 of scrip coupons (10 coupons worth \$1.00 each). This is a 50 percent discount off the taxi fare. Program participants may purchase up to ten booklets per week, but no more than twenty booklets per month. Participants must fill out an application in order to be eligible.

Local Taxi Scrip Operating Data and Performance Measures

SolTrans works with two different taxi operators (Veterans Corporation and Liberty Transit) to provide Local Taxi Scrip trips. General operating data were available for both Veterans Corporation and Liberty Transit, however detailed boarding and alighting data were available for Veterans Taxi Company only. As shown in Table 41, over a year beginning in March 2017 and ending February 2018 the Local Taxi Scrip program completed approximately 7,300 trips, serving nearly 8,800 passengers. Veterans served slightly over half of the passengers (55 percent) while Liberty served 45 percent. Veterans also served more passengers per hour (14.5) compared to Liberty (8.1). The average trip length on Liberty (4.4 miles) was longer than on Veterans Taxi. The subsidy for Local Taxi Scrip totaled \$114,732. In addition, SolTrans incurred

costs estimated at \$125,000 for administration, marketing and monitoring of the program. Overall, the Local Taxi Scrip program served 10.8 passengers per operating hour, at a cost of \$27.87 per trip. It is notable that this latter figure is fully 60 percent lower than the subsidy per passenger-trip for the General Public DAR program.

Table 41: Soltrans Local Taxi Scrip Annual Operating Data and Performance Measures

| Operating Data | | | | | | |
|-----------------------|--------------|--------------|---------------|---------------|------------------|----------------------------|
| Taxi Company | Trips | Passengers | Revenue Hours | Revenue Miles | Total Subsidy | Percent of Total Passenger |
| Veterans | 3,839 | 4,716 | 333 | 17,653 | \$58,389 | 55% |
| Liberty | 3,458 | 3,887 | 479 | 17,213 | \$56,343 | 45% |
| <i>Administrative</i> | -- | -- | -- | -- | <i>\$125,000</i> | |
| Total | 7,297 | 8,603 | 812 | 34,866 | \$239,732 | |

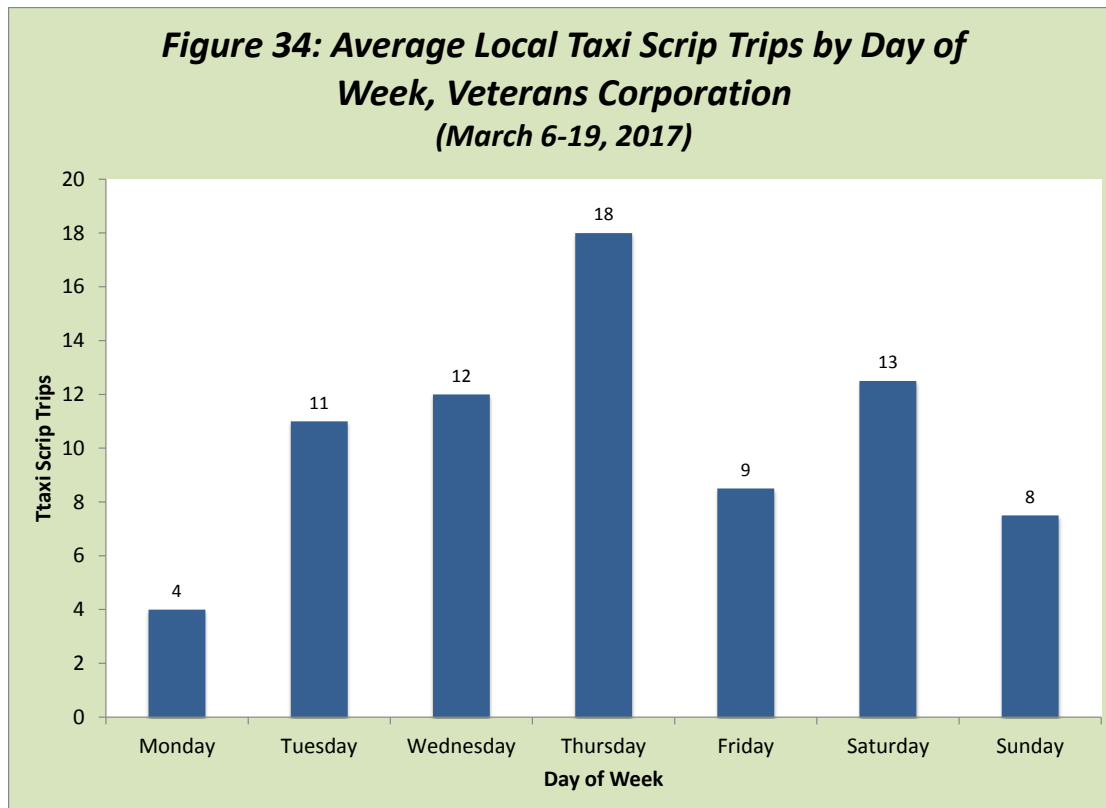
| Performance Measures | | | | | |
|----------------------|--------------------------------|---------------------|---------------------|---------------------|------------------------------------|
| Taxi Company | Passengers per Taxi Scrip Trip | Passengers per Hour | Passengers per Mile | Average Trip Length | Subsidy per Passenger ¹ |
| Veterans | 1.2 | 14.2 | 0.27 | 3.7 | -- |
| Liberty | 1.1 | 8.1 | 0.23 | 4.4 | -- |
| Total | 1.2 | 10.6 | 0.25 | 4.1 | \$27.87 |

Source: Veterans Corporation and Liberty Transit, Inc. weekly invoices to Soltrans for March 5, 2017 to February 25, 2018.

Note 1: Total annual cost includes cost of taxi company invoices plus \$125,000 administrative and staffing costs, per Soltrans staff, 5/10/2018.

Ridership by Day of the Week

Detailed ridership information was only available for Veterans Corporation. Figure 34 shows ridership by day of the week for Veterans Corporation Local Taxi Scrip trips. During the two-week sample period, Thursdays had the highest average trips, at 18 trips, or 24 percent of trips. Other weekdays, Saturdays and Sundays all had between 8 and 13 average trips, with the exception of Mondays, which only had 4 trips.



Ridership by Hour

As shown in Figure 35, over a sample two-week period between March 6 and March 19, 2017 the highest average number of trips during any given hour was 3.0. Weekday trips on Veterans Taxi Service peaked at 4:00 PM, while Saturday trips peaked at 5:00 PM. Sunday trips peaked at 3:00 PM. Other busy times on weekdays were at 9:00 and 10:00 AM, and at 1:00 PM. Although the number of trips is lower, riders did use the service throughout the evening. One weekday rider used the service at 1:00 AM.

Geographic Distribution of Trips

Table 41 provides information about riders' travel between zones using Veterans Corporation, showing the percentage of trips between zones and the percentage of trip-ends in each zone. This analysis uses the same zone system presented in Figure 29 for the fixed routes, above. The busiest corridor was between Central West and Downtown, with 14 percent of all trips travelling between those two zones. The second busiest corridor was between Central West and Southwest zones (8 percent of trips). There were no Local Taxi Scrip trips to or from the non-downtown area of Benicia, although there were a few trips to the Benicia Downtown Core. The Central West and Downtown zones also generated the greatest number of trip-ends, at 27 and 20 percent, respectively. Central East and East of Downtown were the next busiest zones, each with 11 percent of trip-ends.

Figure 35: Local Taxi Scrip Trips by Hour and Day of Week - Veterans Corporation

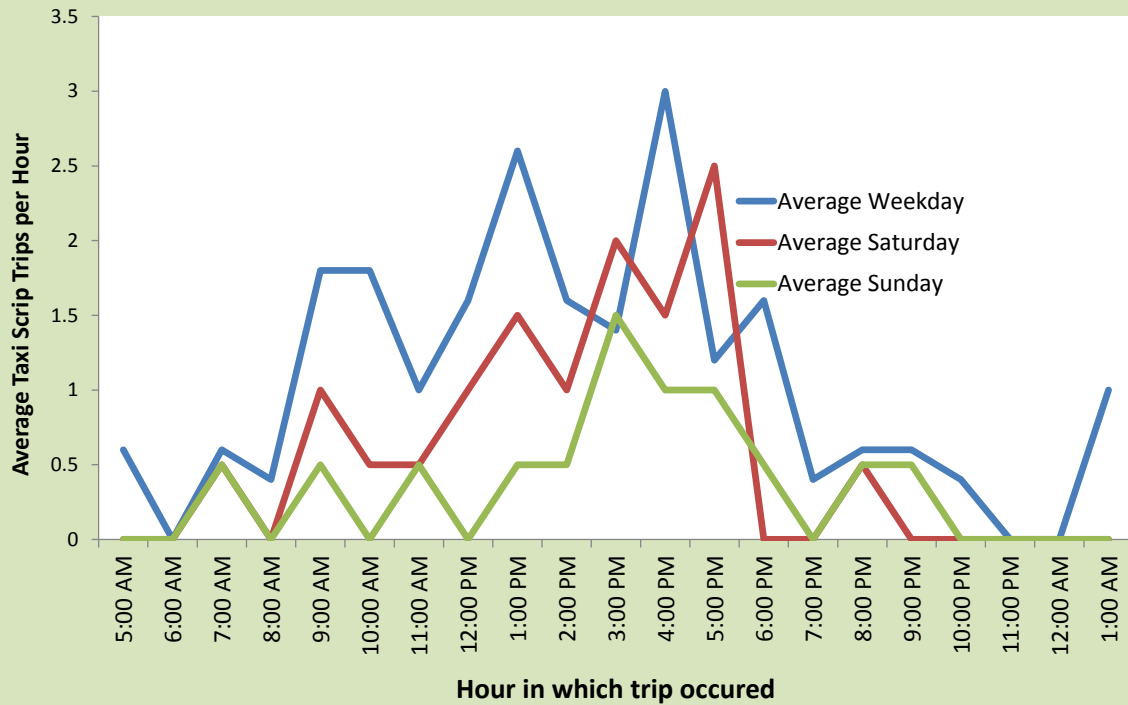


Table 42: Percentage of Local Taxi Scrip Trips By Origin and Destination Zone

March 6 - 19, 2017, Veterans Corporation

| | North | North-west | Central West | Central East | North-east | Downtown | East of Dntn | East | South-west | South | Benicia Core | Benicia Other | Total % Trip-Ends in Zone |
|------------------|-------|------------|--------------|--------------|------------|----------|--------------|------|------------|-------|--------------|---------------|---------------------------|
| North | 0% | 0% | 2% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 2% |
| Northwest | | 0% | 1% | 1% | 1% | 1% | 1% | 1% | 0% | 0% | 0% | 0% | 3% |
| Central West | | | 3% | 6% | 0% | 14% | 6% | 3% | 8% | 6% | 2% | 0% | 27% |
| Central East | | | | 0% | 1% | 6% | 6% | 1% | 1% | 1% | 0% | 0% | 11% |
| Northeast | | | | | 0% | 0% | 0% | 1% | 1% | 0% | 0% | 0% | 3% |
| Downtown | | | | | | 3% | 3% | 3% | 3% | 1% | 1% | 0% | 20% |
| East of Downtown | | | | | | | 0% | 0% | 3% | 3% | 0% | 0% | 11% |
| East | | | | | | | | 1% | 0% | 2% | 0% | 0% | 6% |
| Southwest | | | | | | | | | 0% | 0% | 0% | 0% | 8% |
| South | | | | | | | | | | 1% | 1% | 0% | 8% |
| Benicia Core | | | | | | | | | | | 0% | 0% | 2% |
| Benicia Other | | | | | | | | | | | | 0% | 0% |

Source: Veterans Corporation weekly invoices to SolTrans

Recommended Alternatives for Analysis

The analyses presented in the previous chapters, as well as the market analysis presented in Work Paper One, were reviewed to identify various alternatives that warrant detailed technical analysis. The following are alternatives that this review indicates have the potential to increase ridership and/or to improve the efficiency and effectiveness of the SolTrans service, or are common requests for improvements. It should be noted that inclusion on this list is no indication that an alternative will be included in the final plan.

- Consider a north-south route east of I-80.
- Develop a high-frequency/high-amenity corridor along North Broadway north from the 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.
- Elimination of Route 20.
- Revision to Route 3 to eliminate the long in-vehicle travel times. This could include separate services for the areas west of I-80 and east of I-80.
- 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 in the mid-day period.
- Provision of subsidized Transportation Network Company (TNC) services (such as Lyft, Uber or local taxi) to address lower-demand public transit needs. While there are many pros and cons to TNC service, potential options for consideration 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.

In addition, a “clean slate” analysis will be conducted, in which a route service plan is developed based upon overall travel needs, regardless of the existing routes and schedules. Service alternatives will be developed assuming both no change in available operating funding, as well growth in available resources to fund a 25 percent increase in annual vehicle-hours.