6 RECOMMENDATIONS

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CHAPTER 6 – RECOMMENDATIONS

This chapter presents and prioritizes recommendations for enhancing Santa Cruz METRO services operating within the city of Watsonville (Routes 69A, 69W, 71, 91X, 72, 74, 75, and 79). In doing so, it is intended to serve as a blueprint for enhancing transit performance and quality of service. Through an evaluation of various outreach and market research efforts conducted concurrently with analysis of demographic data and historic performance completed throughout the study's duration, the following recommendations were crafted. They reflect a combination of public input, performance analysis, and consultant insight. Recommendations include Administrative, Capital and Operational aspects.

Administrative

Policy adherence. We recommend Santa Cruz METRO planning staff actively participate in driver training and safety meetings. Emphasis should be placed on safety, customer service, and schedule adherence. To help combat on-time performance issues, regular reminders and in-field "spot checks" should be performed to enhance service performance via the identified operating inconsistencies (i.e. early and late departures at/from published time-points).

Customer outreach versus marketing. Santa Cruz METRO has a diverse customer base ranging across nearly every race, income, and age demographic. This varied customer base requires multiple forms of communication in order to effectively deliver information. A proactive approach to marketing and outreach is recommended, along with a set list of goals defining success. Examples include increased community/organization visits and direct outreach to seniors versus simply information dissemination (i.e., travel training sessions versus schedule book distribution). All outreach and collateral should be made available in languages spoken by the customer base. Based on American Community Survey data (2008-2010), approximately 74 percent of Watsonville's population identifies a language other than English as their "primary language." More than 70 percent of Watsonville's resident population speaks Spanish or Spanish Creole, with approximately 43 percent of this population indicated speaking English "very well." Additional information regarding marketing strategies can be found in Chapter 8.

Fare Policy. Exhibit 6.1 presents Santa Cruz METRO's current fixed-route fare structure.

Exhibit 6.1 Fixed-Route Fare Structure

METRO Fixed-Route	Regular Service in Santa Cruz County						Amtrak Highway 17 Express			
Fare Category	Cash	Day Pass	3-Day Pass	7-Day Pass	31-Day Pass	15-Ride Pass	Cash	Day Pass	5-Day Pass	31-Day Pass
Child (less than 46 inches tall)	Free	N/A	N/A	N/A	N/A	N/A	Free	N/A	N/A	N/A
Youth (up to 17)	$2.00	$6.00	$15.00	$32.00	$48.00	$27.00	$5.00	$10.00	$42.00	$113.00
Adult (18 and older)	$2.00	$6.00	$15.00	$32.00	$65.00	$27.00	$5.00	$10.00	$42.00	$113.00
Discount Fare	$1.00	$3.00	$7.50	$16.00	$32.00	$13.50	$2.50	$10.00	$42.00	$113.00

**Commuter Express fares are the same as fixed-route fares.*

Santa Cruz METRO has experienced recent declines in farebox revenue specific to fixed-route and demand-response services operating in and through Watsonville (from 19.5 percent in FY 2010 to 19.1 percent in FY 2011). We believe this decline can be attributed to a number of factors including increased labor costs, reductions in service, and the recent economic downturn. In determining whether another fare increase is warranted, evaluating the current system trends subsequesnt to the September 2011 fare increase would be crucial.

The current economic environment makes it difficult to anticipate fare elasticity (i.e., potential impact of fare adjustments on transit ridership). Traditionally, public transit has a forecast elasticity of -0.4 for every one percent fare increase. While recent increases in fuel costs resulted in increased ridership in public transit service, the loss of employment opportunities for Watsonville's labor force has contributed to decreases. This indicates a fare increase may not result in a relatively modest decrease of in ridership, but instead force customers on the financial "fence" to seek other forms of transportation.

Capital

Technological enhancements. Santa Cruz METRO services operating within Watsonville could benefit from the incorporation of additional technologies. Focus groups conducted as part of this study reveal a desire for internet access onboard Santa Cruz METRO buses. Currently, Santa Cruz METRO offers roving "hot spots" on its Highway 17 Express buses. However, this feature is not available on its fleet used for intercity and fixed-route service. The mobile high-speed internet service enhancement was made available in December 2007, when Santa Cruz METRO received a $37,500 grant from the California Air Resources Board to encourage residents to use public transit. The majority of the Express bus fleet were wired for internet service in 2008 coinciding with that year's fleet replacement schedule. This enhancement was also made available on certain Monterey Salinas Transit (MST) buses in July 2007. MST equipped eight 40-foot express buses with Parvus' next-generation mobile high-speed Internet access solution, RiderNet³ ("RiderNet cubed"). This mobile Wi-Fi hotspot service was introduced as a free-of-charge service for customers and funded by a grant from the Monterey Bay Unified Air Pollution Control District. If made available on Santa Cruz METRO intercity (especially Routes 69A, 69W, and 71), internet access onboard buses would benefit customers traveling between Santa Cruz and Watsonville, further incentivizing the use of public transit as a convenient and attractive service.

All vehicles operating along fixed-routes in Watsonville should continue to follow Santa Cruz METRO's existing Bicycles on Fixed-Route Buses policy and at minimum, be equipped with exterior front-mounted bike racks. Onsite observations reveal Santa Cruz METRO bus bike racks are often at capacity limiting the number of patrons with bikes from riding the bus. Although two standard bikes are permitted onboard the bus, this accommodation is only available on select routes (i.e., Highway 17; Routes 40, 41, and 42) depending on space available onboard the bus. Folding bikes or folders are also permitted onboard. Santa Cruz METRO defines folder storage restrictions in its Bicycles on Fixed-Route Buses policy. While there are few options to increase the capacity on such racks,

replacement of any Santa Cruz METRO fixed-route vehicle should include consideration of upgrading to the maximum bicycle capacity at the time of procurement. Santa Cruz METRO might also consider utilizing cargo bays for bike storage. Bike storage would be limited to one bike per cargo bay, pending availability of storage space in the cargo bay.

Infrastructure. Focus groups were conducted in Watsonville between July 20, 2011 and August 24, 2011 to solicit input regarding mobility issues from residents. These focus groups were supplemental to the community survey conducted in June 2011. A number of potential improvements were identified pertaining to local transit infrastructure. Desired improvements included adding bus shelters and benches along Green Valley, Lincoln, Pennsylvania, Freedom, Clifford, and at Watsonville High School.

Transit amenities at existing stop locations help promote safety and comfort as well as provide opportunity to advertise available services through info-posts/schedule displays and system maps. Once a capital budget has been identified, a list of improvements based on boarding/alighting activity should be generated with timeline for implementation. This recommendation is in line with the Association of Monterey Bay Area Governments (AMBAG) adopted Metropolitan Transportation Improvement Program (MTIP). Additional funding information is presented within Chapter 7 – Capital and Financial Plans (Note: Santa Cruz METRO has compiled a list of potential bus stop improvements. (Note: Decisions as to specific improvements are dependent chiefly on funding availability.)

We recommend Santa Cruz METRO increase efforts towards promoting its existing capital improvement plan. An annual discussion to identify and prioritize bus stop improvements within Watsonville would help not only promote the improvements, but also solicit community feedback as to where and when capital should be spent if and when funding is available. Given the volatility of the current funding environment, it is of great importance the community at-large is kept informed as to the impact transit funding cuts have on their service. Such discussion would aid in educating the community at-large as to the process of service adjustments, capital purchases, and other transit-related challenges. (Note: Throughout this report's preparation, it became clear that Satan Cruz METRO has invested considerable effort into public outreach and education. These activities include regular attendance to Metro Advisory Council and Elderly and Disabled TAC, presentations to the Stroke Center, including non-profit organization or agency planning efforts, etc.)

Major investments/developments, such as a park-and-ride lot to meet commuter needs or storage yard/transit facility, should include public input from the onset. We recommend Santa Cruz METRO begin discussion with Watsonville city staff with the goal of identifying locations wherein commuters may park safely, without unnecessarily disrupting businesses.

Operational

Prior findings. Review of Santa Cruz METRO's 2008 Short Range Transit Plan (SRTP) revealed a number of recommendations we consider still relevant. One such operational recommendation was

the uncoupling of the route interlining practice. The interlining generated by Santa Cruz METRO's new HASTUS software continues to create extremely tight schedules. Brief delays early in the initial run may result in large delays at the route's conclusion. This in turn leads to delays in the interlined routes, while also not allowing for any of the previously scheduled layover periods. The 2008 SRTP also recommended limited-stop service for routes where the majority of boarding and alighting activity occurred at few stops along the route path. Additional measures have been previously recommended through the region's Coordinated Human Services Plan (CHSP). Many of these recommendations continue to have value. For example, the CHSP recommended the introduction of limited-stop service along the Highway 1 corridor. These findings remain relevant and have been incorporated as applicable to the individual recommendations below.

System shakeups. Currently Santa Cruz METRO adjusts service schedules as necessary due to funding availability. In response to the volatility of the current transit funding environment comprised of funding shortfalls and uncertainties, as well as increased operating costs due to labor expenditures, Santa Cruz METRO has implemented quarterly scheduling modifications to address funding availability. We recommend Santa Cruz METRO limit the number of service adjustments to twice a year, while maintaining a re-bid every quarter for bus operators, as outlined in the MOU between Santa Cruz, Santa Cruz METRO, and the United Transportation Union (UTU). Frequent changes to schedules, however minor, erode customer confidence. This is especially true in the case of "choice riders" such as commuters with access to a personal vehicle. It is difficult to rely on a public transit service in terms of a work commute when the schedule may change as frequently as every three months. The service shakeups should continue to be timed to coincide with established bid schedules.

Route nomenclature. Santa Cruz METRO should rename routes serving the Watsonville area with clear and distinct names and alignments. Routes to be renamed include Routes 69A, 69W, and 71. These routes have different alignments and/or frequencies which vary throughout the service day.

Currently Route 69A has a different alignment and schedule than Route 69W. We see no significant benefit to either Santa Cruz METRO or passengers in continuing this confusing naming approach. The difference in alignments lies with four stops (i.e., Cabrillo College, Green Valley and Main, Neilson and Watsonville, and Airport Blvd. and Freedom Centre). Route 69W travels to Cabrillo College and Green Valley and Main, while Route 69A travels to Neilson and Watsonville Hospital and Airport Blvd and Freedom Centre. Each of these routes should have a distinct alignment and schedule displayed in separate locations on marketing collateral. Doing so would also eliminate the need for the "foot-notes" included within the schedule guide. We recommend renaming Route 69A to Route 68, and Route 69W to Route 69.

Route 71 has four distinct deviations serving different locations during varying day-parts. The deviations are published on the schedule and labeled as "I, J, K, and L". For naming purposes we will refer to these four alignments (in this section) as "Deviation I", "Deviation J", "Deviation K", and "Deviation L". All four deviations follow the same alignment traveling inbound until Airport Blvd.

and Freedom Centre. Between 7:01 a.m. and 9:06 p.m., "Deviation I" travels to the Crestview Center before returning to the Watsonville Transit Center. "Deviation J" deviates to Clifford and Pennsylvania offering service between 7:47 a.m. and 12:36 a.m. "Deviation K" serves Pennsylvania and Main between 3:06 p.m. and 6:59 p.m., while "Deviation L" travels to the Alta Vista and Arthur Rd. offering four PM-peak trips (i.e., 3:35 p.m. and 6:35 p.m.) before returning to the Watsonville Transit Center. The four alignments can cause confusion to new and existing riders. Santa Cruz METRO should also consider repurposing deviations K and L to travel along the same alignments as deviations I and J, thereby eliminating the need for said deviations. The individual route schedules should be segregated and each alignment given a unique name. We recommend renaming "Deviation I" alignment to Route 70 and "Deviation J" alignment to Route 71.

Regional connectivity. In order to improve customer satisfaction within Watsonville, Santa Cruz METRO should continue to coordinate local service schedules to allow for smooth and on-time transfers/connections to regional services. Connections with MST services operating within the Watsonville area (MST Routes 27, 28, and 29) should be a primary focus. MST Route 27 departs Watsonville every two hours from 8:09 a.m. to 8:09 p.m. Route 28 departs every hour from 7:28 a.m. to 9:58 p.m. Route 29 departs every hour from 7:50 a.m. to 6:50 p.m. every hour. The consultant team met with MST staff to identify potential opportunities for enhanced connectivity between MST and Santa Cruz METRO services. Should recommendations require adjustment of transfer/connection times for either MST or Santa Cruz METRO customers, the following recommendations provide additional insight.

Santa Cruz METRO is in the process of implementing a fare agreement wherein fare media can be shared between regional agencies from Monterey to San Jose. Currently transfers between services are accepted though they are in the form of one-time use passes and day passes. Monthly passes are not accepted for transfers. The introduction and promotion of reloadable fare media or joint monthly passes valid on both systems would improve connectivity and enhance regional travel. Doing so also addresses concerns regarding the current fare structure and pricing raised during the Watsonville focus groups (see Chapter 5).

On-time performance. The industry standard for on-time performance is considered 90-percent during peak-hour service and 95-percent during for off-peak service hours.[2] Based on data compiled during both ride check efforts, Watsonville-specific routes varied between 55- and 65-percent on-time performance. This poor on-time performance was often the result of buses departing early or late from published time-points. Additionally, missed trips (i.e., buses leaving 10 minutes later than the published departure time) occurred on several routes. This poor performance impacts the reliability and perception of transit services provided within Watsonville. Moore & Associates recommends the following adjustments (in hierarchical order) to improve on-time performance.

[2] Center for Urban Transportation Research University of South Florida. "Best Practices in Transit Service Planning – Final Report". http://www.nctr.usf.edu/pdf/77720.pdf.

Route 69A and 69W

Based on the ride check performance data garnered on Routes 69A and 69W, the consultant team recommends the following enhancements. Route 69A (Capitola Rd. and Watsonville via Airport B) provides inbound/outbound service between Santa Cruz and Watsonville. It operates along Capitola Road in Santa Cruz, traveling to Watsonville on Highway 1 and Freedom Blvd. Inbound service runs hourly from 6:45 a.m. to 7:48 p.m. weekdays, and every two hours from 8:20 a.m. to 6:20 p.m. on weekends. Outbound weekday service operates hourly between 7:07 a.m. and 7:10 p.m., and on weekends every other hour from 9:00 a.m. to 8:03 p.m.

Similar to Route 69A, Route 69W (Capitola Rd./Cabrillo/Watsonville) provides inbound/outbound service linkage Santa Cruz and Watsonville. However, this alignment differs slightly as it runs along Soquel Drive in Santa Cruz and onto Main Street rather than Freedom Blvd. in Watsonville. Outbound service is offered hourly from 6:37 a.m. to 7:37 p.m. on weekdays, and every two hours from 8:20 a.m. to 7:18 p.m. on weekends. Inbound service runs hourly from 6:20 a.m. to 7:18 p.m. on weekdays, and every two hours between 7:20 a.m. and 6:25 p.m. on weekends. The primary differences between these two routes are the slight variances in alignment throughout the service day. As stated previously, we believe further clarification/distinction should be made between these routes.

In order to address on-time performance erosion, we recommend increasing the time between time-points at the beginning and end of each trip. This may require the unlinking of interlined trips. Interlined trips may not be providing sufficient layover time between different interlined routes. The greatest incidence of on-time performance erosion for Routes 69A and 69W occurred during the AM and PM-peak day-parts at the beginning and end of each trip segment. This is not unexpected as the route has few stop locations in the middle of the alignment (as it travels along State Highway 1). The addition of five minutes to the layover time for each trip would significantly improve on-time performance while not significantly impacting other route aspects, such as stop locations or alignment. This would also modify Routes 69A and 69W headways to 70 minutes. Exhibit 6.2 presents a proposed schedule for Route 69A inclusive of recommended enhancements. Exhibit 6.3 presents a proposed schedule for Route 69W inclusive of recommended enhancements.

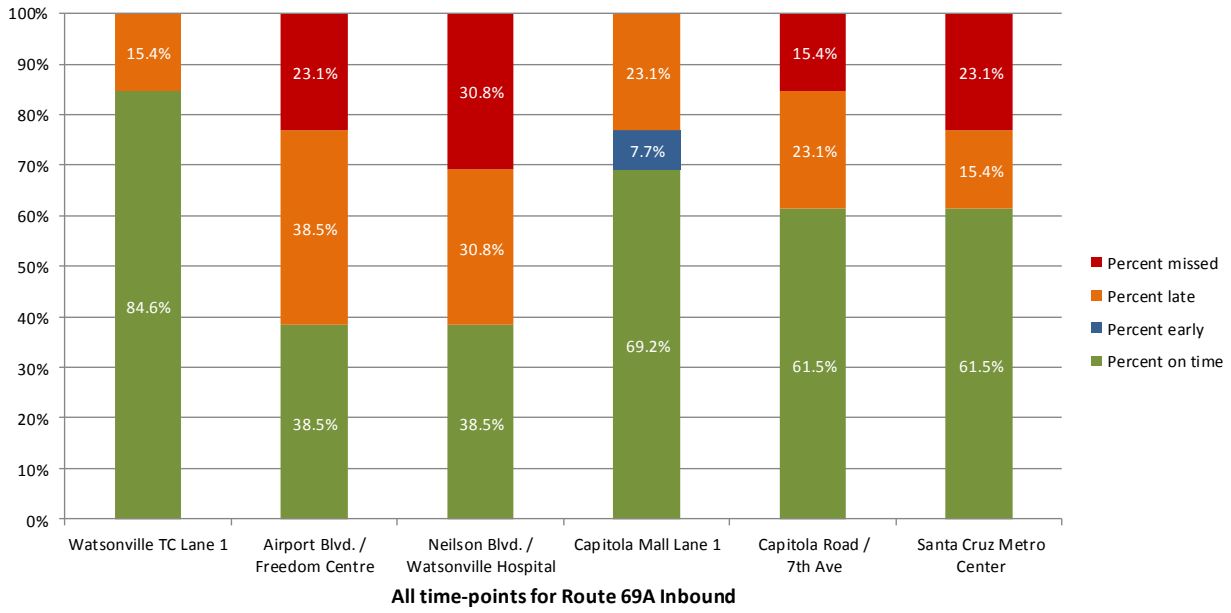
Exhibit 6.2 Proposed Route 69A Schedule

OUTBOUND M-F						
	A	B	C	F	G	H
69A	7:07:00 AM	7:23:00 AM	7:35:00 AM	7:50:00 AM	7:56:00 AM	8:10:00 AM
69A	8:17:00 AM	8:33:00 AM	8:45:00 AM	9:00:00 AM	9:06:00 AM	9:20:00 AM
69A	9:27:00 AM	9:43:00 AM	9:55:00 AM	10:10:00 AM	10:16:00 AM	10:30:00 AM
69A	10:37:00 AM	10:53:00 AM	11:05:00 AM	11:20:00 AM	11:26:00 AM	11:40:00 AM
69A	11:47:00 AM	12:03:00 PM	12:15:00 PM	12:30:00 PM	12:36:00 PM	12:50:00 PM
69A	12:57:00 PM	1:13:00 PM	1:25:00 PM	1:40:00 PM	1:46:00 PM	2:00:00 PM
69A	2:07:00 PM	2:23:00 PM	2:35:00 PM	2:50:00 PM	2:56:00 PM	3:10:00 PM
69A	3:17:00 PM	3:33:00 PM	3:45:00 PM	4:00:00 PM	4:06:00 PM	4:20:00 PM
69A	4:27:00 PM	4:43:00 PM	4:55:00 PM	5:10:00 PM	5:16:00 PM	5:30:00 PM
69A	5:37:00 PM	5:53:00 PM	6:05:00 PM	6:20:00 PM	6:26:00 PM	6:40:00 PM
69A	6:47:00 PM	7:03:00 PM	7:15:00 PM	7:30:00 PM	7:36:00 PM	7:50:00 PM
69A	7:57:00 PM	8:13:00 PM	8:25:00 PM	8:40:00 PM	8:46:00 PM	9:00:00 PM
INBOUND M-F						
	H	G	F	C	B	A
69A	6:45:00 AM	7:02:00 AM	7:08:00 AM	7:29:00 AM	7:38:00 AM	7:52:00 AM
69A	7:55:00 AM	8:12:00 AM	8:18:00 AM	8:39:00 AM	8:48:00 AM	9:02:00 AM
69A	9:05:00 AM	9:22:00 AM	9:28:00 AM	9:49:00 AM	9:58:00 AM	10:12:00 AM
69A	10:15:00 AM	10:32:00 AM	10:38:00 AM	10:59:00 AM	11:08:00 AM	11:22:00 AM
69A	11:25:00 AM	11:42:00 AM	11:48:00 AM	12:09:00 PM	12:18:00 PM	12:32:00 PM
69A	12:35:00 PM	12:52:00 PM	12:58:00 PM	1:19:00 PM	1:28:00 PM	1:42:00 PM
69A	1:45:00 PM	2:02:00 PM	2:08:00 PM	2:29:00 PM	2:38:00 PM	2:52:00 PM
69A	2:55:00 PM	3:12:00 PM	3:18:00 PM	3:39:00 PM	3:48:00 PM	4:02:00 PM
69A	4:05:00 PM	4:22:00 PM	4:28:00 PM	4:49:00 PM	4:58:00 PM	5:12:00 PM
69A	5:15:00 PM	5:32:00 PM	5:38:00 PM	5:59:00 PM	6:08:00 PM	6:22:00 PM
69A	6:25:00 PM	6:42:00 PM	6:48:00 PM	7:09:00 PM	7:18:00 PM	7:32:00 PM
69A	7:35:00 PM	7:52:00 PM	7:58:00 PM	8:19:00 PM	8:28:00 PM	8:42:00 PM
69A	8:45:00 PM	9:02:00 PM	9:08:00 PM	9:29:00 PM	9:38:00 PM	9:52:00 PM

Exhibit 6.3 Proposed Route 69W Schedule

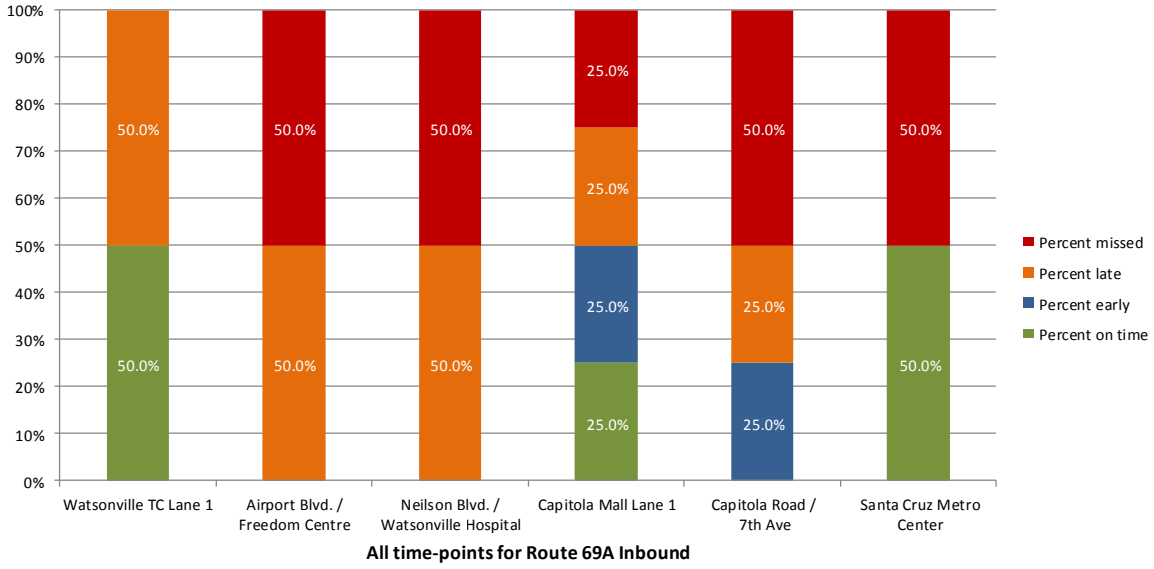
OUTBOUND M-F								
	A	B	C	D	E	F	G	H
69W	6:37:00 AM	6:52:00 AM	7:07:00 AM	7:25:00 AM	7:39:00 AM	---	---	7:46:00 AM
69W	7:47:00 AM	8:02:00 AM	8:17:00 AM	8:35:00 AM	8:49:00 AM	---	---	8:56:00 AM
69W	8:57:00 AM	9:12:00 AM	9:27:00 AM	9:45:00 AM	9:59:00 AM	---	---	10:06:00 AM
69W	10:07:00 AM	10:22:00 AM	10:37:00 AM	10:55:00 AM	11:09:00 AM	---	---	11:16:00 AM
69W	11:17:00 AM	11:32:00 AM	11:47:00 AM	12:05:00 PM	12:19:00 PM	---	---	12:26:00 PM
69W	12:27:00 PM	12:42:00 PM	12:57:00 PM	1:15:00 PM	1:29:00 PM	---	---	1:40:00 PM
69W	1:20:00 PM	1:35:00 PM	1:50:00 PM	2:08:00 PM	2:22:00 PM	---	---	2:30:00 PM
69W	2:30:00 PM	2:45:00 PM	3:00:00 PM	3:18:00 PM	3:32:00 PM	---	---	3:40:00 PM
69W	3:40:00 PM	3:55:00 PM	4:10:00 PM	4:28:00 PM	4:42:00 PM	---	---	4:50:00 PM
69W	4:50:00 PM	5:05:00 PM	5:20:00 PM	5:38:00 PM	5:52:00 PM	---	---	6:00:00 PM
69W	6:00:00 PM	6:15:00 PM	6:30:00 PM	6:48:00 PM	7:02:00 PM	---	---	7:10:00 PM
69W	7:10:00 PM	7:25:00 PM	7:40:00 PM	7:58:00 PM	8:12:00 PM	---	---	8:19:00 PM
69W	8:20:00 PM	8:35:00 PM	8:50:00 PM	9:08:00 PM	9:22:00 PM	---	---	9:29:00 PM
INBOUND M-F								
	H	G	F	E	D	C	B	A
69W	6:20:00 AM	---	---	6:31:00 AM	6:45:00 AM	7:01:00 AM	7:10:00 AM	7:25:00 AM
69W	7:30:00 AM	---	---	7:41:00 AM	7:55:00 AM	8:11:00 AM	8:20:00 AM	8:35:00 AM
69W	8:40:00 AM	---	---	8:51:00 AM	9:05:00 AM	9:21:00 AM	9:30:00 AM	9:45:00 AM
69W	9:50:00 AM	---	---	10:01:00 AM	10:15:00 AM	10:31:00 AM	10:40:00 AM	10:55:00 AM
69W	11:00:00 AM	---	---	11:11:00 AM	11:25:00 AM	11:41:00 AM	11:50:00 AM	12:05:00 PM
69W	12:10:00 PM	---	---	12:21:00 PM	12:35:00 PM	12:51:00 PM	1:00:00 PM	1:15:00 PM
69W	1:20:00 PM	---	---	1:31:00 PM	1:45:00 PM	2:01:00 PM	2:10:00 PM	2:25:00 PM
69W	2:30:00 PM	---	---	2:41:00 PM	2:55:00 PM	3:11:00 PM	3:20:00 PM	3:35:00 PM
69W	3:40:00 PM	---	---	3:51:00 PM	4:05:00 PM	4:21:00 PM	4:30:00 PM	4:45:00 PM
69W	4:50:00 PM	---	---	5:01:00 PM	5:15:00 PM	5:31:00 PM	5:40:00 PM	5:55:00 PM
69W	6:00:00 PM	---	---	6:11:00 PM	6:25:00 PM	6:41:00 PM	6:50:00 PM	7:05:00 PM
69W	7:10:00 PM	---	---	7:21:00 PM	7:35:00 PM	7:51:00 PM	8:00:00 PM	8:15:00 PM
69W	8:20:00 PM	---	---	8:31:00 PM	8:45:00 PM	9:01:00 PM	9:10:00 PM	9:25:00 PM

Exhibit 6.4 Route 69A Inbound On-Time Performance



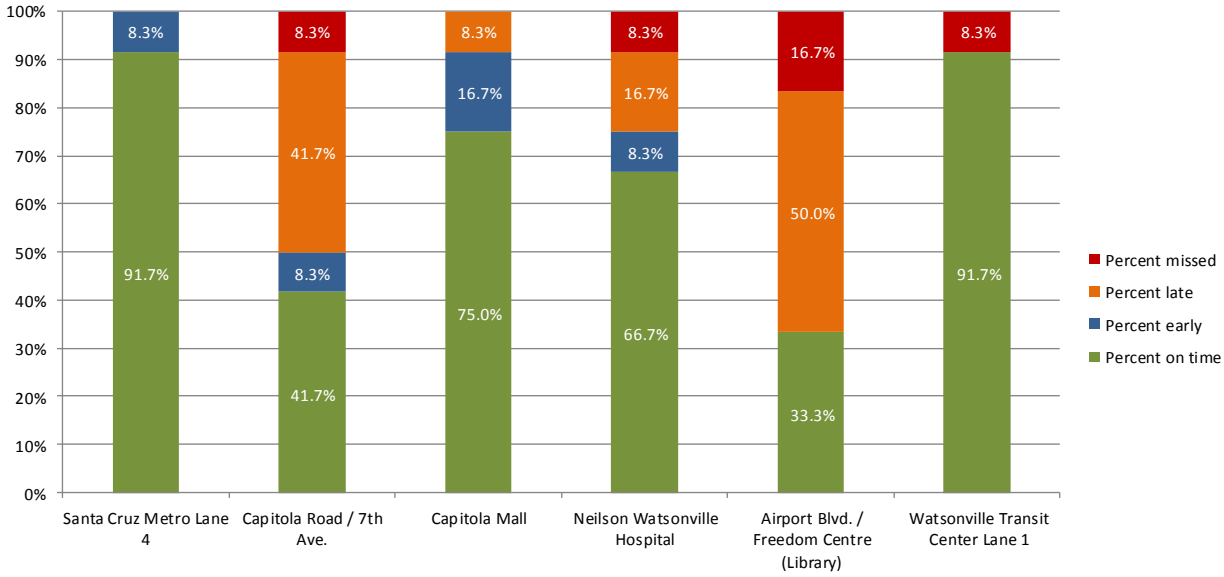
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.

Exhibit 6.5 Route 69A Inbound On-Time Performance



Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO.

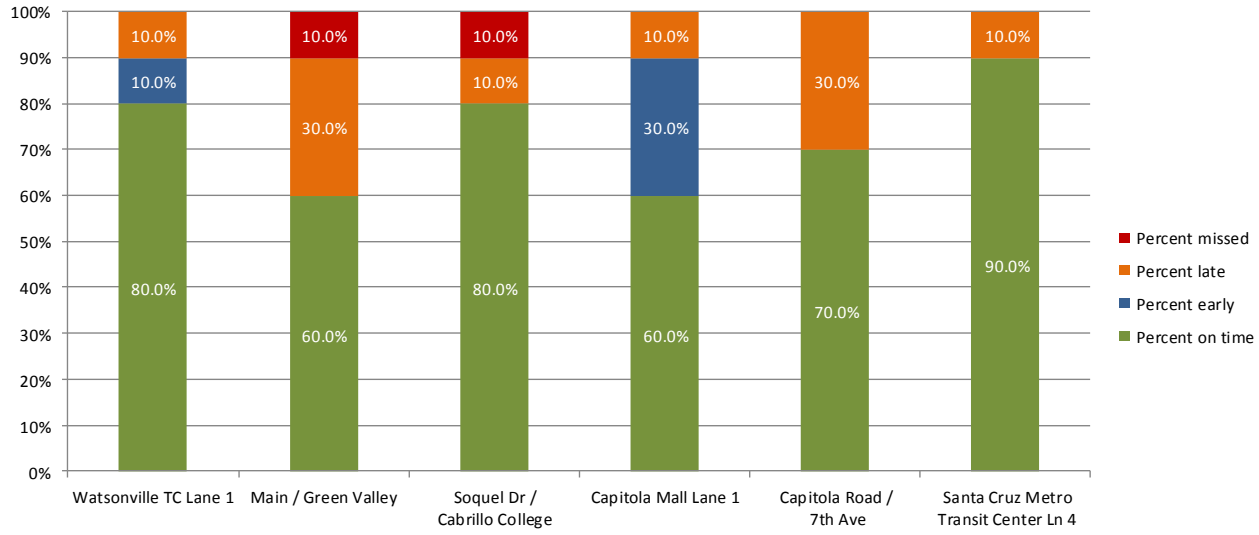
Exhibit 6.6 Route 69A Outbound On-Time Performance



All time-points for Route 69A Outbound

Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.

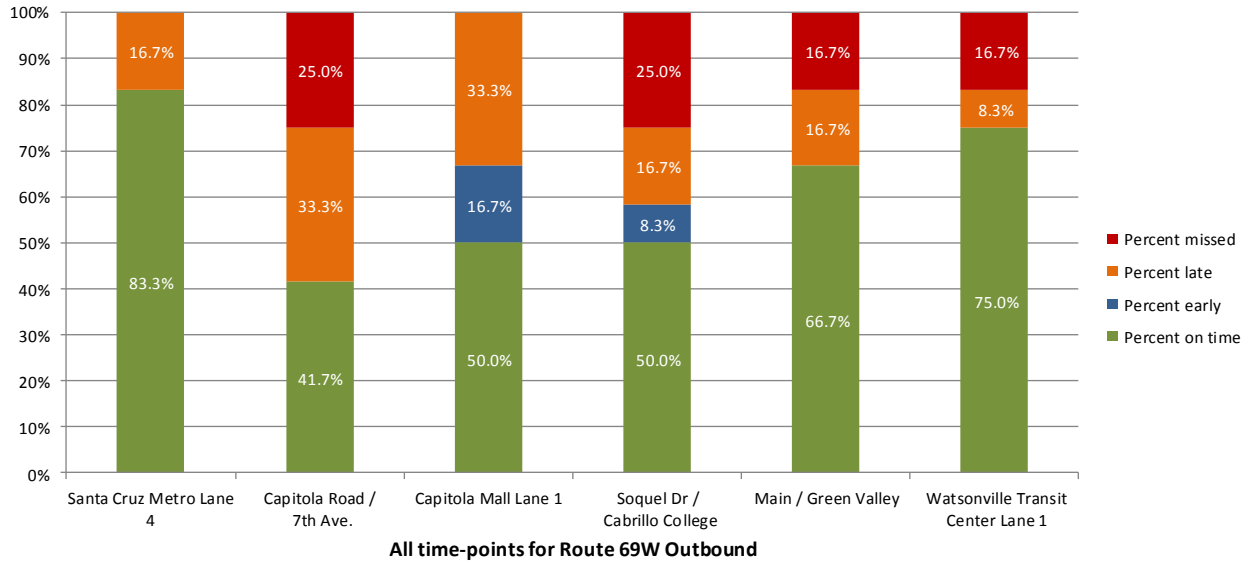
Exhibit 6.7 Route 69W Inbound On-Time Performance



All time-points for Route 69W Inbound

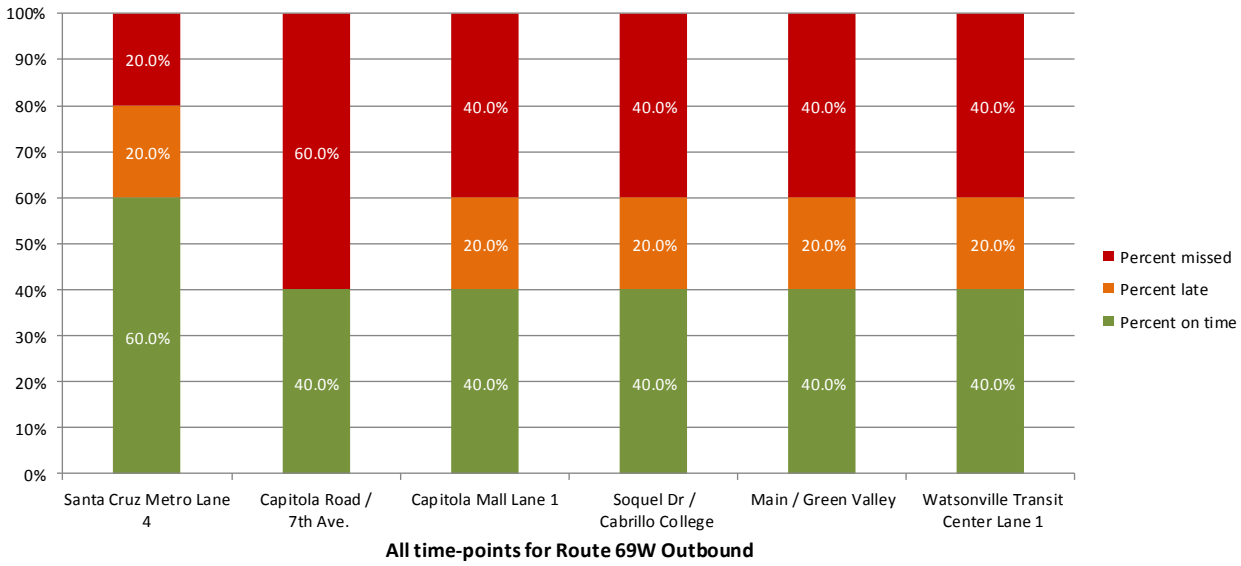
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.

Exhibit 6.8 Route 69W Outbound On-Time Performance by Stop



Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.

Exhibit 6.9 Route 69W Outbound On-Time Performance



Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

Route 71. Route 71 (Santa Cruz/Watsonville) runs between the downtown Santa Cruz METRO Station and Watsonville Transit Center. Service is provided daily, with reduced service on weekends (Saturday and Sunday). Outbound service operates every 30 minutes from 6:10 a.m. to 9:45 p.m. on weekdays, with hour frequency between 9:45 p.m. and 12:45 a.m. Route 71 inbound currently has four distinct alignments upon departing the Watsonville Transit Center. Two of these alignments are "once daily" (7:25 a.m. and 7:55 a.m. departures inbound to Santa Cruz). The other route deviations run approximately every hour for the balance of the service day.

We recommend eliminating the 7:25 and 7:55 runs, and renaming the balance (i.e., Route 70 and 71, or Routes 70 and 80) to reduce confusion in understanding the route schedule. Santa Cruz METRO could also repurpose these trips to run other existing deviation alignments rather than reduce frequency. We also recommend eliminating the route deviations during outbound trips from Santa Cruz due to low productivity and poor on-time performance. Service would remain available to the Watsonville Transit Center via a modification to Route 72 (see Route 72 recommendations for additional details).

Route 71 had average on-time performance of 55-percent, based on ride check data (see Chapter 4). It also posted the highest boarding averages during the midday day-part (46.3 boardings). Currently Route 71 provides a total of 35 inbound (to Santa Cruz) weekday runs with head-way varying by day-part. We recommend the introduction of limited-stop runs (inbound and outbound) to Santa Cruz during weekday hours. This would help reduce travel times during the midday day-part which has the highest level of activity. These trips would operate with limited stops both inbound and outbound from the Watsonville Transit Center to the Santa Cruz Transit Center. Santa Cruz METRO is in the process of substantially increasing frequency of the existing 91X service. This increase will not necessarily alleviate existing capacity concerns and on-time performance issues on the Route 71. Our recommendation remains to introduce a limited-stop service along the Route 71 alignment as detailed below.

These limited-stop trips should be marketed as either a new route with appropriately distinct name, or as an express version of the existing Route 71. For clarification Route 71X would be utilized in reference to the proposed limited-stop runs. Route 71X would not require alignment modification at this time, as the reduction of available stops on the express trips would improve on-time performance. Route 71X would follow the current alignment which travels inbound to Santa Cruz Transit Center along Freedom Blvd. The reduced number of time-points would also aid in on-time performance. A 75-minute headway would be assigned resulting in an overall increase in lay-over time at the two end-points. We propose the limited-stop service only board and alight passengers at established time-points along the current alignment. Introduction of six limited-stop runs would translate to an additional 1,950 VSH at a cost of $252,876 based on Santa Cruz METRO's Cost/VSH of $129.68. See Chapter 7 for funding details.

Exhibit 6.10 Proposed Outbound Route 71 and Route 71X Schedule

	OUTBOUND M-F												
	A	B	C	D	E	F	G	H	I	J	K	L	M
71-X	5:35:00 AM		5:53:00 AM	6:00:00 AM	6:08:00 AM		6:20:00 AM	6:35:00 AM					6:50:00 AM
71	6:10:00 AM	6:16:00 AM	6:21:00 AM	6:26:00 AM	6:33:00 AM	6:36:00 AM	6:42:00 AM	6:54:00 AM	7:01:00 AM				7:13:00 AM
71	6:45:00 AM	6:54:00 AM	7:00:00 AM	7:06:00 AM	7:15:00 AM	7:18:00 AM	7:25:00 AM	7:39:00 AM		7:47:00 AM			8:00:00 AM
71	7:15:00 AM	7:24:00 AM	7:30:00 AM	7:36:00 AM	7:45:00 AM	7:48:00 AM	7:55:00 AM	8:10:00 AM	8:17:00 AM				8:30:00 AM
71	7:45:00 AM	7:54:00 AM	8:00:00 AM	8:06:00 AM	8:15:00 AM	8:18:00 AM	8:25:00 AM	8:39:00 AM		8:47:00 AM			9:00:00 AM
71	8:15:00 AM	8:24:00 AM	8:30:00 AM	8:36:00 AM	8:45:00 AM	8:48:00 AM	8:55:00 AM	9:10:00 AM	9:17:00 AM				9:30:00 AM
71-X	8:30:00 AM		8:48:00 AM	8:55:00 AM	9:03:00 AM		9:15:00 AM	9:30:00 AM					9:45:00 AM
71	8:45:00 AM	8:54:00 AM	9:00:00 AM	9:06:00 AM	9:15:00 AM	9:18:00 AM	9:25:00 AM	9:39:00 AM		9:47:00 AM			10:00:00 AM
71	9:15:00 AM	9:24:00 AM	9:30:00 AM	9:36:00 AM	9:45:00 AM	9:48:00 AM	9:55:00 AM	10:10:00 AM	10:17:00 AM				10:30:00 AM
71	9:45:00 AM	9:54:00 AM	10:00:00 AM	10:06:00 AM	10:15:00 AM	10:18:00 AM	10:25:00 AM	10:39:00 AM		10:47:00 AM			11:00:00 AM
71	10:15:00 AM	10:24:00 AM	10:30:00 AM	10:36:00 AM	10:45:00 AM	10:48:00 AM	10:55:00 AM	11:10:00 AM	11:17:00 AM				11:30:00 AM
71	10:45:00 AM	10:54:00 AM	11:00:00 AM	11:06:00 AM	11:15:00 AM	11:18:00 AM	11:25:00 AM	11:39:00 AM		11:47:00 AM			12:00:00 PM
71	11:15:00 AM	11:26:00 AM	11:32:00 AM	11:38:00 AM	11:47:00 AM	11:50:00 AM	11:57:00 AM	12:12:00 PM	12:20:00 PM				12:35:00 PM
71	11:45:00 AM	11:56:00 AM	12:02:00 PM	12:08:00 PM	12:17:00 PM	12:20:00 PM	12:27:00 PM	12:42:00 PM		12:50:00 PM			1:05:00 PM
71	12:15:00 PM	12:26:00 PM	12:32:00 PM	12:38:00 PM	12:47:00 PM	12:50:00 PM	12:57:00 PM	1:12:00 PM	1:20:00 PM				1:35:00 PM
71	12:45:00 PM	12:56:00 PM	1:02:00 PM	1:08:00 PM	1:17:00 PM	1:20:00 PM	1:27:00 PM	1:41:00 PM		1:49:00 PM			2:00:00 PM
71-X	11:30:00 AM		11:48:00 AM	11:55:00 AM	12:03:00 PM		12:15:00 PM	12:30:00 PM					12:45:00 PM
71	1:15:00 PM	1:26:00 PM	1:32:00 PM	1:38:00 PM	1:47:00 PM	1:50:00 PM	1:57:00 PM	2:11:00 PM	2:18:00 PM				2:30:00 PM
71	1:45:00 PM	1:56:00 PM	2:02:00 PM	2:08:00 PM	2:17:00 PM	2:20:00 PM	2:27:00 PM	2:41:00 PM		2:49:00 PM			3:00:00 PM
71	2:00:00 PM	2:11:00 PM	2:17:00 PM	2:23:00 PM	2:32:00 PM	2:35:00 PM	2:42:00 PM	2:58:00 PM			3:06:00 PM		3:15:00 PM
71	2:15:00 PM	2:26:00 PM	2:32:00 PM	2:38:00 PM	2:47:00 PM	2:50:00 PM	2:57:00 PM	3:11:00 PM	3:18:00 PM				3:30:00 PM
71	2:30:00 PM	2:41:00 PM	2:47:00 PM	2:53:00 PM	3:02:00 PM	3:05:00 PM	3:12:00 PM	3:28:00 PM				3:35:00 PM	3:50:00 PM
71	2:45:00 PM	2:56:00 PM	3:02:00 PM	3:08:00 PM	3:17:00 PM	3:20:00 PM	3:27:00 PM	3:43:00 PM		3:51:00 PM			4:05:00 PM
71	3:00:00 PM	3:11:00 PM	3:17:00 PM	3:23:00 PM	3:32:00 PM	3:35:00 PM	3:42:00 PM	3:58:00 PM			4:06:00 PM		4:15:00 PM
71	3:15:00 PM	3:26:00 PM	3:32:00 PM	3:38:00 PM	3:47:00 PM	3:50:00 PM	3:57:00 PM	4:11:00 PM	4:18:00 PM				4:30:00 PM
71	3:30:00 PM	3:41:00 PM	3:47:00 PM	3:53:00 PM	4:02:00 PM	4:05:00 PM	4:12:00 PM	4:28:00 PM				4:35:00 PM	4:45:00 PM
71	3:45:00 PM	3:56:00 PM	4:02:00 PM	4:08:00 PM	4:17:00 PM	4:20:00 PM	4:27:00 PM	4:43:00 PM		4:51:00 PM			5:05:00 PM
71-X	2:35:00 PM		2:53:00 PM	3:00:00 PM	3:08:00 PM		3:20:00 PM	3:35:00 PM					3:50:00 PM
71	4:00:00 PM	4:11:00 PM	4:17:00 PM	4:23:00 PM	4:32:00 PM	4:35:00 PM	4:42:00 PM	4:59:00 PM			5:07:00 PM		5:20:00 PM
71	4:15:00 PM	4:26:00 PM	4:32:00 PM	4:38:00 PM	4:47:00 PM	4:50:00 PM	4:57:00 PM	5:13:00 PM	5:21:00 PM				5:35:00 PM
71	4:30:00 PM	4:41:00 PM	4:47:00 PM	4:53:00 PM	5:02:00 PM	5:05:00 PM	5:12:00 PM	5:28:00 PM				5:35:00 PM	5:50:00 PM
71	4:45:00 PM	4:56:00 PM	5:02:00 PM	5:08:00 PM	5:17:00 PM	5:20:00 PM	5:27:00 PM	5:43:00 PM		5:51:00 PM			6:05:00 PM
71	5:00:00 PM	5:11:00 PM	5:17:00 PM	5:23:00 PM	5:32:00 PM	5:35:00 PM	5:42:00 PM	5:59:00 PM			6:07:00 PM		6:20:00 PM
71	5:15:00 PM	5:26:00 PM	5:32:00 PM	5:38:00 PM	5:47:00 PM	5:50:00 PM	5:57:00 PM	6:13:00 PM	6:21:00 PM				6:35:00 PM
71	5:30:00 PM	5:41:00 PM	5:47:00 PM	5:53:00 PM	6:02:00 PM	6:05:00 PM	6:12:00 PM	6:28:00 PM				6:35:00 PM	6:50:00 PM
71	5:45:00 PM	5:54:00 PM	6:00:00 PM	6:06:00 PM	6:15:00 PM	6:18:00 PM	6:25:00 PM	6:38:00 PM		6:46:00 PM			6:55:00 PM
71	6:00:00 PM	6:09:00 PM	6:15:00 PM	6:21:00 PM	6:30:00 PM	6:33:00 PM	6:40:00 PM	6:51:00 PM			6:59:00 PM		7:10:00 PM
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71	6:45:00 PM	6:54:00 PM	7:00:00 PM	7:06:00 PM	7:15:00 PM	7:18:00 PM	7:25:00 PM	7:38:00 PM		7:46:00 PM			7:55:00 PM
71-X	5:35:00 PM		5:53:00 PM	6:00:00 PM	6:08:00 PM		6:20:00 PM	6:35:00 PM					6:50:00 PM
71	7:15:00 PM	7:22:00 PM	7:27:00 PM	7:33:00 PM	7:40:00 PM	7:43:00 PM	7:49:00 PM	8:00:00 PM	8:06:00 PM				8:15:00 PM
71	7:45:00 PM	7:53:00 PM	7:58:00 PM	8:03:00 PM	8:11:00 PM	8:13:00 PM	8:18:00 PM	8:29:00 PM		8:36:00 PM			8:45:00 PM
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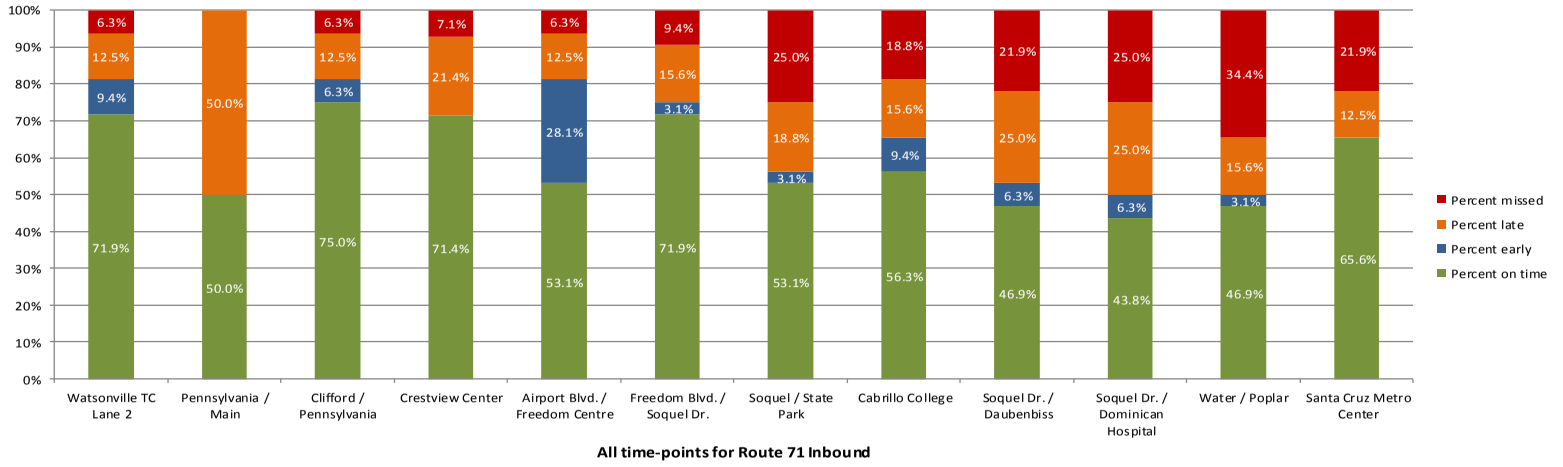
71	8:45:00 PM	8:53:00 PM	8:58:00 PM	9:03:00 PM	9:11:00 PM	9:13:00 PM	9:18:00 PM	9:29:00 PM		9:36:00 PM			9:45:00 PM
71	9:45:00 PM	9:53:00 PM	9:58:00 PM	10:03:00 PM	10:11:00 PM	10:13:00 PM	10:18:00 PM	10:29:00 PM		10:36:00 PM			10:45:00 PM
71	10:45:00 PM	10:53:00 PM	10:58:00 PM	11:03:00 PM	11:11:00 PM	11:13:00 PM	11:18:00 PM	11:29:00 PM		11:36:00 PM			11:45:00 PM
71	11:45:00 PM	11:53:00 PM	11:58:00 PM	12:03:00 AM	12:11:00 AM	12:13:00 AM	12:18:00 AM	12:29:00 AM		12:36:00 AM			12:45:00 AM

Exhibit 6.11 Proposed Inbound Route 71 and Route 71X Schedule

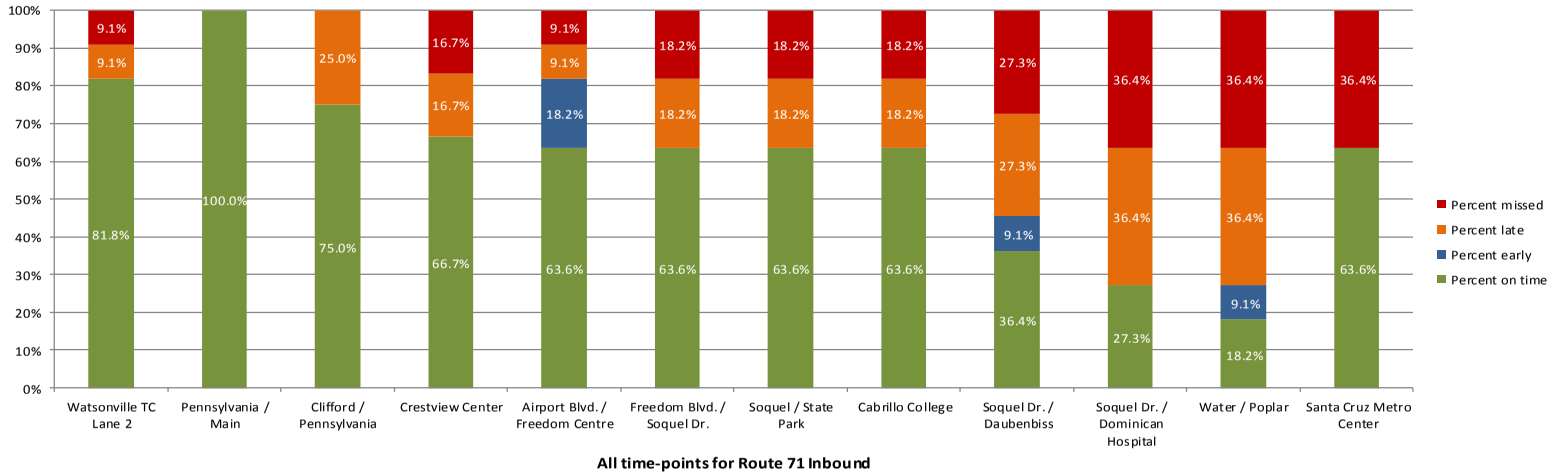
INBOUND M-F													
	M	I	J	K	L	H	G	F	E	D	C	O	A
71	5:35:00 AM		5:42:00 AM			5:50:00 AM	6:00:00 AM	6:05:00 AM	6:10:00 AM	6:14:00 AM	6:19:00 AM	6:23:00 AM	6:35:00 AM
71	6:10:00 AM	6:15:00 AM				6:25:00 AM	6:40:00 AM	6:46:00 AM	6:50:00 AM	6:57:00 AM	7:03:00 AM	7:08:00 AM	7:25:00 AM
71	6:40:00 AM		6:49:00 AM			6:58:00 AM	7:11:00 AM	7:17:00 AM	7:22:00 AM	7:28:00 AM	7:34:00 AM	7:39:00 AM	7:55:00 AM
71-X	6:55:00 AM					7:13:00 AM		7:34:00 AM	7:39:00 AM		7:52:00 AM	7:59:00 AM	8:09:00 AM
71	7:10:00 AM	7:16:00 AM				7:27:00 AM	7:42:00 AM	7:49:00 AM	7:54:00 AM	8:02:00 AM	8:08:00 AM	8:15:00 AM	8:35:00 AM
71	7:25:00 AM			7:32:00 AM		7:42:00 AM	7:57:00 AM	8:04:00 AM	8:09:00 AM	8:17:00 AM	8:23:00 AM	8:30:00 AM	8:50:00 AM
71	7:40:00 AM		7:49:00 AM			7:58:00 AM	8:11:00 AM	8:17:00 AM	8:22:00 AM	8:28:00 AM	8:34:00 AM	8:39:00 AM	8:55:00 AM
71	7:55:00 AM				8:01:00 AM	8:11:00 AM	8:25:00 AM	8:31:00 AM	8:38:00 AM	8:44:00 AM	8:50:00 AM	8:55:00 AM	9:10:00 AM
71	8:10:00 AM	8:16:00 AM				8:27:00 AM	8:41:00 AM	8:47:00 AM	8:52:00 AM	8:58:00 AM	9:03:00 AM	9:08:00 AM	9:25:00 AM
71	8:40:00 AM		8:49:00 AM			8:58:00 AM	9:11:00 AM	9:17:00 AM	9:22:00 AM	9:28:00 AM	9:34:00 AM	9:39:00 AM	9:55:00 AM
71	9:10:00 AM	9:16:00 AM				9:27:00 AM	9:41:00 AM	9:47:00 AM	9:52:00 AM	9:58:00 AM	10:03:00 AM	10:08:00 AM	10:25:00 AM
71	9:40:00 AM		9:49:00 AM			9:58:00 AM	10:11:00 AM	10:17:00 AM	10:22:00 AM	10:28:00 AM	10:34:00 AM	10:39:00 AM	10:55:00 AM
71-X	9:55:00 AM					10:13:00 AM		10:34:00 AM	10:39:00 AM		10:52:00 AM	10:59:00 AM	11:09:00 AM
71	10:10:00 AM	10:16:00 AM				10:27:00 AM	10:41:00 AM	10:47:00 AM	10:52:00 AM	10:58:00 AM	11:03:00 AM	11:08:00 AM	11:25:00 AM
71	10:40:00 AM		10:49:00 AM			10:58:00 AM	11:11:00 AM	11:17:00 AM	11:22:00 AM	11:28:00 AM	11:34:00 AM	11:39:00 AM	11:55:00 AM
71	11:10:00 AM	11:16:00 AM				11:27:00 AM	11:41:00 AM	11:47:00 AM	11:52:00 AM	11:58:00 AM	12:03:00 PM	12:08:00 PM	12:25:00 PM
71	11:40:00 AM		11:49:00 AM			11:58:00 AM	12:11:00 PM	12:17:00 PM	12:22:00 PM	12:28:00 PM	12:34:00 PM	12:39:00 PM	12:55:00 PM
71	12:10:00 PM	12:16:00 PM				12:27:00 PM	12:41:00 PM	12:47:00 PM	12:52:00 PM	12:58:00 PM	1:03:00 PM	1:08:00 PM	1:25:00 PM
71	12:40:00 PM		12:49:00 PM			12:58:00 PM	1:11:00 PM	1:17:00 PM	1:22:00 PM	1:28:00 PM	1:34:00 PM	1:39:00 PM	1:55:00 PM
71-X	12:55:00 PM					1:13:00 PM		1:34:00 PM	1:39:00 PM		1:52:00 PM	1:59:00 PM	2:09:00 PM
71	1:10:00 PM	1:16:00 PM				1:27:00 PM	1:41:00 PM	1:47:00 PM	1:52:00 PM	1:58:00 PM	2:03:00 PM	2:08:00 PM	2:25:00 PM
71	1:40:00 PM		1:49:00 PM			1:59:00 PM	2:13:00 PM	2:19:00 PM	2:24:00 PM	2:31:00 PM	2:37:00 PM	2:44:00 PM	3:00:00 PM
71	2:10:00 PM	2:17:00 PM				2:28:00 PM	2:42:00 PM	2:49:00 PM	2:54:00 PM	3:00:00 PM	3:06:00 PM	3:12:00 PM	3:30:00 PM
71	2:40:00 PM		2:49:00 PM			2:59:00 PM	3:13:00 PM	3:19:00 PM	3:24:00 PM	3:31:00 PM	3:37:00 PM	3:44:00 PM	4:00:00 PM
71	3:10:00 PM	3:17:00 PM				3:28:00 PM	3:42:00 PM	3:49:00 PM	3:54:00 PM	4:00:00 PM	4:07:00 PM	4:13:00 PM	4:25:00 PM
71	3:40:00 PM		3:49:00 PM			3:59:00 PM	4:13:00 PM	4:19:00 PM	4:24:00 PM	4:31:00 PM	4:37:00 PM	4:44:00 PM	5:00:00 PM
71-X	3:55:00 PM					4:13:00 PM		4:34:00 PM	4:39:00 PM		4:52:00 PM	4:59:00 PM	5:09:00 PM
71	4:10:00 PM	4:17:00 PM				4:28:00 PM	4:42:00 PM	4:49:00 PM	4:54:00 PM	5:00:00 PM	5:07:00 PM	5:13:00 PM	5:25:00 PM
71	4:40:00 PM		4:49:00 PM			4:59:00 PM	5:13:00 PM	5:19:00 PM	5:24:00 PM	5:31:00 PM	5:37:00 PM	5:44:00 PM	5:58:00 PM
71	5:10:00 PM	5:16:00 PM				5:26:00 PM	5:40:00 PM	5:46:00 PM	5:51:00 PM	5:57:00 PM	6:02:00 PM	6:08:00 PM	6:20:00 PM
71	5:40:00 PM		5:49:00 PM			5:58:00 PM	6:10:00 PM	6:16:00 PM	6:21:00 PM	6:27:00 PM	6:32:00 PM	6:37:00 PM	6:50:00 PM
71	6:10:00 PM	6:16:00 PM				6:26:00 PM	6:40:00 PM	6:46:00 PM	6:51:00 PM	6:57:00 PM	7:02:00 PM	7:08:00 PM	7:20:00 PM
71	6:40:00 PM		6:49:00 PM			6:58:00 PM	7:10:00 PM	7:16:00 PM	7:21:00 PM	7:27:00 PM	7:32:00 PM	7:37:00 PM	7:50:00 PM
71-X	6:55:00 PM					7:13:00 PM		7:34:00 PM	7:39:00 PM		7:52:00 PM	7:59:00 PM	8:09:00 PM
71	7:00:00 PM	7:05:00 PM				7:13:00 PM	7:25:00 PM	7:31:00 PM	7:36:00 PM	7:40:00 PM	7:44:00 PM	7:48:00 PM	8:00:00 PM
71	7:30:00 PM		7:37:00 PM			7:45:00 PM	7:55:00 PM	8:01:00 PM	8:06:00 PM	8:11:00 PM	8:15:00 PM	8:19:00 PM	8:30:00 PM
71	8:00:00 PM	8:05:00 PM				8:13:00 PM	8:25:00 PM	8:31:00 PM	8:36:00 PM	8:40:00 PM	8:44:00 PM	8:48:00 PM	9:00:00 PM
71	8:30:00 PM		8:37:00 PM			8:45:00 PM	8:55:00 PM	9:01:00 PM	9:06:00 PM	9:11:00 PM	9:15:00 PM	9:19:00 PM	9:30:00 PM
71	9:30:00 PM		9:37:00 PM			9:45:00 PM	9:55:00 PM	10:01:00 PM	10:06:00 PM	10:11:00 PM	10:15:00 PM	10:19:00 PM	10:30:00 PM
71	10:50:00 PM		10:37:00 PM			11:05:00 PM	11:15:00 PM	11:21:00 PM	11:26:00 PM	11:31:00 PM	11:35:00 PM	11:39:00 PM	11:50:00 PM

Exhibit 6.12 Route 71 Inbound On-Time Performance



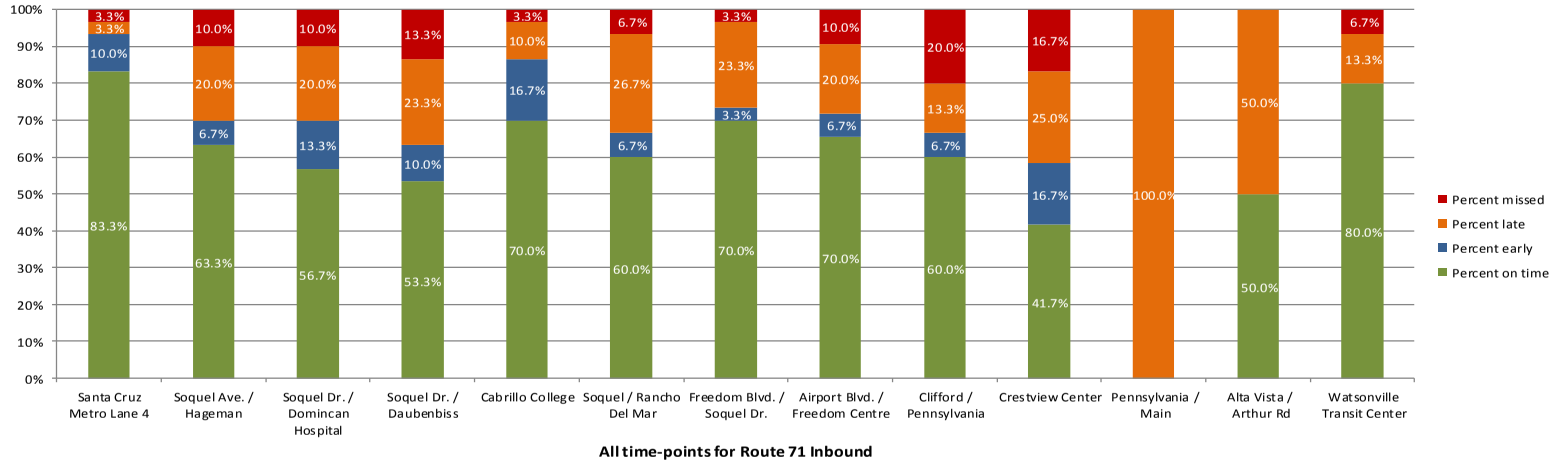
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.

Exhibit 6.13 Route 71 Inbound On-Time Performance



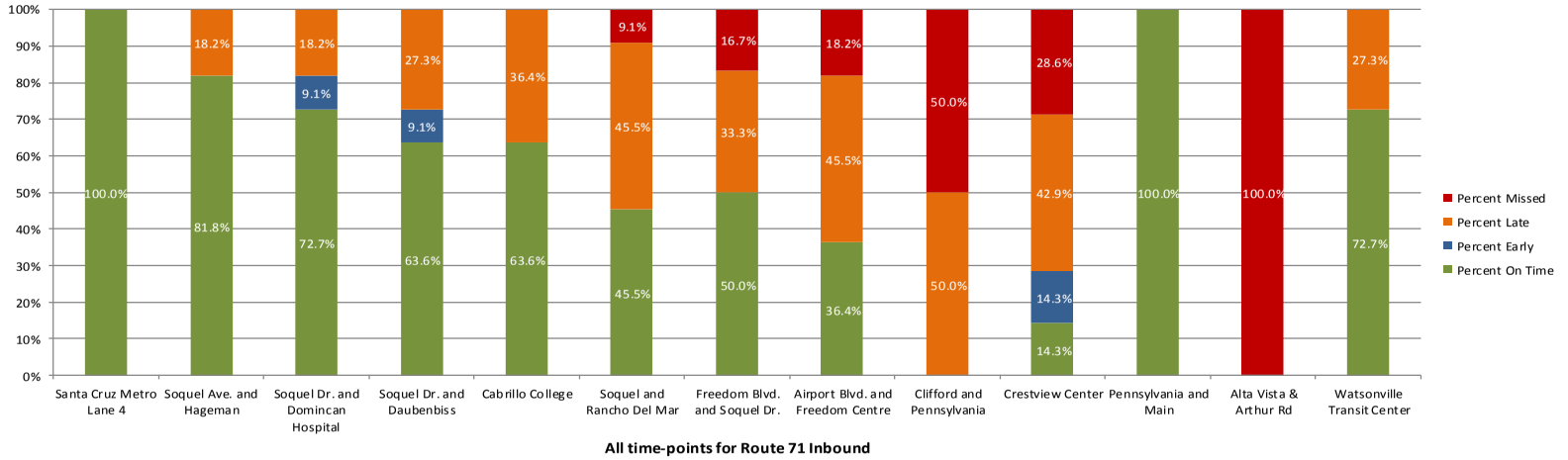
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

Exhibit 6.14 Route 71 Outbound On-Time Performance



Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.

Exhibit 6.15 Route 71 Outbound On-Time Performance



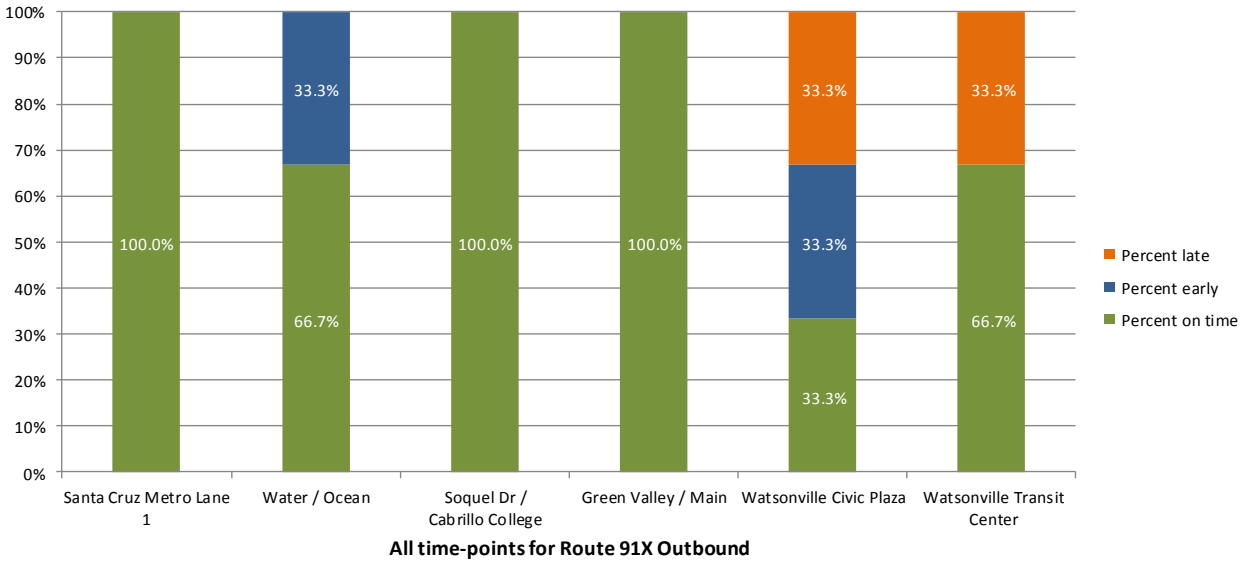
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

Route 91X. This route functions as a limited-stop service between Watsonville and Santa Cruz. Route 91X (Santa Cruz to Watsonville) runs along a southeast/northwest axis with inbound/outbound express service between the Santa Cruz METRO Center and Watsonville Transit Center. Originating at the Santa Cruz METRO Center, the alignment travels along Water Street for a short stretch before proceeding along Cabrillo Highway (Highway 1). Transitioning onto Soquel Drive, the route continues back onto Cabrillo Highway until Main Street, before terminating at the Watsonville Transit Center. The outbound limited-stop service operates morning and evening peak-hour periods (6:35 a.m. to 9:12 a.m., and 3:30 p.m. to 5:25 p.m.) on weekdays. Inbound service runs between 5:55 a.m. and 10:19 a.m., and again between 4:30 p.m. to 6:19 p.m.

For those trips surveyed, Route 91X departed early from published time-points more than 10-percent of the time. Early departures are one of the greatest barriers to customer satisfaction and confidence in public transit. As it is already a limited-stop service, should a customer arrive at the bus stop location on-time and find the bus has already departed, the result is a delay of up to 55 minutes to the customer. Route 91X has a 100-percent on-time performance at trip-end. This infers there is sufficient time in the current operating schedule to support on-time departures without the need for "hot running." Drivers may feel the need to depart early based on their perception of historic ridership patterns, as well as the need to interline with another route.

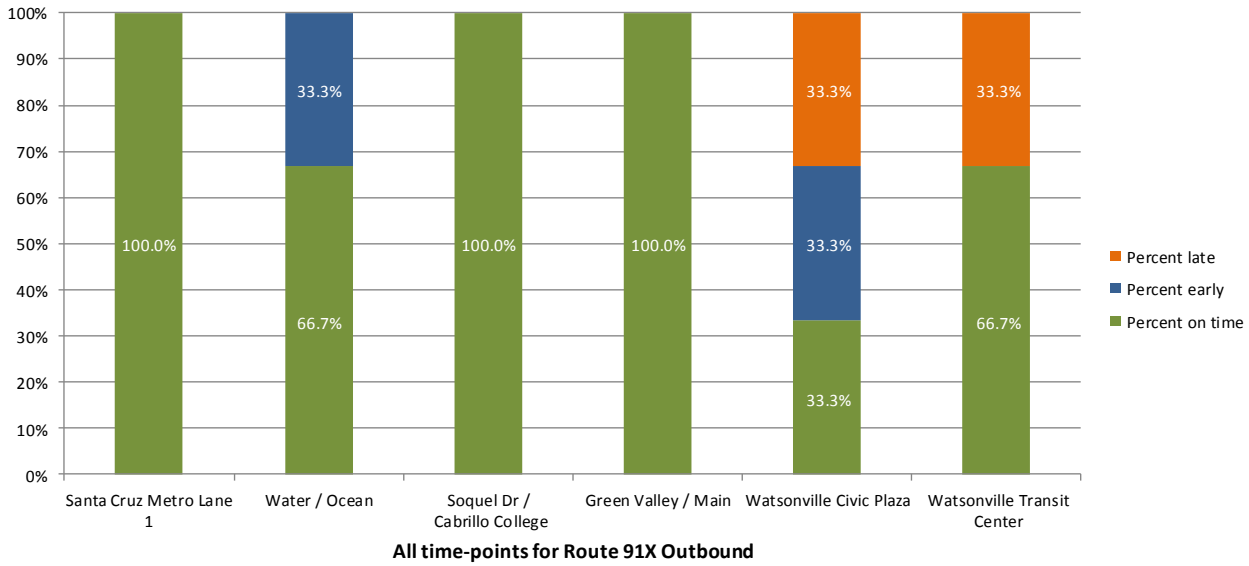
Based on customer input and discussion arising at Watsonville focus groups, we also recommend introducing an additional weekday outbound trip in the evening. This would allow customers departing Santa Cruz after 4:30 p.m. to return to Watsonville. The run would depart Santa Cruz at 5:30 p.m. and in arrive Watsonville around 6:30 p.m. Doing so would require an additional 260 VSH annually at a cost of $33,716 based on a Cost/VSH of $129.68. See Chapter 7 for funding details.

Exhibit 6.16 Route 91X Inbound On-Time Performance



Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

Exhibit 6.17 Route 91X Outbound On-Time Performance

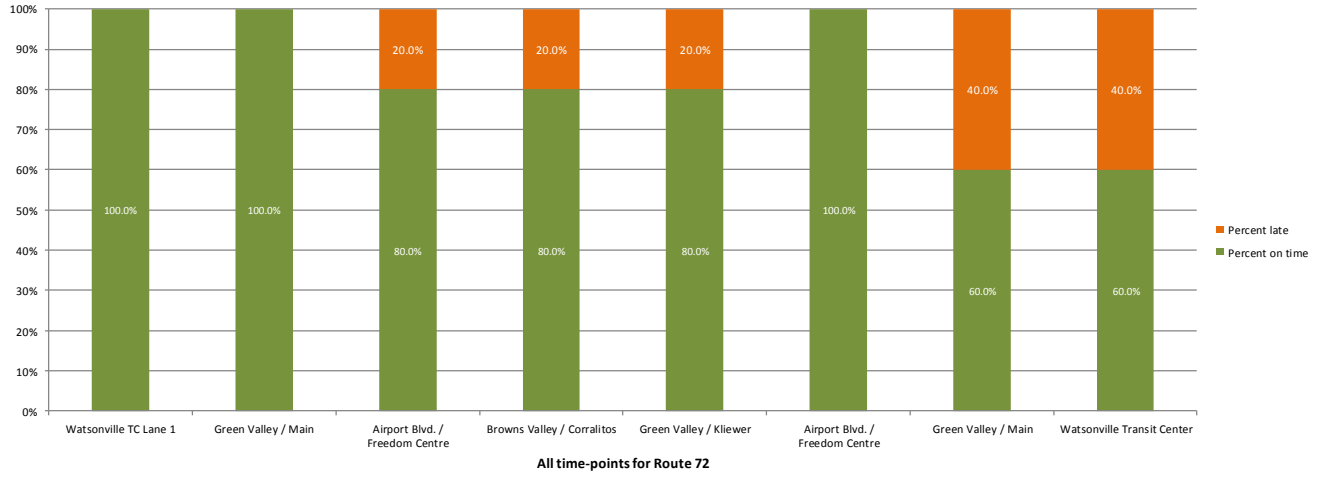


Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

Route 72 (Corralitos) travels from the Watsonville Transit Center north to Browns Valley and Corralitos. The alignment operates along Main Street where it travels up Green Valley Rd. and Airport Blvd. and then along Green Valley Rd. The alignment continues northbound along Arnesti Rd. where it extends out to Corralitos and (on a clockwise loop) back onto Green Valley Rd. before terminating at the Watsonville Transit Center. Hours of operation are 5:50 a.m. to 7:48 p.m. The ride checks conducted June, September, and October 2011 reveal inconsistencies in arrival and departure times, resulting in poor on-time performance across all day-parts. The on-time performance results discussed herein reflect both Moore & Associates and Santa Cruz METRO staff-conducted ride checks. Late departures were noted at the Green Valley and Kliewer, Airport Blvd and Freedom Centre (Inbound and Outbound), Brown Valley and Corralitos, and Green Valley and Main time-points. Delays varied from five to 18 minutes, resulting in nine "missed" time-points of the 56 surveyed.

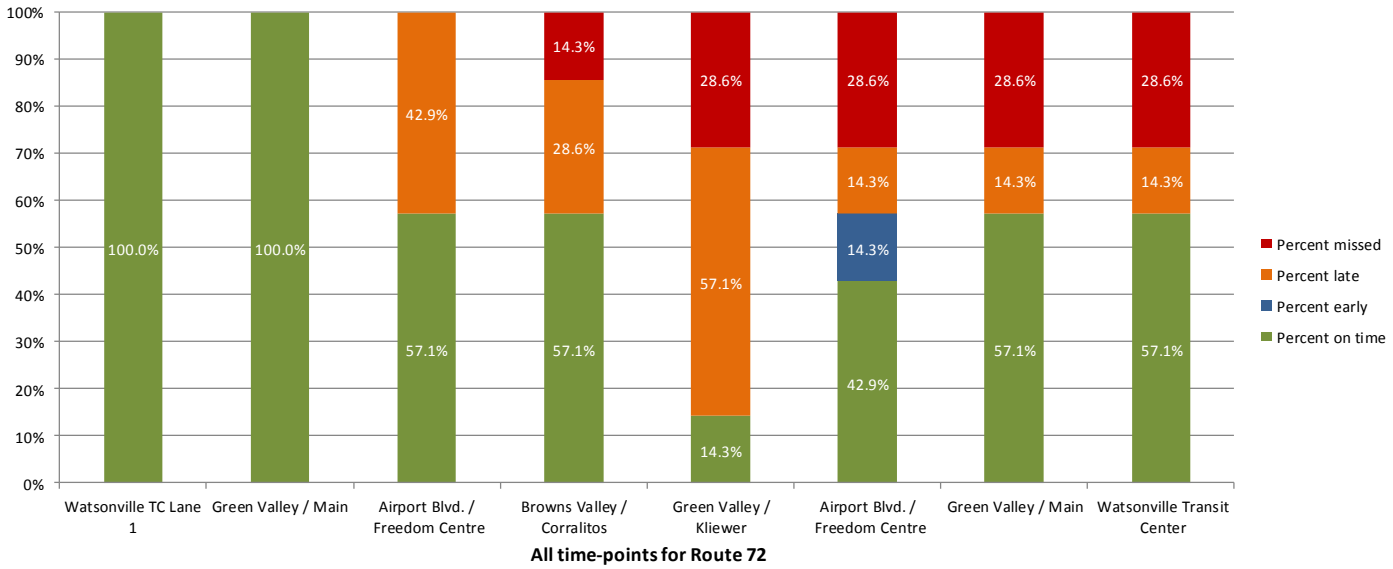
Late arrivals also occurred at the Watsonville Transit Center, largely resulting from delays during the "start of trip" segments. We recommend adjusting the schedule by a minimum of seven minutes to alleviate delays across each day-part, especially during Midday service. The following graphs represent a snapshot of Watsonville route on-time performance and activity during the evaluation periods (both June 2011 and September through October 2011). Given the variation in ride check sample size completed by Moore & Associates and Santa Cruz METRO staff, separate graphs have been prepared. As presented in exhibit 6.14, five stops experienced delays of greater than 20 percent in departures from the published time-point; with Green Valley and Main, and Watsonville Transit Center exhibiting 40-percent late departures/arrivals. Surprisingly, Airport Blvd. and Freedom Centre (inbound to Watsonville Transit Center), departed on-time to all time-points. However, on-time performance eroded as the run neared Green Valley and Main.

Exhibit 6.18 Route 72 On-Time Performance



Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.

Exhibit 6.19 Route 72 On-Time Performance

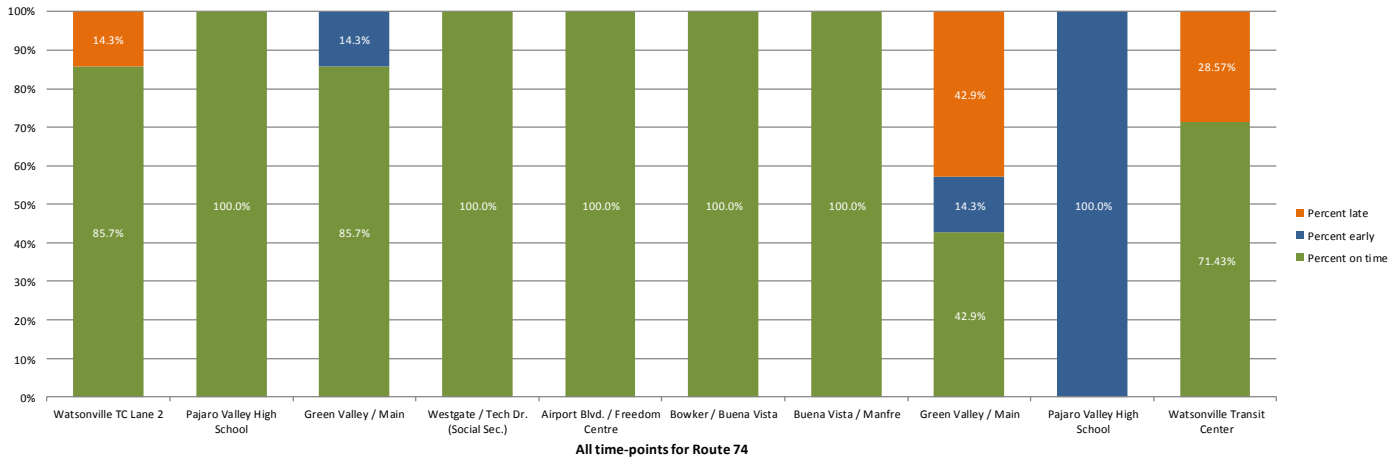


Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

Route 74 (Ohlone Parkway/Rolling Hills) provides service to/from the Watsonville Transit Center between Ohlone Parkway and Rolling Hills. The route alignment travels in a "figure-eight" fashion heading northbound to the Watsonville Municipal Airport. Running on a clockwise loop along Anna Street, the route then travels counter-clockwise along Buena Vista before heading toward Airport Blvd. Route stops include Pajaro Valley High School before continuing back to the Watsonville Transit Center. The service operates weekdays from 6:50 a.m. to 5:40 p.m. Given the majority of Santa Cruz METRO routes are interlined, on-time performance for one line can adversely affect another. Although there is a nine-minute recovery/layover time at the Watsonville Transit Center between runs, late departures beyond 10 minutes (on an inbound run) can cause delays on Route 74.

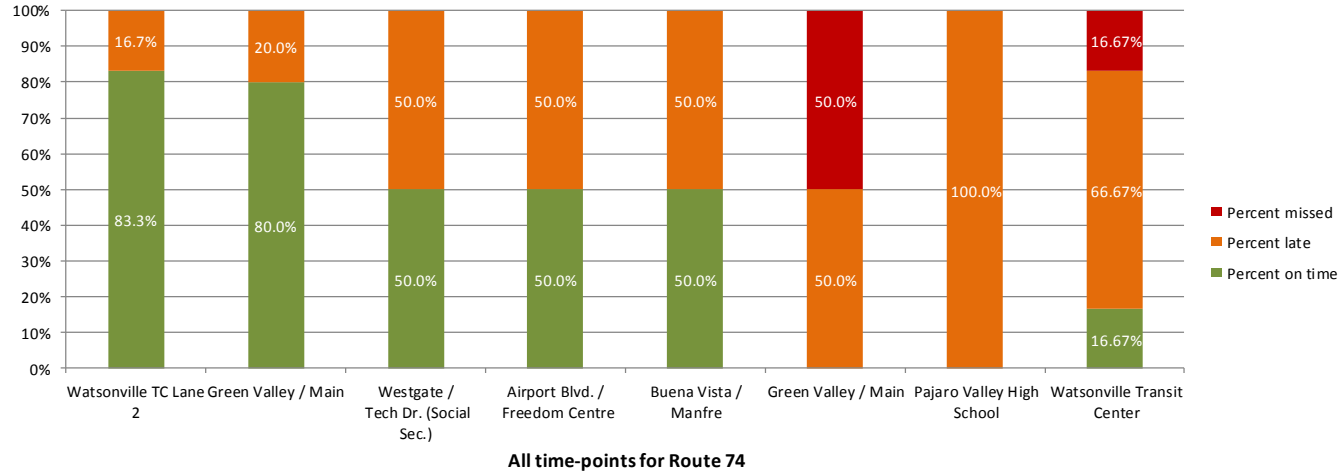
Based on the ride check data, Route 74 (see Chapter 4 – Ride Check chapter for data segregated by day-part) shows a higher propensity for late departures during Midday service, specifically at the Green Valley and Main stop (inbound to Watsonville Transit Center). Moore & Associates and Santa Cruz METRO staff-conducted ride checks revealed delays of up to 13 minutes during AM Peak and Midday day-parts, as well as nine-minute delays during PM Peak. We recommend inserting five to seven minutes to the current schedule to offset late departures chiefly at the Green Valley and Main stop. Doing so would adjust the arrivals at the Watsonville Transit Center to 45 and 50 minutes past the hour. Exhibit 6.16 (below) illustrates on-time performance for Route 74 during the June 2011 ride checks.

Exhibit 6.20 Route 74 On-Time Performance



**Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.*

Exhibit 6.21 Route 74 On-Time Performance



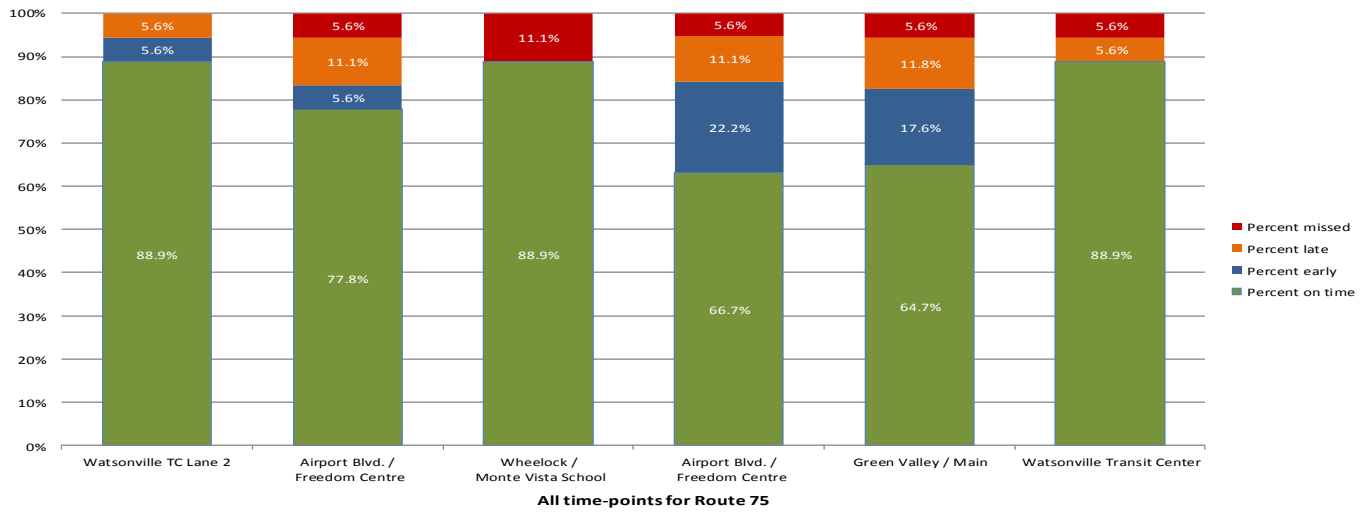
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

Route 75 (Green Valley) provides service between the Watsonville Transit Center and as far north as Wheelock and Monte Vista School. This route travels northbound from the Watsonville Transit Center proceeding onto Green Valley Road, detouring slightly onto Airport Blvd, before continuing along Green Valley Road. The route then continues onto Wheelock Road where it travels in a counter-clockwise fashion before returning to its point of origin. Service is provided seven days a week, between 6:09 a.m. and 7:57 p.m. Trip duration varies between 43 and 53 minutes, alternating every other run.

Based on the ride check data, frequent early departures occurred during the AM Peak and Midday day-parts. Early departures (departing one to two minutes prior to the published schedule) during the AM Peak hours were noted at the Airport Blvd and Freedom Centre and Green Valley and Main stops. "Hot running" may be in large part due to drivers arriving early to a stop and then departing

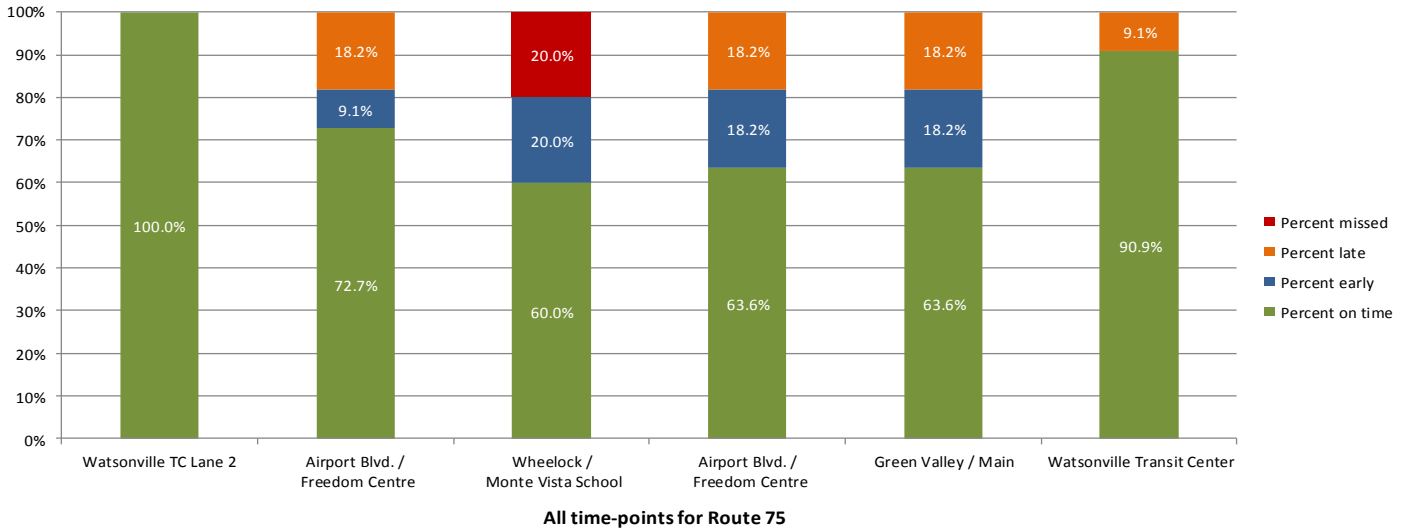
before the published schedule time (indicating possible surplus running time). Additionally, early departures/arrivals may also be the result of route interlining, as the variations in route pairings may cause variations in travel time. "Running hot" or early departures from a stop are never acceptable as it may impact customers waiting at published time-points. Santa Cruz METRO should enforce a "no-early departure" policy to ensure customers are not missing their bus. By contrast, on-time performance during the PM Peak day-part (service after 4:00 p.m.) consisted of excessive delays in departures from the Airport Blvd and Freedom Centre and Green Valley and Main (between seven and 11-minute delays). We recommend adjusting schedule times (up to seven minutes in the schedule) during PM Peak trips to mitigate external factors such as road congestion and/or delays due to route interlining.

Exhibit 6.22 Route 75 On-Time Performance



Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates

Exhibit 6.23 Route 75 On-Time Performance

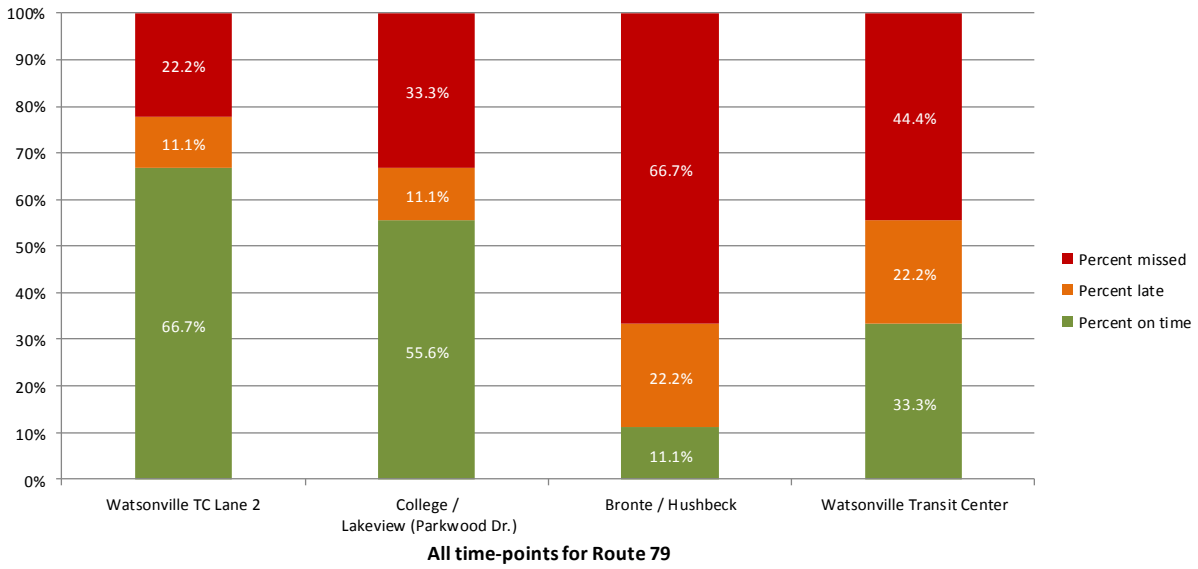


Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

Route 79 operates Monday through Friday between 7:10 a.m. and 5:35 p.m., originating and terminating at the Watsonville Transit Center. This route serves the East Lake area traveling along E. Beach Street and onto E. Lake Avenue the route then heads east onto College Drive before returning to the Watsonville Transit Center. Route 79 operates on a 60-minute headway with a trip duration of approximately 25 minutes.

The ride check data reveals several missed trips (i.e., departures of more than 10 minutes past the published schedule) during the Midday day-part every hour between 11:25 a.m. and 3:25 p.m., primarily at the Bronte and Hushbeck time-point. Santa Cruz METRO buses typically arrived on-time at the College and Lakeview stop. Delays were incurred as the route neared the Bronte and Hushbeck stop. Boarding and alighting data further suggests increased activity during the trip segment between College/Lakeview and Bronte/Hushbeck stops, in contrast to the balance of the route. We recommend adjusting the time-point at Bronte/Hushbeck by seven to ten minutes during AM Peak and Midday services. Inserting additional time to the mid-trip segment should reduce the incidence of late departures.

Exhibit 6.24 Route 79 On-Time Performance

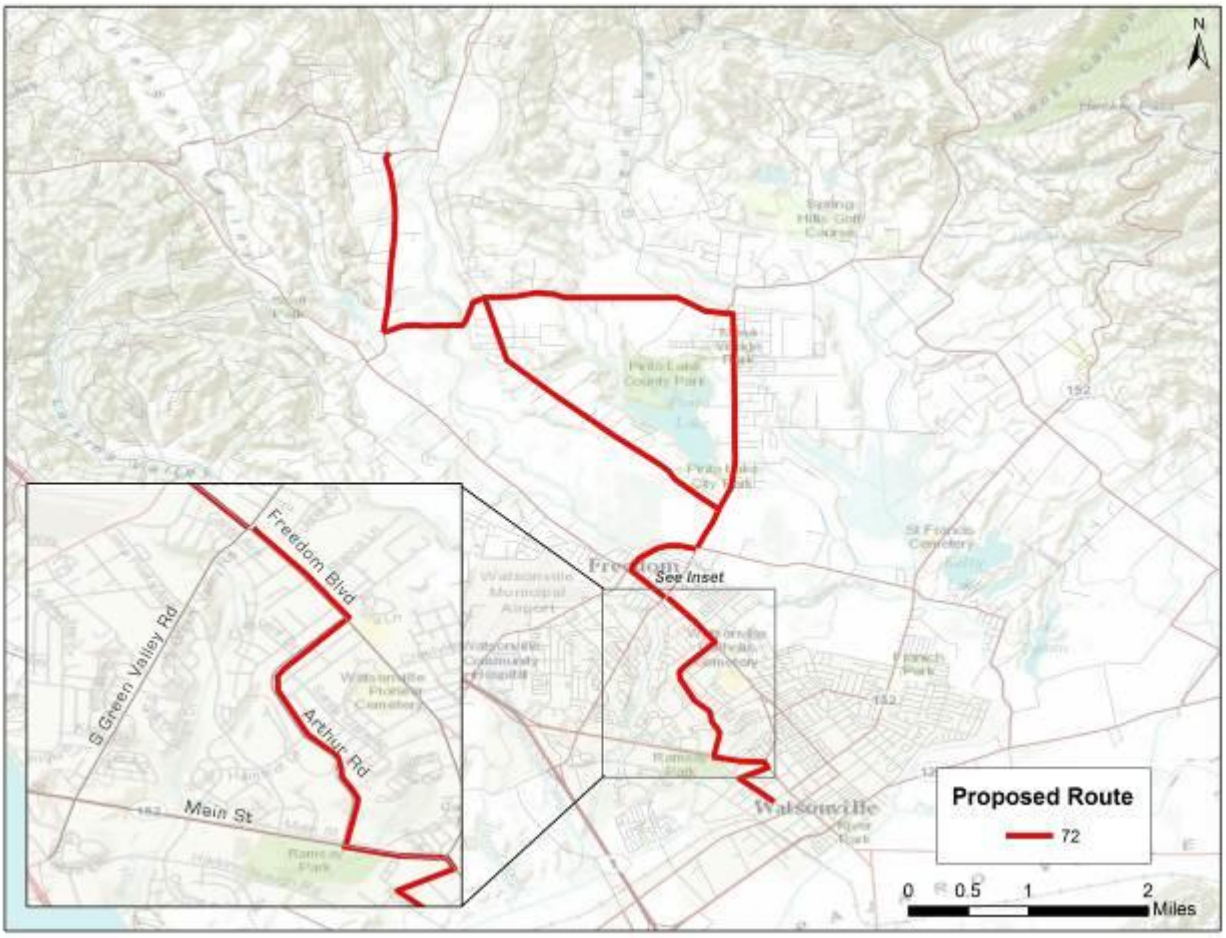


Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

Reduce overlapping of service through streamlining redundant services and adjusting Route 72's alignment. Routes 72 and 75 share more than 30 stops, translating to more than 60-percent route duplication. Although the routes depart at different times (roughly 20 minutes apart) from these common bus stops, we recommend Santa Cruz METRO consider rerouting Route 72 to reduce route redundancy while also reducing Vehicle Service Hours. While the overlapping of stops typically increases schedule frequency, we believe there would still be sufficient service along the alignment to meet current demand based on ride check activity.

We recommend the modified Route 72 alignment between the Airport Blvd./Freedom Centre, and Green Valley/Main be replaced inbound by the Route 71 alignment which stops at Alta Vista Rd./Arthur Rd. For differentiation purposes, this alignment of Route 71 will be referenced as "Deviation L" (vis-a-vis the stop designation in the Santa Cruz METRO schedule guide). Deviation L provides access to local Watsonville schools (i.e., Starlight Elementary School and Cesar E. Chavez Middle School). Currently Deviation L provides four trips to Alta Vista Rd./Arthur Rd. during PM Peak hours (3:35 p.m. to 6:35 p.m.). Riders who typically patronize this stop on Route 71 would instead use Route 72 to travel to the Watsonville Transit Center. The inbound alignment of Route 72 would also provide return access to these stops (in contrast to the current Route 71 Deviation L).

Exhibit 6.25 Revised Route 72 Alignment



7 CAPITAL AND FINANCIAL PLANS

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CHAPTER 7 – CAPITAL AND FINANCIAL PLANS

CAPITAL IMPROVEMENT PROGRAM (CIP)

The Capital Improvement Program (CIP) presents a framework for the ongoing development of the infrastructure necessary for the effective and efficient provision of public transit service throughout the Watsonville study area. This element includes an inventory of all vehicles, amenities, and facilities currently in use (as provided by Santa Cruz METRO), as well as a strategy for the development of additional capital resources across the next twenty years to support transit service enhancements, ultimately leading to an increase in transit ridership and fare revenue.

The CIP is divided into three elements: fleet, bus stops, and facilities. Each plays an important role in the efficient provision of public transit services within the study area. Within each element we outline existing conditions followed by discussion of those steps necessary to support recommended service enhancements as well as reflect to community input arising throughout the transit planning study process.

Revenue Fleet

Effective fleet development and replacement is crucial to the continued success of Santa Cruz METRO. The reliability and safety, as well as cleanliness, of rolling stock plays a vital role in retaining and attracting customers. While ride-dependent customers may exhibit a greater tolerance for an outdated fleet, "choice riders" expect newer vehicles incorporated the latest amenities. Maintenance and proper timing of vehicle replacement is critical in resource management and sustainability of the transit program. The following is a discussion of Santa Cruz METRO's vehicle fleet, which includes local fixed-route, intercity, and ParaCruz services.

The following three tables (Exhibits 7.1, 7.2, and 7.3) present detailed information for each active vehicle in the Santa Cruz METRO fleet. The fleet is composed of 156 vehicles: 84 local fixed-route, 45 Dial-A-Ride/Paratransit, and 27 support/contingency vehicles for maintenance and other purposes.

The Federal Transit Administration recognizes two types of vehicles: active and contingency. According to the FTA, buses may be stockpiled in an inactive contingency fleet in preparation for emergencies. No bus may be stockpiled before it has reached the end of its service life. Buses assigned to a contingency fleet must be properly stored, maintained, and documented within a contingency plan. The plan should be updated as necessary, to support the continuation of a contingency fleet. These vehicles do not factor in the calculation of an operator's vehicle spare ratio.

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Exhibit 7.1 Local Fixed-Route Fleet*

	Vehicle Number	Vehicle Identification Number	Manufacturer	Model	Fuel Type	Purchase Year	Rehabilitation Year	Planned Replacement Year	Vehicle Length (in feet)	*Wheelchair Capacity (unconfirmed)	Use	Notes on Replacements
1	9801	5FYD2SL04WU018344	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
2	9803	5FYD2SL08WU018346	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
3	9806	5FYD2SL03WU018349	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR Spare	purchased with STP/MBUAPCD and CMAQ funds 96-97
4	9807	5FYD2SL0XWU018350	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
5	9808	5FYD2SL01WU018351	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
6	9809	5FYD2SL03WU018352	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR Spare	purchased with STP/MBUAPCD and CMAQ funds 96-97
7	9810	5FYD2SL05WU018353	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR Spare	purchased with STP/MBUAPCD and CMAQ funds 96-97
8	9812	5FYD2SL09WU018355	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
9	9813	5FYD2SL00WU018356	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
10	9815	5FYD2SL04WU018358	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR Spare	purchased with STP/MBUAPCD and CMAQ funds 96-97
11	9816	5FYD2SL06WU018359	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
12	9817	5FYD2SL02WU018360	New Flyer	D35LF	Diesel	1998	-	December-13	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
13	9823	5FYD2LL06WU018366	New Flyer	D40LF	Diesel	1998	-	December-13	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
14	9827	5FYD2LL08WU018370	New Flyer	D40LF	Diesel	1998	-	December-13	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
15	9829	5FYD2LL01WU018372	New Flyer	D40LF	Diesel	1998	-	December-13	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
16	2201	5FYC2LP092U024047	New Flyer	C40LF	CNG	2002	-	2014	40	2	FR	FTA funds/MBUAPCD Moyer
17	2202	5FYC2LP002U024048	New Flyer	C40LF	CNG	2002	-	2014	40	2	FR	FTA funds/MBUAPCD Moyer
18	2203	5FYC2LP022U024049	New Flyer	C40LF	CNG	2002	-	2014	40	2	FR	FTA funds/MBUAPCD Moyer
19	2204	5FYC2LP092U024050	New Flyer	C40LF	CNG	2002	-	2014	40	2	FR	FTA funds/MBUAPCD Moyer
20	2205	5FYC2LP002U024051	New Flyer	C40LF	CNG	2002	-	2014	40	2	FR	FTA funds/MBUAPCD Moyer
21	2206	5FYC2LP022U024052	New Flyer	C40LF	CNG	2002	-	2014	40	2	FR	FTA funds/MBUAPCD Moyer
22	2207	5FYC2LP042U024053	New Flyer	C40LF	CNG	2002	-	2014	40	2	FR	FTA funds/MBUAPCD Moyer
23	2208	5FYC2LP062U024054	New Flyer	C40LF	CNG	2002	-	2014	40	2	FR	FTA funds/MBUAPCD Moyer
24	2210	5FYD2GL082U024705	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
25	2211	5FYD2GL0X2U024706	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
26	2212	5FYD2GL012U024707	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
27	2213	5FYD2GL032U024708	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
28	2214	5FYD2GL052U024709	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
29	2215	5FYD2GL012U024710	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
30	2216	5FYD2GL032U024711	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
31	2217	5FYD2GL052U024712	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
32	2218	5FYD2GL072U024713	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
33	2219	5FYD2GL092U024714	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
34	2220	5FYD2GL002U024715	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
35	2221	5FYD2GL022U024716	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
36	2222	5FYD2GL042U024717	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
37	2223	5FYD2GL062U024718	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
38	2224	5FYD2GL082U024719	New Flyer	D35LFC	CNG	2003	-	2015	35	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
39	2225	5FYD2LL052U024640	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
40	2226	5FYD2LL072U024641	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
41	2227	5FYD2LL092U024642	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP

**Data provided by Santa Cruz METRO. Valid as of January 2012.*

Exhibit 7.1 Local Fixed-Route Fleet (continued)*

	Vehicle Number	Vehicle Identification Number	Manufacturer	Model	Fuel Type	Purchase Year	Rehabilitation Year	Planned Replacement Year	Vehicle Length (in feet)	*Wheelchair Capacity (unconfirmed)	Use	Notes on Replacements
42	2228	5FYD2LL002U024643	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
43	2229	5FYD2LL022U024644	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
44	2230	5FYD2LL042U024645	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
45	2231	5FYD2LL062U024646	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
46	2232	5FYD2LL082U024647	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
47	2233	5FYD2LL0X2U024648	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
48	2234	5FYD2LL012UO24649	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
49	2235	5FYD2LL082U024650	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
50	2236	5FYD2LL0X2U024651	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
51	2237	5FYD2LL012U024652	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
52	2238	5FYD2LL032U024653	New Flyer	D40LFC	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
53	2301	1VHAH3A2536502006	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
54	2302	1VHAH6A2936502141	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
55	2303	1VHAH6A2036502142	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
56	2304	1VHAH6A2236502143	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
57	2305	1VHAH6A2436502144	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
58	2306	1VAHA6A2636502145	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
59	2307	1VHAH6A2836502146	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
60	2308	1VHAH6A2X36502147	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
61	2309	1VHAH6A2136502148	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
62	2310	1VHAH6A2336502149	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
63	2311	1VHAH6A2X36502150	Orion	V	CNG	2003	-	2015	40	2	FR	Repowered STIP/State 05A00048-8/Orig Purchase TCRP
64	2406	1FDXE45S33HB85227	Ford/Goshen	GCII	CNG	2003	-	2015	40	2	FR	FTA 03-0505 funds
65	2601	5FYC4FP076C030758	New Flyer	C40LF	CNG	2006	-	2018	40	2	FR	FTA 03-0505 funds
66	2602	5FYC4FP096C030759	New Flyer	C40LF	CNG	2006	-	2018	40	2	FR	FTA 03-0505 funds
67	2801	5FYC4FB058C034575	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
68	2802	5FYC4FB078C034576	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
69	2803	5FYC4FB098C034577	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
70	2804	5FYC4FB008C034578	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
71	2805	5FYC4FB028C034579	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
72	2806	5FYC4FB028C034372	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
73	2807	5FYC4FB048C034373	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
74	2808	5FYC4FB068C034374	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
75	2809	5FYC4FB088C034375	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
76	2810	5FYC4FB0X8C034376	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
77	2811	5FYC4FB018C034377	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
78	2812	5FYC4FB038C034378	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
79	2813	5FYC4FB058C034379	New Flyer	C40LF	CNG	2008	-	2020	40	2	FR	STIP via PTA overage in 06-07/SCCRTC
80	1001	5FYC5FB02AC038294	New Flyer	C40LF	CNG	2010	-	2022	40	2	FR	VTA PROP 1A
81	1002	5FYC5FB04AC038295	New Flyer	C40LF	CNG	2010	-	2022	40	2	FR	VTA PROP 1A
82	1003	5FYC5FB04AC038296	New Flyer	C40LF	CNG	2010	-	2022	40	2	FR	VTA PROP 1A
83	1004	5FYC5FB04AC038297	New Flyer	C40LF	CNG	2010	-	2022	40	2	FR	VTA PROP 1A
84	1005	5FYC5FB04AC038298	New Flyer	C40LF	CNG	2010	-	2022	40	2	FR	VTA PROP 1A

**Data provided by Santa Cruz METRO. Valid as of 1/17/2012.*

Exhibit 7.2 shows the vehicle fleet assigned primarily for ParaCruz services, composed of 45 active vehicles. The ParaCruz fleet is 100-percent CNG fueled and ranges between 35 and 40 feet in length. All vehicles have two wheelchair tie-down positions. The majority of these vehicles were purchased in 2011 and reflect a useful life of at least 5 years or 150,000 miles.

Exhibit 7.2 ParaCruz Fleet

	Vehicle Number	Vehicle Identification Number	Manufacturer	Model	*Fuel Type (unconfirmed)	Purchase Year	Replacement Year	*Wheelchair Capacity (unconfirmed)	Lift Type	Replace Funding Source	Notes on Replacements
1	104	1GNDX03E71D157031	Chevrolet	VENTURE	CNG	2001	2005	2	Ramp		FTA CA-90-024A-01
2	105	1GNDX03E61D156713	Chevrolet	VENTURE	CNG	2001	2005	2	Ramp		FTA CA-90-024A-01
3	108	1GNDX03E31D162095	Chevrolet	VENTURE	CNG	2001	2005	2	Ramp		FTA CA-90-024A-01
4	110	1GNDX03E11D157428	Chevrolet	VENTURE	CNG	2001	2005	2	Ramp		FTA CA-90-024A-01
5	206	1GNDX03E22D155107	Chevrolet	VENTURE	CNG	2002	2006	2	Ramp		FTA-CA-03-0505
6	207	1GNDX03E32D155195	Chevrolet	VENTURE	CNG	2002	2006	2	Ramp		FTA-CA-03-0505
7	315	1GBDX23E33D264556	Chevrolet	VENTURE	CNG	2003	2007	2	Ramp		FTA-CA-03-0505
8	317	1GBDX23EX3D263288	Chevrolet	VENTURE	CNG	2003	2007	2	Lift		FTA-CA-03-0505
9	319	1GBDX23E33D265786	Chevrolet	VENTURE	CNG	2003	2007	2	Lift		FTA-CA-03-0505
10	1101	1FTDS3EL4BDA00451	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
11	1102	1FTDS3EL5BDA00443	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
12	1103	1FTDS3EL2BDA00447	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
13	1104	1FTDS3EL4BDA00448	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
14	1105	1FTDS3EL6BDA00449	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
15	1106	1FTDS3EL2BDA00450	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
16	1107	1FTDS3EL4BDA00434	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
17	1108	1FTDS3EL6BDA00452	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
18	1109	1FTDS3EL8BDA00453	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
19	1110	1FTDS3ELXBDA00454	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
20	1111	1FTDS3EL1BDA00455	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
21	1112	1FTDS3EL6BDA00435	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
22	1113	1FTDS3EL8BDA00436	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
23	1114	1FTDS3ELXBDA00437	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
24	1115	1FTDS3EL1BDA00438	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
25	1116	1FTDS3EL3BDA00439	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
26	1117	1FTDS3ELXBDA00440	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
27	1118	1FTDS3EL1BDA00441	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
28	1119	1FTDS3EL3BDA00442	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
29	1120	1FTDS3EL7BDA00444	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
30	1121	1FTDS3EL9BDA00445	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Lift		ARRA
31	1122	1FTDS3EL0BDA00446	Ford/El Dorado	E350 -Versa Shuttle	CNG	2011	2016	2	Ramp		ARRA
32	1123	2D4RN4DE7AR462460	Dodge	Amerivans	CNG	2010	2016	2	Ramp		ARRA
33	1124	2D4RN4DE9AR462461	Dodge	Amerivans	CNG	2010	2016	2	Ramp		ARRA
34	1125	2D4RN4DE0AR462462	Dodge	Amerivans	CNG	2010	2016	2	Ramp		ARRA
35	1126	2D4RN4DE2AR462463	Dodge	Amerivans	CNG	2010	2016	2	Ramp		ARRA
36	1127	2D4RN4DE4AR462464	Dodge	Amerivans	CNG	2010	2016	2	Lift		ARRA
37	2401	1FDXE45S43HB85219	Ford/Goshen	GCII	CNG	2003	2010	2	Lift		FTA CA-03-0505
38	2402	1FDXE45S23HB85221	Ford/Goshen	GCII	CNG	2003	2010	2	Lift		FTA CA-03-0505
39	2403	1FDXE45S63HB85240	Ford/Goshen	GCII	CNG	2003	2010	2	Lift		FTA CA-03-0505
40	2404	1FDXE45S33HB85230	Ford/Goshen	GCII	CNG	2003	2010	2	Lift		FTA CA-03-0505
41	2405	1FDXE45S53HB85231	Ford/Goshen	GCII	CNG	2003	2010	2	Lift		FTA CA-03-0505
42	2603	1FDXE45S16DA05819	Ford/Aerotech	Aerotech	CNG	2006	2013	2	Lift		Local Capital Funds
43	2604	1FTSS34L66DA91642	Ford/Braun	TRANSPORTER	CNG	2006	2010	2	Lift		Local Capital Funds
44	2701	1FTSS34L67DB28979	Ford/Braun	TRANSPORTER	CNG	2007	2011	2	Lift		Local Capital Funds
45	2800	1GBE5V1G88F407013	Chevrolet	Aero Elite	CNG	2008	2015	2	Lift		Local Capital Funds

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Exhibit 7.3 shows the Santa Cruz METRO contingency fleet. The fleet is relatively old; more than half of the vehicles were purchased more than twenty years ago and are well beyond their useful life, while the balance are more than ten years old.

Exhibit 7.3 Contingency Fleet

	Vehicle Number	Vehicle Identification Number	Manufacturer	Model	Fuel Type	Purchase Year	Rehabilitation Year	Planned Replacement Year	Vehicle Length (in feet)	*Wheelchair Capacity (unconfirmed)	Use	Notes on Replacements
1	8106	C07KU013474	New Flyer	D40	Diesel	1989	-	September-11	40	2	17 Spare	Spare
2	8107	C09KU013475	New Flyer	D40	Diesel	1989	-	December-12	40	2	17 Spare	Spare
3	9802	5FYD2SL06WU018345	New Flyer	D35LF	Diesel	1998	-	December-12	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
4	9804	5FYD2SL0XWU018347	New Flyer	D35LF	Diesel	1998	-	December-12	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
5	9805	5FYD2SL01WU018348	New Flyer	D35LF	Diesel	1998	-	December-12	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
6	9811	5FYD2SL07WU018354	New Flyer	D35LF	Diesel	1998	-	December-12	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
7	9814	5FYD2SL02WU018357	New Flyer	D35LF	Diesel	1998	-	December-12	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
8	9818	5FYD2SL04WU018361	New Flyer	D35LF	Diesel	1998	-	December-12	35	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
9	9819	5FYD2LL09WU018362	New Flyer	D40LF	Diesel	1998	-	December-12	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
10	9820	5FYD2LL00WU018363	New Flyer	D40LF	Diesel	1998	-	December-12	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
11	9821	5FYD2LL02WU018364	New Flyer	D40LF	Diesel	1998	-	December-12	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
12	9822	5FYD2LL04WU018365	New Flyer	D40LF	Diesel	1998	-	December-12	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
13	9824	5FYD2LL08WU018367	New Flyer	D40LF	Diesel	1998	-	December-12	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
14	9825	5FYD2LL0XWU018368	New Flyer	D40LF	Diesel	1998	-	December-12	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
15	9826	5FYD2LL01WU018369	New Flyer	D40LF	Diesel	1998	-	December-12	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
16	9828	5FYD2LL0XWU018371	New Flyer	D40LF	Diesel	1998	-	December-12	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
17	9830	5FYD2LL03WU018373	New Flyer	D40LF	Diesel	1998	-	December-12	40	2	FR	purchased with STP/MBUAPCD and CMAQ funds 96-97
18	9831	15GCD081XE1080814	Gillig	D40LF	CNG	1984	1998	September-12	40	2	FR	1998 Rehab w/ TCRP funds, extended life 12 years
19	9832	15GCD0814E1080787	Gillig	D40LF	CNG	1984	1998	September-12	40	2	FR	1998 Rehab w/ TCRP funds, extended life 12 years
20	9833	15GCD0813E1080790	Gillig	D40LF	CNG	1984	1998	September-12	40	2	FR	1998 Rehab w/ TCRP funds, extended life 12 years
21	9834	15GCD0817E1080792	Gillig	D40LF	CNG	1984	1998	September-12	40	2	FR	1998 Rehab w/ TCRP funds, extended life 12 years
22	9835	15GCD081DE1080800	Gillig	40TB/96	CNG	1984	1998	September-12	40	2	FR	1998 Rehab w/ TCRP funds, extended life 12 years
23	9836	15GCD0816E1080803	Gillig	40TB/96	CNG	1984	1998	September-12	40	2	FR	1998 Rehab w/ TCRP funds, extended life 12 years
24	9837	15GCD081XE1080805	Gillig	40TB/96	CNG	1984	1998	September-12	40	2	FR	1998 Rehab w/ TCRP funds, extended life 12 years
25	9838	15GCD0816E1080807	Gillig	40TB/96	CNG	1984	1998	September-12	40	2	FR	1998 Rehab w/ TCRP funds, extended life 12 years
26	9839	15GCD0814E1080811	Gillig	40TB/96	CNG	1984	1998	September-12	40	2	FR	1998 Rehab w/ TCRP funds, extended life 12 years
27	9840	15GCD0816E1080812	Gillig	40TB/96	CNG	1984	1998	September-12	40	2	FR	1998 Rehab w/ TCRP funds, extended life 12 years

**Data provided by Santa Cruz METRO. Valid as of 1/17/2012.*

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Exhibit 7.4 shows the peak vehicle requirement and active spare vehicles for each service and route operated by Santa Cruz METRO. In total, Santa Cruz METRO operations within Watsonville require 21 vehicles during peak-hour operations; assigning 4 vehicles as spare. This translates to 0.190 spare vehicles per peak vehicles in operation, or 19-percent spare ratio. Santa Cruz METRO also has a contingency fleet totaling 27 buses for emergencies for all fixed-routes (which according to the FTA is not to be included in the spare ratio calculation). The basic spare ratio calculation is:

$$\textit{Spare Ratio} = \frac{\textit{Total active fleet – Peak vehicle requirement}}{\textit{Peak vehicle requirement}}$$

According to FTA Circular 9030.1C, for grantees with 50 or more fixed-route buses, a reasonable spare ratio should not exceed 20 percent of the vehicles operated in peak service. Peak or max service is defined as the revenue vehicle count during the peak season of the year, on the week and day that maximum service is provided. It excludes atypical days and one-time special events. For fleets with fewer than 50 fixed-route vehicles, judgment must be applied to determine what a reasonable number of spare vehicles would be.

To maintain current *fixed-route* services (i.e., Local and Inter-city bus services) in the Watsonville service area during peak operating times, 20 vehicles are required with four assigned spare vehicles. This equates to a spare ratio of 20.0 percent. This meets the FTA-recommend spare ratio as discussed above.

Recommendations presented in Chapter 6 include the introduction of limited-stop service for Route 71 and an extension in operating hours for Route 91X. These recommendations increase the overall Inter-city peak requirement for Santa Cruz METRO from 16 to 17 vehicles. To accommodate the additional local fixed-route vehicles for Watsonville service as discussed in the Recommendations Chapter, we recommend Santa Cruz METRO replace (at a minimum) the five oldest commuter coaches as each becomes eligible for replacement with low-floor CNG buses. This also assumes Santa Cruz METRO intends to replace vehicles as their useful life expires (see Exhibit 7.5).

Exhibit 7.4 Peak Vehicle Requirement

	Current	Recommended
Watsonville Fixed-Route Peak Vehicles		
Route 72	1	1
Route 74	1	1
Route 75	1	1
Route 79	1	1
Local Fixed-route Peak Fleet Total	4	4
Local Fixed-route Fleet Spares	1	1
Local Fixed-route Spare Ratio	25.0%	25.0%
Inter-city Peak Vehicles		
Route 69A	3	3
Route 69W	3	3
Route 71	6	6
Route 71X	---	1
Route 91X	4	4
Intercity Peak Fleet Total	16	17
Intercity Fleet Spares	3	3
Intercity Spare Ratio	18.8%	17.6%
ParaCruz Peak Vehicles		
Watsonville	1*	1*
Watsonville ParaCruz Peak Fleet Total	1*	1*
ParaCruz has no spare ratio requirements		

*Based on Passenger/VSH of 2.03.

Fleet Replacement Strategy

The fleet replacement strategy presented in Exhibits 7.5, 7.6, and 7.7 was generated based on anticipated service levels. In general, replacement strategies are based primarily on FTA-stipulated "useful life" standards adopted for a specific vehicle type. These standards must be adhered to by transit organizations purchasing vehicles using federal capital funds. Vehicles must be in service for a stipulated period of time (years) and/or number of miles prior to said vehicle's retirement to ensure effective use of federally-funded assets. There are five different service-life categories which vary depending on vehicle specifications and other characteristics (as specified in FTA Circular 9030.1B). Other factors contributing to vehicle expansion or replacement include adjustments in spare ratios, as well as expansions or reductions in service levels. Given the recommendations presented in Chapter 6 reflect modest vehicle requirement changes, implementation of said recommendations would most likely require Santa Cruz METRO to either adjust interlining schedules or increase vehicle assignment to Watsonville services.

Federal Transit Administration (FTA) regulations stipulate large, heavy-duty vehicles—such as those in Santa Cruz METRO's local and inter-city fleet—must be operated in revenue service for at least 12 years (or 500,000 miles, whichever comes first) to be eligible for replacement funding. Santa Cruz METRO replaced a large percentage of its fleet in FY 2002 and FY 2003 (approximately 44 percent in FY 2002 and FY 2003). These vehicles are currently approaching (or have surpassed) FTA useful life requirements at roughly the same time. Santa Cruz METRO is aware of the need to begin replacement of said vehicles and the following replacement strategy identifies a sustainable timeline for replacement. Additional operational expenses may be incurred due to increased maintenance of aging fleet vehicles. We recommend an aggressive replacement schedule for the next five fiscal years in order to replenish the aging fleet and to stagger vehicle replacement, thereby returning to the FTA useful life 12-year cycle. Doing so would ultimately reduce maintenance costs as the average age of the fleet would be reduced. The replacement schedule proposed for these types of vehicles is presented in Exhibits 7.5 and 7.6.

The replacement strategy in Exhibit 7.5 illustrates each active vehicle in Santa Cruz METRO's fixed-route fleet and the year of its planned replacement. Given the majority of the vehicles in this fleet were purchased between 1998 and 2003, vehicle replacement should have occurred in 2010. The following schedule does not reflect procurements for fleet expansion. Details regarding fleet expansion are presented in the Capital Plan.

Exhibit 7.6 illustrates the fleet replacement strategy for ParaCruz vehicles. FTA regulations also stipulate light-duty vehicles, including small bus cutaways and mini-vans—such as the vehicles used primarily for ParaCruz services —be kept in service at least five years (or 150,000 miles, whichever comes first) to be eligible for replacement funding. This fleet is newer than the local fixed-route fleet. Therefore, vehicle replacements would begin in Fiscal Year 2013 and be ordered in such a way as to ensure full fleet replacement every six years as illustrated in Exhibit 7.6.

Exhibit 7.7 illustrates the replacement strategy for contingency vehicles reflecting replacement years provided in Santa Cruz METRO's fleet list. Contingency vehicles may be replaced using retired fixed-route vehicles. Therefore, the replacement schedule closely aligns with the local fixed-route replacement schedule. Additionally, in 2012 two vehicles are scheduled to be retired without replacement, in an effort to reduce maintenance costs of excess vehicles.

Exhibit 7.5 Fixed-Route Local Fleet Replacement Schedule

	Vehicle Number	Model	Fuel Type	Purchase Year	Rehabilitation Year	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
1	9801	D35LF	Diesel	1998	-																					
2	9803	D35LF	Diesel	1998	-																					
3	9806	D35LF	Diesel	1998	-																					
4	9807	D35LF	Diesel	1998	-																					
5	9808	D35LF	Diesel	1998	-																					
6	9809	D35LF	Diesel	1998	-																					
7	9810	D35LF	Diesel	1998	-																					
8	9812	D35LF	Diesel	1998	-																					
9	9813	D35LF	Diesel	1998	-																					
10	9815	D35LF	Diesel	1998	-																					
11	9816	D35LF	Diesel	1998	-																					
12	9817	D35LF	Diesel	1998	-																					
13	9823	D40LF	Diesel	1998	-																					
14	9827	D40LF	Diesel	1998	-																					
15	9829	D40LF	Diesel	1998	-																					
16	2201	C40LF	CNG	2002	-																					
17	2202	C40LF	CNG	2002	-																					
18	2203	C40LF	CNG	2002	-																					
19	2204	C40LF	CNG	2002	-																					
20	2205	C40LF	CNG	2002	-																					
21	2206	C40LF	CNG	2002	-																					
22	2207	C40LF	CNG	2002	-																					
23	2208	C40LF	CNG	2002	-																					
24	2210	D35LFC	CNG	2003	-																					
25	2211	D35LFC	CNG	2003	-																					
26	2212	D35LFC	CNG	2003	-																					
27	2213	D35LFC	CNG	2003	-																					
28	2214	D35LFC	CNG	2003	-																					
29	2215	D35LFC	CNG	2003	-																					
30	2216	D35LFC	CNG	2003	-																					
31	2217	D35LFC	CNG	2003	-																					
32	2218	D35LFC	CNG	2003	-																					
33	2219	D35LFC	CNG	2003	-																					
34	2220	D35LFC	CNG	2003	-																					
35	2221	D35LFC	CNG	2003	-																					
36	2222	D35LFC	CNG	2003	-																					
37	2223	D35LFC	CNG	2003	-																					
38	2224	D35LFC	CNG	2003	-																					
39	2225	D40LFC	CNG	2003	-																					
40	2226	D40LFC	CNG	2003	-																					
41	2227	D40LFC	CNG	2003	-																					

**Data provided by Santa Cruz METRO. Valid as of 1/17/2012.*

Exhibit 7.5 Fixed-Route Local Fleet Replacement Schedule (Continued)

	Vehicle Number	Model	Fuel Type	Purchase Year	Rehabilitation Year	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
42	2228	D40LFC	CNG	2003	-																					
43	2229	D40LFC	CNG	2003	-																					
44	2230	D40LFC	CNG	2003	-																					
45	2231	D40LFC	CNG	2003	-																					
46	2232	D40LFC	CNG	2003	-																					
47	2233	D40LFC	CNG	2003	-																					
48	2234	D40LFC	CNG	2003	-																					
49	2235	D40LFC	CNG	2003	-																					
50	2236	D40LFC	CNG	2003	-																					
51	2237	D40LFC	CNG	2003	-																					
52	2238	D40LFC	CNG	2003	-																					
53	2301	V	CNG	2003	-																					
54	2302	V	CNG	2003	-																					
55	2303	V	CNG	2003	-																					
56	2304	V	CNG	2003	-																					
57	2305	V	CNG	2003	-																					
58	2306	V	CNG	2003	-																					
59	2307	V	CNG	2003	-																					
60	2308	V	CNG	2003	-																					
61	2309	V	CNG	2003	-																					
62	2310	V	CNG	2003	-																					
63	2311	V	CNG	2003	-																					
64	2406	GCII	CNG	2003	-																					
65	2601	C40LF	CNG	2006	-																					
66	2602	C40LF	CNG	2006	-																					
67	2801	C40LF	CNG	2008	-																					
68	2802	C40LF	CNG	2008	-																					
69	2803	C40LF	CNG	2008	-																					
70	2804	C40LF	CNG	2008	-																					
71	2805	C40LF	CNG	2008	-																					
72	2806	C40LF	CNG	2008	-																					
73	2807	C40LF	CNG	2008	-																					
74	2808	C40LF	CNG	2008	-																					
75	2809	C40LF	CNG	2008	-																					
76	2810	C40LF	CNG	2008	-																					
77	2811	C40LF	CNG	2008	-																					
78	2812	C40LF	CNG	2008	-																					
79	2813	C40LF	CNG	2008	-																					
80	1001	C40LF	CNG	2010	-																					
81	1002	C40LF	CNG	2010	-																					
82	1003	C40LF	CNG	2010	-																					
83	1004	C40LF	CNG	2010	-																					
84	1005	C40LF	CNG	2010	-																					

**Data provided by Santa Cruz METRO. Valid as of 1/17/2012.*

Exhibit 7.6 ParaCruz Fleet Replacement Schedule

	Vehicle Number	Model	*Fuel Type (unconfirmed)	Purchase Year	Planned Replacement Year	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
1	104	VENTURE	CNG	2001	2005																					
2	105	VENTURE	CNG	2001	2005																					
3	108	VENTURE	CNG	2001	2005																					
4	110	VENTURE	CNG	2001	2005																					
5	206	VENTURE	CNG	2002	2006																					
6	207	VENTURE	CNG	2002	2006																					
7	315	VENTURE	CNG	2003	2007																					
8	317	VENTURE	CNG	2003	2007																					
9	319	VENTURE	CNG	2003	2007																					
10	1101	E350 -Versa Shuttle	CNG	2011	2016																					
11	1102	E350 -Versa Shuttle	CNG	2011	2016																					
12	1103	E350 -Versa Shuttle	CNG	2011	2016																					
13	1104	E350 -Versa Shuttle	CNG	2011	2016																					
14	1105	E350 -Versa Shuttle	CNG	2011	2016																					
15	1106	E350 -Versa Shuttle	CNG	2011	2016																					
16	1107	E350 -Versa Shuttle	CNG	2011	2016																					
17	1108	E350 -Versa Shuttle	CNG	2011	2016																					
18	1109	E350 -Versa Shuttle	CNG	2011	2016																					
19	1110	E350 -Versa Shuttle	CNG	2011	2016																					
20	1111	E350 -Versa Shuttle	CNG	2011	2016																					
21	1112	E350 -Versa Shuttle	CNG	2011	2016																					
22	1113	E350 -Versa Shuttle	CNG	2011	2016																					
23	1114	E350 -Versa Shuttle	CNG	2011	2016																					
24	1115	E350 -Versa Shuttle	CNG	2011	2016																					
25	1116	E350 -Versa Shuttle	CNG	2011	2016																					
26	1117	E350 -Versa Shuttle	CNG	2011	2016																					
27	1118	E350 -Versa Shuttle	CNG	2011	2016																					
28	1119	E350 -Versa Shuttle	CNG	2011	2016																					
29	1120	E350 -Versa Shuttle	CNG	2011	2016																					
30	1121	E350 -Versa Shuttle	CNG	2011	2016																					
31	1122	E350 -Versa Shuttle	CNG	2011	2016																					
32	1123	Amerivans	CNG	2010	2016																					
33	1124	Amerivans	CNG	2010	2016																					
34	1125	Amerivans	CNG	2010	2016																					
35	1126	Amerivans	CNG	2010	2016																					
36	1127	Amerivans	CNG	2010	2016																					
37	2401	GCII	CNG	2003	2010																					
38	2402	GCII	CNG	2003	2010																					
39	2403	GCII	CNG	2003	2010																					
40	2404	GCII	CNG	2003	2010																					
41	2405	GCII	CNG	2003	2010																					
42	2603	Aerotech	CNG	2006	2013																					
43	2604	TRANSPORTER	CNG	2006	2010																					
44	2701	TRANSPORTER	CNG	2007	2011																					
45	2800	Aero Elite	CNG	2008	2015																					

Data provided by Santa Cruz METRO. Valid as of 1/17/2012.

Exhibit 7.7 Contingency Vehicle Fleet Replacement Schedule

	Vehicle Number	Model	Fuel Type	Purchase Year	Rehabilitation Year	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
1	8106	D40	Diesel	1989	-	Retire																				
2	8107	D40	Diesel	1989	-	Retire																				
3	9802	D35LF	Diesel	1998	-																					
4	9804	D35LF	Diesel	1998	-																					
5	9805	D35LF	Diesel	1998	-																					
6	9811	D35LF	Diesel	1998	-																					
7	9814	D35LF	Diesel	1998	-																					
8	9818	D35LF	Diesel	1998	-																					
9	9819	D40LF	Diesel	1998	-																					
10	9820	D40LF	Diesel	1998	-																					
11	9821	D40LF	Diesel	1998	-																					
12	9822	D40LF	Diesel	1998	-																					
13	9824	D40LF	Diesel	1998	-																					
14	9825	D40LF	Diesel	1998	-																					
15	9826	D40LF	Diesel	1998	-																					
16	9828	D40LF	Diesel	1998	-																					
17	9830	D40LF	Diesel	1998	-																					
18	9831	D40LF	CNG	1984	1998																					
19	9832	D40LF	CNG	1984	1998																					
20	9833	D40LF	CNG	1984	1998																					
21	9834	D40LF	CNG	1984	1998																					
22	9835	40TB/96	CNG	1984	1998																					
23	9836	40TB/96	CNG	1984	1998																					
24	9837	40TB/96	CNG	1984	1998																					
25	9838	40TB/96	CNG	1984	1998																					
26	9839	40TB/96	CNG	1984	1998																					
27	9840	40TB/96	CNG	1984	1998																					

*Contingency vehicles may be replaced with retired Fixed -Route vehicles.

**Data provided by Santa Cruz METRO. Valid as of 1/17/2012.*

Bus Stop Element

This portion of the Capital Improvement Program includes an assessment of current bus stop amenities as well as a strategy for their enhancement in support of the proposed recommendations.

Santa Cruz METRO currently has three different types of bus stops:

1. Stops with sign poles,
2. Stops with benches, and
3. Stops with bus shelters.

Bus shelters can play a key role in the success of a public transit program. Shelters build awareness of the service and can generate advertising revenue, yet first and foremost bus stop shelters contribute toward transit rider safety and comfort. Industry research has confirmed bus shelters can also play a vital role in attracting additional ridership. The absence of adequate amenities at bus stops can deter both potential and existing patrons from using transit given the relative comfort and convenience inherent in a personal vehicle.

Additional details regarding bus stop amenities to be included after the public release of METRO's Bus Stop Improvement Plan scheduled for January 24, 2012.

Facilities Element

In Santa Cruz, Santa Cruz METRO utilizes four main transit/transfer centers: Santa Cruz METRO Center (Pacific Station), Capitola Mall Transit Center, Cavallero Transit Center, and Watsonville Transit Center. The following is a brief discussion of transit center amenities and proposed development/improvements at these facilities.

Santa Cruz METRO Center (Pacific Station). This Transit Center is located on Front Street north of Laurel Street. This location functions as the primary transit center in Santa Cruz, and offers services such as pass sales, photo identity card applications, lost and found, and Greyhound. This facility is located in downtown Santa Cruz with a number of businesses, shops and residential units within walking distance.

Capitola Mall Transit Center. This location is an unstaffed facility, located at the mall itself. It offers connections to Mid-City, Live Oak, and Cabrillo South County routes. Transit passes may be purchased at the nearby Save Mart.

Cavallero Transit Center. This facility is located along Kings Village Road, in front of the Kings Village Shopping Center. This is an unstaffed location and primarily serves Routes 30-35 (Scotts Valley/SLC) and the Amtrak Highway 17 Express. This location also has a commuter park and ride lot. Passes may be purchased at the nearby Epic Adventures Games store.

Watsonville Transit Center. This facility is shared with Greyhound, and is located on the southwest corner of West Lake Boulevard and Rodriguez Street. Services provided here include general information and pass sales, as well as various vendors and a restaurant. This facility is located in downtown Watsonville with a number of businesses, shops and residential units within walking distance.

MetroBase. The MetroBase facility is an operation headquarters proposed to be built in western Santa Cruz near the intersection of River Street and Golf Club Drive. It represents an effort to bring operations, maintenance, and administration into a single centralized location, thereby improving efficiency and supporting increased annual service hours. In December 2011, the agency was awarded $11 million in state Proposition 1B funding for construction of the operations building.

CAPITAL PLAN

The twenty-year Capital Plan (Exhibit 7.9) identifies cost figures for anticipated future improvements or capital purchases, recommendations included within the Capital Improvement Program, as well as improvements/capital purchases recommended to support proposed recommendations.

To support the operational recommendations presented in the Capital Improvement Program, the consultant team prepared a comprehensive fleet replacement strategy which reflects a staggered approach toward replacing vehicles beyond the industry useful life standards.

Twenty-year capital expenses have been developed using the following assumptions:

- Implementation of recommendations would occur in Fiscal Year 2013;
- A two-percent annual inflation rate for vehicle costs and bus stop signage/equipment (baseline unit cost shown under FY 2012);
- Purchases of replacement vehicles would occur during the fiscal year identified in the Capital Improvement Plan (see Exhibits 7.5 and 7.6); and
- Additional capital expenses would be covered through grant funding.

Capital Funding Sources. Exhibit 7.8 presents existing sources for funding Santa Cruz METRO's capital projects/activities. Currently Santa Cruz METRO is seeking additional funding sources to offset these necessary capital expense (fleet, facilities, and other non-operating revenue projects) in the near future.

Exhibit 7.8 Capital Program Funding

Capital Program Funding	FY 2011	FY 2012
Federal Grants	$7,480,265	$7,793,662
State Funds - Detail		
Measure A - VTA	$2,500,000	
PTMISEA (1B)	$891,938	$375,000
State Security Bond Funds (1B)	$820,505	$960,000
Caltrans Section 5311	$267,464	
Statewide Transportation Improvement Program (STIP)	$0	$500,000
Traffic Congestion Relief Program (TCRP)	$617,333	
State Transit Assistance (STA) (Carryover) - Prior Years	$614,500	$442,000
Monterey Bay Unified Air Pollution Control District (MBUAPCD)	-	$160,000
Local Funds - Details		
Local Reserves (Lawsuit & Sakata Proceeds)	-	$25,000
Reserved Retained Earnings	-	$2,507,873
Local Operating Match	-	$134,535
	$13,192,005	$12,898,070

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Exhibit 7.9 Capital Plan (FY 2011 – FY 2022)

	FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		FY 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022	
	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost
Fleet																								
Fixed-Route																								
1984 Diesel Gillig		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
1989 New Flyer		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
1998 New Flyer		$0		$0	13	$6,026,816	12	$5,646,663	5	$2,388,068		$0		$0		$0		$0		$0		$0		$0
2002 New Flyer		$0		$0		$0		$0	8	$3,820,909		$0		$0		$0		$0		$0		$0		$0
2003 New Flyer		$0		$0		$0		$0	10	$4,776,136	10	$4,847,778	10	$4,920,495	11	$5,493,732		$0		$0		$0		$0
2003 Orion V		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
2003 Ford/Goshen		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
2006 New Flyer		$0		$0		$0		$0		$0		$0		$0		$0	2	$1,126,493		$0		$0		$0
2008 New Flyer		$0		$0		$0		$0		$0		$0		$0		$0		$0	7	$4,001,865	6	$3,481,622		$0
2010 New Flyer	5	$2,500,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0	5	$2,944,872
ParaCruz										$0														$0
2001 Chevrolet Venture		$0		$0	4	$309,068		$0		$0		$0		$0		$0	4	$337,948		$0		$0		$0
2002 Chevrolet Venture		$0		$0		$0	2	$156,852		$0		$0		$0		$0		$0	2	$171,508		$0		$0
2003 Chevrolet Venture		$0		$0		$0	3	$235,278		$0		$0		$0		$0		$0	3	$257,263		$0		$0
2003 Ford/Goshen GCII		$0		$0		$0		$0	5	$355,557		$0		$0		$0		$0		$0	5	$388,781		$0
2006 Ford/Aerotech		$0		$0		$0	1	$78,426		$0		$0		$0		$0		$0	1	$85,754		$0		$0
2006 Ford/Braun Transporter		$0		$0		$0		$0	1	$79,602		$0		$0		$0		$0		$0	1	$87,041		$0
2007 Ford/Braun Transporter		$0		$0		$0		$0	1	$79,602		$0		$0		$0		$0		$0	1	$87,041		$0
2008 Chevrolet Aero Elite		$0		$0		$0		$0	1	$79,602		$0		$0		$0		$0		$0	1	$87,041		$0
2010 Dodge Amerivans	22	$1,425,926		$975,000		$0		$0		$0		$0		$0	5	$359,672		$0		$0		$0		$0
2011 Ford/El Dorado E350 - Versa Shuttle	5	$324,074				$0		$0		$0	10	$698,239	10	$708,713	2	$143,869		$0		$0		$0	10	$763,485
Other Fleet Purchases																								
AVL/APC		$13,953		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Replace Highway 17 - WiFi (23 Units)		$7,609		$60,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Smart Card Farebox System (ARRA) (5311)		$2,362,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Land Mobile Radio Project (OHS-1B)		$195,000		$790,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
2nd CNG Tank (STIC, MBUAPCD, REC. RET. EARN)		$1,561,070		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Subtotal	32	$8,389,632	0	$1,825,000	17	$6,335,884	18	$6,117,218	31	$11,579,476	20	$5,546,017	20	$5,629,208	18	$5,997,273	6	$1,464,440	13	$4,516,390	14	$4,131,525	15	$3,708,358
Bus Stops and Equipment																								
MTC Lane Four Shelter Replacement		$75,000		$75,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Shelters		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Benches		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Trash Receptacles		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Subtotal	0	$75,000	0	$75,000	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Facilities																								
MetroBase Maintenance Facility (5309)/PTMISEA		$2,000,000		$400,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Purchase of 425 Front Street (FTA)/(TCRP)		$2,075,000		$40,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Facilities Video Surveillance Project (OHS-1B)		$185,000		$150,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Repair, Reseal, Restripe (Sinkholes) - Operations		$170,000		$10,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Emergency Generator Relocation (OHS-1B)		-		$20,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Operatings Bldg. Repairs (RES. RET. EARN.)		-		$200,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
MetroCenter Repairs (RES. RET. EARN.)		-		$200,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Automatic Refrigerant Recovery Recycling & Re-Charaging Unit		-		$4,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Subtotal	0	$4,430,000	0	$1,024,000	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Information Technology																								
Replace Fleet & Facilities Maintenance Software (STA)		$170,000		$115,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
HR Software Upgrade (STA)		$181,500		$125,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Trapeze Pass Customer Certification Software (STA)		$5,000		-		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Automated Purchasing System Software (STA)		$84,000		$40,000		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Transit Management Info Technology (ARRA)		$1,165,000		-		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Subtotal	0	$1,605,500	0	$280,000	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Total	32	$14,500,132	0	$3,204,000	17	$6,335,884	18	$6,117,218	31	$11,579,476	20	$5,546,017	20	$5,629,208	18	$5,997,273	6	$1,464,440	13	$4,516,390	14	$4,131,525	15	$3,708,358

Replacement schedule includes fixed-route active and contingency vehicles. Source: Santa Cruz METRO

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Exhibit 7.10 Capital Plan (FY 2023 – FY 2032) (Continued)

	FY 2023		FY 2024		FY 2025		FY 2026		FY 2027		FY 2028		FY 2029		FY 2030		FY 2031		FY 2032	
	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost	Number	Total Cost
Fixed-Route																				
1984 Diesel Gillig		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
1989 New Flyer		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
1998 New Flyer		$0		$0	8	$4,434,321	7	$3,938,231		$0		$0		$0		$0		$0		$0
2002 New Flyer		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
2003 New Flyer		$0		$0		$0		$0	8	$4,568,348		$0		$0		$0		$0		$0
2003 Orion V		$0		$0		$0		$0	10	$5,710,435	10	$5,796,091	10	$5,883,033		$0		$0		$0
2003 Ford/Goshen		$0		$0		$0		$0		$0		$0		$0	11	$6,568,406		$0		$0
2006 New Flyer		$0		$0		$0		$0		$0		$0		$0		$0	2	$1,346,855		$0
2008 New Flyer		$0		$0		$0		$0		$0		$0		$0		$0		$0	7	$4,784,702
2010 New Flyer		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
ParaCruz		$0		$0		$0														
2001 Chevrolet Venture		$0		$0	4	$369,527		$0		$0		$0		$0		$0	4	$404,057		$0
2002 Chevrolet Venture		$0		$0		$0	2	$187,535		$0		$0		$0		$0		$0	2	$205,059
2003 Chevrolet Venture		$0		$0		$0	3	$281,302		$0		$0		$0		$0		$0	3	$307,588
2003 Ford/Goshen GCII		$0		$0		$0		$0	5	$425,110		$0		$0		$0		$0		$0
2006 Ford/Aerotech		$0		$0		$0	1	$93,767		$0		$0		$0		$0		$0	1	$102,529
2006 Ford/Braun Transporter		$0		$0		$0		$0	1	$95,174		$0		$0		$0		$0		$0
2007 Ford/Braun Transporter		$0		$0		$0		$0	1	$95,174		$0		$0		$0		$0		$0
2008 Chevrolet Aero Elite		$0		$0		$0		$0	1	$95,174		$0		$0		$0		$0		$0
2010 Dodge Amerivans		$0	5	$393,281		$0		$0		$0		$0		$0	5	$430,030		$0		$0
2011 Ford/El Dorado E350 - Versa Shuttle	10	$774,938	2	$157,312		$0		$0		$0	10	$834,828	10	$847,350	2	$172,012		$0		$0
Other Fleet Purchases																				
AVL/APC		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Replace Highway 17 - WiFi (23 Units)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Smart Card Farebox System (ARRA) (5311)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Land Mobile Radio Project (OHS-1B)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
2nd CNG Tank (STIC, MBUAPCD, REC. RET. EARN)																				
Subtotal	10	$774,938	7	$550,593	12	$4,803,847	13	$4,500,835	26	$10,989,415	20	$6,630,919	20	$6,730,383	18	$7,170,449	6	$1,750,912	13	$5,297,349
Bus Stops and Equipment																				
MTC Lane Four Shelter Replacement		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Shelters		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Benches		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Trash Receptacles		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Subtotal	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Facilities																				
MetroBase Maintenance Facility (5309)/PTMISEA		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Purchase of 425 Front Street (FTA)/(TCRP)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Facilities Video Surveillance Project (OHS-1B)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Repair, Reseal, Restripe (Sinkholes) - Operations		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Emergency Generator Relocation (OHS-1B)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Operatings Bldg. Repairs (RES. RET. EARN.)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
MetroCenter Repairs (RES. RET. EARN.)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Automatic Refrigerant Recovery Recycling & Re-Charaging Unit		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Subtotal	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
Information Technology																				
Replace Fleet & Facilities Maintenance Software (STA)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
HR Software Upgrade (STA)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Trapeze Pass Customer Certification Software (STA)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Automated Purchasing System Software (STA)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Transit Management Info. Technology (ARRA)		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0
Subtotal	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0
	10	$774,938	7	$550,593	12	$4,803,847	13	$4,500,835	26	$10,989,415	20	$6,630,919	20	$6,730,383	18	$7,170,449	6	$1,750,912	13	$5,297,349

Replacement schedule includes fixed-route active and contingency vehicles. Source: Santa Cruz METRO

FINANCIAL PLAN

The Financial Plan forecasts those expenditures needed to implement the recommendations included within the Recommendations Chapter (Chapter 6). Such changes vary in scope from schedule amendments to route alignment modifications. Therefore, they may vary in cost significantly. The Financial Plan also includes rider fare projections, anticipated operating cost for each recommendation, as well as the estimated farebox recovery ratio by mode.

Financial Plan Assumptions

Twenty-year operating expenses have been developed using the following assumptions:

1. All recommendations outlined in the Recommendations Chapter (Chapter 6) would be implemented starting in FY 2013.
2. Purchases of replacement vehicles would occur during the fiscal year identified in the Capital Plan.
3. Other capital purchases would occur during the fiscal year identified in the Capital Plan.
4. Operational costs are based on agency-provided data (i.e., Financial Budget reports (FY 2011 and FY 2012), TDA Fiscal Audit, and other financial documents).
5. The rate of inflation is forecast at no greater than three percent per annum.
6. Fixed-route ridership and fare revenue are projected to increase four percent/annum.
7. ParaCruz ridership and fare revenue are projected to increase four percent/annum.
8. Highway 17 ridership and fare revenue are projected to increase one percent/annum.
9. In September 2011, the agency implemented a 33-percent fare increase.
10. Non-Operating and One-Time Revenues are required to balance the agency's operating budget across the 20-year planning horizon (figures unknown for outlying years).

The table below summarizes the effect implementing the listed recommendations (see Chapter 6) would have on the fixed-route services. No recommendations have been proposed for the ParaCruz services. Therefore, discussion of impact on this service is not included in the following table. The proposed recommendations increase operating cost by $580,274. This is largely the result of the addition of six trips on Route 71 and increases to Vehicle Service Hours, which are anticipated to result in increases in both fare revenue and ridership. Vehicle Service Hour calculations are based on agency-provided data.

Exhibit 7.11 Summary of Recommendations Impact and Cost

Recommendations	Current Service Hours		Recommendations Service Hours		Difference		Cost/VSH	Annual Operating Cost		
	Weekly	Annually	Weekly	Annually	Weekly	Annual		Current	Recommendations	Difference
Fixed-Route										
Route 69A	226	11,509	238	12,142	12	633	$145.25	$1,671,642	$1,763,621	$91,980
Route 69W	229	11,668	241	12,310	13	642		$1,694,754	$1,787,968	$93,214
Route 71	788	40,173	811	41,363	23	1,190		$5,835,104	$6,007,951	$172,848
Route 91X	72	3,696	77	3,909	4	213		$536,869	$567,734	$30,866
Route 72	81	4,128	86	4,366	5	238		$599,595	$634,164	$34,570
Route 74	61	3,102	64	3,281	4	179		$450,579	$476,506	$25,927
Route 75	105	5,331	113	5,764	9	434		$774,278	$837,244	$62,966
Route 79	34	1,748	43	2,216	9	468		$253,952	$321,857	$67,904
Total	1,595	81,355	1,674	85,350	78	3,995		$11,816,772	$12,397,045	$580,274

Note: Operating Cost/VSH reflects calculations for Watsonville Routes 69A, 69W, 71, 91X, 72, 74, 75, and 79 only. Operating costs by route were calculated based on VSH percent by route multiplied by Operating Cost/VSH.

In September 2011, a fare increase was implemented impacting adult fixed-route and ParaCruz one-way fares. Fare changes include a 33.3-percent increase to one-way fares and day passes for all fare types, as well as an increase to the 31-day pass fares. It is not uncommon for a transit operator to experience ridership loss during the first year a fare increase is implemented. This negative ridership impact can be calculated by the fare elasticity formula which accounts a 0.4-percent decrease in ridership for every one-percent increase in fare. This is applicable towards fare decreases as well, resulting in a potential increase in ridership.[3] We anticipate ridership to continue to increase albeit modestly in spite of the recent fare increase.

FY 2011 and FY 2012 represent data received from Santa Cruz METRO's Financial Budgets for FY 2011 and FY 2012. Proposed implementation year for all recommendations is FY 2013. As shown in Exhibit 7.11 system fixed-route service will undergo a $580,774 increase in operating cost arising from implementation of those recommendations outlined in the Recommendations Chapter. Special Transit or Contracts, as presented in the final operating budget, are included in Fare Revenue estimates. Special Transit or Contracts is the line item in the budget document which includes the following revenue from agreements: Cabrillo College, Pacific Shores, UCSC, Santa Cruz County, City of Santa Cruz, and Seaside Company. These service modifications will result in a slight decrease in Farebox Recovery. However, we anticipate ridership and fare revenue would continue to increase in out-years.

[3] McCollom, Brian E. and Richard H. Pratt. Transportation Research Board. TCRP Report 95: Chapter 12, Transit Pricing and Fares, Traveler Response to Transportation System Changes. (Washington D.C., 2004)

Exhibit 7.12 Impact on Farebox Recovery (System Fixed-Route)

	Cost	Passengers	Fare Revenue	Farebox Recovery
FY 2011	$28,142,307	5,446,104	$6,747,031	24.0%
FY 2012	$28,986,576	5,606,688	$7,252,228	25.0%
FY 2013	$30,436,447	5,887,127	$7,358,909	24.2%
FY 2014	$31,349,541	6,063,741	$7,653,265	24.4%
FY 2015	$32,290,027	6,245,653	$7,959,396	24.6%
FY 2016	$33,258,728	6,433,023	$8,277,772	24.9%
FY 2017	$34,256,490	6,626,013	$8,608,883	25.1%
FY 2018	$35,284,184	6,824,794	$8,953,238	25.4%
FY 2019	$36,342,710	7,029,538	$9,311,367	25.6%
FY 2020	$37,432,991	7,240,424	$9,683,822	25.9%
FY 2021	$38,555,981	7,457,637	$10,071,175	26.1%
FY 2022	$39,712,660	7,681,366	$10,474,022	26.4%
FY 2023	$40,904,040	7,911,807	$10,892,983	26.6%
FY 2024	$42,131,161	8,149,161	$11,328,702	26.9%
FY 2025	$43,395,096	8,393,636	$11,781,850	27.2%
FY 2026	$44,696,949	8,645,445	$12,253,124	27.4%
FY 2027	$46,037,857	8,904,808	$12,743,249	27.7%
FY 2028	$47,418,993	9,171,952	$13,252,979	27.9%
FY 2029	$48,841,563	9,447,111	$13,783,098	28.2%
FY 2030	$50,306,810	9,730,524	$14,334,422	28.5%
FY 2031	$51,816,014	10,022,440	$14,907,799	28.8%
FY 2032	$53,370,494	10,323,113	$15,504,111	29.0%

Special Transit/Contract Service Operating Costs are included in total Fare Revenue.

Source: Santa Cruz METRO Financial Budget for FY 2012.

No changes have been proposed for ParaCruz services. Projections are based on agency-provided data. Current farebox recovery trends (across FY 2011 and FY 2012) indicate a gradual increase in Farebox Recovery. Fare Revenue is projected to increase in FY 2012 in part due to the adjustment of one-way fares from $3.00 to $4.00.

Exhibit 7.13 Impact on Farebox Recovery (ParaCruz)

	Cost	Passengers	Fare Revenue	Farebox Recovery
FY 2011	$4,434,489	94,510	$239,851	5.4%
FY 2012	$4,567,524	96,400	$251,843	5.5%
FY 2013	$4,704,549	100,256	$261,917	5.6%
FY 2014	$4,845,686	104,266	$272,393	5.6%
FY 2015	$4,991,056	108,437	$283,289	5.7%
FY 2016	$5,140,788	112,775	$294,621	5.7%
FY 2017	$5,295,012	117,286	$306,406	5.8%
FY 2018	$5,453,862	121,977	$318,662	5.8%
FY 2019	$5,617,478	126,856	$331,408	5.9%
FY 2020	$5,786,002	131,930	$344,665	6.0%
FY 2021	$5,959,582	137,208	$358,451	6.0%
FY 2022	$6,138,370	142,696	$372,789	6.1%
FY 2023	$6,322,521	148,404	$387,701	6.1%
FY 2024	$6,512,197	154,340	$403,209	6.2%
FY 2025	$6,707,562	160,513	$419,337	6.3%
FY 2026	$6,908,789	166,934	$436,111	6.3%
FY 2027	$7,116,053	173,611	$453,555	6.4%
FY 2028	$7,329,535	180,556	$471,697	6.4%
FY 2029	$7,549,421	187,778	$490,565	6.5%
FY 2030	$7,775,903	195,289	$510,188	6.6%
FY 2031	$8,009,180	203,101	$530,595	6.6%
FY 2032	$8,249,456	211,225	$551,819	6.7%

Source: Santa Cruz METRO

All revenue sources are listed at the top of Exhibit 7.13. Revenue sources include rider fares, federal operating grants, federal capital grants, and transfers to reserves among other revenue resources. As presented in Exhibit 7.13, in the event forecast revenue exceeds cost in a given year, the difference is included within the "Carryover" line item within the following year. FY 2011 data represents Projected Actual Data figures, while FY 2012 reflects Final Budget figures included in Santa Cruz METRO's FY 2012 Final Budget adopted June 2011.

Currently, Santa Cruz METRO has a greater than $5.4 million deficit requiring the use of One-Time and Non-Operating Revenues to balance its operating budget. As discussed in the FY 2012 Final Budget, Santa Cruz METRO staff has recommended using several funding sources to mitigate the operating deficit. Given the volatility of the current transit funding environment, there is no guarantee funding sources such as State Transit Assistance (STA), Small Transit Intensive Cities (STIC), or other historic grant sources will be available in future years. However, as shown in Exhibit 7.13, these funding sources will be necessary to close the gap between operating revenues and expenditures. All operational and non-operational expenses are listed at the bottom of Exhibit 7.13. Capital Outlay (i.e., facilities, bus stop improvements, and fleet) are located in Exhibit 7.13. Factors contributing to increased operating cost include additional trips and increase in Vehicle Service Hours to multiple routes in order to enhance fixed-route on-time performance.

Exhibit 7.14 Financial Plan FY 2011 – FY 2032

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
Revenues																						
Rider Fares																						
Fixed-Route (includes Special Transit Fares/Contracts)	$6,747,031	$7,252,228	$7,358,909	$7,653,265	$7,959,396	$8,277,772	$8,608,883	$8,953,238	$9,311,367	$9,683,822	$10,071,175	$10,474,022	$10,892,983	$11,328,702	$11,781,850	$12,253,124	$12,743,249	$13,252,979	$13,783,098	$14,334,422	$14,907,799	$15,504,111
Santa Cruz County ParaCruz	$239,851	$251,843	$261,917	$272,393	$283,289	$294,621	$306,406	$318,662	$331,408	$344,665	$344,665	$358,451	$372,789	$387,701	$403,209	$419,337	$436,111	$453,555	$471,697	$490,565	$510,188	$530,595
Highway 17	$1,099,854	$1,110,852	$1,121,961	$1,133,180	$1,144,512	$1,155,957	$1,167,517	$1,179,192	$1,190,984	$1,202,894	$1,214,922	$1,227,072	$1,239,342	$1,251,736	$1,264,253	$1,276,896	$1,289,665	$1,302,561	$1,315,587	$1,328,743	$1,342,030	$1,355,451
Rider Fares Total	*$8,086,736*	*$8,614,923*	*$8,742,786*	*$9,058,839*	*$9,387,197*	*$9,728,349*	*$10,082,805*	*$10,451,091*	*$10,833,759*	*$11,231,380*	*$11,630,762*	*$12,059,545*	*$12,505,114*	*$12,968,139*	*$13,449,312*	*$13,949,357*	*$14,469,025*	*$15,009,096*	*$15,570,383*	*$16,153,730*	*$16,760,017*	*$17,390,157*
Highway 17 Payments	$411,732	$415,849	$420,007	$424,208	$428,450	$432,734	$437,061	$441,432	$445,846	$450,305	$454,808	$459,356	$463,950	$468,589	$473,275	$478,008	$482,788	$487,616	$492,492	$497,417	$502,391	$507,415
Commissions	$4,375	$5,600	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,500	$5,501
Advertising Income	$219,077	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000
Rent Income - SC Pacific Station	$84,670	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000	$85,000
Rent Income - Watsonville Transit Center	$41,306	$40,000	$40,800	$41,616	$42,448	$43,297	$44,163	$45,046	$45,947	$46,866	$47,804	$48,760	$49,735	$50,730	$51,744	$52,779	$53,835	$54,911	$56,010	$57,130	$58,272	$59,438
Rent Income - General	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Income	$137,181	$120,000	$121,200	$122,412	$123,636	$124,872	$126,121	$127,382	$128,656	$129,943	$131,242	$132,555	$133,880	$135,219	$136,571	$137,937	$139,316	$140,709	$142,117	$143,538	$144,973	$146,423
Other Non-Transportation Revenue	$18,107	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100	$18,100
Sales Tax (1/2 cent)	$14,600,000	$15,038,000	$15,338,760	$15,645,535	$15,958,446	$16,277,615	$16,603,167	$16,935,230	$17,273,935	$17,619,414	$17,971,802	$18,331,238	$18,697,863	$19,071,820	$19,453,257	$19,842,322	$20,239,168	$20,643,951	$21,056,830	$21,477,967	$21,907,526	$22,345,677
Transportation Development Act (TDA) Funds	$5,001,737	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963	$5,244,963
FTA Section 5307 - Op Assistance	$3,696,155	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070	$3,707,070
Prop 84 - TOD	-	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000	$10,000
FTA Section 5311 - Rural Op Assistance	$156,618	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312	$156,312
AMBAG Funding	$40,600	$154,400	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,001
Revenue Subtotal	***$24,411,558***	***$25,195,294***	***$25,397,712***	***$25,710,716***	***$26,029,925***	***$26,355,464***	***$26,687,458***	***$27,026,036***	***$27,371,330***	***$27,723,473***	***$28,082,601***	***$28,448,854***	***$28,822,373***	***$29,203,303***	***$29,591,792***	***$29,987,990***	***$30,392,052***	***$30,804,133***	***$31,224,393***	***$31,652,996***	***$32,090,108***	***$32,535,899***
One-time Revenues																						
ARRA Operating	$270,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Small Transit Intensive Cities (STIC) Funds	$1,202,159	$1,020,417	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Transit Assistance (STA) Funds	$1,991,905	$786,266	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fuel Tax Credit	$776,438	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000
One-time Revenue Total	***$4,240,502***	***$2,056,683***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***	***$250,000***
Carryover	-	*$1,762,862*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer from Insurance Res-Legal Settlement	*$30,897*	*$455,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,000*	*$150,001*
Transfer (to)/from Reserves	*$111,345*	*$75,631*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unrealized Revenue	*$398,280*	*$1,101,062*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue	***$37,279,318***	***$39,261,455***	***$34,540,499***	***$35,169,555***	***$35,817,122***	***$36,483,813***	***$37,170,263***	***$37,877,128***	***$38,605,089***	***$39,354,853***	***$40,113,363***	***$40,908,398***	***$41,727,487***	***$42,571,442***	***$43,441,104***	***$44,337,347***	***$45,261,076***	***$46,213,229***	***$47,194,776***	***$48,206,727***	***$49,250,125***	***$50,326,057***
Expenditures																						
Labor	$16,346,370	$15,824,273	$16,299,001	$16,787,971	$17,291,610	$17,810,359	$18,344,669	$18,895,010	$19,461,860	$20,045,716	$20,647,087	$21,266,500	$21,904,495	$22,561,630	$23,238,478	$23,935,633	$24,653,702	$25,393,313	$26,155,112	$26,939,766	$27,747,958	$28,580,397
Fringe Benefits	$12,770,259	$14,939,402	$15,387,584	$15,849,212	$16,324,688	$16,814,429	$17,318,861	$17,838,427	$18,373,580	$18,924,787	$19,492,531	$20,077,307	$20,679,626	$21,300,015	$21,939,015	$22,597,186	$23,275,102	$23,973,355	$24,692,555	$25,433,332	$26,196,332	$26,982,222
Services	$2,397,454	$2,532,082	$2,582,724	$2,634,378	$2,687,066	$2,740,807	$2,795,623	$2,851,536	$2,908,566	$2,966,738	$3,026,072	$3,086,594	$3,148,326	$3,211,292	$3,275,518	$3,341,028	$3,407,849	$3,476,006	$3,545,526	$3,616,437	$3,688,765	$3,762,541
Mobile Materials & Supplies	$3,114,100	$3,210,000	$3,274,200	$3,339,684	$3,406,478	$3,474,607	$3,544,099	$3,614,981	$3,687,281	$3,761,027	$3,836,247	$3,912,972	$3,991,232	$4,071,056	$4,152,477	$4,235,527	$4,320,237	$4,406,642	$4,494,775	$4,584,670	$4,676,364	$4,769,891
Other Materials & Supplies	$351,104	$295,101	$298,052	$301,033	$304,043	$307,083	$310,154	$313,256	$316,388	$319,552	$322,748	$325,975	$329,235	$332,527	$335,852	$339,211	$342,603	$346,029	$349,489	$352,984	$356,514	$360,079
Utilities	$544,000	$535,000	$540,350	$545,754	$551,211	$556,723	$562,290	$567,913	$573,592	$579,328	$585,122	$590,973	$596,883	$602,851	$608,880	$614,969	$621,118	$627,330	$633,603	$639,939	$646,338	$652,802
Casuality & Liability	$791,050	$1,096,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,050	$791,051
Taxes	$67,000	$53,300	$53,513	$53,727	$53,942	$54,158	$54,375	$54,592	$54,810	$55,030	$55,250	$55,471	$55,693	$55,915	$56,139	$56,364	$56,589	$56,815	$57,043	$57,271	$57,500	$57,730
Purchased Transportation	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,001
Miscellaneous Expenses	$266,281	$283,200	$288,864	$294,641	$300,534	$306,545	$312,676	$318,929	$325,308	$331,814	$338,450	$345,219	$352,124	$359,166	$366,349	$373,676	$381,150	$388,773	$396,548	$404,479	$412,569	$420,820
Leases & Rentals	$381,700	$243,047	$245,477	$247,932	$250,412	$252,916	$255,445	$257,999	$260,579	$263,185	$265,817	$268,475	$271,160	$273,871	$276,610	$279,376	$282,170	$284,992	$287,842	$290,720	$293,627	$296,564
Total Expenditures	**$37,279,318**	**$39,261,455**	**$40,010,816**	**$41,095,382**	**$42,211,033**	**$43,358,676**	**$44,539,243**	**$45,753,693**	**$47,003,015**	**$48,288,226**	**$49,610,374**	**$50,970,536**	**$52,369,822**	**$53,809,374**	**$55,290,370**	**$56,814,020**	**$58,381,570**	**$59,994,304**	**$61,653,543**	**$63,360,648**	**$65,117,018**	**$66,924,098**
Surplus/(Deficit)	$0	$0	($5,470,317)	($5,925,827)	($6,393,911)	($6,874,863)	($7,368,980)	($7,876,565)	($8,397,926)	($8,933,373)	($9,497,011)	($10,062,137)	($10,642,335)	($11,237,933)	($11,849,266)	($12,476,672)	($13,120,494)	($13,781,076)	($14,458,767)	($15,153,921)	($15,866,893)	($16,598,040)

Data taken from SC METRO Financial Budget for FY 2011 and FY 2012.

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8 MARKETING RECOMMENDATIONS

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CHAPTER 8 – MARKETING RECOMMENDATIONS

The chapter outlines marketing strategies intended to support implementation of the service/operational recommendations presented in the Service Recommendations chapter. The marketing strategies outlined herein focus short and mid-range recommendations and has a 12- to 18-month horizon.

CURRENT MARKETING

Santa Cruz METRO currently employs two primary marketing tools: its website (www.scmtd.com) and its quarterly bus book, *Headways*. While neither are specifically focused toward the Watsonville service area, both contain Watsonville-specific as well as system-wide service information.

Goals and Objectives

Goals

There are two primary goals guiding marketing for Santa Cruz METRO, especially as it pertains to Watsonville. These are:

- Improve mobility for persons residing and working in Watsonville, and
- Ensure reasonable accessibility to public transit for persons residing and working in Watsonville.

Objectives

To that end, using the aforementioned goals as a guide, we have identified the following specific marketing objectives.

- Increase the availability of service information.
- Increase the reach and scope of service information.
- Support federal Title VI guidelines by producing and distributing alternate-language and/or pictograph-based collateral.
- Ensure community-wide notification regarding service changes.

These marketing objectives represent specific, quantifiable actions that can be employed to achieve the broad-based goals outlined above. They are supported by the marketing strategies discussed on the following pages.

Marketing Strategy 1: Service Information

Headways Bus Rider's Guide. The primary printed information resource for Santa Cruz METRO is its bus book, which features service information as well as route-specific maps and timetables for all Santa Cruz METRO routes in both English and Spanish. While *Headways* is an outstanding resource, should Santa Cruz METRO prefer to continue publication of its bus book, should funding sources allow, we recommend reducing the frequency of service changes to twice annually so as to extend the "shelf life" of the bus book and increase its availability throughout the community.

Example: The Ventura County Transportation Commission (VCTC), which operates the VISTA inter-community bus service, formerly published time schedules for all of its routes in a single brochure. A small change to any route necessitated reprinting of every brochure. In 2010, VCTC transitioned to a series of individual route brochures. Doing so allows the agency to reprint only those routes undergoing changes, which proved especially useful when downtown roadwork led to the relocation of a bus stop at a time when no other service changes were being made.

Route naming protocol. Santa Cruz METRO's current route naming protocol has led to confusion due to multiple routes with the same number, distinguished only by a different letter. In Watsonville, this primarily refers to Routes 69A and 69W, which serve generally the same alignment but feature different stops. We recommend assigning a unique number or name designator to all Santa Cruz METRO routes in order to clearly distinguish between similar routes.

Bus book distribution *Headways*/availability. Santa Cruz METRO *Headways* should be stocked on all vehicles, as well as at high-traffic locations throughout the service area. Potential outlets include rail/transit stations, senior centers, libraries, community centers, city government buildings, etc. We recommend Santa Cruz METRO compile a database of all locations currently displaying marketing collateral (including relevant contact information) as well as locations at which it intends to distribute materials. Periodic contact with distribution points to ensure an adequate stock of brochures should be undertaken. This periodic contact should, at a minimum, take place whenever a new/revised version of the service information collateral is published.

Example: The City of Burbank maintains an active brochure distribution program for its transit program, Burbank Bus. Each brochure distribution location is contacted at least twice annually to assess stock of materials and resupply as needed. When service changes take place, new materials are delivered to each location in order to ensure the information being distributed is current. This also allows the city to identify where information is typically being distributed.

Onboard notices regarding service changes. We recommend continuing the use of car cards to communicate service changes to Santa Cruz METRO customers. The messages should clearly explain changes in a friendly and positive manner in English and Spanish. Car cards can also be used to promote the Santa Cruz METRO website, let customers know where they can obtain service information/schedules, and notify customers of upcoming public involvement opportunities.

Example: Santa Ynez Valley Transit (SYVT) uses onboard notices ("car cards") to notify customers about upcoming events, schedule changes, and policy or program changes. This allows SYVT to effectively communicate with its customers in a very cost-effective manner.

Exhibit 8.1 Sample Car Cards (SYVT)

Example: Livermore Amador Valley Transit Authority (LAVTA) recently employed car cards to promote its redesigned website and special holiday shopping promotion.

Exhibit 8.2 Sample Car Cards (LAVTA)

Federal Title VI Compliance: According to the census and other demographic resources, the primary language other than English spoken in Watsonville is Spanish. While Spanish material is provided both in *Headways* and online, we recommend Santa Cruz METRO coordinate with leaders from the Costanoan Ohlone Rumsen-Mutsun Tribe and migrant worker organizations to determine if there are language barriers impeding use of transit in Watsonville. If so, specific strategies should be defined, which could include providing some collateral in Mixteco (the primary language of many immigrants from Oaxaca) or development of parallel pictogram-based materials .

Marketing Strategy 2: Online Resources

Website maintenance. The current Santa Cruz METRO website is well-designed, easy to navigate, and contains news, service information, organization information, and trip planning capabilities in both English and Spanish. It is important to keep the website up to date with news, schedule adjustments, new features, etc. In addition, the site should be independently evaluated once or twice a year to ensure it is still working correctly and meeting the needs of the community.

Website functionality in Spanish. While the Spanish language site fully mirrors the English site, the Google Transit feature redirects to the Google site, which is available only in English. This limits the use of this feature for customers without proficiency in English. While Santa Cruz METRO is not responsible for what is available on the Google Transit website, the agency may wish to include a notice on the Spanish language home page indicating this and directing customers to call the bilingual customer service line for trip planning assistance in Spanish.

Other features appearing on the Spanish language site that ultimately connect to a page in English include the following:

- Online shopping feature and My Cart/*Mi Compra,*
- Email update registration/*Regístrese con METRO,*
- Agency Information: Employment/*Información de la Agencia: Empleo* (partially in Spanish),
- Sign In/*Ingresar* (partially in Spanish), and
- Help/*Ayuda.*

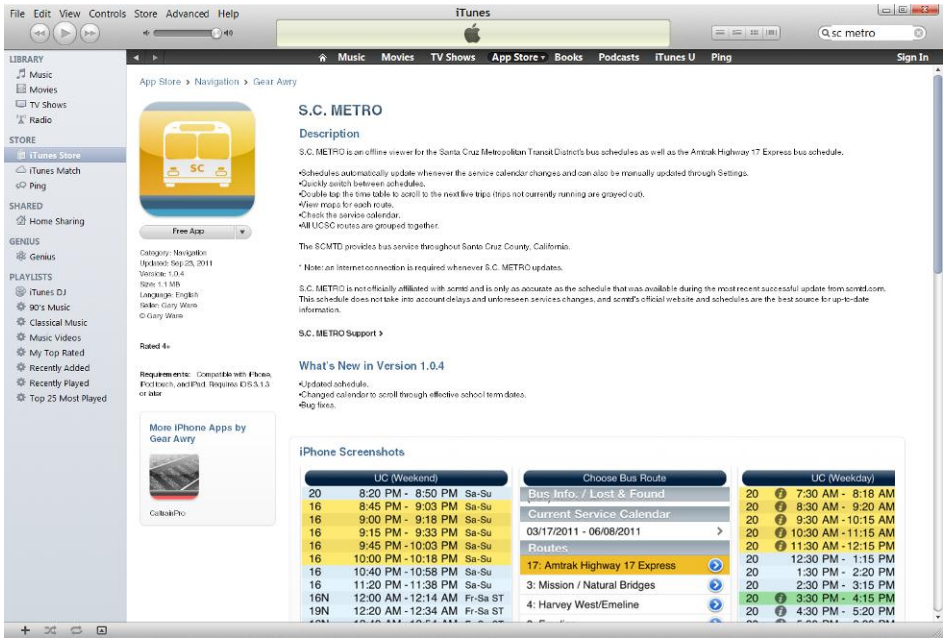
Several pages under the "Agency Information" tab indicate that information is only available in English and include a link to redirect to the English page. If the above pages cannot be translated, the agency may wish to place a similar statement on those pages and/or provide an alternative solution (i.e., call the bilingual call center for further information/assistance).

Mobile version of website. While the Santa Cruz METRO website works great on a computer, its use on a mobile device (especially a smartphone) is limited due to the small size of the screen. Santa Cruz METRO should consider the development of a mobile version of its website to better serve those customers who use the Internet primarily via a smartphone or mobile device. This is dependent upon a grants strategy that includes approximately $4 million in Federal funds to obtain

the Automatic Vehicle Locator and Automatic Passenger Counting (AVL/APC) technology. Santa Cruz METRO is currently awaiting the announcement of federal discretionary, competitive grant programs and will apply for this technology as part of their 2012 grants strategy Once this technology is implemented (an estimated 12-to-18-month roll-out, the agency can develop a smartphone application for the website and real-time bus schedules for customers, as well as ensuring modern data collection means for governmental reporting purposes.

Mobile application. A third-party application (developed by Gear Awry) called S.C. METRO is currently available through the Apple App Store. It is a free download for iPhone, iPod Touch, and iPad. The description states the app is not officially affiliated with Santa Cruz METRO. The agency may wish to look into the app and, if warranted, promote the app on its website to better serve its customers who use mobile devices. Since this tool exists, provided it is accurate, Santa Cruz METRO customers should be made aware of it.

Exhibit 8.3 S.C. METRO iPhone App (App Store)



Inclusion of URL on all collateral materials. *Headways* currently features the Santa Cruz METRO URL (www.scmtd.com) prominently on its front cover. We recommend including this URL on all printed collateral, as well as on all downloadable materials available on the website.

Marketing Strategy 3: Service Marketing

Bus stop signage and info-posts. We recommend Santa Cruz METRO phase in bus stop information units (info-posts) for all Watsonville bus stops using State Proposition 1B funding or other state or federal grants. These could display route schedule information and a route map for that stop or route. At a minimum, all key transfer locations should feature a poster-sized system map to facilitate regional connections as well as info-posts containing schedule information for the routes serving that location

Exhibit 8.4 SYVT Info-Post (Custom-Painted Unit)

Community outreach. Santa Cruz METRO worked with local community groups to help raise awareness of the bus service in Watsonville as well as to provide basic rider instructions. Santa Cruz METRO should continue to work with local community groups and reach out to others such as La Manzana Community Resources and the Second Harvest Food Bank. Doing so could help eliminate barriers to information that may be inhibiting the use of the transit service by some residents.

Direct mail. We recommend implementing a direct mail program to supplement other promotional and marketing activities. Direct mail materials are a relatively low-cost way of targeting a specific geographic area or demographic population. Direct mail can be used to supplement community outreach in a particular area, promote an online feature or upcoming event, introduce Santa Cruz METRO to new residents, and/or include trial ridership offers.

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APPENDIX

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APPENDIX – SUPPLEMENTAL RIDE CHECK DATA

The following data was collected by Santa Cruz METRO staff across a three-month period onboard Santa Cruz METRO routes serving Watsonville. This data is intended to supplement these ride checks conducted by Moore & Associates in June 2011 (as presented in Chapter 4). This ride check data will be referred to as the "supplemental" to the June ride checks conducted specifically for this study.

Methodology

Utilizing identical transit survey sheets created by the consultant team for the June 2011 ride checks, the supplemental ride checks tracked boarding and alighting as well as on-time performance data from a sampling of weekday trips specific to Santa Cruz METRO Routes 69A, 69W, 71, 72, 74, 75, 79, and 91x. Although the supplemental ride checks do not represent a 100-percent sampling of weekday trips offered by these routes, it does compare ridership activity and performance between different seasons. By contrast the consultant ride checks were conducted in the summer (June 8 through June 13, 2011) during a one-week period, while the supplemental ride checks were conducted in the fall/winter season (October 24 through December 9, 2011). In addition, the June ride checks represent one full service week (Monday through Sunday), while the supplemental ride checks are a sampling of weekday only (Monday through Friday) trips.

Critical to the evaluation process is data segregation by day-part. In doing so, we identified five distinct time blocks:

- 4:45 a.m. to 6:00 a.m. (AM Other),
- 6:01 a.m. to 9:00 a.m. (AM Peak),
- 9:01 a.m. to 3:30 p.m. (Midday),
- 3:31 p.m. to 7:00 p.m. (PM Peak), and
- 7:01 p.m. to 11:30 p.m. (PM Other).

SUPPLEMENTAL ON-TIME PERFORMANCE

The following criteria were used to evaluate on-time performance:

- **On-time,** defined as trip departure occurring up to five minutes after the published schedule time.
- **Early,** defined as any departure from an established time-point occurring in advance of the published schedule time.
- **Late,** defined as any departure from an established time-point occurring five or more minutes after the published schedule time.
- **Missed,** defined as any departure from an established time-point occurring more than 10 minutes after the published schedule time.

The evaluation revealed 56.31 percent of Santa Cruz METRO trips operated on-time during the evaluation period. In contrast to the June ride checks, the second set of ride checks revealed several trips departed from time-points more than 10 minutes late. Therefore, missed trips were included in this analysis. Some missed trips and late departures were caused by either road construction or detours due to incidences such as a downed telephone pole.

Exhibit A.1 shows the combined on-time performance for the sampling of trips of those Santa Cruz METRO routes serving Watsonville by day-part. Similar to the June ride checks (Chapter X), on-time performance declined across the service day, with late departures being the primary contributor to the eroding on-time performance.

Early departures were mostly an issue in the AM Other and AM Peak periods. Missed trips contributed most significantly to the poor on-time performance in the Midday and PM Peak day-parts. Although some of the missed and late trips can be explained by external factors (i.e., road detours and traffic delays), many remain unexplained.

Exhibit A.1 Overall Weekday On-Time Performance by Day-Part

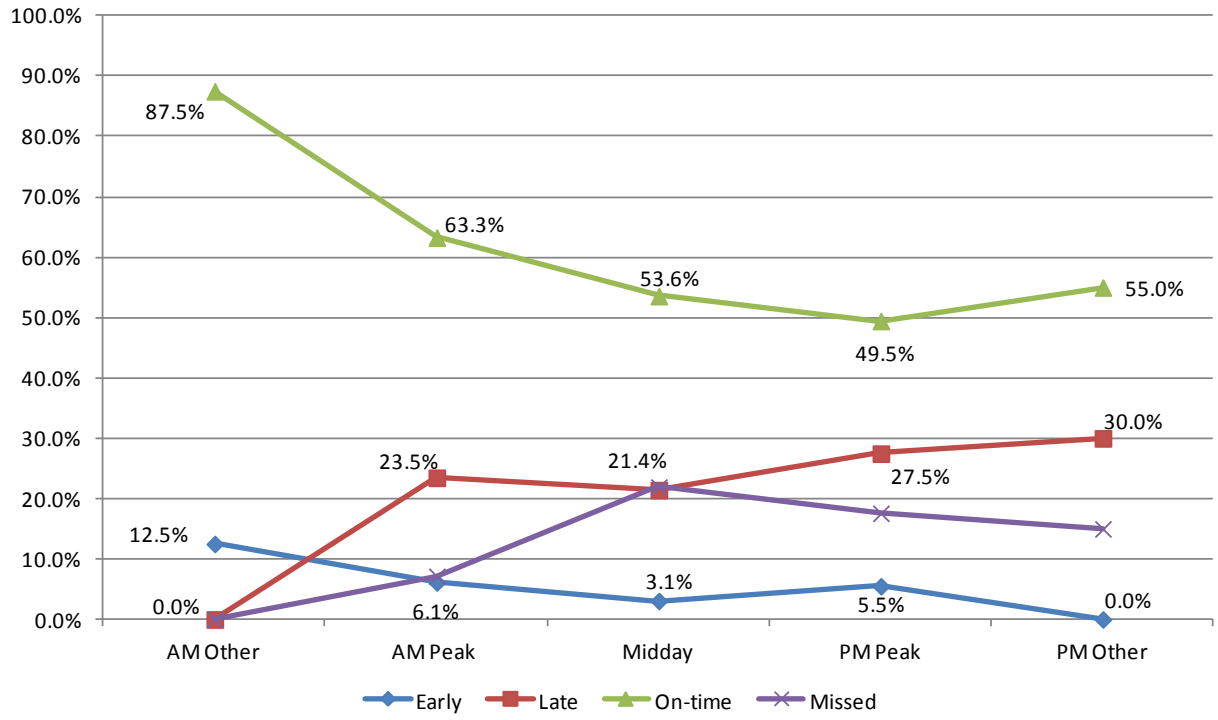
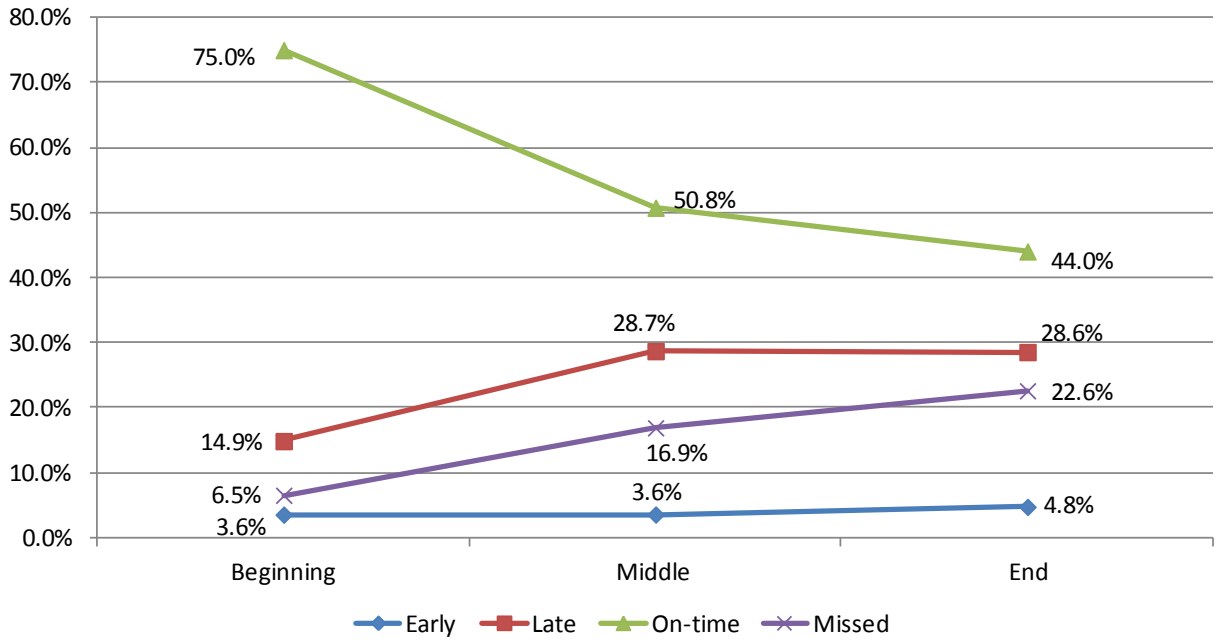


Exhibit A.2 shows the overall weekday on-time performance for the sampling of trips for Santa Cruz METRO routes serving Watsonville. As noted in the June ride checks, the on-time performance never reached the 90-percent threshold for on-time departures for the surveyed trips in the fall/winter period. As is often the case, on-time performance was best at or near trip-start with a decline in performance during trip-middle due to a combination of increased late departures and missed trips.

Overall, early departures remained consistent throughout the duration of a sample trip. During the June 2011 ride checks, increased early departures at the end of the trip resulted in decreased on-time performance. In contrast, the supplemental ride checks suggested missed trips to be a greater contributing factor to poor on-time performance. Given late and missed (more than 10 minutes late) departures contributed significantly to the poor on-time performance (around 50 percent for Middle and End of route segments), routes serving Watsonville are greatly affected by external delays during fall/winter months.

To mitigate or reduce the impact of late departures on riders, we recommend Santa Cruz METRO invest in a GPS tracking program that distributes real-time arrival/departure information such as NEXTbus. NEXTbus allows customers to obtain real-time travel information via online as well as by cell phone or SMS (text) messaging. This feature would allow transit riders to be aware of any delays so they can alter their schedule versus having to wait for the bus and possibly being late to appointments.

Exhibit A.2 Overall Weekday On-Time Performance by Trip Segment



Exhibits A.3 and A.4 present on-time performance for each route by day-part and trip segment for those weekday trips surveyed during the supplemental ride check period. The majority of the trips surveyed for the supplemental ride checks occurred during the AM Peak, Midday, and PM Peak periods. Therefore, the on-time performance for the AM Other and PM Other periods reflect only a couple of trips.

In contrast to the June ride checks wherein Route 72 posted the best on-time performance (87 percent) during the AM Peak period, during the supplemental ride checks Route 72 had the lowest on-time performance during the AM Peak period (see Exhibit A.3). Interestingly, Route 72 had the best on-time performance during the PM Peak period (81.3 percent).

As revealed in the June ride checks, Route 91X Outbound had the second-best on-time performance in the AM Peak period. One route, Route 69W had 100-percent on-time performance during the AM Peak period. However, this reflects only one trip surveyed. Overall, on-time performance was the best during the morning periods (AM Other and AM Peak) and poorest during the PM Peak period.

Generally speaking (Exhibit A.4), each route experiences a decline in on-time performance as the run progresses. As also revealed in the June ride checks, late arrivals were the single largest contributor to poor on-time performance throughout a trip's duration. Early departures, although not a significant issue, occurred most frequently on Routes 91X (Inbound and Outbound), 69A (Inbound), 75, and 71 (Inbound).

Exhibit A.3 Overall Weekday On-time Performance by Route and Day-Part

Route	Day-Part (Fall/Winter)																								
	AM Other					AM Peak					Midday					PM Peak					PM Other				
	Early	Late	Missed	On-time	Total	Early	Late	Missed	On-time	Total	Early	Late	Missed	On-time	Total	Early	Late	Missed	On-time	Total	Early	Late	Missed	On-time	Total
Route 69A Inbound	-	-	-	-	-	0.0%	50.0%	0.0%	50.0%	100.0%	0.0%	16.7%	83.3%	0.0%	100.0%	33.3%	33.3%	0.0%	33.3%	100.0%	-	-	-	-	-
Route 69A Outbound	-	-	-	-	-	-	-	-	-	-	0.0%	16.7%	0.0%	83.3%	100.0%	-	-	-	-	-	-	-	-	-	-
Route 69W Inbound	-	-	-	-	-	-	-	-	-	-	0.0%	58.3%	16.7%	25.0%	100.0%	-	-	-	-	-	-	-	-	-	-
Route 69W Outbound	-	-	-	-	-	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	20.8%	50.0%	29.2%	100.0%	-	-	-	-	-	-	-	-	-	-
Route 71 Inbound	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Route 71 Outbound	-	-	-	-	-	0.0%	25.0%	0.0%	75.0%	100.0%	3.3%	16.7%	26.7%	53.3%	100.0%	7.5%	20.0%	25.0%	47.5%	100.0%	0.0%	30.0%	15.0%	55.0%	100.0%
Route 72	12.5%	0.0%	0.0%	87.5%	100.0%	0.0%	37.5%	37.5%	25.0%	100.0%	0.0%	37.5%	0.0%	62.5%	100.0%	0.0%	18.8%	0.0%	81.3%	100.0%	-	-	-	-	-
Route 74	-	-	-	-	-	0.0%	57.1%	7.1%	35.7%	100.0%	0.0%	38.1%	9.5%	52.4%	100.0%	0.0%	42.9%	14.3%	42.9%	100.0%	-	-	-	-	-
Route 75	-	-	-	-	-	23.5%	0.0%	0.0%	76.5%	100.0%	9.4%	0.0%	0.0%	90.6%	100.0%	0.0%	63.6%	9.1%	27.3%	100.0%	-	-	-	-	-
Route 79	-	-	-	-	-	0.0%	25.0%	12.5%	62.5%	100.0%	0.0%	20.8%	37.5%	41.7%	100.0%	0.0%	25.0%	75.0%	0.0%	100.0%	-	-	-	-	-
Route 91X Inbound	-	-	-	-	-	0.0%	28.6%	28.6%	42.9%	100.0%	28.6%	0.0%	0.0%	71.4%	100.0%	0.0%	14.3%	14.3%	71.4%	100.0%	-	-	-	-	-
Route 91X Outbound	-	-	-	-	-	16.7%	0.0%	0.0%	83.3%	100.0%	0.0%	33.3%	0.0%	66.7%	100.0%	-	-	-	-	-	-	-	-	-	-
Total	12.5%	0.0%	0.0%	87.5%	100.0%	6.1%	23.5%	7.1%	63.3%	100.0%	3.1%	21.4%	21.9%	53.6%	100.0%	5.5%	27.5%	17.6%	49.5%	100.0%	0.0%	30.0%	15.0%	55.0%	100.0%

Exhibit A.4 Overall On-time Performance by Route and Trip Segment

Route	Weekday Trip Segment														
	Beginning					Middle					End				
	Early	Late	Missed	On-time	Total	Early	Late	Missed	On-time	Total	Early	Late	Missed	On-time	Total
Route 69A Inbound	0.0%	50.0%	25.0%	25.0%	100.0%	12.5%	25.0%	50.0%	12.5%	100.0%	12.5%	12.5%	50.0%	25.0%	100.0%
Route 69A Outbound	0.0%	25.0%	0.0%	75.0%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	25.0%	0.0%	75.0%	100.0%
Route 69W Inbound	0.0%	50.0%	25.0%	25.0%	100.0%	0.0%	75.0%	25.0%	0.0%	100.0%	0.0%	50.0%	0.0%	50.0%	100.0%
Route 69W Outbound	0.0%	10.0%	40.0%	50.0%	100.0%	0.0%	20.0%	40.0%	40.0%	100.0%	0.0%	20.0%	40.0%	40.0%	100.0%
Route 71 Inbound	6.1%	12.1%	9.1%	72.7%	100.0%	2.3%	20.5%	20.5%	56.8%	100.0%	3.0%	33.3%	27.3%	36.4%	100.0%
Route 71 Outbound	3.0%	12.1%	0.0%	84.8%	100.0%	2.3%	36.4%	4.5%	56.8%	100.0%	3.0%	36.4%	18.2%	42.4%	100.0%
Route 72	0.0%	14.3%	0.0%	85.7%	100.0%	0.0%	50.0%	14.3%	35.7%	100.0%	4.8%	14.3%	28.6%	52.4%	100.0%
Route 74	0.0%	16.7%	0.0%	83.3%	100.0%	0.0%	55.6%	0.0%	44.4%	100.0%	0.0%	58.3%	33.3%	8.3%	100.0%
Route 75	4.5%	9.1%	0.0%	86.4%	100.0%	18.8%	12.5%	6.3%	62.5%	100.0%	13.6%	13.6%	0.0%	72.7%	100.0%
Route 79	0.0%	22.2%	11.1%	66.7%	100.0%	0.0%	16.7%	50.0%	33.3%	100.0%	0.0%	33.3%	33.3%	33.3%	100.0%
Route 91X Inbound	16.7%	0.0%	0.0%	83.3%	100.0%	11.1%	22.2%	11.1%	55.6%	100.0%	0.0%	16.7%	33.3%	50.0%	100.0%
Route 91X Outbound	16.7%	0.0%	0.0%	83.3%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%	16.7%	33.3%	0.0%	50.0%	100.0%
Total	3.6%	14.9%	6.5%	75.0%	100.0%	3.6%	28.7%	16.9%	50.8%	100.0%	4.8%	28.6%	22.6%	44.0%	100.0%

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SUPPLEMENTAL BOARDING AND ALIGHTING COUNTS

This section discusses aggregate or overall fixed-route boarding and alighting counts observed during the supplemental ride check. Boarding and alighting data collected from the supplemental ride check were recorded on the same data collection form as on-time performance data (discussed above). Data were then imported into Microsoft Excel and segregated by route, stop, and day-part. All exhibit data reflect "activity," defined as combined boardings and alightings for weekday trips only.

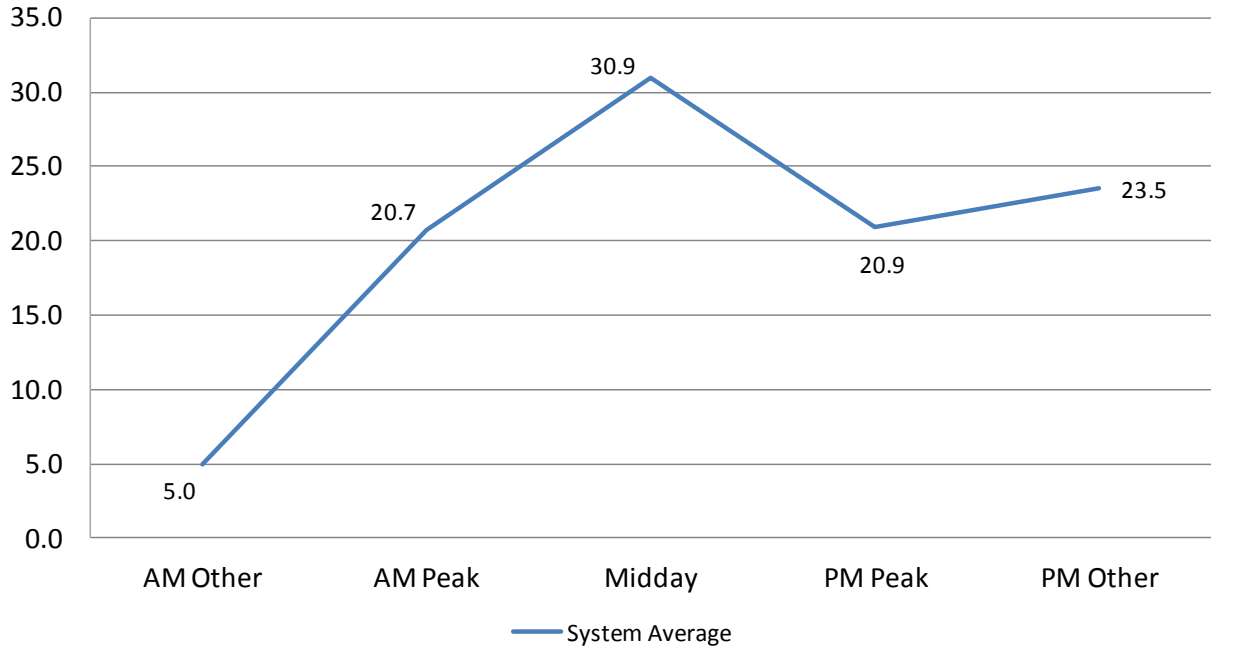
Boarding by Day-Part

Boarding and alighting data were collected by Santa Cruz METRO staff across a random-sampling of weekday service days across a three-month period in fall of 2011 (October through December). The accuracy of data may be influenced by external factors (i.e., school schedules, weather, construction, etc.) occurring during the ride check, potentially impacting results and trends.

As defined in the prior section (On-Time Performance), the route analysis is divided into five separate day-parts (A.M. Other, A.M. Peak, Midday, P.M. Peak, and P.M. Other). To more accurately assess productivity by time of day, boarding averages were derived from total boardings divided by the number of trips surveyed during the specified day-part. This approach calculates the average boardings per trip per day-part in contrast to total boardings which may be skewed by the number of trips surveyed.

Exhibit A.5 illustrates the overall boarding averages by day-part for those weekday survey trips. Similar to what was revealed from the June 2011 ride checks, the supplemental ride checks also indicate a spike in activity during the Midday period. Given both ride checks were conducted when local schools were in session, we believe this may reflect the large number of students who use the service on a frequent basis.

Exhibit A.5 Boarding Averages by Day-Part



The compilation of boarding averages by day-part is shown in Exhibit A.6. During the Midday period, which was revealed to be the most productive day-part, Routes 69A Inbound, 69W Outbound, and 71 Inbound posted more than 55 boardings per trip. Given the supplemental surveyed activity is similar to the June ride check activity; the resulting trends may represent typical performance of those Santa Cruz METRO routes serving Watsonville.

The most productive routes based on the supplemental ride checks were also the most productive routes from the June 2011 ride checks. This includes Routes 69A, 69W, and 71. These routes provide service between Santa Cruz and Watsonville, further supporting the finding there is strong demand for travel between Santa Cruz and Watsonville and points in between.

Exhibit A.6 Overall Boarding by Route and Day-Part

Weekday Boarding Averages						
Route	**AM Other**	**AM Peak**	**Midday**	**PM Peak**	**PM Other**	**Route Average**
Route 69A Inbound	-	32.0	58.0	31.0	-	44.8
Route 69A Outbound	-	-	27.5	-	-	27.5
Route 69W Inbound	-	-	44.0	-	-	44.0
Route 69W Outbound	-	20.0	58.5	-	-	50.8
Route 71 Inbound	-	39.0	55.3	30.5	23.5	37.5
Route 71 Outbound	-	24.0	41.0	21.0	-	32.5
Route 72	5.0	22.0	20.5	14.5	-	16.2
Route 74	-	18.0	8.3	11.0	-	12.0
Route 75	-	15.0	20.3	34.5	-	21.5
Route 79	-	10.5	9.8	8.0	-	9.8
Route 91X Inbound	-	10.0	12.0	1.0	-	6.0
Route 91X Outbound	-	20.0	12.0	-	-	17.3
Total	**5.0**	**20.7**	**30.9**	**20.9**	**23.5**	**25.9**

Given alighting activity by day-part mirrors that of boarding activity for the surveyed trips, a separate discussion of alighting activity was not prepared.

Boarding and Alighting by Trip Segment

Exhibit A.7 shows the average boarding and alighting by trips segment for each route. Generally speaking, most routes had highest boardings at the beginning of the trips and alightings at trip-end. However, to underscore the finding from the previous discussion, those routes traveling between Santa Cruz and Watsonville (Routes 69A, 69W, 71) had a significant level of boarding and alighting activity in and during mid-route. This suggests many Santa Cruz METRO patrons use the routes to travel to/from activity points located between the two cities.

These findings mirrored the findings arising from the June 2011 ride checks.

Exhibit A.7 Weekday Boarding and Alighting by Trip Segment

Route	Boarding			Alighting		
	Beginning	Middle	End	Beginning	Middle	End
Route 69A Inbound	40.5	31.0	18.0	12.5	19.0	58.0
Route 69A Outbound	9.3	3.0	1.5	3.0	4.0	6.8
Route 69W Inbound	17.5	20.5	6.0	4.0	19.0	21.0
Route 69W Outbound	27.4	19.6	3.8	5.4	20.6	24.6
Route 71 Inbound	13.2	17.1	7.3	3.7	9.6	24.2
Route 71 Outbound	19.0	9.5	3.9	5.1	13.2	14.2
Route 72	8.3	3.0	4.8	4.2	2.7	9.3
Route 74	4.5	4.7	2.8	1.3	3.3	7.3
Route 75	11.5	7.8	2.1	4.2	9.4	7.9
Route 79	3.6	5.4	0.8	0.0	4.7	5.1
Route 91X Inbound	3.8	2.3	0.0	0.0	3.5	2.5
Route 91x Outbound	14.3	3.0	0.0	0.0	11.0	6.3
Total Average	**14.4**	**10.6**	**4.3**	**3.6**	**10.0**	**15.6**

Route-Segment Analysis

The following analysis identifies key bus stops and points of significant activity during the survey period. Boarding and alighting data collected at each published time-point was geocoded using ESRI ArcView Geographic Information System (GIS) software. From there, maps were generated to illustrate boarding and alighting densities. All exhibit data represent stop activity only for representative weekday service days.

Note: Some of the following basic route information may be repetitive from the Ride Check Analysis (Chapter 4). However, it has been included to provide context for the reader.

Route 69A Boarding and Alighting Counts

Local Route 69A links Watsonville with Santa Cruz, with weekday service between 7:07 a.m. and 7:10 p.m. for the Santa Cruz to Watsonville (outbound) and between 6:45 a.m. and 7:48 p.m. for the Watsonville to Santa Cruz (inbound). The weekday, Saturday, and holiday services operate on one-hour headways with a run-time of between 57 and 77 minutes.

Outbound trips: Route 69A trips originate from the Santa Cruz METRO Transit Metro Center Station on Pacific Avenue, and terminate at the Watsonville Transit Center on Rodriguez Street. Service on Route 69A travels from the Santa Cruz METRO Center at Pacific Station down Soquel Avenue to Capitola Road to 41st Avenue, then to Highway 1 to Airport Boulevard to Freedom Boulevard to Lincoln Street, completing the route along West Lake Avenue.

Exhibits A.8 and A.9 show the top five boarding and alighting points for Route 69A Inbound reflective of a sampling of weekday trips. Similar to the June ride checks, the Capitola Mall and Watsonville Transit Center had the greatest boardings along this route and direction. Further, as was also revealed in the June ride checks, the Santa Cruz Metro Transit Center, followed by the Capitola Mall, had the highest incidence of alighting activity along this route and direction.

Again, the fact the supplemental ride checks were conducted during different months of the year (versus the June ride checks) further suggests this data reflects “typical” activity along this route.

Exhibit A.8 Route 69A Weekday Inbound Top Boardings Points

Route 69A Weekday Inbound		
Rank	**Stop**	**Boardings**
1	Capitola Mall Lane 1	49
2	Watsonville Transit Center Lane 1	43
3	Freedom & Crestview (Courthouse)	9
4	Lincoln St. & 5th	7
5	E. Beach & Marchant	6

Exhibit A.9 Route 69A Weekday Inbound Top Alighting Points

Route 69A Weekday Inbound		
Rank	Stop	Alightings
1	Santa Cruz Metro Transit Center Lane 4	48
2	Capitola Mall Lane 1	22
3	Soquel Ave & Front (Longs)	18
4	Freedom & Crestview (Courthouse)	11
5	Soquel Ave & Frederick	8
6	Soquel Ave & Ocean	8

Exhibits A.10 and A.11 show the top five boarding and alighting locations for the Outbound direction of Route 69A on weekdays. Again, mirroring the June ride checks for weekday activity, the Santa Cruz Metro Transit Center and Capitola Mall had the greatest boarding activity along this route. Outbound alighting activity (towards Watsonville from Santa Cruz) was more dispersed among stops. In other words, the concentrations were not as great as to where the majority of boardings occurred.

Exhibit A.10 Route 69A Weekday Outbound Top Boarding Points

Route 69A Weekday Outbound		
Rank	Stop	Boardings
1	Santa Cruz Metro Transit Center Lane 4	20
2	Capitola Mall	11
3	Soquel Ave & Ocean	5
4	Freedom & Davis (Stereo)	3
5	Soquel Ave & Frederick	3

Exhibit A.11 Route 69A Weekday Outbound Top Alighting Points

Route 69A Weekday Outbound		
Rank	Stop	Alightings
1	Capitola Mall	6
2	Capitola Rd & 41st	5
3	Freedom & Crestview	5
4	E Lake & Sudden	4
5	Freedom & Davis (Stereo)	4
6	Soquel Ave & Cayuga	4

Exhibit A.12 Route 69A Inbound/Outbound Passenger Boarding and Alighting by Stop

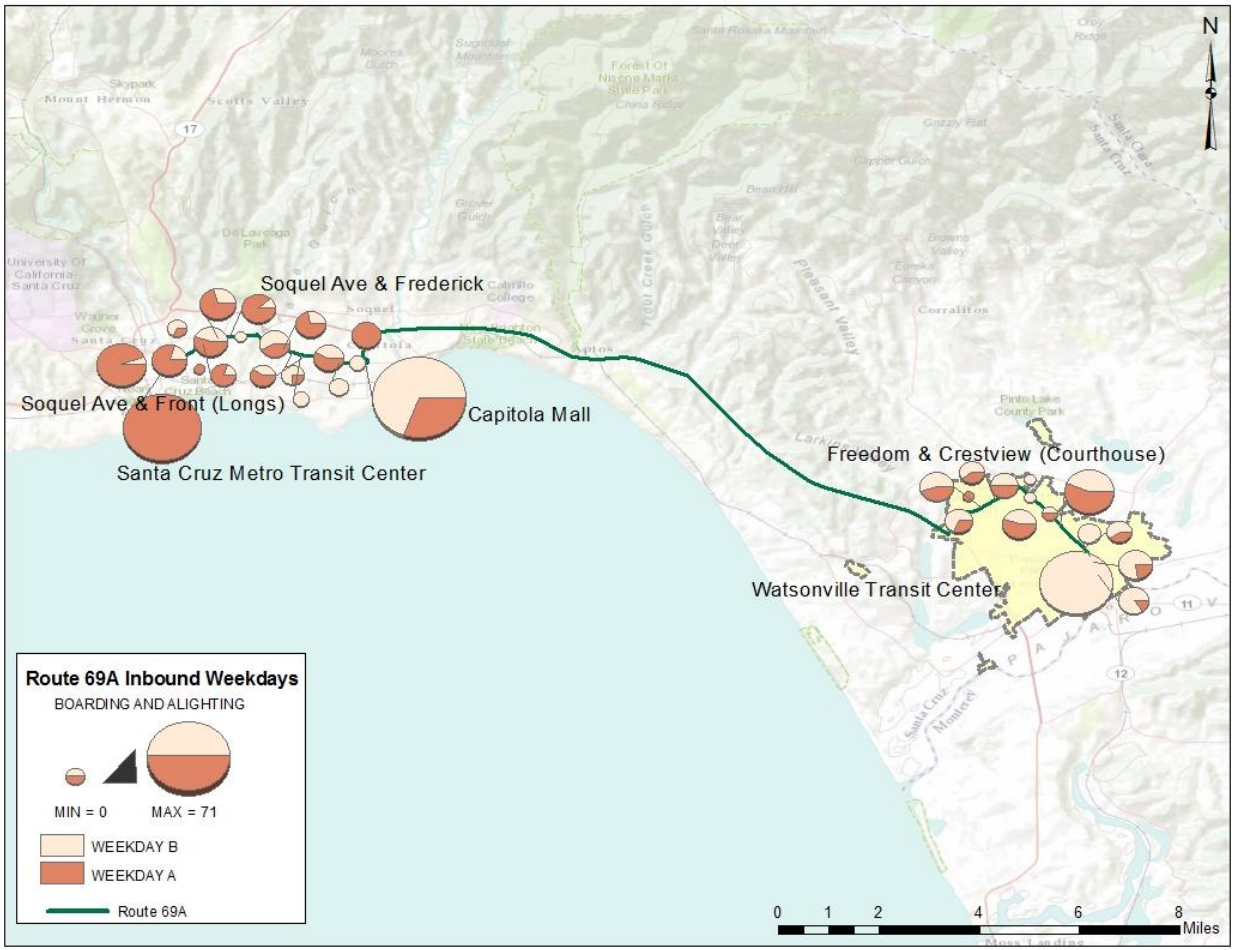
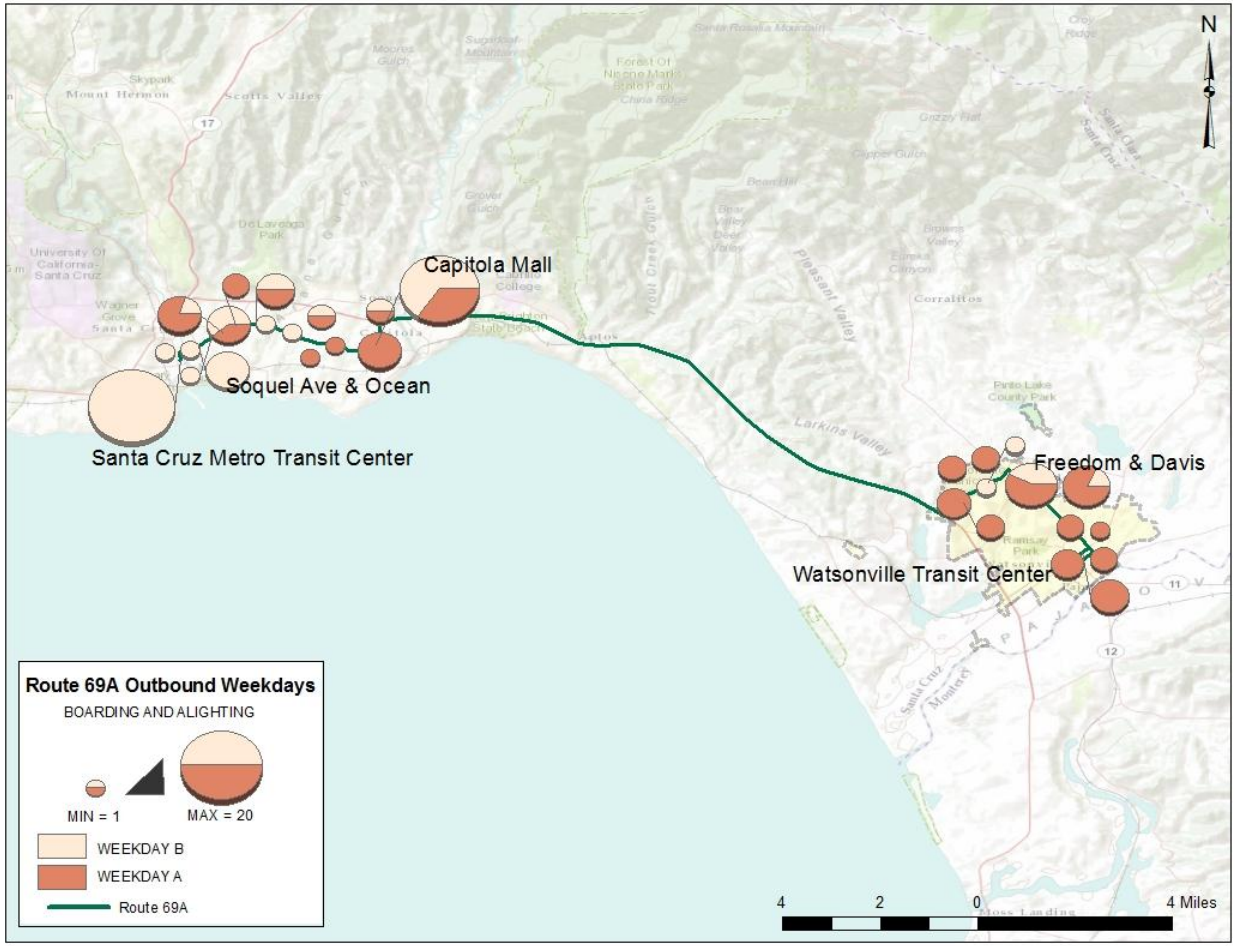


Exhibit A.13 Route 69A Outbound Passenger Boarding and Alighting by Stop



Route 69W Boarding and Alighting Counts

Local Route 69W links Watsonville with Santa Cruz with weekday service between 6:37 a.m. and 7:37 p.m. for the Santa Cruz to Watsonville (outbound) and between 6:20 a.m. and 7:18 p.m. for the Watsonville to Santa Cruz (inbound). The weekday, Saturday, and holiday services operate on one-hour headways with a run-time of between 57 and 70 minutes.

Outbound trips: Route 69W trips originate from the Santa Cruz METRO Transit Center (Pacific Avenue) and terminate at the Watsonville Transit Center (Rodriguez Street). Service on Route 69A travels from the Santa Cruz METRO Center at Pacific Station down Soquel Avenue to Capitola Road to 41st Avenue, continuing along Soquel Drive to Highway 1 at State Park Drive to Main Street, ending up on Rodriguez Street.

Exhibits A.13 and A.14 present the top boarding and alighting locations for Route 69W Inbound. Similar to the June 2011 ride checks, the Watsonville Transit Center had the most boardings. However, the supplemental ride checks revealed the Soquel Drive/Cabrillo College stop had the second-highest boardings, in contrast to the June 2011 ride checks which indicated the Capitola Mall having the second-highest for this route on weekdays. We believe this is likely due to the fact the June ride checks were conducted when Cabrillo College was out of session. The Fall 2011 data indicates the college is a key activity point major stop during the school year (along with modest summer activity).

Mirroring the June 2011 ride checks, the Santa Cruz Metro Center (Pacific Avenue) had the greatest alighting activity, followed by Soquel Avenue at Front Street (Longs).

Exhibit A.14 Route 69W Weekday Inbound Top Boarding Points

Route 69W Weekday Inbound		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center Lane 1	26
2	Soquel Dr & Cabrillo College	25
3	Main & Green Valley	8
4	Capitola Mall Lane 1	7
5	Soquel Dr & Daubenbiss	4

Exhibit A.15 Route 69W Weekday Inbound Top Alighting Points

Route 69W Weekday Inbound		
Rank	Stop	Alightings
1	Santa Cruz Metro Transit Center Lane 4	16
2	Soquel Ave & Front (Longs)	12
3	Capitola Mall Lane 1	11
4	Soquel Dr & Cabrillo College	7
5	Soquel Dr & Daubenbiss	7
6	Soquel Dr & Main	7

Top boarding and alighting locations surveyed for the Outbound direction of Route 69W are illustrated in Exhibits A.15 and A.16. Outbound trips had the greatest number of boardings at the Santa Cruz Metro Transit Center, followed by Capitola Mall and Soquel Dr/Cabrillo College stops.

Only four stop locations were revealed to have significant alighting activity for this route and direction. The top two alighting stops were Watsonville Transit Center and Capitola Mall. With the exception of the Soquel Dr/Cabrillo College stop, this observed activity matched that observed during the June 2011 ride checks.

Exhibit A.16 Route 69W Weekday Outbound Top Boarding Points

Route 69W Weekday Outbound		
Rank	Stop	Boardings
1	Santa Cruz Metro Transit Center Lane 4	97
2	Capitola Mall Lane 1	32
3	Soquel Dr & Cabrillo College	32
4	Capitola Rd & 17th	10
5	Main & Green Valley	7
6	Soquel Ave & Ocean	7

Exhibit A.17 Route 69W Weekday Outbound Top Alighting Points

Route 69W Weekday Outbound		
Rank	Stop	Alightings
1	Watsonville Transit Center Lane 1	74
2	Capitola Mall Lane 1	45
3	Capitola Rd & 41st	18
4	Main & Green Valley	16

Exhibit A.18 Route 69W Inbound Passenger Boarding and Alighting by Stop

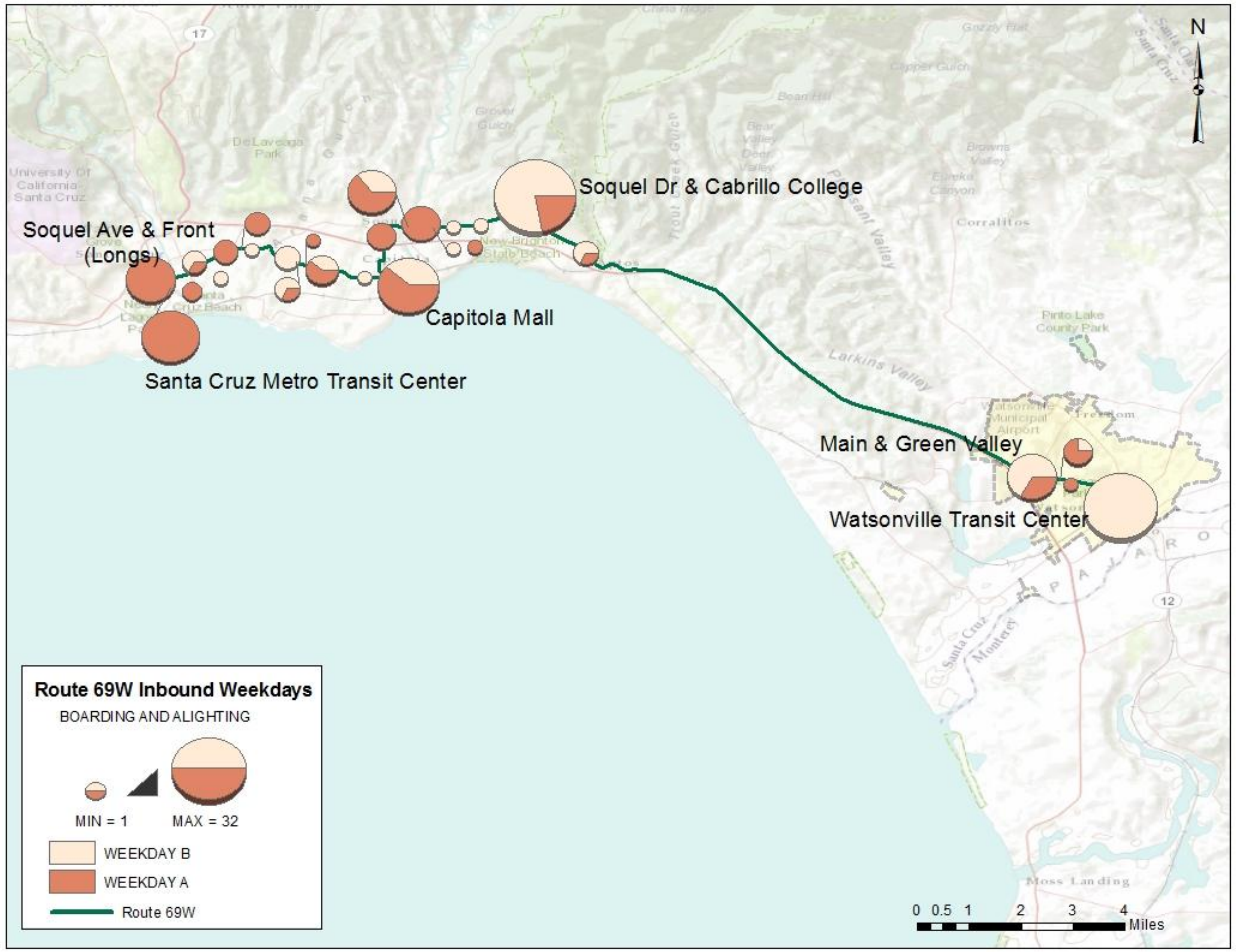
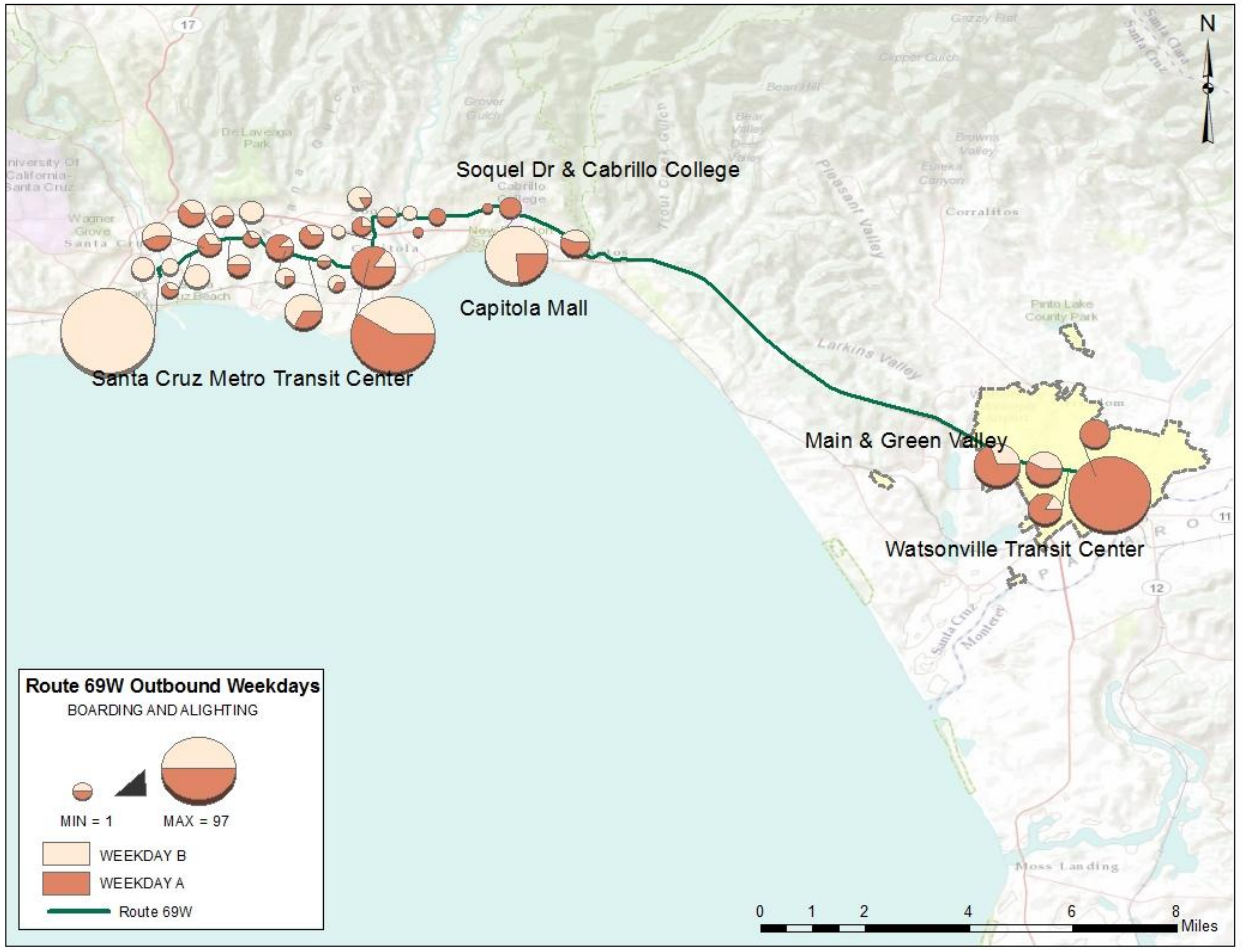


Exhibit A.19 Route 69W Outbound Passenger Boarding and Alighting by Stop



Route 71 Boarding and Alighting Counts

Local Route 71 links Watsonville with Santa Cruz with weekday service from 6:10 a.m. to 12:45 a.m. to Watsonville (outbound) and from 5:35 a.m. to 11:30 p.m. to Santa Cruz (inbound).

Outbound trips on Route 71 trips originate at the Santa Cruz METRO Transit Center on Pacific Avenue and terminate at the Watsonville Transit Center on Rodriguez Street. Service on Route 71 travels down Soquel Avenue to Freedom Boulevard, and then either along Main Street, Crestview Street, Pennsylvania Street, Arthur Street, or Clifford Street, arriving at the Watsonville Transit Center.

The weekday outbound service operates on a 30-minute headway from 6:45 a.m. to 1:15 p.m., 15-minute headway from 1:15 p.m. to 6:15 p.m., 30-minute headway from 6:15 p.m. to 9:45 p.m., and 60-minute headway from 9:45 p.m. to 11:45 p.m. The run time on weekday Route 71 Outbound trips ranges from 60 to 80 minutes.

The weekday inbound service operates on a 15-minute headway from 6:10 a.m. to 8:10 a.m., 30-minute headway from 8:10 a.m. to 3:40 p.m., 15-minute headway from 3:40 p.m. to 5:40 p.m., 30-minute headway from 5:40 p.m. to 9:30 p.m., and 60-minute headway from 9:30 p.m. to 10:30 p.m. The run time on weekday Route 71 Inbound trips ranges from 60 to 80 minutes.

Exhibits A.18 and A.19 show the top five boarding and alighting points for Route 71 Inbound. Cabrillo College had the highest number of boardings, followed by the Watsonville Transit Center. The June ride checks found the Watsonville Transit Center had the most boardings followed by Cabrillo College, suggesting these two stops feature the highest level of boarding activity.

The top alighting points were the Santa Cruz Metro Transit Center and Cabrillo College. Of all the routes, Route 71 was observed to have the highest level of activity at Cabrillo College during weekday service days when school is in session.

Exhibit A.20 Route 71 Weekday Inbound Top Boarding Points

Route 71 Weekday Inbound		
Rank	**Stop**	**Boardings**
1	Cabrillo College	87
2	Watsonville Transit Center	73
3	Airport Blvd. & Freedom Centre	16
4	Soquel Dr. & Dominican Hospital	15
5	Soquel Dr & Mission Dr	14

Exhibit A.21 Route 71 Weekday Inbound Top Alighting Points

Route 71 Weekday Inbound		
Rank	Stop	Alightings
1	Santa Cruz Metro Transit Center	74
2	Cabrillo College	40
3	River & River St Extension	25
4	Water & Ocean	25
5	Water & Market	21

The following exhibits (Exhibit 20 and 21) list the top boarding and alighting points for outbound Route 71 (from Santa Cruz to Watsonville). As was the case for Routes 69A and 69W, the Santa Cruz Metro Transit Center had the most boardings for the surveyed weekday trips and the Watsonville Transit Center the most alightings. Cabrillo College was again a key origin and destination point.

Exhibit A.22 Route 71 Weekday Outbound Top Boarding Points

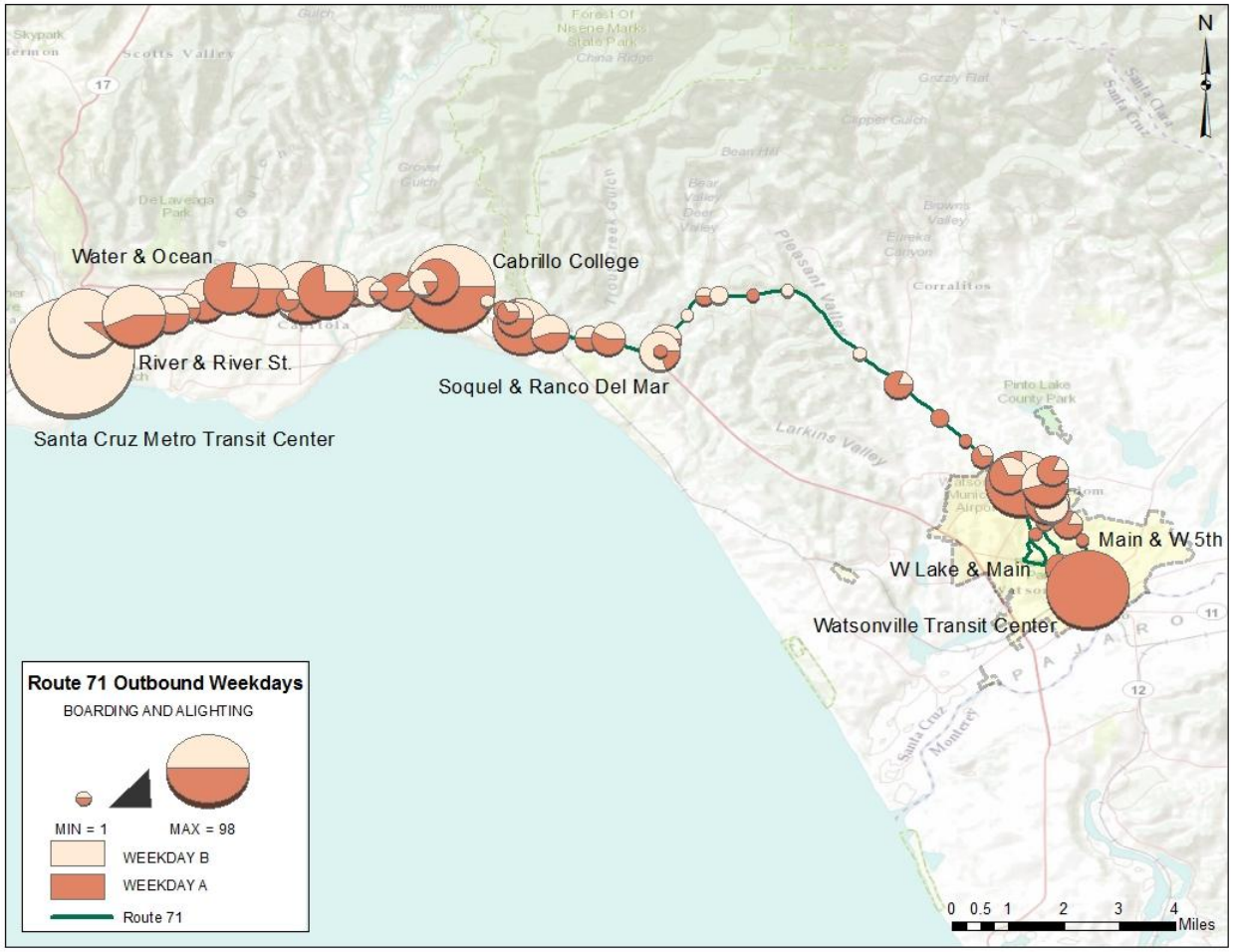
Route 71 Weekday Outbound		
Rank	Stop	Boardings
1	Santa Cruz Metro Transit Center	98
2	Water & Ocean	28
3	Cabrillo College	22
4	Soquel Dr & Cotton (41st)	17
5	River & River St.	15

Exhibit A.23 Route 71 Weekday Outbound Top Alighting Points

Route 71 Weekday Outbound		
Rank	Stop	Alightings
1	Watsonville Transit Center	42
2	Cabrillo College	28
3	Airport Blvd. & Freedom Centre	22
4	W Lake & Main	16
5	Soquel & Ranco Del Mar	15

Exhibit A.24 Route 71 Inbound Passenger Boarding and Alighting by Stop

Exhibit A.25 Route 71 Outbound Passenger Boarding and Alighting by Stop



Route 72 Boarding and Alighting Counts

Local Route 72 provides local service in Watsonville, running in a loop from the Watsonville Transit Center to Corralitos. Route 72 provides weekday service from 5:40 a.m. to 7:38 p.m. There is no Saturday, Sunday or holiday service. The weekday service operates on 60 minute headways. The run time is between 51 and 57 minutes.

Route 72 trips originate and terminate at the Watsonville Transit Center on Rodriguez Street. Service travels from the Watsonville Transit Center to Corralitos via Main Street, Green Valley Road, Airport Boulevard, Amesti Road, Varni Road, and Corralitos Road; and returns along Carralitos Road, Varni Road, Pioneer Road, Green Valley Road, Airport Boulevard, Freedom Boulevard, Green Valley Road, and Main Street, returning to the Watsonville Transit Center.

Route 72's top boarding and alighting points are shown in Exhibits A.23 and A.24. As with the June ride checks, the Watsonville Transit Center had the greatest boarding and alighting activity. While activity was spread throughout the route, alighting activity occurred at only three points.

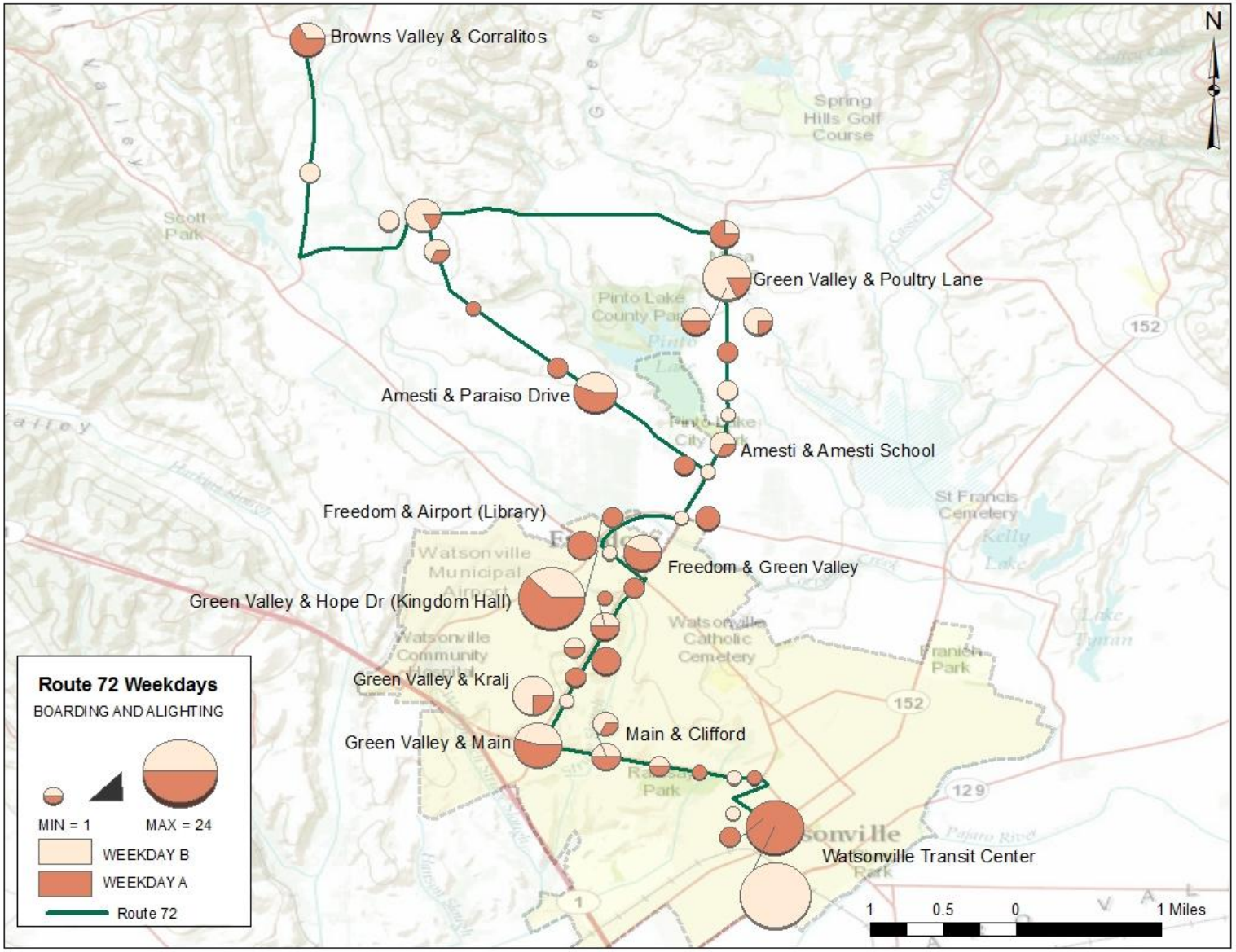
Exhibit A.26 Route 72 Top Boarding Points

Route 72 Weekday		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center	24
2	Green Valley & Poultry Lane	9
3	Airport Blvd. & Freedom Centre	8
4	Green Valley & Kralj	6
5	Green Valley & Main	5
6	Varni & Amesti	5

Exhibit A.27 Route 72 Top Alighting Points

Route 72 Weekday		
Rank	**Stop**	**Alightings**
1	Watsonville Transit Center (Start)	16
2	Airport Blvd. & Freedom Centre	13
3	Green Valley & Main	6

Exhibit A.28 Route 72 Passenger Boarding and Alighting by Stop



Route 74 Boarding and Alighting Counts

Local Route 74 provides service in Watsonville, running in a loop from the Watsonville Transit Center. The line serves Pajaro Valley High School, the Social Security Administration office, Watsonville Hospital, and neighborhoods in proximity to the Watsonville Airport. Route 74 operates from 6:50 a.m. to 6:35 p.m. on weekdays. There is no Saturday, Sunday or holiday service. Service operates on a 60-minute headway with a run time between 45 and 50 minutes.

Route 74 trips originate and terminate at the Watsonville Transit Center on Rodriguez Street. The route travels from the Watsonville Transit Center via West Beach Street, Ohlone Parkway, Harkins Slough Road, Green Valley Road, Larkin Valley Road, Technology Drive, Anna Street, Shady Oaks Drive, Holly Drive, and Green Valley Road before circling the airport along Freedom Boulevard. It then continues along Buena Vista Drive, Calabasas Road, Browker Road, Manfre Road, Larkin Valley Road, Airport Boulevard, Nielson Street, Hangar Way, Airport Boulevard, and Ross Way before heading back to the Watsonville Transit Center along Shady Oaks Drive, Anna Street, Kralj Drive, Green Valley Road, Harkins Slough Road, Ohlone Parkway, and West Beach Street.

Exhibits A.26 and A.27 show the stops where the majority of boarding and alighting activity occurred. As with most other Santa Cruz METRO routes, including those observed in the June ride checks, the Watsonville Transit Center was the most active boarding location. Alighting activity observed during the supplemental ride checks in the fall/winter season revealed a different trend from the June 2011 ride checks; wherein Exhibit A.27 shows the Pajaro Valley High School had the most boardings, followed by the Watsonville Transit Center. This could be due to the fact that the supplemental ride checks represent a portion of trips along this route. Therefore, the sampled trips may have occurred during busy home-to-school travel times.

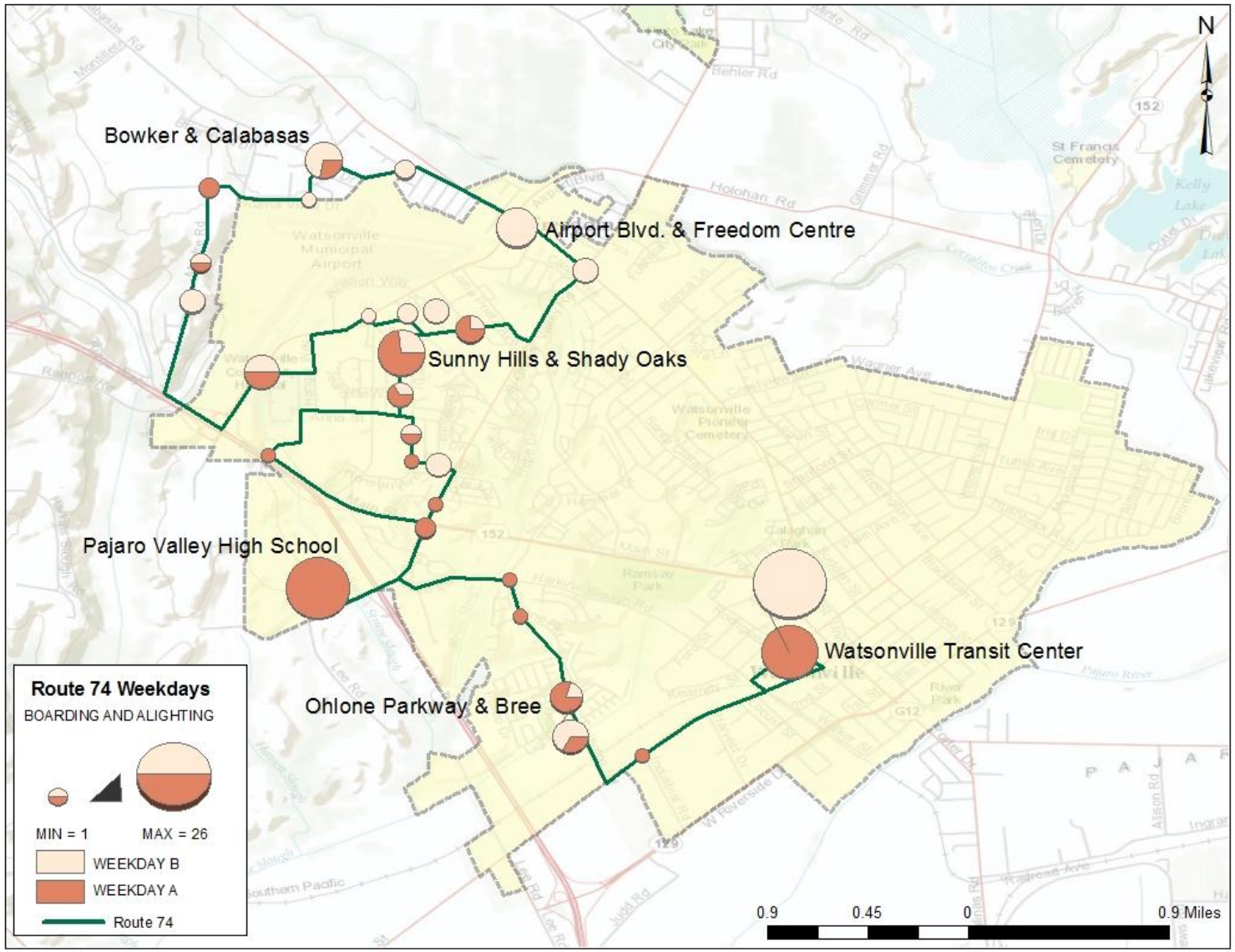
Exhibit A.29 Route 74 Top Boarding Points

Route 74 Weekday		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center	26
2	Airport Blvd. & Freedom Centre	8
3	Bowker & Calabasas	5
4	Ohlone Parkway & Bree	4

Exhibit A.30 Route 74 Top Alighting Points

Route 74 Weekday		
Rank	**Stop**	**Alightings**
1	Pajaro Valley High School	20
2	Watsonville Transit Center	15
3	Sunny Hills & Shady Oaks	8
4	Ohlone Parkway & Lighthouse	4

Exhibit A.31 Route 74 Passenger Boarding and Alighting by Stop



Route 75 Boarding and Alighting Counts

Local Route 75 provides service in Watsonville, running in a loop from the Watsonville Transit Center up and down Green Valley Road. Service is offered from 6:09 a.m. to 9:02 p.m. on weekdays. Saturday, Sunday or holiday service operates from 9:09 a.m. to 7:57 p.m. Route 75 operates on a 60-minute headway with a run time between 53 and 58 minutes.

Route 75 trips originate and terminate at the Watsonville Transit Center on Rodriguez Street. The route travels from the Watsonville Transit Center to Fifth Street, Main Street, Green Valley Road, Airport Boulevard, Green Valley Road, Arroyo Drive, Mark Avenue, Casserly Road, Green Valley Road, Wheelock Road, Green Valley Road, Airport Boulevard, Loma Prieta Avenue, Green Valley Road, and then down Main Street to the Watsonville Transit Center.

Exhibits A.29 and A.30 show the top weekday boarding and alighting points for Route 75. The Watsonville Transit Center had the highest number of boardings and alightings, as was revealed in the June ride checks. The second highest activity, both boardings and alightings, was Airport Boulevard/Freedom Centre. As discussed in the Ride Check Analysis (Chapter 4) the high level of activity at the Airport Boulevard/Freedom Centre location is most likely due to the array of retail businesses located nearby.

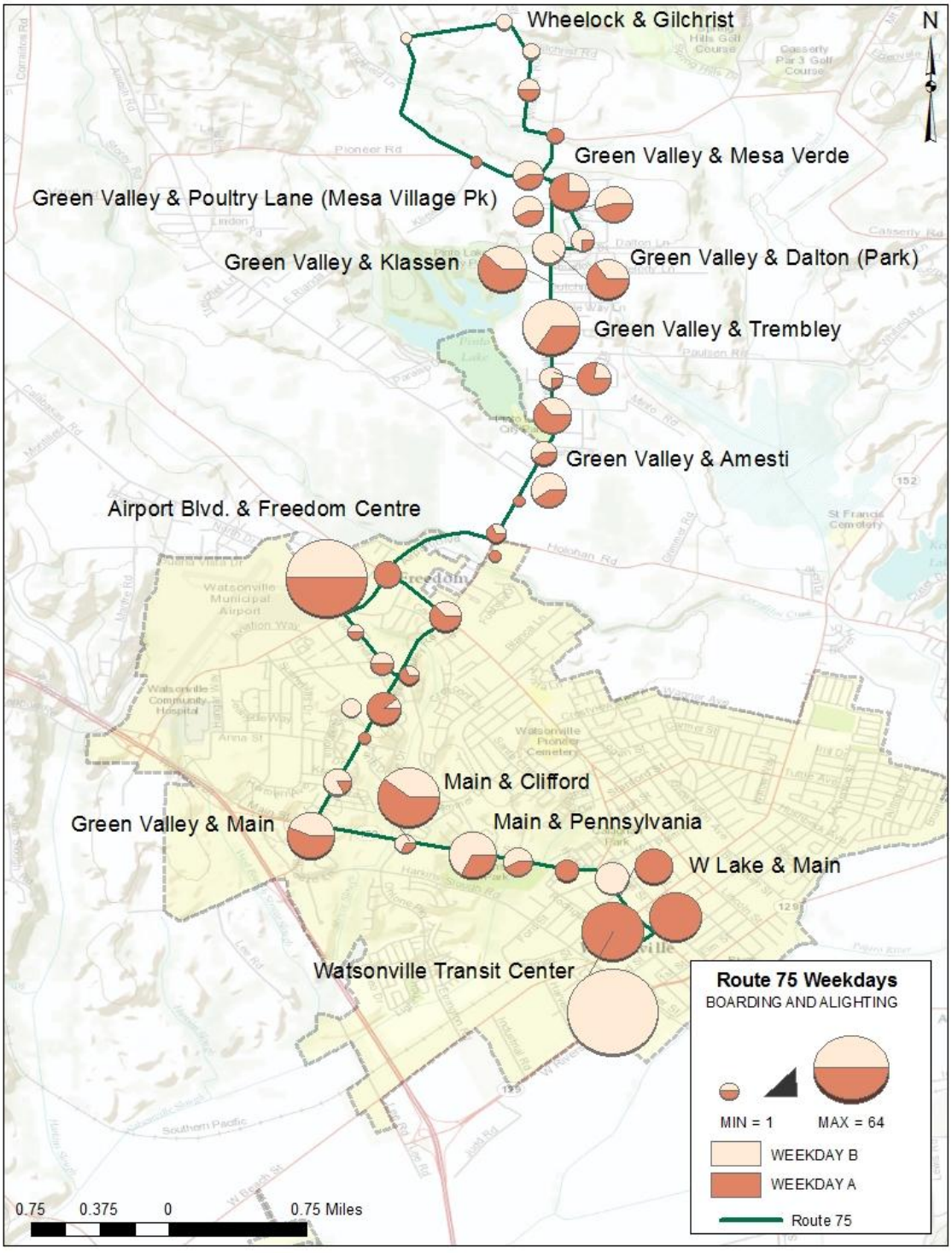
Exhibit A.32 Route 75 Weekday Top Boarding Points

Route 75 Weekday		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center	64
2	Airport Blvd. & Freedom Centre	26
3	Green Valley & Trembley	17
4	Main & Clifford	12
5	Main & Pennsylvania	12

Exhibit A.33 Route 75 Weekday Top Alighting Points

Route 75 Weekday		
Rank	**Stop**	**Alightings**
1	Watsonville Transit Center (Start)	30
2	Airport Blvd. & Freedom Centre	26
3	W Lake & Main	21
4	Main & Clifford	18
5	Green Valley & Klassen	11
6	Main & W 5th	11

Exhibit A.34 Route 75 Passenger Boarding and Alighting by Stop



Route 79 Boarding and Alighting Counts

Local Route 79 provides service in Watsonville, running in a loop from the Watsonville Transit Center through the East Lake and East Beach areas. Weekday service runs from 7:10 a.m. to 5:35 p.m. There is no Saturday, Sunday or holiday service. Route 79 operates on a 60-minute headway with a run time of 45 minutes.

Route 79 trips originate and terminate at the Watsonville Transit Center on Rodriguez Street. The route travels from the Watsonville Transit Center via East Beach Street, Lincoln Street, East Lake Avenue, College Road, Lakeview Road, Parkwood Drive, and returns to the Transit Center along College Road, East Lake Avenue, Tuttle Avenue, Bridge Street, Bronte Avenue, Hushbeck Avenue, East Beach Street, Lincoln Street, and East Lake Avenue before returning to the Watsonville Transit Center.

Top boarding and alighting activity points for Route 79 are shown in Exhibits A.32 and A.33. Again, the Watsonville Transit Center was observed to have the highest boardings of all the stops, as also revealed in the June 2011 ride checks. Top alighting points were distributed evenly with no one stop generating a disproportionate level of activity.

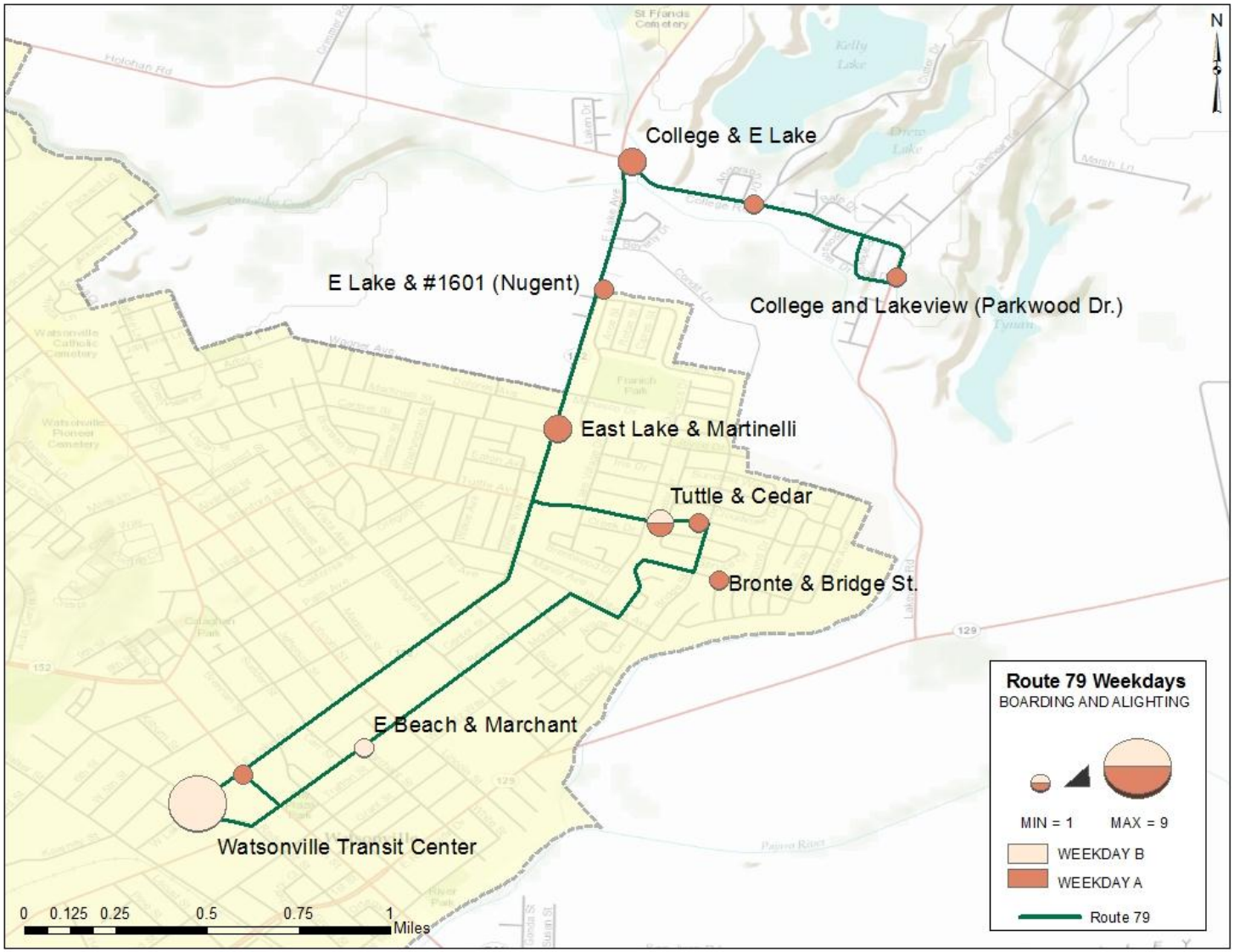
Exhibit A.35 Route 79 Top Boarding Points

Route 79 Weekday		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center (Start)	9
2	E Beach & Marchant	1
3	Tuttle & Cedar	1

Exhibit A.36 Route 79 Top Alighting Points

Route 79 Weekday		
Rank	**Stop**	**Alightings**
1	East Lake & Martinelli	2
2	College & E Lake	2
3	Tuttle & Cedar	1
4	East Lake & Bridge	1
5	College and Lakeview (Parkwood Dr.)	1

Exhibit A.37 Route 79 Passenger Boarding and Alighting by Stop



Route 91X Boarding and Alighting Counts

Route 91X provides express limited-stop service linking Watsonville and Santa Cruz with service from 6:35 a.m. to 9:12 a.m. and 3:30 p.m. to 5:25 p.m. (outbound) and from 5:55 a.m. to 10:19 a.m. and 4:30 p.m. to 6:19 p.m. (inbound). No weekend service is provided.

Outbound Route 91X trips originate from the Santa Cruz METRO Center (Pacific Avenue) and terminate at the Watsonville Transit Center (Rodriguez Street). Service on Route 91X travels from the Santa Cruz METRO Center down River Street, Water Street, Morrissey Boulevard, Highway 1, exiting onto Park Avenue to serve Cabrillo College on Soquel. The route returns to Highway 1 at State Park, enters Watsonville via Main Street, and arrives at the Watsonville Transit Center via West Lake. The inbound alignment is similar, but serves Dominican Hospital by exiting Highway 1 at 41st Avenue and reentering Highway 1 at Soquel Drive.

The weekday inbound service operates on a 30-minute headway from 5:55 a.m. to 6:25 a.m., 25-minute headways from 6:25 a.m. to 7:15 a.m., 15-minute headway from 7:15 a.m. to 7:30 a.m., 60-minute headways from 7:30 a.m. to 9:30 a.m., and 60-minute headway from 4:30 p.m. to 5:30 p.m. The run time on weekday Route 91X Inbound trips ranges from 47 to 65 minutes.

Top boarding and alighting points for inbound trips are shown in Exhibits A.35 and A.34. The Watsonville Transit Center generated the majority of boardings along this route and direction. By contrast, the June 2011 ride checks indicated the stops with the most alightings were Soquel Dr/Cabrillo College followed by the Santa Cruz Metro Transit Center.

Exhibit A.38 Route 91X Inbound Top Boarding Points

Route 91X Inbound		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center	10
2	Watsonville Civic Plaza	5
3	Green Valley and Main	3
4	Soquel Dr & Cabrillo College	2
5	Soquel Dr & E Ledyard/State Park	2

Exhibit A.39 Route 91X Inbound Top Alighting Points

Route 91X Inbound		
Rank	Stop	Alightings
1	Soquel Dr & Cabrillo College	9
2	Santa Cruz Metro Transit Center	5
3	Water and Ocean	3
4	Green Valley and Main	2
5	Water & Poplar	2

Exhibits A.37 and A.38 show the top boarding and alighting points along Route 91X Outbound (travelling to Watsonville). Again, as noted in the June 2011 ride checks and along the other routes serving this location, the Santa Cruz Metro Transit Center generated the greatest number of boardings along this route and direction. By contrast, the June 2011 ride checks indicated Soquel Dr/Cabrillo College as the point of most alightings.

Exhibit A.40 Route 91X Outbound Top Boarding Points

Route 91X Outbound		
Rank	Stop	Boardings
1	Santa Cruz Metro Transit Center	35
2	Water and Ocean	7
3	Water & Poplar (Catalpa)	4
4	Soquel Dr & Cabrillo College	3
5	Soquel Dr & State Park	2

Exhibit A.41 Route 91X Outbound Top Alighting Points

Route 91X Outbound		
Rank	Stop	Alightings
1	Soquel Dr & Cabrillo College	24
2	Watsonville Civic Plaza	14
3	Green Valley and Main	6

Exhibit A.42 Route 91X Inbound Passenger Boarding and Alighting by Stop

Exhibit A.43 Route 91X Outbound Passenger Boarding and Alighting by Stop