SANTA CRUZ METROPOLITAN TRANSIT DISTRICT

WATSONVILLE TRANSIT PLANNING STUDY
FINAL REPORT

FEBRUARY 2012

moore & associates

Santa Cruz Metropolitan Transit District
Watsonville Transit Study

FINAL REPORT

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Prepared for

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1 EXECUTIVE SUMMARY

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CHAPTER 1 – EXECUTIVE SUMMARY

Moore & Associates was retained by the Santa Cruz Metropolitan Transit District (Santa Cruz METRO) to prepare a Transit Study for the Watsonville community. The cornerstone goal of the project was to assess the efficiency of transit services provided within the city of Watsonville. As with many other California transit operators, Santa Cruz METRO faces the challenge of providing adequate and efficient service provision despite budget shortfalls and future funding uncertainties. Santa Cruz METRO and the consultant team conducted a comprehensive assessment of existing transit services within Watsonville, and from said assessment crafted a set of recommendations for service enhancement. The primary recommendations focus on enhancing efficiency while maintaining fair and balanced geographic coverage within Watsonville.

Eight Santa Cruz METRO routes operate within the city of Watsonville, including four intra-city routes, three inter-city routes, and a commuter express route. Local service routes include Route 72 (Corralitos), Route 74 (Ohlone Parkway/Rolling Hills), Route 75 (Green Valley), and Route 79 (Eastlake). The inter-city service is positioned within the South County area and includes Route 69A (Capitola Rd/Watsonville via Airport B), Route 69W (Capitola Rd/Cabrillo/Watsonville), and Route 71 (Santa Cruz/Watsonville). The commuter service (i.e., Route 91X) functions as a link between Santa Cruz and Watsonville. Monterey-Salinas Transit (MST) operates three routes to/in Watsonville (Line 27 Watsonville-Marina, Line 28 Salinas-Watsonville via Castroville, and Line 29 Salinas-Watsonville via Prunedale). All routes terminate at the Watsonville Transit Center where connections can be made to Santa Cruz METRO services.

Transit Study Process

A project initiation meeting was held on March 29, 2011 at the Santa Cruz METRO administrative offices. Topics discussed included the project timeline, data needs, proposed project completion strategy, inclusion of other entities (i.e., local non-profits), and data collection methodologies.

Report Structure

The Watsonville Transit Study report is divided into eight chapters including an Executive Summary. Each chapter provides analysis of findings generated from the specific or individual project component. Chapters include: Executive Summary, Service Evaluation, Demand Analysis, Public Involvement, Ride Check, Public Involvement, Recommendations, Capital and Financial Plans, and Marketing. Presented herein is a summary of each and the associated findings.

A key goal of the Study was to identify strategies for optimizing service within the framework of immediate and near-term budget realities. The Service Evaluation chapter (Chapter 2) details the performance of those transit services operated by Santa Cruz METRO within Watsonville for the period Fiscal Year (FY) 2009 through FY 2011. The Service Evaluation chapter is divided into three sections. The first is an overview of combined service (i.e., fixed-route and paratransit) metrics, including operating hours and fare structure. The second discusses performance specific to fixed-

route services within Watsonville. The third details the performance of paratransit (ParaCruz) services within the entire Santa Cruz METRO service area (given Watsonville-specific ParaCruz data was unavailable at the time of this study).

Summary Points:

- Exhibit 1.1 presents the combined (fixed-route and paratransit) performance indicators for transit services in Watsonville for FY 2009 through FY 2011.
- Fixed-route ridership increased across the evaluation period by nearly 15,000 unlinked-rides translating to approximately one-percent growth.
- The combined Watsonville services posted an average farebox ratio of 19.9 percent, just shy of the TDA standard of 20 percent for urbanized operators.
- Those fixed-routes with the lowest annual ridership (i.e., below 100,000 unlinked trips) were Routes 79 and 74.
- ParaCruz productivity (Passengers/Vehicle Service Hour) improved from 2.09 to 2.15, although farebox recovery declined from 8.9 percent to 5.5 percent.

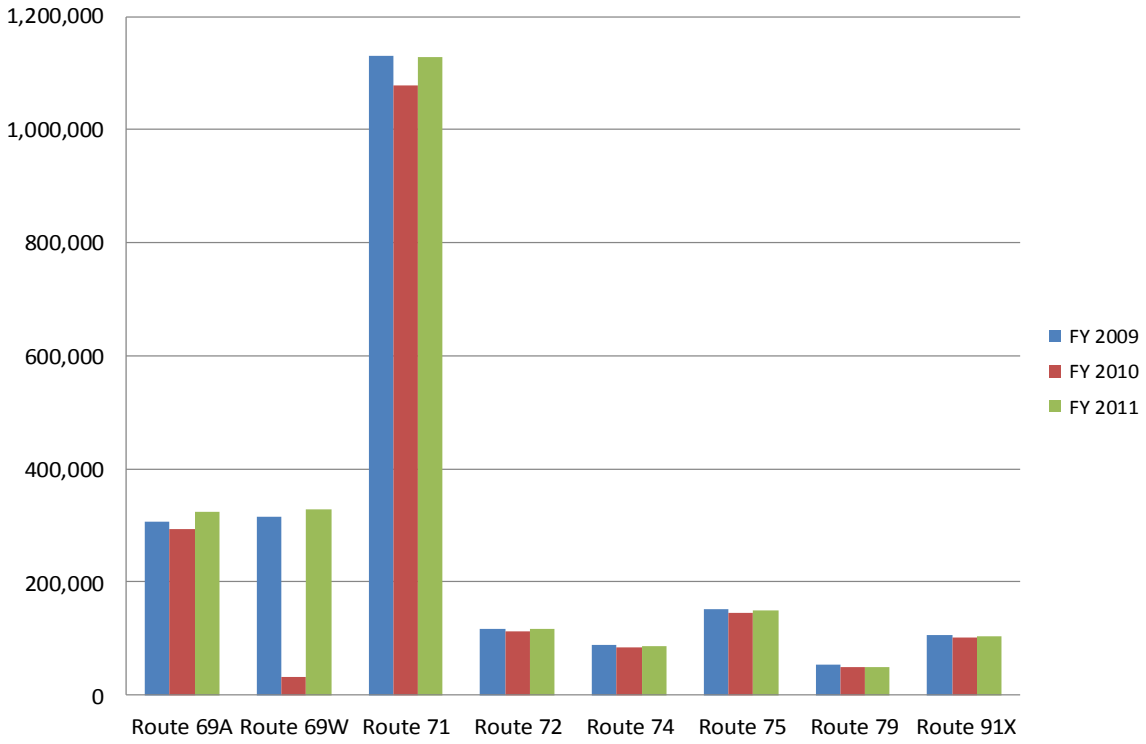
Exhibit 1.1 Combined Performance Indicators

**Performance Measure	**FY 2009	**FY 2010	**FY 2011
Operating Cost	$14,569,697	$14,995,663	$16,251,261
percent change	*0.0%*	*2.9%*	*8.4%*
Fare Revenue	$3,094,128	$2,920,178	$3,102,160
percent change	*0.0%*	*-5.6%*	*6.2%*
Vehicle Service Hours	125,004	124,393	125,318
percent change	*0.0%*	*-0.5%*	*0.7%*
Vehicle Service Miles	1,845,533	1,822,879	1,842,089
percent change	*0.0%*	*-1.2%*	*1.1%*
Ridership	2,365,414	2,274,216	2,381,391
percent change	*0.0%*	*-3.9%*	*4.7%*
Performance Indicator			
Operating Cost/VSH	$116.55	$120.55	$129.68
percent change	*0.0%*	*3.4%*	*7.6%*
Operating Cost/VSM	$7.89	$8.23	$8.82
percent change	*0.0%*	*4.2%*	*7.2%*
Operating Cost/Passenger	$6.16	$6.59	$6.82
percent change	*0.0%*	*7.1%*	*3.5%*
Passengers/VSH	18.92	18.28	19.00
percent change	*0.0%*	*-3.4%*	*3.9%*
Passengers/VSM	1.28	1.25	1.29
percent change	*0.0%*	*-2.7%*	*3.6%*
Farebox Recovery	21.2%	19.5%	19.1%
percent change	*0.0%*	*-8.3%*	*-2.0%*
Fare/Passenger	$1.31	$1.28	$1.30
percent change	*0.0%*	*-1.8%*	*1.5%*

***Data reflects Routes 69A, 69W, 71, 72, 74, 75, 79, 91X, and ParaCruz.*

- Route 71 functions as the "backbone" of transit service to and from Watsonville, accounting for the majority of riders and fare revenue.

Exhibit 1.2 Fixed-Route Ridership by Route



The primary goal of the Demand Analysis (Chapter 3) was to identify and analyze an array of actual and potential contributors influencing transit demand for residents, workers, and visitors within Watsonville. The analysis considers factors such as transportation options, trip generators, key demographics, economic indicators, recent and proposed land-use changes, and home-to-work travel behavior. The analysis seeks to provide a basis for future service recommendations intended to enhance fixed-route and ParaCruz services throughout the Watsonville community by assessing reported demand and observed mobility trends while also seeking to identify temporal and spatial gaps.

Summary Points:

- The primary transportation corridor through Watsonville is Highway 1.
- The primary transfer point between local, inter-city, and regional transit services operating in Watsonville is the Watsonville Transit Center located at West Lake Boulevard and Rodriguez Street.
- The Atkinson Lane Specific Plan and Manabe-Ow Business Park Specific Plan are projected to result in a substantial increase in residents and jobs within Watsonville.
- Exhibit 1.3 presents transit-dependent population growth projections for Watsonville through 2020.

Exhibit 1.3 Transit-Dependent Population Growth

Population Group	2000		2010		2020 Forecast		Percent Change	
	Number	Share of Population	Number	Share of Population	Number	Share of Population	2000-2010	2010-2020
Youth (ages 6 to 17)	10,937	24.70%	10,298	20.10%	12,025	20.10%	-5.80%	16.80%
Seniors (60 and over)	3,802	8.60%	4,239	8.30%	4,726	7.90%	11.50%	11.50%
Persons with a disabilities*	8,350	18.90%	5,629	12.90%	7,718	17.70%	-32.60%	37.10%
Low-Income Individuals*	8,361	18.90%	9,488	19.20%	11,052	22.40%	13.50%	16.50%
Persons with no vehicle access*	1,184	2.70%	1,124	2.30%	1,376	2.80%	-5.10%	22.40%

**Census 2010 data not available. Data reflects 2007 ACS data (disabilities, total population = 43,725) and 2009 ACS data (low-income, no-vehicle, total population = 49,418). 2020 population based on 1.57 percent increase/year.*

Exhibit 1.4 Summary of Watsonville Economic Characteristics

		Commute			Income				
	Percentage Unemployed	Drive Alone	Public Transit	Walked	Median Household Income	Social Security Income	Public Assistance Income	Median Family Income	Per Capita Income
City of Watsonville	10.5%	70.3%	1.2%	4.2%	$47,526.00	$12,563.00	$5,911.00	$49,458.00	$16,227.00
Santa Cruz County	7.5%	71.3%	2.9%	4.0%	$64,349.00	$14,631.00	$5,694.00	$81,709.00	$33,532.00
California	7.9%	73.0%	5.1%	2.8%	$60,392.00	$14,722.00	$5,455.00	$68,909.00	$29,020.00
Nationally	7.2%	75.9%	5.0%	2.9%	$51,425.00	$14,966.00	$3,363.00	$62,363.00	$27,041.00

Source: 2009 American Community Survey

The Ride Check Analysis (Chapter 4) presents a thorough assessment of those transit services operating in Watsonville under actual operating conditions. In doing so, a snapshot results illustrating system activity as well as service quality. Moore & Associates conducted a ride check of trips operated by Santa Cruz METRO along Routes 69A, 69W, 71, 72, 74, 75, 79, and 91X. Ride checks were conducted during the summer season from June 8 to June 13, 2011. Supplemental ride checks were conducted by Santa Cruz METRO staff during fall and winter (October 24 through December 9, 2011) on the same routes as the June 2011 ride check. The fall/winter ride check data and detailed route-by-route assessment are presented in the Appendix.

The Ride Check Analysis includes two elements: system on-time performance and productivity (i.e., boarding and alighting activity) by stop, route, and day-part. Following a summary of ride check data are key findings as well as recommendations for improvement.

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.

Ride checks were also segregated into specific day-parts and by trip segments. The day-parts are:

- **AM Other** (3:01 a.m. to 6:00 a.m.)
- **AM Peak** (6:01 a.m. to 9:00 a.m.)
- **Midday** (9:01 a.m. to 3:30 p.m.)
- **PM Peak** (3:31 p.m. to 7:00 p.m.)
- **PM Other** (7:01 p.m. to 3:00 a.m.)

Detailed route-by-route performance and graphic representations of boarding and alighting activity for the June 2011 ride checks is presented in Chapter 4.

Summary Points (summer ride checks):

- The most significant issue in terms of on-time performance was the incidence of late departures during the PM day-parts. This suggests inadequate "run time" in the current operating schedule.
- While the incidence of early departures were an issue throughout the operating day for all observed routes it was particularly acute during the *AM Peak* day-part (20.3 percent).
- 17.8 percent of surveyed trips during the *PM Peak* departed early from published time points.

Exhibit 1.5 Overall On-Time Performance by Day-Part

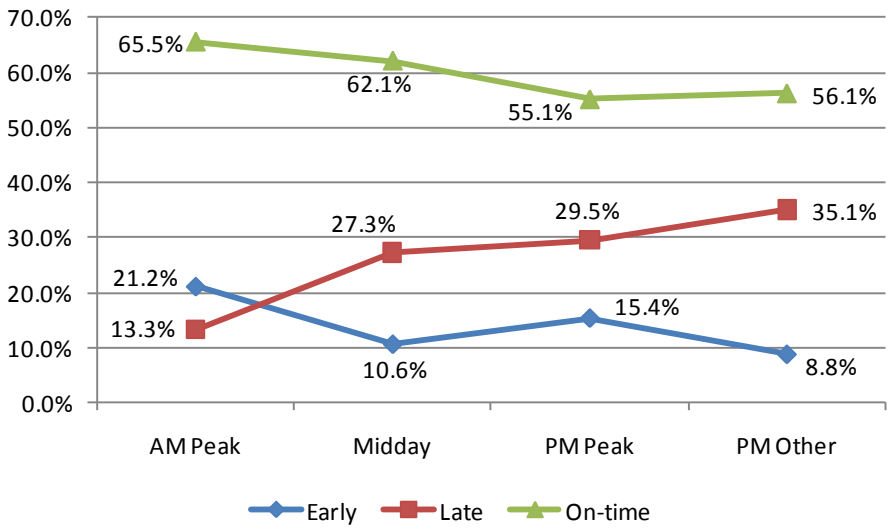


Exhibit 1.6 Overall Boardings by Route and Day-Part

Boarding Averages						
Route	**AM Other**	**AM Peak**	**Midday**	**PM Peak**	**PM Other**	**Route Average**
Route 69A Inbound	-	32.7	37.8	29.8	-	32.9
Route 69A Outbound	-	22.0	30.0	39.3	-	32.2
Route 69W Inbound	-	24.0	39.6	24.0	-	31.8
Route 69W Outbound	-	-	43.7	29.3	20.0	36.9
Route 71 Inbound	-	32.5	46.3	20.3	22.0	36.7
Route 71 Outbound	-	19.3	33.5	31.8	26.3	30.0
Route 72	-	10.0	11.0	15.0	-	11.2
Route 74	-	5.0	15.0	10.7	-	10.3
Route 75	-	14.6	23.3	17.8	8.5	18.0
Route 79	-	2.0	-	9.0	-	5.5
Route 91X Inbound	-	6.0	7.0	-	-	6.5
Route 91X Outbound	-	7.0	-	-	-	7.0
Total	**-**	**19.4**	**34.8**	**25.3**	**19.7**	**28.0**

Exhibit 1.7 Overall Alightings by Route and Day-Part

Alighting Averages						
Route	AM Other	AM Peak	Midday	PM Peak	PM Other	Route Average
Route 69A Inbound	-	29.7	35.3	29.7	-	31.4
Route 69A Outbound	-	22.0	30.6	40.3	-	32.9
Route 69W Inbound	-	24.0	39.6	23.8	-	31.7
Route 69W Outbound	-	-	43.1	32.8	20.0	37.8
Route 71 Inbound	-	32.3	45.9	18.8	17.0	36.0
Route 71 Outbound	-	19.3	33.4	31.0	25.3	29.6
Route 72	-	9.3	11.0	15.0	-	10.8
Route 74	-	5.0	14.0	10.7	-	10.0
Route 75	-	14.6	23.1	17.8	8.0	17.9
Route 79	-	2.0	-	9.0	-	5.5
Route 91X Inbound	-	6.0	7.0	-	-	6.5
Route 91X Outbound	-	9.0	-	-	-	9.0
Total	**-**	**19.1**	**34.5**	**25.5**	**18.4**	**27.7**

Summary Points (fall/winter ride checks):

- The most significant issue in terms of on-time performance was the incidence of late departures during the PM Other day-part (30 percent). This suggests inadequate "run time" in the operating schedule.
- The observance of missed trips resulted in a decrease in overall on-time performance. Missed trips imply severely inadequate "run time" in the operating schedules.
- The incidents of early departures decreased from the summer ride checks. Early departures remain a concern during the AM Other day-part (12.5-percent).
- Exhibit 1.9 presents overall boarding by route and day-part for Fall/Winter 2011 ride checks.

Exhibit 1.8 Overall On-Time Performance by Day-Part

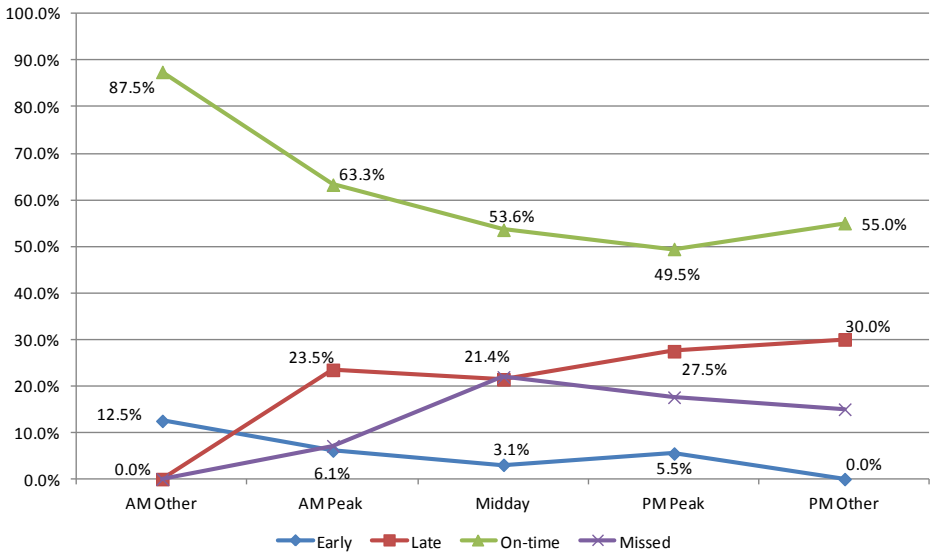


Exhibit 1.9 Overall Boardings by Route and Day-Part

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**

The most successful transit plans include active community involvement. To encourage public involvement the project plan included a bilingual community survey and six community workshops within Watsonville.

Public Involvement (Chapter 5): Outreach efforts focused on soliciting feedback from riders and non-riders alike regarding perception of current transit offerings throughout the study area. The community survey had three objectives: identify and quantify mobility needs, gauge perception of existing services, and identify opportunities for attracting "choice riders". The approach quantified travel patterns, identified barriers to use of transit, and identified mobility preferences of persons residing within the study area who had not patronized public transit within 90 days of the survey contact.

Summary Points:

- A community survey was employed using two distinct methodologies: intercept survey throughout Watsonville, and onboard survey for those Santa Cruz METRO fixed-routes serving Watsonville.
- 354 surveys were collected, reflecting a statistically-valid sample size (95-percent confidence level).
- 38.7 percent of respondents stated they live in a household with an annual income of less than $35,000, which suggests potential sensitivity to fare increases.
- 37.9 percent indicated speaking a language other than English (primarily Spanish) at home.
- 24 percent indicated they were employed. Of these, more than 80 percent stated they work in Watsonville or adjoining areas.
- 35 percent of respondents indicated they had a difficult time accessing healthcare and employment due to the absence of affordable transportation.
- Generally, riders were satisfied with all six service attributes. Riders were particularly satisfied with the safety of transit service in Watsonville.
- "Having access to a personal vehicle" is the greatest barrier to transit usage (cited by 58 percent of total respondents).
- There is little consensus amongst rider groups regarding preferred service enhancement.
- More than 52 percent cited they would not support any fare increase, even if it would result in the desired service enhancement. More than 70 percent of non-riders indicated they would not support any fare increase.

To achieve effective outreach with the community at-large, Moore & Associates facilitated six focus groups between July 20 and August 24, 2011. Exhibit 1.10 presents the location and attendance at each session.

Exhibit 1.10 Focus Groups

Location	Attendance
La Manzana Community Resource Center (Focus Group 1)	25
La Manzana Community Resource Center (Focus Group 2)	13
Watsonville Senior Center (Focus Group 1)	25
Watsonville Senior Center (Focus Group 2)	21
Volunteer Center - Friends Outside (Focus Group 1)	15
Volunteer Center - Community Connection (Focus Group 2)	18

Focus group comments were segregated into the following four categories: new/additional service area(s), enhancements to existing service, capital/technology, and policy.

- New areas where service was requested included the county jail off Buena Vista, county employment offices, and Santa Cruz public beaches.
- Requested enhancements to existing services included more frequency to local businesses (groceries, hardware), extended evening service hours on local routes, and additional service to healthcare centers.
- Capital and technology requests included additional bicycle capacity, internet service on vehicles, and additional infrastructure (bus shelters and benches) along current alignments.
- Policy enhancements requested included easing the bus transfer process for customers, increased availability of bus passes, enhanced distribution of service information to local schools, reduction in fares, and additional multi-use pass options.

The Recommendations chapter (Chapter 6) presents a ”roadmap” for the continuing enhancement of Santa Cruz METRO services within Watsonville across the study horizon. The recommendations reflect the findings presented within the Service Evaluation, Demand Analysis, Ride Check, and Public Involvement chapters specific to current service offerings.

The consultant’s recommendations are segregated into distinct program segments:

- Administrative,
- Capital, and
- Operational.

Administrative recommendations include:

- Santa Cruz METRO staff should actively participate in driver training and safety meetings.
- Marketing within Watsonville should focus on direct outreach to the community versus traditional/historic marketing methods.

- Focus on increasing ridership versus modifying fare structures.
- Consider "uncoupling" the interlined routes to enhance system flexibility resulting in improved on-time performance.

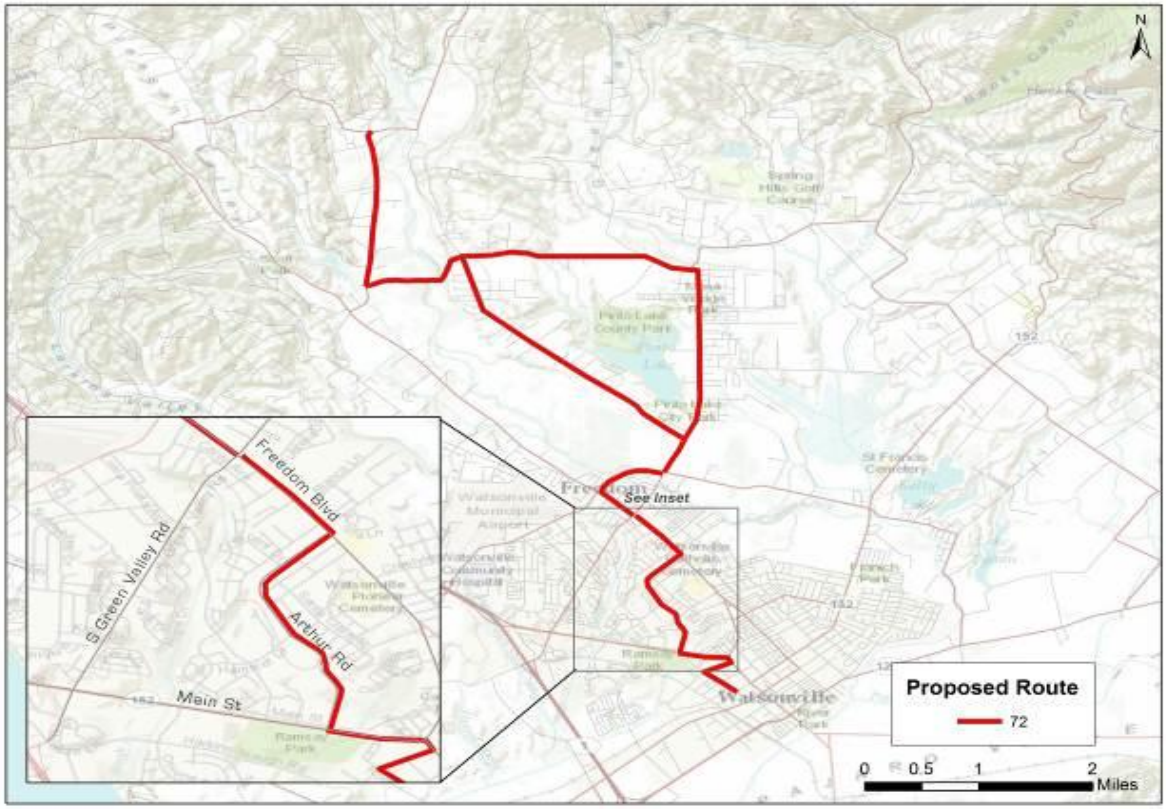
Capital recommendations include:

- Identify funding for internet access onboard vehicles.
- Bicycle capacity should be a consideration when procuring new service vehicles.
- Involve the community directly with regard to the enhancement and development of new infrastructure projects. Can be accomplished as part of recurring public hearings such as the annual TDA Article 8 "Unmet Needs" public hearings.

Operational recommendations include:

- System shakeups (schedule modifications) should be limited to twice annually to reduce customer confusion and increase confidence in the schedules.
- Route nomenclature should be revised to reduce confusion and redundancy. For example, renaming Routes 69A and 69W to unique identifiers such as Route 68 and Route 69.
- Maintain regular communication and coordination with regional operators, in particular Monterey-Salinas Transit, to streamline regional travel for transit riders.
- Increase run time for Routes 69A and 69W to improve on-time performance.
- Eliminate or revise unproductive trips on Route 71.
- Increase run time on Route 71 to improve on-time performance.
- Introduce a new limited-stop express route (Route 71X) to address vehicle crowding.
- Extend Route 91X service span into the early evening by adding another outbound trip to Watsonville.
- Increase run time on Route 74 to improve on-time performance.
- Increase run time (trip mid-segment) on Route 79 to improve on-time performance.
- Reduce alignment duplication on Routes 72 and 75 by modifying the current Route 72 alignment so as to travel along a different path (Exhibit 1.11).

Exhibit 1.11 Revised Route 72 Alignment



In addition to presenting service and policy recommendations, the Study includes Capital and Financial Plans (Chapter 7) forecasting fiscal impact across a twenty-year horizon. The Capital Plan presents a framework for the ongoing development of the infrastructure needed to support the efficient provision of public transit service throughout the Study area focusing on transit fleet and facilities. The Financial Plan identifies those expenditures needed to implement the recommendations included within the operational recommendations within Recommendations (Chapter 6).

The Marketing chapter (Chapter 8) presents marketing tactics intended to support implementation of the service/operational recommendations presented in the Recommendations chapter. The marketing strategies focus on short and mid-range recommendations (a 12- to 18-month horizon). Three primary strategies are identified:

- Service information,
- Online resources, and
- Service marketing.

Each of the strategies presents specific and detailed suggestions for achieving the Study goals of improving mobility for persons residing and working in Watsonville, while also ensuring reasonable access to public transit.

2 SERVICE EVALUATION

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CHAPTER 2 – SERVICE EVALUATION

Watsonville is served by two transportation providers: Santa Cruz Metropolitan Transit (Santa Cruz METRO) and Monterey-Salinas Transit (MST). Over the last three years, Santa Cruz METRO services operating to and within Watsonville averaged more than two million unlinked trips annually. However, year-to-year tallies reveal a fluctuation in ridership, with a decline in FY 2010 attributable to service adjustments to the overall system, population change, and shifts in transit demand due chiefly to the economic downturn. In contrast, MST continues to enjoy steady ridership on its three Watsonville routes (Lines 27, 28, and 29), which offer connections with Santa Cruz METRO at the Watsonville Transit Center.

Eight Santa Cruz METRO routes operate within the city of Watsonville, including four intra-city routes, three inter-city routes, and a commuter express route. Local routes include Route 72 (Corralitos), Route 74 (Ohlone Parkway/Rolling Hills), Route 75 (Green Valley), and Route 79 (Eastlake). The inter-city service is positioned within the South County area and includes Route 69A (Capitola Rd/Watsonville via Airport B), Route 69W (Capitola Rd/Cabrillo/Watsonville), and Route 71 (Santa Cruz/Watsonville). The commuter service (i.e., Route 91X) functions as a link between Santa Cruz and Watsonville.

Monterey-Salinas Transit (MST) operates three routes to/in Watsonville (Line 27 Watsonville-Marina, Line 28 Salinas-Watsonville via Castroville, and Line 29 Salinas-Watsonville via Prunedale). All routes terminate at the Watsonville Transit Center where connections can be made with Santa Cruz METRO services. At the time of this report, Line 26 Watsonville-Aromas had been discontinued. Therefore, discussion of this route is not included in our report. The consultant team contacted MST staff and discussed near-term plans for MST services to Watsonville. MST plans to reduce service to Watsonville by nearly 50 percent as early as April 2012. Planned reductions include modifying MST Routes 28 and 29 to 120-minute headways (versus current 60-minute headways). These planned reductions will also impact the nearby community of Pajaro as MST provided the only direct link from Pajaro to the Watsonville Transit Center. Connections between Santa Cruz METRO and MST services are now even more important to regional travel due to planned decrease in service.

Objectives of Evaluation

The cornerstone objectives of this chapter are: (1) evaluate aspects of Santa Cruz METRO's operations (both internal and external) impacting the day-to-day delivery of public transit services operating within the city of Watsonville, and (2) present cost-effective strategies and recommendations for achieving a higher quality of service. Our analysis includes operational, maintenance, and administrative elements.

Evaluation Approach

Throughout the course of this project, Moore & Associates met with Santa Cruz METRO staff to establish project priorities, deliverables, and data collection methodologies. Additionally, our project team coordinated with Santa Cruz METRO staff with respect to report writing responsibilities and individual project tasks. With the assistance of Santa Cruz METRO staff, we employed strategies for soliciting community input (i.e., community intercept survey), compiled performance and service activity data for Santa Cruz METRO Watsonville services (i.e., ride checks), and solicited community participation through focus groups and stakeholder meetings.

Santa Cruz Metropolitan Transit District Overview

The Santa Cruz Metropolitan Transit District (Santa Cruz METRO) was formed in 1968 as a special district within Santa Cruz County. Its initial services operated within the cities of Santa Cruz and Capitola, and the community of Live Oak. In 1974, Santa Cruz METRO expanded its service area to include Watsonville, Scotts Valley, and the San Lorenzo Valley. Currently, eight of its 34 fixed-route alignments (including the 91X Commuter Express) operate within the city of Watsonville and provide connections with Monterey-Salinas Transit (MST) at the Watsonville Transit Center. In addition to fixed-route service, Santa Cruz METRO ParaCruz provides a county-wide paratransit program which includes ADA complementary service for eligible Watsonville residents.

Fixed-route operating schedules may vary slightly in transit times depending on the season. Santa Cruz METRO updates its transit services quarterly and some schedules or hours of operation detailed below may change subsequent to the adoption of this report.

Santa Cruz METRO's Mission Statement

To provide a public transportation service that enhances personal mobility and creates a sustainable transportation option in Santa Cruz County through a cost-effective, reliable, accessible, safe, clean and courteous transit service.

Inter-City Fixed-Route Alignments

The following narrative describes Santa Cruz METRO fixed-route, commuter, and impacted ParaCruz services operating within the city of Watsonville. Historically Santa Cruz METRO has made quarterly updates to its published schedule resulting in potential variances in hours of operation presented within this report. For purposes of this report, the transit schedule presented herein is reflective of the published schedule in effect September 15, 2011 to January 4, 2012. Several routes were discontinued in 2011 due chiefly to funding shortfall.

Route 69A (Capitola Rd./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. in Watsonville. 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. Origin and terminus points are the Watsonville Transit Center and Santa Cruz METRO Center.

Similar to the Route 69A alignment, 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 route functions as a limited express between Watsonville Transit Center and Cabrillo College serving all published time-points as well as the following stops: Rodriguez & Main, Main & Pennsylvania, Main & Clifford, and Soquel & State Park. All posted stops are served between the Santa Cruz METRO Center and Cabrillo College.

Route 71 (Santa Cruz/Watsonville) runs on 30-minute headways between the Santa Cruz METRO Station and Watsonville Transit Center. Service is provided daily, with reduced service on weekends (Saturday and Sunday). Outbound service operates every half hour 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. Outbound weekend service operates on a similar schedule, every half hour from 7:15 a.m. to 9:45 p.m., and hourly from 9:45 p.m. to 12:45 a.m. The first trip on the inbound weekday service begins at 5:35 a.m., with the last trip ending at 11:50 p.m. Frequencies vary from 20-minute to 30-minute headways. Inbound weekend service operates between 6:05 a.m. and 10:30 p.m. At the time of this report, four weekday trips had been eliminated from the schedule (6:55 a.m., 3:55 p.m., 4:25 p.m., and 9:00 p.m.), trip start-time changed from 10:30 p.m. to 10:50 p.m., and weekend service offered one less trip (9:00 p.m.).

Local Fixed-Route Alignments

The Route 72 (Corralitos) alignment runs from the Watsonville Transit Center traveling north to Browns Valley and Corralitos. The alignment starts along Main Street where it heads up Green Valley Rd. before turning onto on Airport Blvd. and then back to Green Valley Rd. The alignment then travels northbound along Arnesti Rd. and then out to Corralitos and on a clockwise loop back onto Green Valley Rd. before returning back to the Watsonville Transit Center. Hours of operation are 5:50 a.m. to 7:48 p.m. The Fall 2011 schedule shake-up modified schedule times so as to depart 50 minutes after the hour, and then hourly from 5:50 a.m. to 5:50 p.m. (with an additional 6:50 p.m. trip).

Route 74 (Ohlone Parkway/Rolling Hills) offers service to/from the Watsonville Transit Center between Ohlone Parkway and Rolling Hills. The alignment travels in a “figure 8” fashion heading northbound to the Watsonville Municipal Airport. Running on a clockwise loop along Anna Street it

then travels counterclockwise along Buena Vista before heading toward Airport Blvd. The route stops at Pajaro Valley High School before continuing back to its origin point at the Watsonville Transit Center. Service operates weekdays from 6:50 a.m. to 5:40 p.m. At the time of this report, Santa Cruz METRO adapted to a 120-minute frequency between 6:50 a.m. and 4:50 p.m., with an added stop at the Social Security office (12:50 p.m. and 4:50 p.m. trips). A schedule adjustment was also made on the 2:50 p.m. trip, serving Pajaro Valley High School at the end of the trip to address the school afternoon bell schedule.

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 Transit Center proceeding onto Green Valley Road, detouring slightly onto Airport Blvd, where it continues onto Green Valley Road. The route path then continues onto Wheelock Road where it travels counter-clockwise before returning to its point of origin. Service is provided seven days a week, between 6:09 a.m. and 7:57 p.m. At the time of this report, the 8:09 p.m. trip had been eliminated as part of Santa Cruz METRO's quarterly service shake-up.

Route 79's (East Lake) alignment extends up College Drive, proceeding to Bridge Street as it heads south to its origin/terminus point, at the Watsonville Transit Center. The service operates Monday through Friday from 7:10 a.m. to 5:35 p.m. on a 60-minute headway.

Route 91X (Santa Cruz to Watsonville) runs on 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 for the lion's share part of the route along Cabrillo Highway. Transitioning onto Soquel Drive the route continues back onto Cabrillo Highway until Main Street, where it terminates at the Watsonville Transit Center. The outbound express bus 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. during evening peak-hours.

Exhibit 2.1 Santa Cruz METRO Service Span

Fall 2011 Schedule			Headways	
Fixed-Routes	Weekday (Monday - Friday)	Weekend (Saturday & Sunday)	Weekday	Weekend
Route 69A Inbound	6:45 a.m. to 7:48 p.m.	8:20 a.m. to 6:20 p.m.	60-minute	120-minute
Route 69A Outbound	7:07 a.m. to 7:10 p.m.	9:00 a.m. to 8:03 p.m.	60-minute	120-minute
Route 69W Inbound	6:20 a.m. to 7:18 p.m.	7:20 a.m. to 6:25 p.m.	60-minute	120-minute
Route 69W Outbound	6:37 a.m. to 7:37 p.m.	8:20 a.m. to 7:18 p.m.	60-minute	120-minute
Route 71 Inbound	5:35 a.m. to 11:50 p.m.	6:05 a.m. to 10:30 p.m.	30-minute	30-minute
Route 71 Outbound	6:10 a.m. to 12:45 a.m.	7:15 a.m. to 12:45 a.m.	30-minute	30-minute
Route 72	5:50 a.m. to 7:48 p.m.	-	120-minute; 60-minute[1]	120-minute
Route 74	6:50 a.m. to 5:40 p.m.	-	120-minute	120-minute
Route 75	6:09 a.m. to 7:57 p.m.	6:09 a.m. to 7:57 p.m.	60-minute	60-minute
Route 79	7:10 a.m. 5:35 p.m.	-	60-minute	-
Route 91X Inbound	5:55 a.m. to 10:19 p.m., 4:30 p.m. to 6:19 p.m.		55-minute; 65-minute; 60-minute[2]	-
Route 91X Outbound	6:35 a.m. to 9:12 a.m., 3:30 p.m. to 5:35 p.m.		60-minute	-

60-minute headway reflects last trip of the day. [1] *Frequency varies by time of day.* [2]

Santa Cruz METRO Fixed-Route Fare Structure

Patrons may travel on Santa Cruz METRO's fixed-route service using one of six possible fare options (i.e., cash, day pass, 3-day pass, 7-day pass, 31-day pass, and 15-ride pass). Patrons riding the Amtrak Highway 17 Express route are required to pay an additional fare for travel between Santa Cruz and San Jose. Children measuring 46 inches or less in height are eligible to ride free on any Santa Cruz METRO fixed-route bus. A limit of three children may ride free with each fare-paying adult. Discounted fares are available for adults (age 62 or older) and persons with disabilities subject to presentation of one of the following METRO-approved identity cards.

Elderly Patrons

- METRO Discount photo identity card,
- METRO ParaCruz identity card,
- Discount photo identity card/Paratransit identity card issued by a recognized transit agency,
- Senior citizen identity card,
- Identification displaying date of birth (i.e., passports and/or birth certificates), and
- Valid State driver license or valid State identity card.

Persons with disabilities:

- METRO Discount photo identity card,
- METRO ParaCruz identity card,
- Discount photo identity card/Paratransit identity card issued by a recognized transit agency,
- Medicare identity card,
- Valid identity card for a California Disabled Person parking placard,
- Disabled Veteran identity card, and
- Children accompanying a parent with a disability may also ride at the discounted fare.

The METRO CASH Card (stored value) does not expire and is available in $10, $20, $30, and $50 denominations. METRO day passes provide unlimited rides in Santa Cruz County (except on Amtrak Highway 17). Patrons may receive additional discounts at the time of purchase of an Amtrak Highway 17 Express day pass when exchanging their METRO discount day pass, METRO day pass, Regular Santa Clara VTA day pass, or displaying their Clipper card and receipt for CalTrain monthly 2-zone pass or VTA Express pass. Amtrak Highway 17 Express Passes are valid for unlimited rides on all METRO and VTA local routes. Patrons may obtain transfer passes valid for travel on Monterey Salinas Transit services onboard Watsonville Routes 71-79.

At the time of this report, Santa Cruz METRO had implemented a fare increase across all fixed-routes. New fares took effect September 2011 and are reflected in the fare table below.

Exhibit 2.2 Santa Cruz METRO Fixed-Route Fare Structure

	Child (less than 46 inches tall)		Youth (up to 17)		Adult (18 and older)		Discount Fare	
METRO Fixed-Route	Current	New	Current	New	Current	New	Current	New
Regular Service in Santa Cruz County								
Cash	Free	Free	$1.50	$2.00	$1.50	$2.00	$0.75	$1.00
Percent Change				*33.3%*		*33.3%*		*33.3%*
Day Pass	N/A	N/A	$4.50	$6.00	$4.50	$6.00	$2.25	$3.00
Percent Change				*33.3%*		*33.3%*		*33.3%*
3-Day Pass	N/A	N/A	$15.00	$15.00	$15.00	$15.00	$7.50	$7.50
Percent Change				*0.0%*		*0.0%*		*0.0%*
7-Day Pass	N/A	N/A	$32.00	$32.00	$32.00	$32.00	$16.00	$16.00
Percent Change				*0.0%*		*0.0%*		*0.0%*
31-Day Pass	N/A	N/A	$35.00	$48.00	$50.00	$65.00	$25.00	$32.00
Percent Change				*37.1%*		*30.0%*		*28.0%*
15-Ride Pass	N/A	N/A	$27.00	$27.00	$27.00	$27.00	$13.50	$13.50
Percent Change				*0.0%*		*0.0%*		*0.0%*
Amtrak Highway 17 Express								
Cash	Free	Free	$5.00	$5.00	$5.00	$5.00	$2.50	$2.50
Percent Change				*0.0%*		*0.0%*		*0.0%*
Day Pass	N/A	N/A	$10.00	$10.00	$10.00	$10.00	$10.00	$10.00
Percent Change				*0.0%*		*0.0%*		*0.0%*
5-Day Pass	N/A	N/A	$42.00	$42.00	$42.00	$42.00	$42.00	$42.00
Percent Change				*0.0%*		*0.0%*		*0.0%*
31-Day Pass	N/A	N/A	$113.00	$113.00	$113.00	$113.00	$113.00	$113.00
Percent Change				*0.0%*		*0.0%*		*0.0%*
ParaCruz Fare (One Way)	One Way Fare							
Cash	$3.00	$4.00						
Percent Change								

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

Paratransit Program

Santa Cruz METRO operates METRO ParaCruz, an eligibility-based, door-to-door, ADA complementary paratransit service for persons with temporary or permanent physical, cognitive, or psychiatric disabilities limiting their use of regular fixed-route transit service. Hours of operation supplement Santa Cruz METRO's fixed-route hours with additional evening service corresponding with later evening fixed-route service. Service is provided throughout Santa Cruz County to locations within three-quarters of a mile of a fixed-route alignment. The service operates on a limited basis during summer months reflective of Route 33 and 34 operating times. Eligible patrons must make reservations at least one day in advance of the scheduled pick-up or drop-off, between 8:00 a.m. and 5:00 p.m. Persons interested in participating in the program must submit an application and complete an in-person interview to determine eligibility. Patrons can ride ParaCruz for $4.00 (one-way). Payment options include cash or a pre-paid coupon valid for a single direction one-way trip. The coupon can be purchased from the driver, online, or at the Santa Cruz METRO Center information booth.

Monterey Salinas Transit Fixed-Route Services (Watsonville Routes)

Line 27 (Watsonville-Marina) offers weekday service between the Marina Transit Exchange and Watsonville Transit Center. Service operates every 120-minutes between 6:10 a.m. and 8:09 p.m. Trips originate at Watsonville Transit Center traveling along Riverside onto Merritt Street. It then travels along Castroville Blvd to Moro Cojo Esperanza and Vista De Tierra, proceeding onto Del Monte Avenue before reaching the Marina Transit Exchange. Returning north it operates on the same alignment terminating at the Watsonville Transit Center.

Line 28 (Salinas-Watsonville via Castroville) provides round trip service between the Watsonville Transit Center and Salinas Transit Center. Hourly service is offered Monday through Saturday from 6:00 a.m. to 10:40 p.m., and Sunday from 6:45 a.m. to 6:40 p.m. Trips originate at the Watsonville Transit Center running along State Highway 1 en route to/from the Salinas Transit Center. Line 28 also runs through Castroville, stopping at Merritt and Union for connections with MST Line 27.

Line 29 (Salinas-Watsonville via Prunedale) provides daily round trips between the Watsonville Transit Center and Salinas Transit Center. Unlike Line 28, Line 29 travels along Salinas Rd. from Watsonville, heading south onto San Miguel Canyon Rd as it passes through Prunedale. The alignment then travels along Highway 101, then onto North Main Street where it loops at the Salinas Transit Center as it travels north to its origin point, the Watsonville Transit Center. Line 29 operates on a 60-minute headway from 6:30 a.m. to 7:35 p.m., Monday through Saturday; and from 6:45 a.m. to 7:55 p.m. on Sunday.

Combined Performance Indicators (Watsonville-Specific Services)

This section analyzes the combined performance of these services operating within Watsonville using a series of quantitative criteria to assess service and efficiency. The performance indicators were evaluated across a three-year period. The analysis reflects performance of eight Santa Cruz METRO fixed-route local and inter-city services as well as ParaCruz, Santa Cruz METRO's county-wide ADA-complementary paratransit program. ParaCruz performance data reflects county-wide performance and is not limited to Watsonville services only.

Fare revenue, ridership, and operating cost for fixed-route services were calculated using Santa Cruz METRO system fixed-route performance indicators (i.e., Operating Cost/VSH, Passengers/VSH, and Fare/Passengers) as route-specific data for the abovementioned measures were not available at the time of this report. Following Exhibit 2.4 are illustrations of each performance indicator as well as a discussion of perceived trends.

Exhibit 2.3 Combined Performance Indicators

**Performance Measure	**FY 2009	**FY 2010	**FY 2011
Operating Cost	$14,569,697	$14,995,663	$16,251,261
percent change	*0.0%*	*2.9%*	*8.4%*
Fare Revenue	$3,094,128	$2,920,178	$3,102,160
percent change	*0.0%*	*-5.6%*	*6.2%*
Vehicle Service Hours	125,004	124,393	125,318
percent change	*0.0%*	*-0.5%*	*0.7%*
Vehicle Service Miles	1,845,533	1,822,879	1,842,089
percent change	*0.0%*	*-1.2%*	*1.1%*
Ridership	2,365,414	2,274,216	2,381,391
percent change	*0.0%*	*-3.9%*	*4.7%*
Performance Indicator			
Operating Cost/VSH	$116.55	$120.55	$129.68
percent change	*0.0%*	*3.4%*	*7.6%*
Operating Cost/VSM	$7.89	$8.23	$8.82
percent change	*0.0%*	*4.2%*	*7.2%*
Operating Cost/Passenger	$6.16	$6.59	$6.82
percent change	*0.0%*	*7.1%*	*3.5%*
Passengers/VSH	18.92	18.28	19.00
percent change	*0.0%*	*-3.4%*	*3.9%*
Passengers/VSM	1.28	1.25	1.29
percent change	*0.0%*	*-2.7%*	*3.6%*
Farebox Recovery	21.2%	19.5%	19.1%
percent change	*0.0%*	*-8.3%*	*-2.0%*
Fare/Passenger	$1.31	$1.28	$1.30
percent change	*0.0%*	*-1.8%*	*1.5%*

***Data reflects Watsonville-bound Routes 69A, 69W, 71, 72, 74, 75, 79, 91X and ParaCruz.*

Combined Ridership (Exhibit 2.4)

Exhibit 2.4 illustrates the combined ridership for Santa Cruz METRO Routes 69A, 71, 72, 74, 75, 79, 91X, and ParaCruz. As shown, ridership declined nearly four percent in FY 2010. We believe this can likely be attributed to the economic recession. Though officially ended in June 2009, economic recovery has been slow. The Department of Labor reports a county unemployment rate of 10.6 percent as of December 2011, down from 13.7 percent in 2009. This downturn resulted in an erosion in transit use due to fewer commuters and limited household income translating into declines in fare revenue and ridership during FY 2010. Ridership rebounded in FY 2011 despite continued economic difficulties.

Combined Passengers/Vehicle Service Hour (Exhibit 2.5)

Passenger/Vehicle Service Hour illustrates the productivity level and efficiency of a transit program during revenue generating hours of operation. This metric quantifies the number of rides provided during each revenue or service hour.

Relative to overall ridership trends, Passengers/Vehicle Service Hour dropped four percent in FY 2010 resulting from increases in Vehicle Service Hours when fewer passengers were transported per single revenue hour. Passengers/VSH increased a modest 0.4 percent across the three-year period from FY 2009. Again, we believe this can be attributed to declines in ridership occurring in FY 2010 associated with the economic recession.

Combined Passengers/Vehicle Service Mile (Exhibit 2.6)

Similar to the above metric, the Operating Cost/VSH measures the cost of providing a single mile of revenue service. This metric is also used to help evaluate a transit service's cost-effectiveness.

Passengers/Vehicle Service Mile mirrored Passengers/Vehicle Service Hour trends, revealing a slight dip in FY 2010. When examining the service modes separately, in FY 2010 the ParaCruz program increased in passengers transported and Vehicle Service Miles, while the fixed-route posted a Vehicle Service Mile increased and ridership loss. Given ParaCruz is an eligibility-based service (i.e., persons with disabilities) it is likely the customer base and associated demand would remain stable.

Combined Operating Cost/Vehicle Service Hour (Exhibit 2.7)

Operating Cost/VSH illustrates the cost incurred by a transit operator for the provision of a single hour of revenue service.

Operating Cost/VSH steadily rose throughout the evaluation period, with an eight-percent jump in FY 2011. This dramatic increase is likely attributable to operating cost escalating at a rate higher than the number of Vehicle Service Hours traveled. During our evaluation period, Santa Cruz METRO discontinued underperforming fixed-route services and modified schedules (as it does seasonally). These service changes resulted in a reduction in total VSH. For Watsonville routes this translated to a 0.7 percent increase in VSH between FY 2010 and FY 2011. Additionally, overtime claims by drivers rose during this time period, adding to the Combined Operating Cost.

Combined Operating Cost/Vehicle Service Mile (Exhibit 2.8)

This metric assesses cost-effectiveness of operating a transit service by calculating the total cost expended to operate a single mile of revenue service.

Similar to the Operating Cost/Vehicle Service Hour trend, combined Operating Cost/Vehicle Service Miles increased due to growth in this metric for ParaCruz services. Santa Cruz METRO experienced a greater than 14-percent increase in Operating Costs, although VSM and Ridership increased modestly across the last fiscal year.

Combined Operating Cost/Passenger (Exhibit 2.9)

Another yardstick of cost-effectiveness, Cost/Passenger illustrates the amount Santa Cruz METRO spends on system-wide for a single unlinked trip.

As Operating Costs increased so did this performance metric. Santa Cruz METRO spent nearly $7.00/Passenger for services to/from Watsonville. The ParaCruz service cost alone increased 14 percent in FY 2011 to $47.00/Passenger, while fixed-route service inched up one percent. This high cost per passenger is reflective of high operating costs for both services, especially the paratransit program.

Combined Farebox Recovery Ratio (Exhibit 2.10)

Farebox Recovery Ratio calculates the percentage of operating cost recovered through passenger fares. It is the most common measure of public subsidy of a transit service.

Across the evaluation period, Farebox Recovery declined from 21.2 percent (in FY 2009) to 19.1 percent (in FY 2011). Based on California Transportation Development Act standards, Santa Cruz METRO should maintain a 20-percent standard for combined fixed-route and paratransit services. Although Santa Cruz METRO has achieved this standard, attention is fixed on the decline witnessed throughout the evaluation period. Continued monitoring is warranted regarding Watsonville service to ensure operating cost does not outpace fare revenue. A continued lower farebox recovery (beyond the evaluation period) may warrant a fare increase or further service modifications.

Combined Fare/Passenger (Exhibit 2.11)

This metric calculates the average fare paid by each passenger (unlinked trip) on Santa Cruz METRO. Fare/Passenger averaged $1.30 across the evaluation period, with a modest decrease in FY 2010 attributable to declines in Ridership and Fare Revenue.

Exhibit 2.4 Combined Ridership

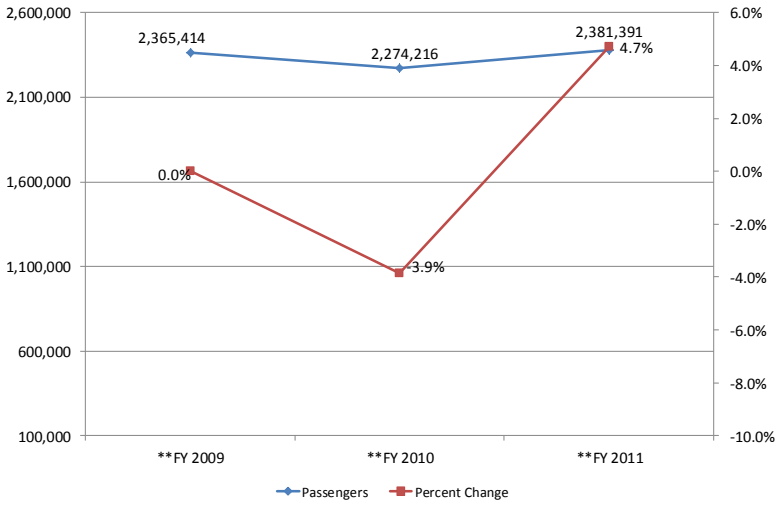


Exhibit 2.5 Combined Passenger/VSH

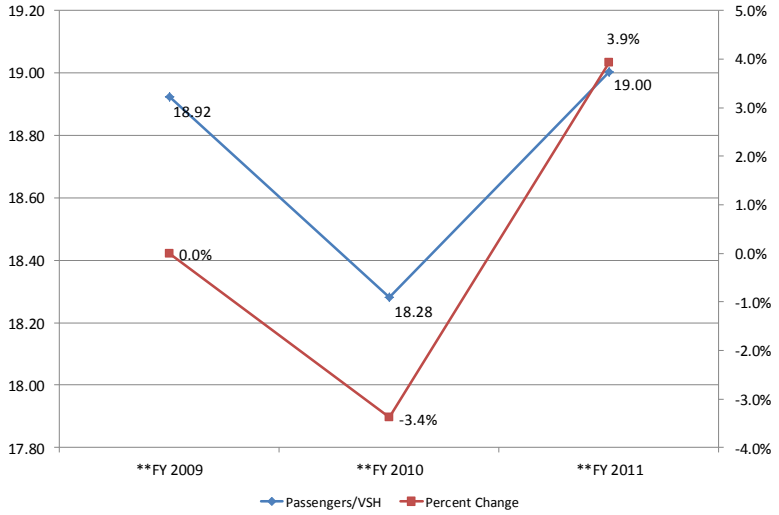


Exhibit 2.6 Combined Passengers/VSM

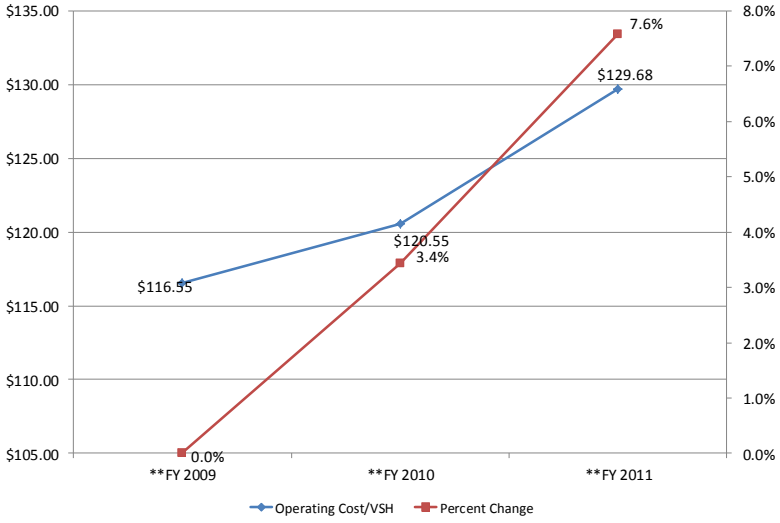


Exhibit 2.7 Combined Operating Cost/VSH

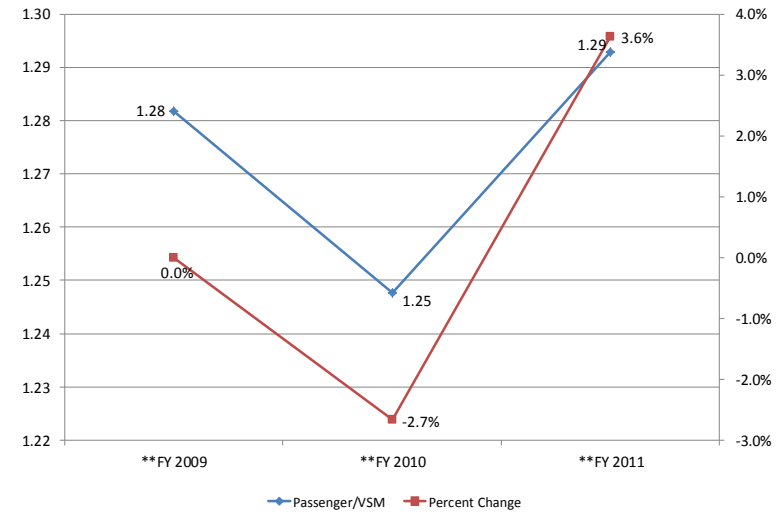


Exhibit 2.8 Combined Operating Cost/VSM

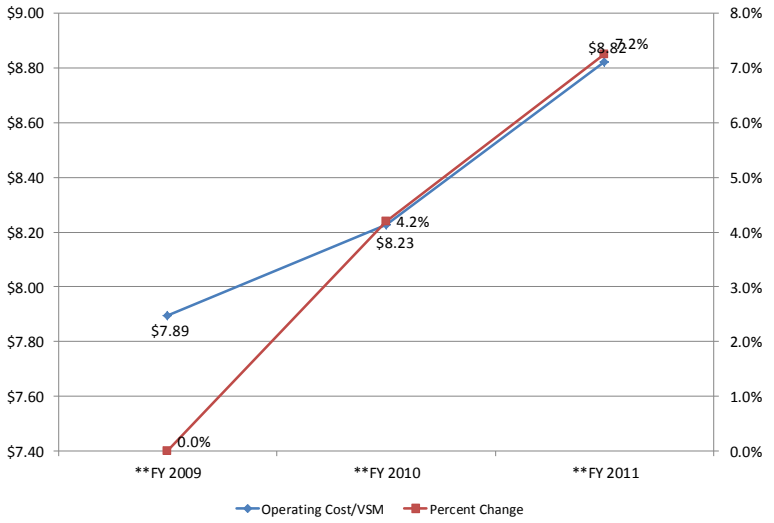


Exhibit 2.9 Combined Operating Cost/Passenger

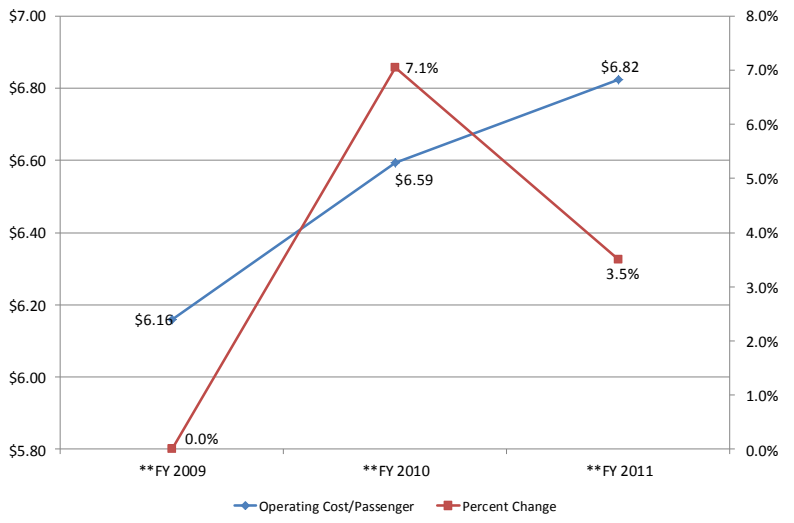


Exhibit 2.10 Combined Farebox Recovery Ratio

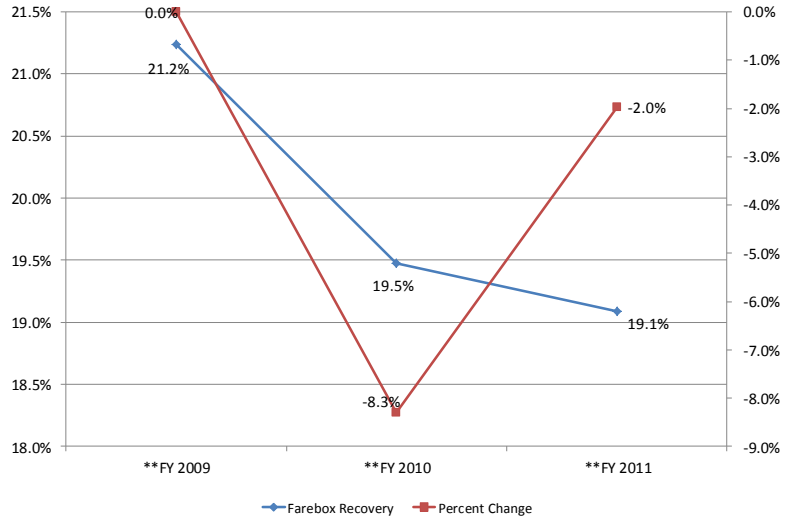
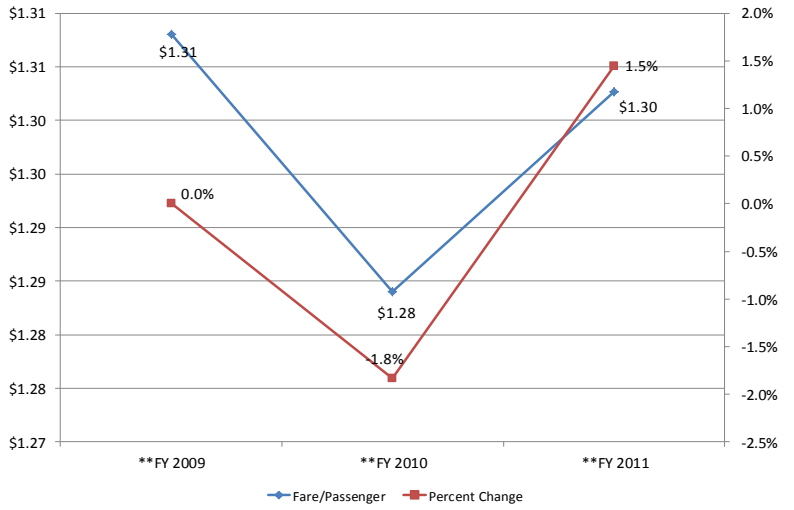


Exhibit 2.11 Combined Fare/Passenger



Fixed-Route Performance Indicators

Exhibit 2.13 shows the performance measures and indicators for Santa Cruz METRO's Watsonville services for FY 2009, 2010, and 2011. This section evaluates Santa Cruz METRO Routes 69A, 69W, 71, 72, 74, 75, 79, and 91X operating within Watsonville using a variety of quantitative criteria to assess effectiveness and efficiency. The indicators were evaluated across a three-year period. Fare Revenue, Ridership, and Operating Cost were calculated using fixed-route performance indicators (i.e., Operating Cost/VSH, Passengers/VSH, and Fare/Passengers). Route-specific data for the aforementioned metrics were not available at the time of this report.

Based on the agency's 2008 Short Range Transit Plan (SRTP), Santa Cruz METRO allocated 38 percent of total Vehicle Service Hours to those services operating within Watsonville. Of note, Routes 69 and 69N, both of which formerly served Watsonville, were discontinued subsequent to the adoption of the 2008 SRTP. Therefore, data regarding these routes is not included within this Study.

Current allocation of Santa Cruz METRO fixed-route Vehicle Service Hours to Watsonville is 38-percent. Although service changes or reductions have occurred (i.e., elimination of Routes 69 and 69N), the performance metrics for FY 2011 suggest transit demand within Watsonville remains strong.

Exhibit 2.12 Fixed-Route Performance Indicators

Performance Measure	FY 2009	FY 2010	FY 2011
Operating Cost	$10,943,540	$11,127,083	$11,816,772
percent change	*0.0%*	*1.7%*	*6.2%*
Fare Revenue	$2,772,004	$2,681,575	$2,858,601
percent change	*0.0%*	*-3.3%*	*6.6%*
Vehicle Service Hours	80,373	81,137	81,355
percent change	*0.0%*	*1.0%*	*0.3%*
Vehicle Service Miles	1,208,632	1,210,997	1,202,665
percent change	*0.0%*	*0.2%*	*-0.7%*
Ridership	2,272,135	2,180,142	2,286,881
percent change	*0.0%*	*-4.0%*	*4.9%*
Performance Indicator			
Operating Cost/VSH	$136.16	$137.14	$145.25
percent change	*0.0%*	*0.7%*	*5.9%*
Operating Cost/VSM	$9.05	$9.19	$9.83
percent change	*0.0%*	*1.5%*	*6.9%*
Operating Cost/Passenger	$4.82	$5.10	$5.17
percent change	*0.0%*	*6.0%*	*1.2%*
Passengers/VSH	28.27	26.87	28.11
percent change	*0.0%*	*-5.0%*	*4.6%*
Passengers/VSM	1.88	1.80	1.90
percent change	*0.0%*	*-4.2%*	*5.6%*
Farebox Recovery	25.3%	24.1%	24.2%
percent change	*0.0%*	*-4.9%*	*0.4%*
Fare/Passenger	$1.22	$1.23	$1.25
percent change	*0.0%*	*0.8%*	*1.6%*

***Data reflects Watsonville Routes 69A, 69W, 71, 72, 74, 75, 79, 91X only.*

Ridership (Exhibit 2.13)

Exhibit 2.13 shows ridership for those Santa Cruz METRO fixed-route service operating to/within Watsonville. Santa Cruz METRO seasonally adjusts its published schedules to reflect changes in travel demand patterns and funding availability.

Given the faltering economy, high unemployment rates, and shifts in commuter patterns in FY 2010, ridership declined significantly on all Watsonville routes. This trend was also noted across the majority of Santa Cruz METRO intercity and local fixed-route services.

Ridership by Route (Exhibit 2.14)

Moore & Associates analyzed ridership data at the individual route level for the period FY 2009 through FY 2011. Exhibit 2.14 illustrates how each route evolved across the three-year period. Route 71 garnered the highest ridership of the eight fixed-routes during the evaluation period. Without exception, FY 2010 experienced a decline in ridership for Watsonville services. This is likely

attributable to the economic downturn which reduced transit demand during this period. As discussed in Chapter 2 (Demand Analysis), Watsonville's unemployment rate reached 10.5 percent in 2009, three percent higher than the county's figure. This high unemployment in 2009 contributed to the decline in ridership, as home-to-work travel demand decreased.

Passengers/Vehicle Service Hour (Exhibit 2.15)

One of the most commonly employed yardsticks for assessing public transit service productivity is Passengers/VSH. This indicator quantifies the number of rides provided within a single revenue hour.

The Passenger/VSH metric fluctuated widely across the evaluation period. The trend mirrored ridership performance data. This is not surprising given Vehicle Service Hours remained relatively stable while ridership varied across the evaluation period.

Passengers/Vehicle Service Mile (Exhibit 2.16)

Passengers/VSM is another metric commonly employed when evaluating public transit service effectiveness. It calculates the number of rides provided for each service mile traveled.

As shown in by Exhibit 2.13, fixed-route services operating within Watsonville posted a four-percent decline in ridership along with a 2.4-percent decrease in fare revenue. This essentially translates to a decrease in this metric with fewer than two persons using the service per revenue mile.

Operating Cost/Vehicle Service Hour (Exhibit 2.17)

This indicator serves as a measure of a transit program's cost-effectiveness, illustrating the cost of providing a single hour of revenue service.

Exhibit 2.17 reveals increasing Cost/VSH. Ideally, a transit operator hopes for Operating Cost to remain flat or in line with inflation. Throughout the evaluation period, Santa Cruz METRO (Watsonville intercity and local routes) experienced increased Operating Cost. As a result, the cost of providing a single hour of revenue service continues to increase. This increase in Cost/VSH can be attributed to both higher labor and fuel costs.

Operating Cost/Vehicle Service Mile (Exhibit 2.18)

This metric serves as an indicator of a transit program's cost-effectiveness by illustrating the cost of providing a single mile of revenue service.

Operating Cost/Vehicle Service Mile increased in FY 2011 due in large part to a seven percent decrease in Vehicle Service Miles. The increase in this metric posits a decrease in cost-effectiveness of the services as Santa Cruz METRO experiences a higher operating cost per single revenue mile.

Operating Cost/Passenger (Exhibit 2.19)

Another gauge of cost-effectiveness, Cost/Passenger indicates how much Santa Cruz METRO is spending to provide a single unlinked trip.

As presented in Exhibit 2.19, Operating Costs increased per unlinked trip across the evaluation period. Higher operating costs coupled with fewer passengers transported caused Santa Cruz METRO to experience a six-percent spike between FY 2009 and FY 2010, a trend noted across the majority of Santa Cruz METRO fixed-routes. Since FY 2010, this metric has improved, rising more than one percent in FY 2011 with increases in ridership.

Although operating costs declined in FY 2010 employee salaries and benefits increased dramatically since 2009. This increase in labor-related expenditures impacts the overall operating cost metric, yielding a net increase in Cost/Passenger. Santa Cruz METRO should continue to monitor labor costs across the next fiscal year and attempt to postpone further wage or benefit increases until the Cost/Passenger metric improves.

Farebox Recovery Ratio (Exhibit 2.20)

Farebox Recovery Ratio calculates the percentage of operating cost realized through passenger fares. It is the most common measure of public subsidy of a transit service.

With the exception of FY 2010, which noted a drop in Farebox Recovery of five percent, Farebox Recovery Ratio continued to surpass the TDA standard of 20 percent for a claimant within an urbanized area. Farebox Recovery Ratio remained above 24 percent modestly decreasing across the evaluation period.

Fare/Passenger (Exhibit 2.21)

This metric calculates the average fare paid for every unlinked trip provided by Santa Cruz METRO on its fixed-route service. This metric fluctuated considerably across the evaluation period, dipping in FY 2010 due likely to ridership loss. Given the average Fare/Passenger was $1.25 in FY 2011, we conclude passengers were likely utilizing increased non-cash discounted fare media given this metric averages 25 cents less than the adult base fare of $1.50.

Exhibit 2.13 Fixed-Route Ridership

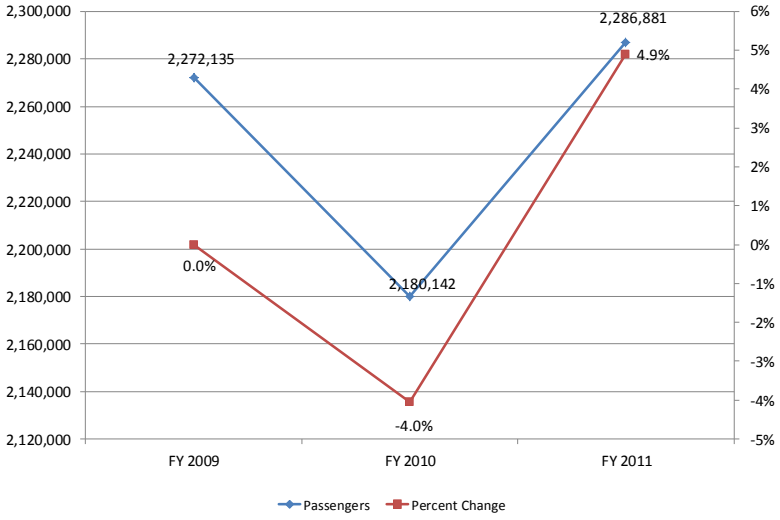


Exhibit 2.14 Fixed-Route Ridership by Route

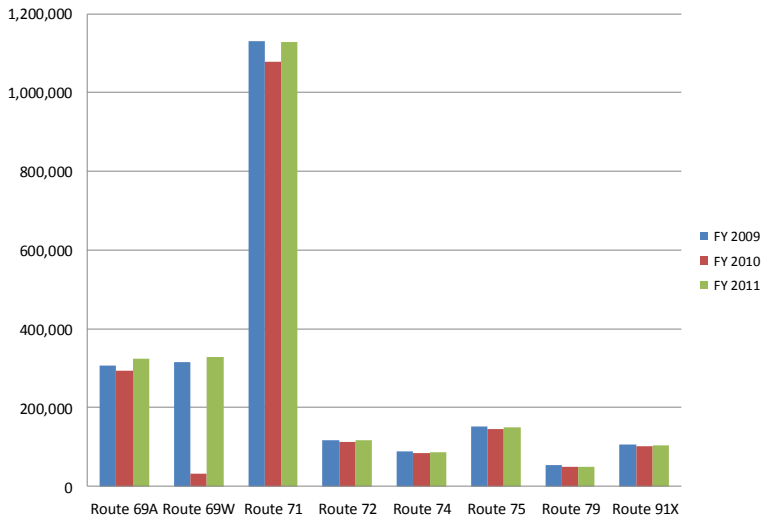


Exhibit 2.15 Fixed-Route Passengers/VSH

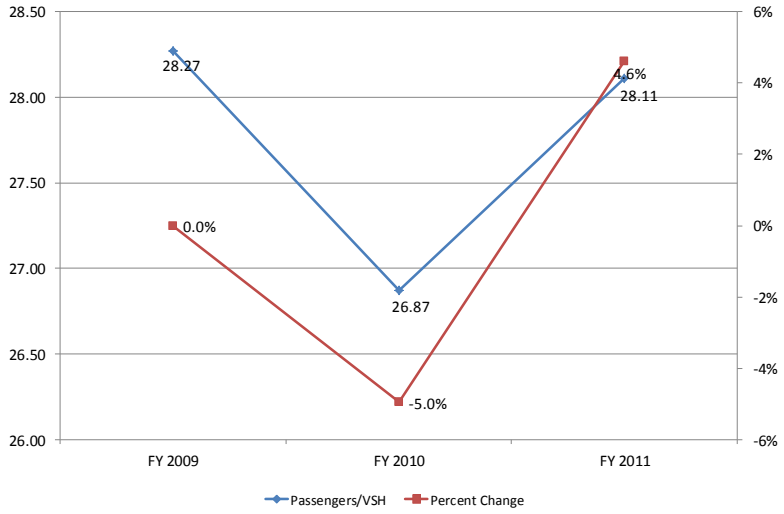


Exhibit 2.16 Fixed-Route Passengers/VSM

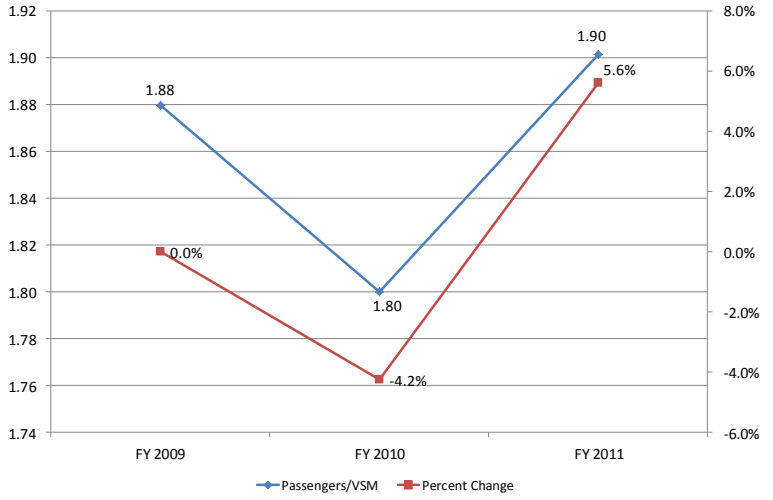


Exhibit 2.17 Fixed-Route Operating Cost/VSH

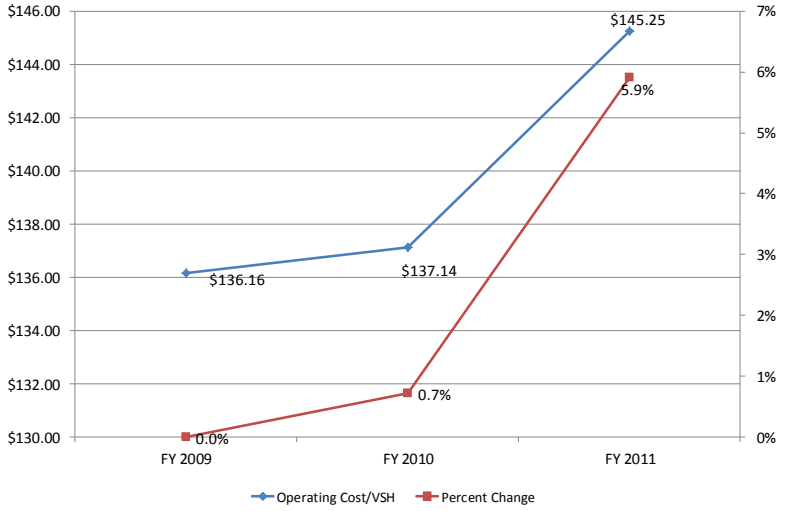


Exhibit 2.18 Fixed-Route Operating Cost/VSM

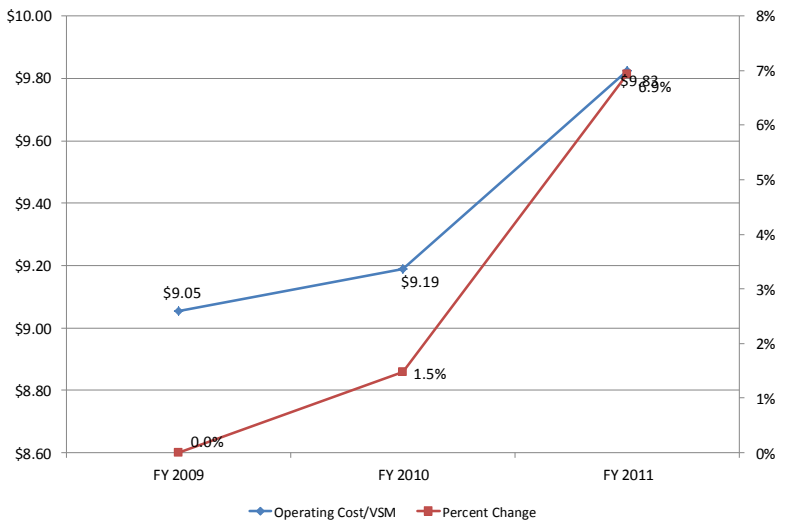


Exhibit 2.19 Fixed-Route Operating Cost/Passenger

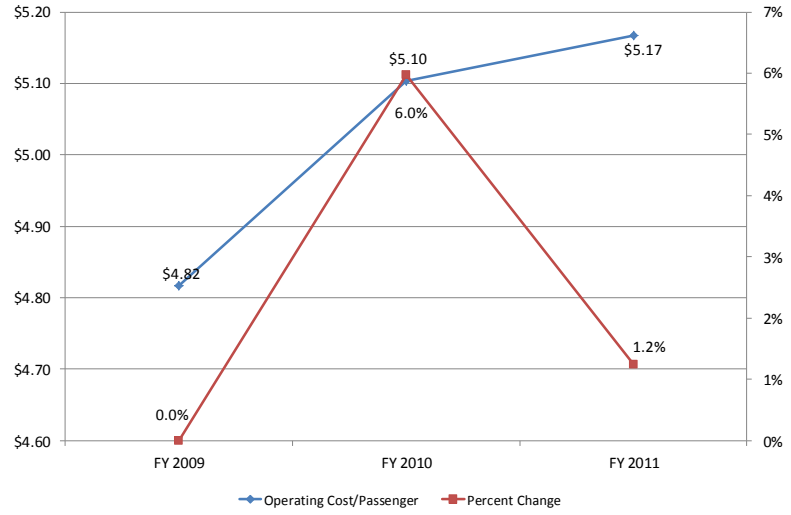


Exhibit 2.20 Fixed-Route Farebox Recovery Ratio

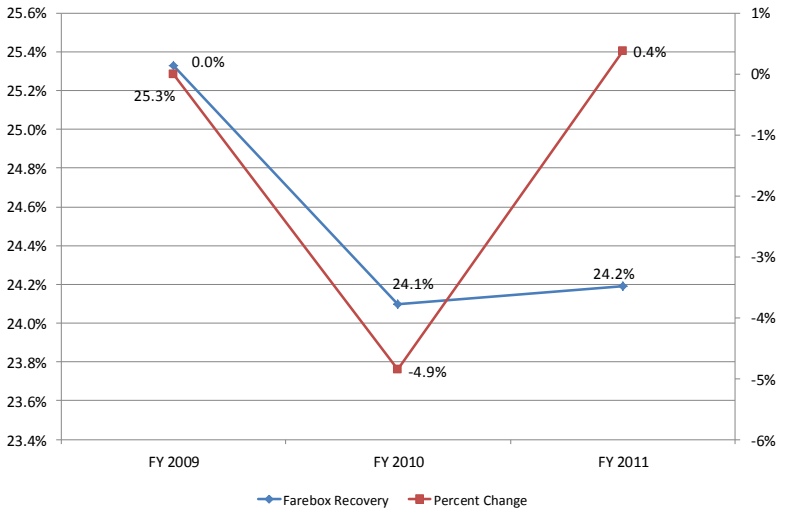
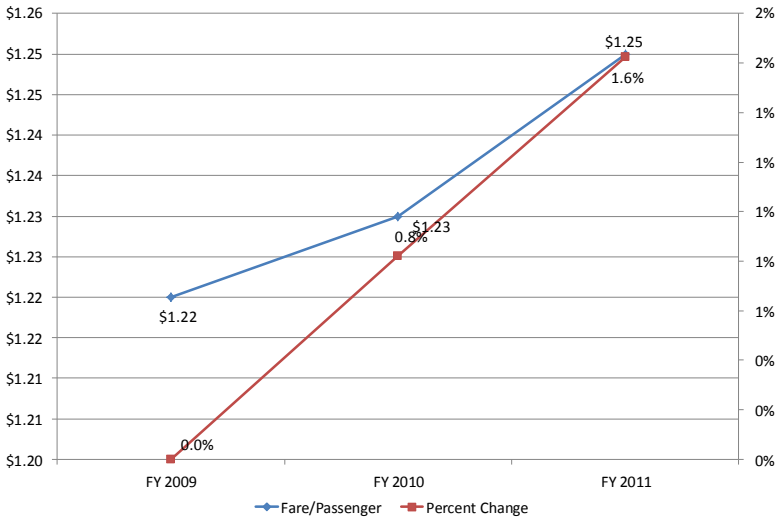


Exhibit 2.21 Fixed-Route Fare/Passenger



Paratransit Performance Indicators (County-wide)

Exhibit 2.22 presents the performance measures and indicators for Santa Cruz METRO's ADA complementary paratransit program (ParaCruz) for the period FY 2009, 2010, and 2011. The evaluation presented herein utilizes a series of quantitative criteria to determine the effectiveness and efficiency. The indicators were evaluated over a three-year period which supports trend analysis. Following the exhibit are illustrations of each performance indicator and include trend analysis where warranted. Paratransit performance data reflects county-wide trips served as Watsonville-specific data was not available at the time of this analysis.

Exhibit 2.22 Paratransit Performance

Performance Measure	FY 2009	FY 2010	FY 2011
Operating Cost	$3,626,157	$3,868,580	$4,434,489
percent change	*0.0%*	*6.7%*	*14.6%*
Fare Revenue	$322,124	$238,603	$243,559
percent change	*0.0%*	*-25.9%*	*2.1%*
Vehicle Service Hours	44,631	43,256	43,963
percent change	*0.0%*	*-3.1%*	*1.6%*
Vehicle Service Miles	636,901	611,882	639,424
percent change	*0.0%*	*-3.9%*	*4.5%*
Passengers	93,279	94,074	94,510
percent change	*0.0%*	*0.9%*	*0.5%*
Performance Indicator			
Operating Cost/VSH	$81.25	$89.43	$100.87
percent change	*0.0%*	*10.1%*	*12.8%*
Operating Cost/VSM	$5.69	$6.32	$6.94
percent change	*0.0%*	*11.0%*	*9.7%*
Operating Cost/Passenger	$38.87	$41.12	$46.92
percent change	*0.0%*	*5.8%*	*14.1%*
Passengers/VSH	2.09	2.17	2.15
percent change	*0.0%*	*4.1%*	*-1.2%*
Passengers/VSM	0.146	0.154	0.148
percent change	*0.0%*	*5.0%*	*-3.9%*
Farebox Recovery	8.9%	6.2%	5.5%
percent change	*0.0%*	*-30.6%*	*-10.9%*
Fare/Passenger	$3.45	$2.54	$2.58
percent change	*0.0%*	*-26.6%*	*1.6%*

Source: Santa Cruz METRO

Paratransit Ridership (Exhibit 2.23)

Unlike fixed-route trends which show a decline in ridership in FY 2010, paratransit ridership steadily increased across the evaluation period, averaging more than 93,000 unlinked trips annually across all three years. As discussed in the Demand Analysis chapter, seniors and persons with disabilities have increased more than eight-percent across the last decade with a similar trend projected in this decade. Assuming demand for affordable mobility options among this population continues to grow, we anticipate demand will not abate.

Passengers/Vehicle Service Hour (Exhibit 2.24)

One of the most commonly employed yardsticks for assessing service effectiveness, Passengers/VSH, quantifies the number of rides provided within a single service hour.

Given the on-demand nature of the paratransit service, one should expect passenger and operations metrics (VSH, VSM) to closely mirror changes in ridership. However, this metric experienced a different trend than the steady increase experienced in ridership. Rather, the metric experienced a modest decline in FY 2011. In spite of overall increases in both performance measures, productivity remained at two passengers/revenue hour.

Passengers/Vehicle Service Mile (Exhibit 2.25)

Passengers/VSM is another commonly employed metric for evaluating public transit service performance. It calculates the number of passengers transported for each service mile traveled.

As with the prior metric, VSM typically varies proportionate to the number of passengers. However, unlike reported VSH and ridership trends which incrementally increased across the evaluation period, VSM declined nearly four percent in FY 2010. This suggests a reduction in average trip length despite an increase in passengers/VSM.

Operating Cost/Vehicle Service Hour (Exhibit 2.26)

This indicator serves as a measure of a transit service's cost-effectiveness by calculating the cost to provide a single hour of revenue service.

Increasing Operating Cost drove this metric higher, especially in FY 2011. Vehicle Service Hours increased slightly across the last fiscal year, suggesting growth in this metric was tied largely to increases in Operating Cost. Given the modest increase in VSH, increases to Operating Cost are likely the result of increases in direct and indirect Operating Cost (i.e., administrative burden, fuel, salaries/overtime, etc.) This increase in cost when all other performance indicators remained relatively stable concludes a reduction in overall Operating Cost of the service is warranted to improve the cost-effectiveness of the service.

Operating Cost/Vehicle Service Mile (Exhibit 2.27)

This indicator serves as a measure of a program's cost-effectiveness by calculating the cost to provide a single mile of revenue service.

As with Operating Cost/VSH metric above, the Operating Cost/Vehicle Service Mile metric increased across the evaluation period. The escalation in the metric indicates a less cost-effective service. Again, increases in Operating Cost did not translate into more service, indicating increased Operating Cost (Salaries/Overtime) is likely the contributor to erosion of the paratransit program operating efficiently.

Operating Cost/Passenger (Exhibit 2.28)

Another measure of cost-effectiveness, Operating Cost/Passenger calculates total funding spent on each unlinked trip provided by ParaCruz.

The Operating Cost/Passenger metric increased more than 14 percent across the last fiscal year, attributable to high operating costs and modest ridership growth. As a result, it became increasingly expensive to operate the service in FY 2011, with Santa Cruz METRO expending more per passenger with each subsequent fiscal year primarily due to increases in salary/wage/benefits costs.

Farebox Recovery Ratio (Exhibit 2.29)

Farebox Recovery Ratio calculates the percentage of Operating Cost recovered through passenger fares. It is the most common measure of public subsidy of a transit service.

Across the evaluation period, the Farebox Recovery Ratio for ParaCruz remained below nine percent, subsequently declining to 5.5 percent in FY 2011. This dramatic decline in Farebox Recovery directly impacts the amount of service which Santa Cruz METRO can provide and threatens future TDA allocations.

Fare/Passenger (Exhibit 2.30)

This indicator calculates the average fare collected for each unlinked trip provided by Santa Cruz METRO's paratransit program.

The metric declined across the evaluation period with a greater than 26-percent decrease in Fare/Passenger in FY 2010. Typically the Fare Revenue trend correlates with ridership trends. However, this was not the case in FY 2010 during which fare revenue decreased while ridership increased. Possible causes may include riders not paying the full fare when using the service, an increase in the number of attendants riding fare-free, or faulty/inoperative farebox equipment.

Exhibit 2.23 Paratransit Annual Ridership

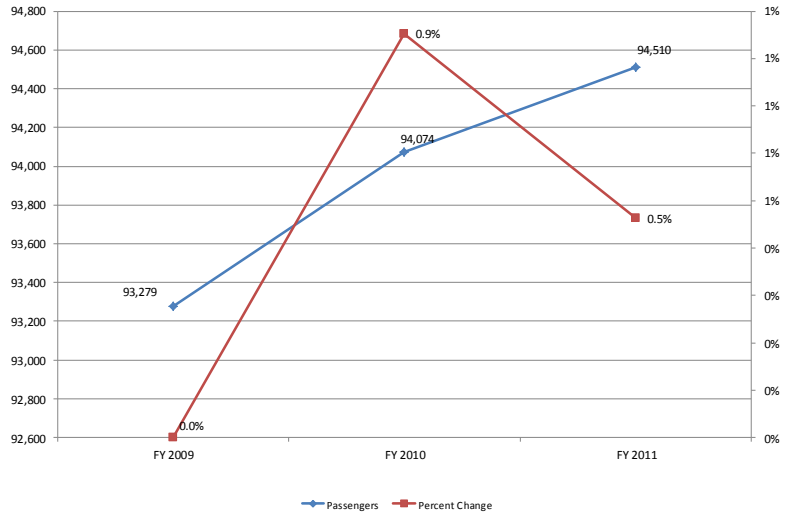


Exhibit 2.24 Paratransit Passengers/VSH

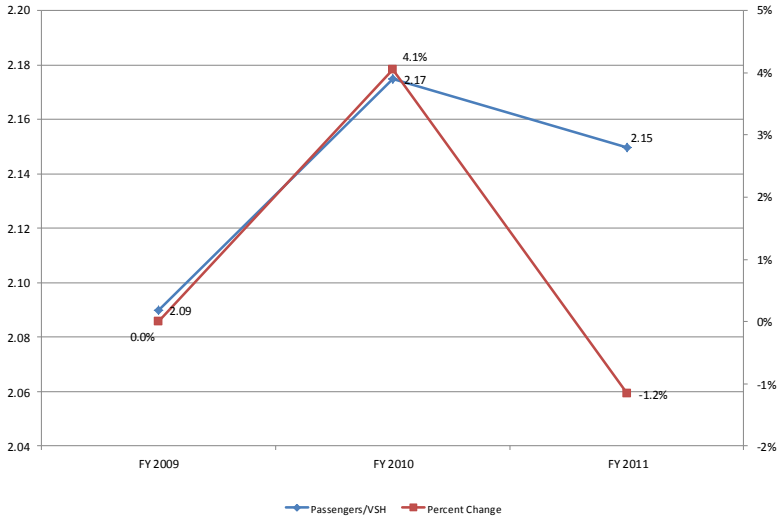


Exhibit 2.25 Paratransit Passengers/VSM

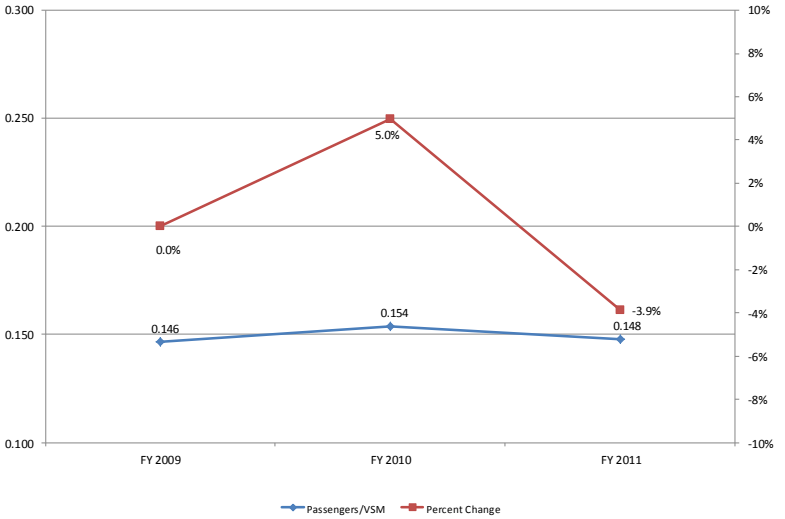


Exhibit 2.26 Paratransit Operating Cost/VSH

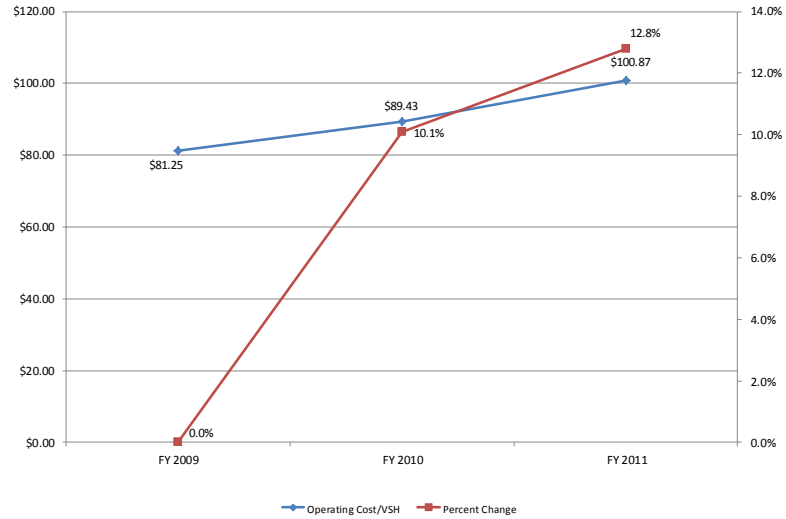


Exhibit 2.27 Paratransit Operating Cost/VSM

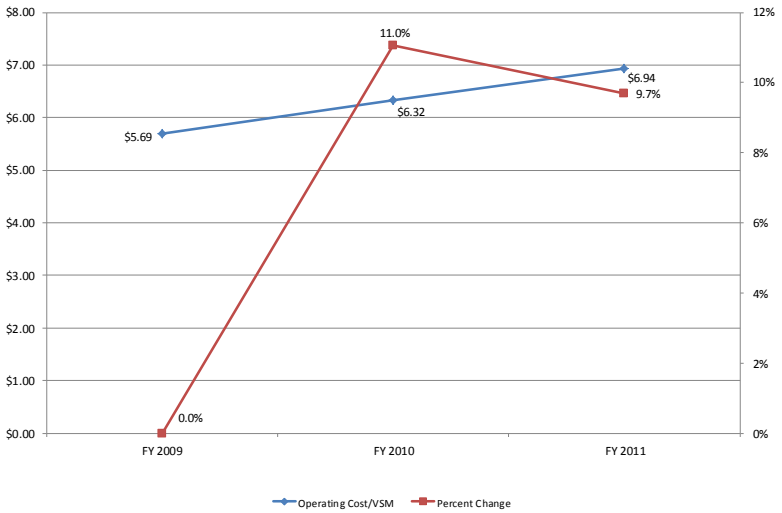


Exhibit 2.28 Paratransit Operating Cost/Passenger

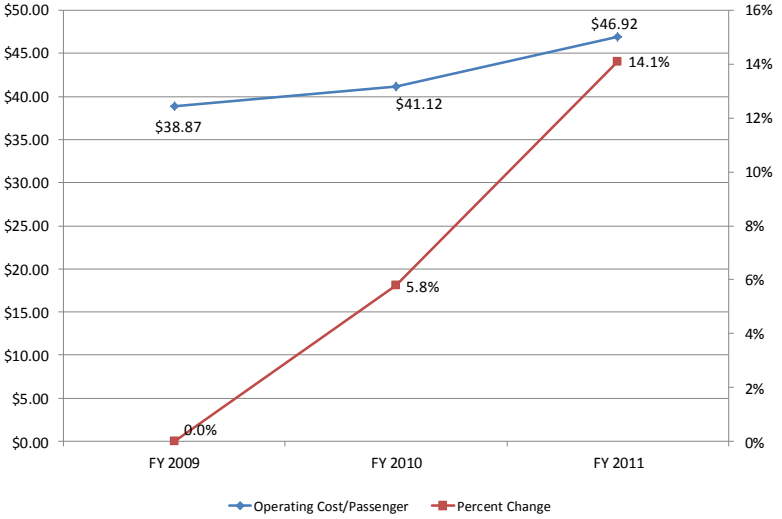


Exhibit 2.29 Paratransit Farebox Recovery Ratio

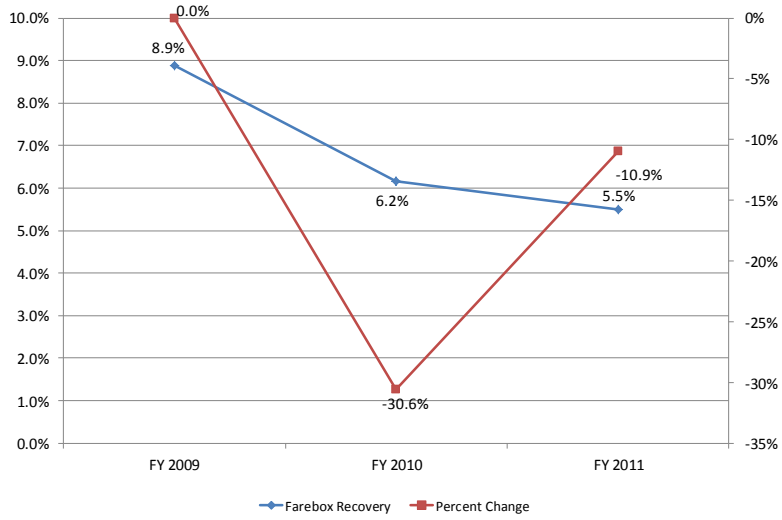
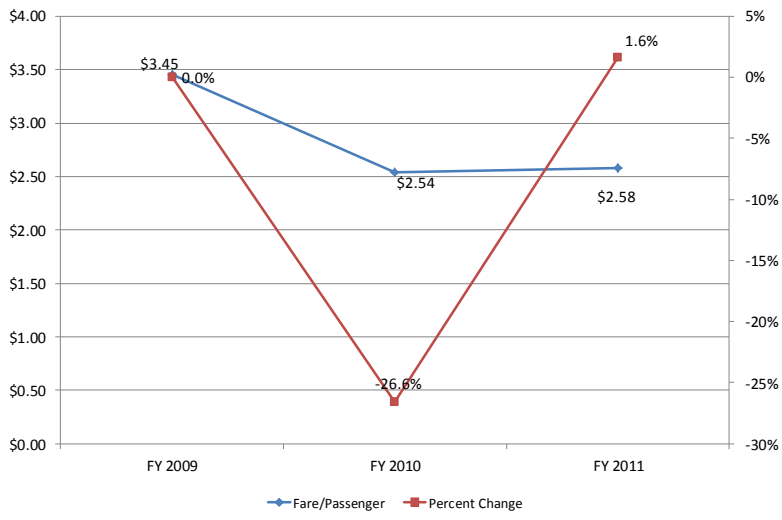


Exhibit 2.30 Paratransit Fare/Passenger



3 DEMAND ANALYSIS

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CHAPTER 3– DEMAND ANALYSIS

Incorporated in 1868, Watsonville lies in the southern portion of Santa Cruz County in the Pajaro Valley. Watsonville is located approximately 18 miles southeast of the city of Santa Cruz, approximately 95 miles south of San Francisco. Watsonville's 2010 population was 51,199.

Watsonville is the center of the agricultural industry in the Pajaro Valley. The city is home to a large number of agricultural workers as well as food processing companies. In addition to the importance of agriculture, Watsonville has a fairly diverse economic base comprised of manufacturing, retail, warehousing, healthcare, and public sector. The top five employers include the Pajaro Valley Unified School District, Watsonville Community Hospital, Fox Racing Shox, local government, and West Marine.

Major Transportation Corridors

The primary transportation corridor through Watsonville and Santa Cruz County is Highway 1 which connects the Pajaro Valley to Monterey County to the south and the city of Santa Cruz, San Mateo County, and San Francisco to the north. In addition, Highways 129 and 152 provide direct connections with Highway 101.

There are several key arterials in Watsonville. Airport Boulevard offers north-south connections between Highway 1 and Freedom Boulevard. The Watsonville Community Hospital, Watsonville Municipal Airport, and several industrial and commercial centers are located along Airport Boulevard.

Freedom Boulevard also provides north-south connectivity along the eastern portions of the city. Several major shopping and employment centers are located along Freedom Boulevard including the Freedom Center and Crestview Shopping Centers.

Main Street and East Lake Boulevard (Highway 152) provide east-west connections through the central portions of Watsonville. Several large shopping centers are located along the Highway 152 corridor as well as the downtown Watsonville, Ramsay Park, and several schools. Beach Street is also part of the Highway 152 corridor in downtown Watsonville.

Riverside Drive (Highway 129) provides north-south connections along the southern portions of Watsonville. Several large food processing companies and warehouses are located along this corridor in the southwest quadrant of the city. Additionally, Riverside Drive passes through the southern portion of downtown Watsonville.

South Green Valley Road is located to the south of Airport Boulevard and provides north-south connections for the northern portion of Watsonville. South Green Valley Road has several large

residential developments along the roadway as well as several large shopping centers at the northern and southern termini.

Public transit routes largely utilize the above-mentioned corridors. The primary transfer point is the Watsonville Transit Center located at West Lake Boulevard and Rodriguez Street (just west of Main Street in downtown Watsonville).

Mobility Inventory

Presented below are public and private transportation services operating throughout Santa Cruz County. Santa Cruz METRO is the primary public transit service provider within the county. It also operates ParaCruz, an ADA complementary paratransit service for persons with disabilities. Intercity-regional transit services are available throughout the county via Santa Cruz METRO and other service providers (i.e., Santa Clara Valley Transportation Authority (VTA) and Monterey-Salinas Transit (MST)). Specialized transportation services operate within Santa Cruz County specific to persons with disabilities, students with disabilities, and elderly individuals through numerous private transportation operators such as Community Bridges – Lift Line and The University of California-Santa Cruz's Transportation and Parking Services (TAPS) campus transit services. The TAPS campus transit service is supported by a student fee and requires a valid campus ID to use, but does not charge a fare.

Exhibit 3.1 Mobility Inventory

Public Transit			Private Transportation Services			
Fixed-Route	Demand-Response	Intercity-Regional	Bus Lines	Taxis	Specialized Services	Rail
Santa Cruz Metropolitan Transit District	Santa Cruz Metropolitan Transit District - ParaCruz	Valley Transportation Authority (VTA)	Greyhound Bus Lines	Courtesy Cab Company (Watsonville Transportation)	Cabrillo College Disabled Student Services	Amtrak Rail
		Monterey Salinas Transit (MST)		Delux Cab, Inc	Central Coast Ambulance Service	Roaring Camp Big Trees Railroad
		San Benito County Express		Yellow Cab Company	City of Capitola- Seasonal Shuttle	
					Community Bridges - Lift Line	
					Davenport Resource Service Center	
					First Transit	
					Medi-Cal/Alliance Non-Emergency Transportation	
					Mental Health Client Action Network	
					Pajaro Valley Unified School District	
					San Lorenzo Valley Unified School District	
					Santa Cruz City Schools	
					Santa Cruz County Veterans Service Office	
					Scotts Valley Senior Center	
					UCSC - Disability Van Service Transportation and Parking Services (TAPS)	
					Van Rentals	

Sources: County of Santa Cruz, Santa Cruz County Regional Transportation Commission

Population Profile

Exhibit 3.2 shows the population trend for Santa Cruz County and Watsonville. Between 2000 and 2010, Watsonville grew at a much faster rate than the county as a whole. This may be largely due to the relative affordability of Watsonville in contrast to Santa Cruz. Therefore it is believed that Watsonville will grow more rapidly over the next decade versus the county at-large. With this in mind, Watsonville should account for the vast majority of the growth in the county moving forward, much as it did during the prior decade.

Given the demographic characteristics described below, this will have important forecast growth implications for provision of transit service to/from and within Watsonville. First, the lower cost of housing in Watsonville may attract additional residents which could increase demand for intercity and inter-county travel. Second, the population growth within Watsonville could potentially increase demand for intracity travel. Since growth will be primarily concentrated in Watsonville, making strategic additions to service will be important to increasing transit ridership.

Exhibit 3.2 Population Growth

	Population			Percent Change	
Geographic Area	2000 Census	2010 Census	2020 Forecast	2000-2010	2010-2020
City of Watsonville	44,265	51,199	59,828	15.7%	16.9%
Santa Cruz County	255,602	262,387	269,557	2.7%	2.7%

Source: US Census

Exhibit 3.3 shows selected demographic characteristics for Watsonville. Compared to the county and state as a whole, Watsonville has a much younger population. This is likely due to the population growth observed in Exhibit 3.2, as families have been attracted to Watsonville for the affordable housing.

In terms of education, Watsonville had a lower educational attainment than Santa Cruz County and California. Given the manufacturing and agricultural basis for the Watsonville economy, this is not surprising. As will be shown in Exhibit 3.13, the lower educational attainment correlates strongly with lower household income. As a result, there are likely more transit-dependent households in Watsonville versus the county at-large.

Exhibit 3.3 Summary of Watsonville Demographic Characteristics

	Median Age	Education		
		Percentage Over 25 without High School Diploma	Percentage High School Diploma or Higher	Percentage Bachelor's Degree or Higher
City of Watsonville	27.4	45.0%	55.0%	11.1%
Santa Cruz County	36.7	14.9%	85.2%	38.7%
California	34.6	19.5%	80.5%	29.7%
Nationally	36.5	15.5%	84.6%	27.5%

Source: 2009 American Community Survey

Exhibit 3.4 shows the population growth of Watsonville residents who are under 18 years old (youth). In 2010, about 20 percent of Watsonville residents are under 18. According to the American Community Survey, the 2020 youth population in Watsonville is projected to grow by almost 17 percent, or slightly more than 1,700 individuals, but make up about the same proportion of residents as in 2010. This could translate to an increased demand for transit schedule coordination with local school bell times.

In terms of youth and student demand, Watsonville has 12 public elementary schools and seven secondary schools within the Santa Cruz METRO service area.[1] Santa Cruz METRO should continue to work with the Pajaro Valley Unified School District to ensure transit service and school schedules are compatible.

Exhibit 3.4 Youth Population Growth

Youth Population Growth			
Year	2000	2010	2020
Population	10,937	10,298	12,025
% change		-5.8%	16.8%
net change		-639	1,727
Percent Share	24.7%	20.1%	20.1%

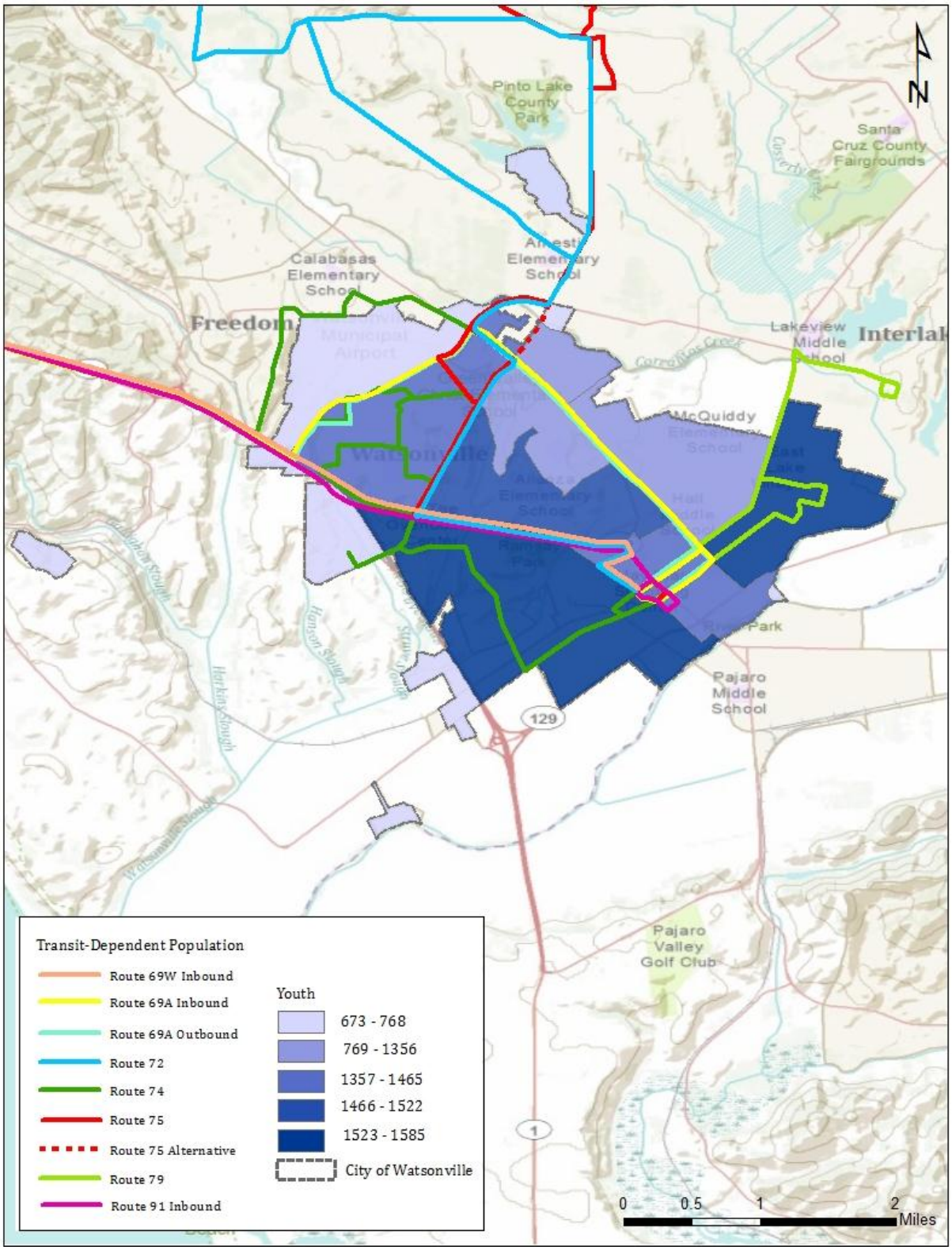
Source: 2009 American Community Survey

Exhibit 3.5 shows the geographic distribution of youth. Existing Santa Cruz METRO route alignments serve many areas with high concentrations of youth. However, there are areas such as East Lake – only served by hourly service on Route 79 – which would benefit from increased service. This is especially true given this route serves E.X. Hall Middle School, Watsonville High School, Ann Soldo Elementary School, and Lakeview Middle School.

In addition, a concentration of youth reside in the Ohlone Parkway area which is served only every other hour by Route 75. This is an area which could warrant expanded service.

[1] http://www.pvusd.k12.ca.us/shortcuts/quick-info.html

Exhibit 3.5 Concentration of Youth by Census Tract



Source: 2009 American Community Survey

Exhibit 3.6 shows the population growth of Watsonville residents who are over 65 years old (seniors). In 2010, about eight percent of Watsonville residents were over 65. It is projected that the 2020 senior population in Watsonville will increase by approximately 500, which should comprise a slightly smaller proportion of residents than in 2010. Based on these projections, demand for transit service within this demographic group should remain unchanged between 2010 and 2020.

In terms of senior demand, METRO and ParaCruz should continue to provide the existing service, while routinely conducting outreach to seniors to ensure their transportation needs are being met.

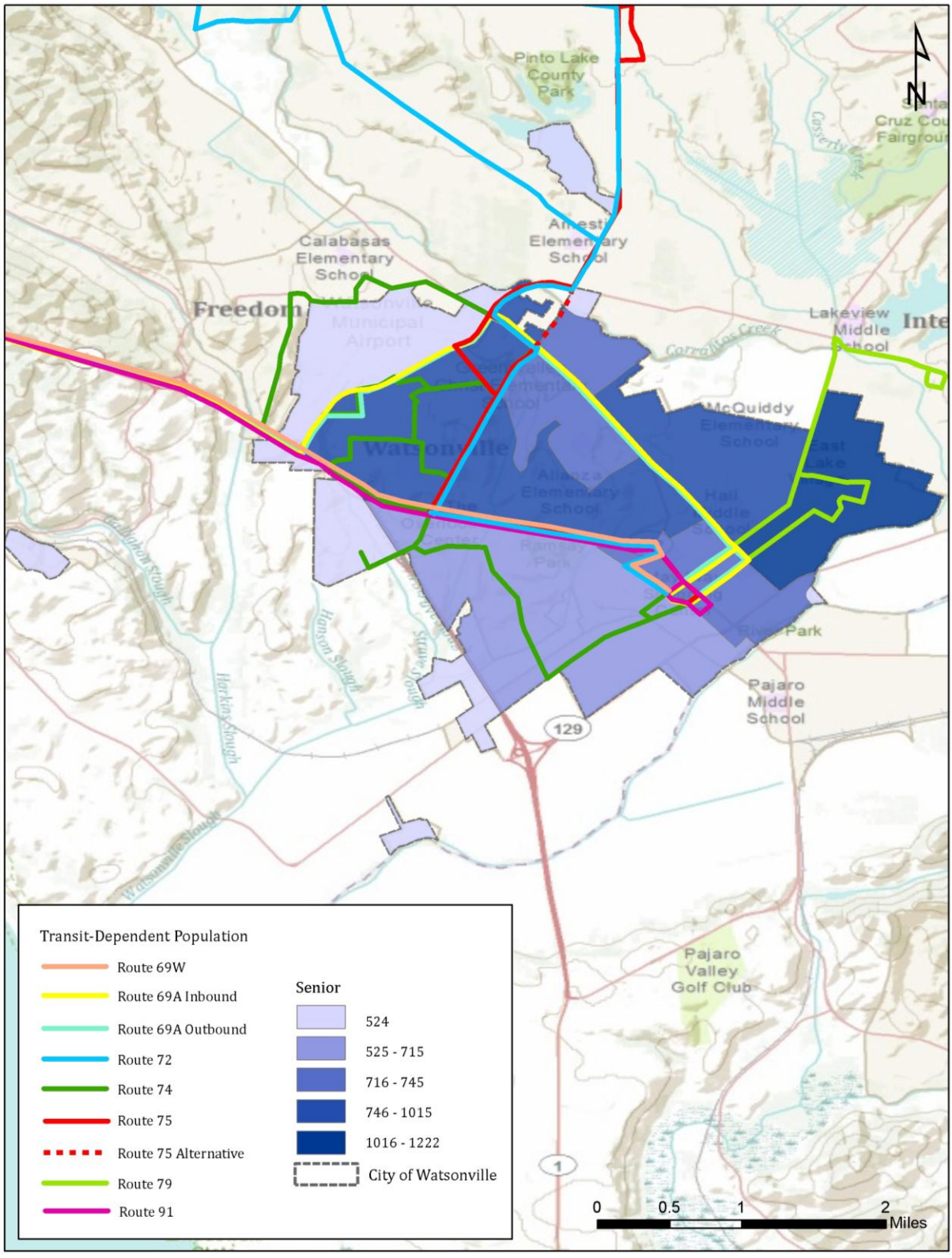
Exhibit 3.6 Senior Population Growth

Senior Population Growth			
Year	2000	2010	2020
Population	3,802	4,239	4,726
% change		11.5%	11.5%
net change		437	487
Percent Share	8.6%	8.3%	7.9%

Source: 2009 American Community Survey

Exhibit 3.7 shows the geographic distribution of seniors. The current Santa Cruz METRO route alignments serve many of the areas with high concentrations of seniors. However, there are portions of Watsonville where service could be enhanced to improve access and mobility for seniors. For example, the Watsonville Senior Center currently has no direct transit service. Residents can access this destination by taking either Route 69A or 79 and then walking at least a quarter-mile to the senior center. Although this is an acceptable walking distance, it may become a barrier for seniors with limited mobility. This could be a consideration in future expanded service in Watsonville. In addition, there is a concentration of seniors living in the East Lake neighborhood, which is only served hourly by Route 79, which would benefit from improved access to transit service.

Exhibit 3.7 Concentration of Senior by Census Tract



Source: 2009 American Community Survey

Exhibit 3.8 shows the population trends related to persons with disabilities in Watsonville. In 2007, approximately 13 percent of Watsonville residents were disabled, which was a sharp decline from the number of disabled persons in Watsonville in 2000. According to the American Community Survey, the 2020 disabled population in Watsonville is projected to grow by around 2,000, yet make up approximately the same proportion of residents as in 2007. While significant, this is still less than the number of disabled residents in the community in 2000. From these numbers, it is likely that the demand for transit service by disabled individuals will be higher than the existing travel demand, which may necessitate adjustments in service.

In terms of demand from persons with disabilities, Santa Cruz METRO and ParaCruz coordinate monitoring ridership patterns on its buses and vans to be able to respond to this change and align its services accordingly. In addition, Santa Cruz METRO should evaluate if this increase can be met using traditional fixed-route or dial-a-ride services, or if more coordination with social service providers (Lift Line) should be considered.

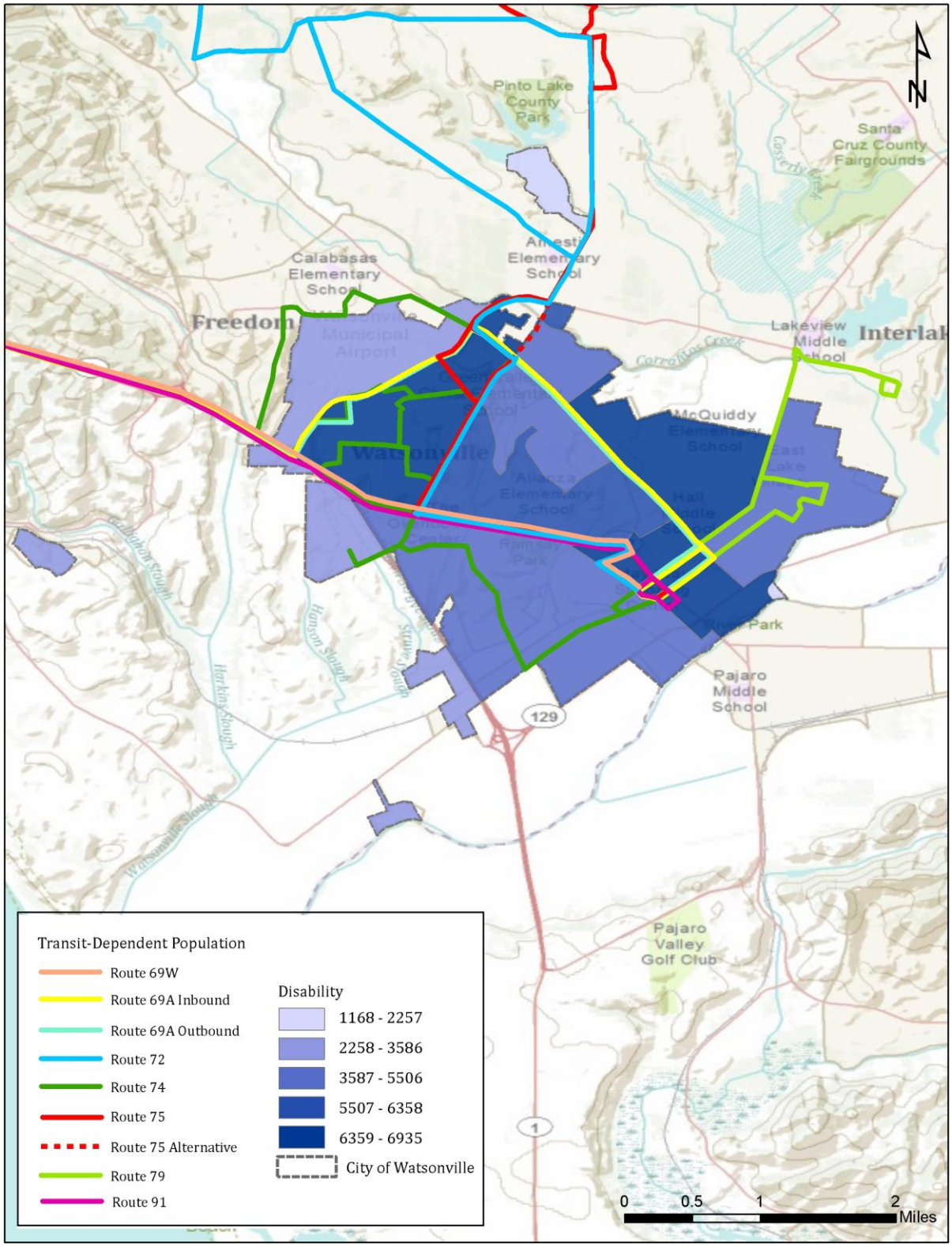
Exhibit 3.8 Persons with Disabilities Population Growth

Persons with Disabilities Population Growth			
Year	2000	2007	2020
Population	8,350	5,629	7,718
% change		-32.6%	37.1%
net change		-2,721	2,089
Percent Share	18.9%	12.9%	12.9%

Source: 2009 American Community Survey

Exhibit 3.9 shows the geographic distribution of persons with disabilities by census tract. The current Santa Cruz METRO route alignments serve many of the areas with high concentrations of persons with disabilities. Areas of high concentrations of persons with disabilities are well served by both local Watsonville routes and routes that connect Watsonville to areas to the north.

Exhibit 3.9 Concentration of Persons with Disabilities by Census Tract



Source: Census 2000 and 2010

Exhibit 3.10 shows the population growth of Watsonville residents who live in zero-vehicle households. In 2009, slightly over two percent of Watsonville households were zero-vehicle. Based on projections, it is estimated the 2020 zero-vehicles households will grow modestly, by around 250 households. Given the projected changes in the number of zero-vehicle households, this population will continue to have a high demand for Santa Cruz METRO service.

Given that the number of zero-vehicle households is predicted to grow slowly from the current number, the demand from this population is expected to be relatively similar to the demand today.

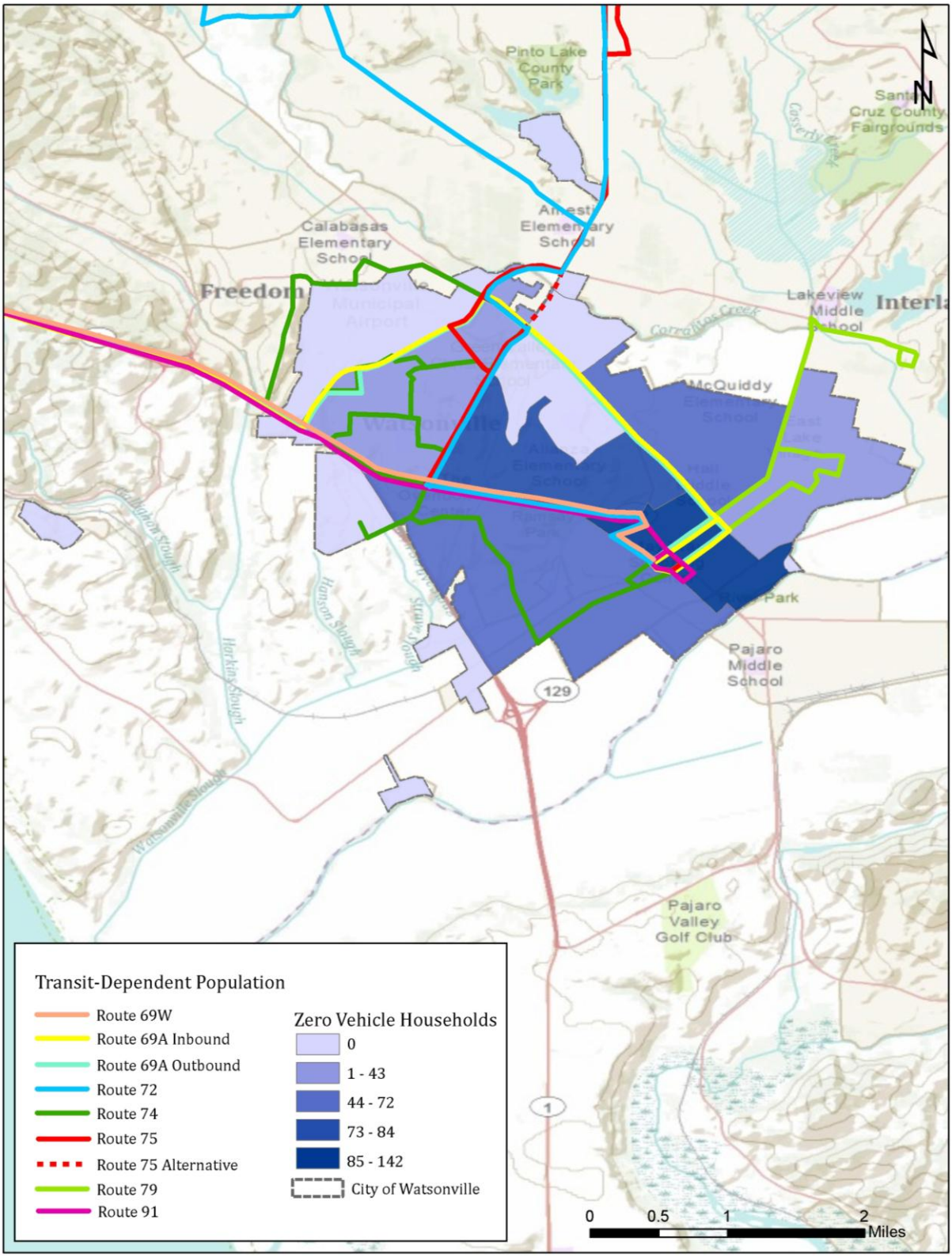
Exhibit 3.10 Zero-Vehicle Households Population Growth

Zero Vehicle Households Population Growth			
Year	2000	2009	2020
Population	1,184	1,124	1,376
% change		-5.1%	22.4%
Net change		-60	252
Percent Share	2.7%	2.3%	2.3%

Source: 2009 American Community Survey

Exhibit 3.11 shows the geographic distribution of zero-vehicle households by Census tract. Many of the zero-vehicle households live in the historical core of the city, which is well served by both local and regional transit service. The current Santa Cruz METRO route alignments serve many of the areas with the highest concentrations of zero-vehicle households. Although Santa Cruz METRO already serves many of the areas with higher rates of zero-vehicle households, there are areas and locations which would benefit these households if there were enhanced access to transit service. For example, there is a moderately high percentage of zero-vehicle households living in the Ohlone Parkway neighborhood, which is currently served by Route 74 on a 120-minute headway. Service enhancements (i.e., increased frequency) to this area would especially benefit zero-vehicle households.

Exhibit 3.11 Concentration of Zero-Vehicle Households by Census Tract



Source: 2009 American Community Survey

Exhibit 3.10 shows the population growth of low-income households in Watsonville. In 2009, 2,259 households in Watsonville were considered low-income, according to the American Community Survey. By 2020, the number of low-income households in Watsonville is projected to grow by almost 80 percent, around 1,754 households, and make up a larger proportion of residents than in 2009. With the increasing number of low-income households, and as a population that is traditionally ride-dependent, this should translate into a continued high demand for Santa Cruz METRO's service. In reviewing demographic statistics for Watsonville, the community has a significantly larger average household size than the nation as a whole (3.6 persons per household versus 2.6 nationwide), higher poverty rate (16.6 percent versus 9.9 percent nationwide, and higher unemployment rate (10.5 percent versus 9.9 percent nationwide). Together, these factors all contribute toward the significant number of low-income households in the community.

The demand for transit service from low-income households will be large. As a growing population with limited purchasing power, having access to a quality and affordable public transit system is incredibly important. METRO should aim to maintain low fares and coverage area in order to facilitate discretionary and non-discretionary trips for this group.

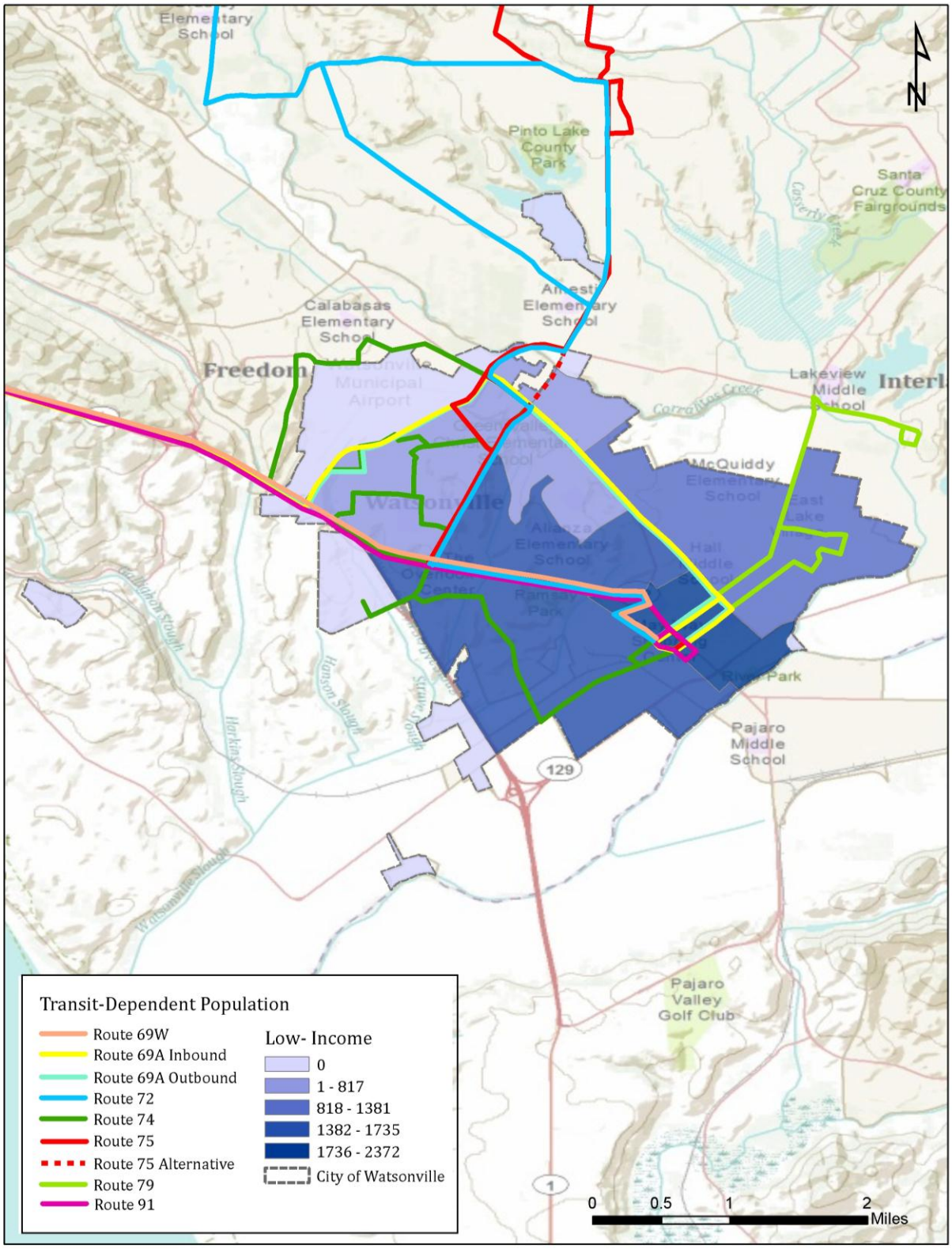
Exhibit 3.12 Low-Income Households Population Growth

Low-Income Population Growth			
Year	2000	2009	2020
Population	1,381	2,259	4,013
% change		63.5%	77.7%
net change		878	1,754
Percent Share	11.7%	16.6%	25.3%

Source: 2009 American Community Survey

Exhibit 3.13 shows the concentration of low-income households by census tract. As illustrated in the map, low-income households are concentrated in downtown Watsonville. The downtown area is well served by both local and regional service. Since low-income residents are particularly vulnerable to high transportation costs, Santa Cruz METRO may wish to increase frequency on local routes to assist connect low-income households with regional service to improve job access.

Exhibit 3.13 Concentration of Low-Income Households by Census Tract



Source: 2009 American Community Survey

Economic Characteristics

The lower educational attainment of Watsonville residents combined with relatively young age suggests a lower average household income than either Santa Cruz County or California. Additionally, the unemployment rate in Watsonville is substantially higher, which suggests driving alone could present a financial burden to many households.

In terms of commuter habits, Watsonville had fewer commuters who drive alone as well as fewer who use public transit compared to Santa Cruz County and California. By contrast, more Watsonville residents indicated walking to work.

Exhibit 3.14 Summary of Watsonville Economic Characteristics

		Commute			Income				
	Percentage Unemployed	Drive Alone	Public Transit	Walked	Median Household Income	Social Security Income	Public Assistance Income	Median Family Income	Per Capita Income
City of Watsonville	10.5%	70.3%	1.2%	4.2%	$47,526.00	$12,563.00	$5,911.00	$49,458.00	$16,227.00
Santa Cruz County	7.5%	71.3%	2.9%	4.0%	$64,349.00	$14,631.00	$5,694.00	$81,709.00	$33,532.00
California	7.9%	73.0%	5.1%	2.8%	$60,392.00	$14,722.00	$5,455.00	$68,909.00	$29,020.00
Nationally	7.2%	75.9%	5.0%	2.9%	$51,425.00	$14,966.00	$3,363.00	$62,363.00	$27,041.00

Source: 2009 American Community Survey

Exhibit 3.15 Summary of Watsonville Housing Characteristics

	Median Rooms per Structure	Owner-Occupied		Renter-Occupied	
		Median Value	Percentage of owners spending more than 30% on income on mortgage	Median Rent	Percentage of renters spending more than 30% on income on rent
City of Watsonville	4.8	$497,600.00	66.2%	$1,024.00	65.5%
Santa Cruz County	4.9	$675,300.00	55.7%	$1,251.00	59.2%
California	5.1	$479,200.00	51.6%	$1,116.00	54.5%
Nationally	5.4	$185,400.00	36.9%	$817.00	50.1%

Source: 2009 American Community Survey

Exhibit 3.16 shows the ten largest employers in Watsonville. By far the largest employer is the Pajaro Valley Unified School District, which has 20 schools located throughout the city. The second-largest employer is Watsonville Community Hospital. The hospital is located in the northwest portion of the city and has a bus stop for Routes 69A and 74. As shown in Exhibit 3.17, many of the top trip generators are located along existing routes. Only two employers, West Marine and Couch Distributing, are not currently served by Santa Cruz METRO.

Exhibit 3.16 Top 10 Employers in Watsonville

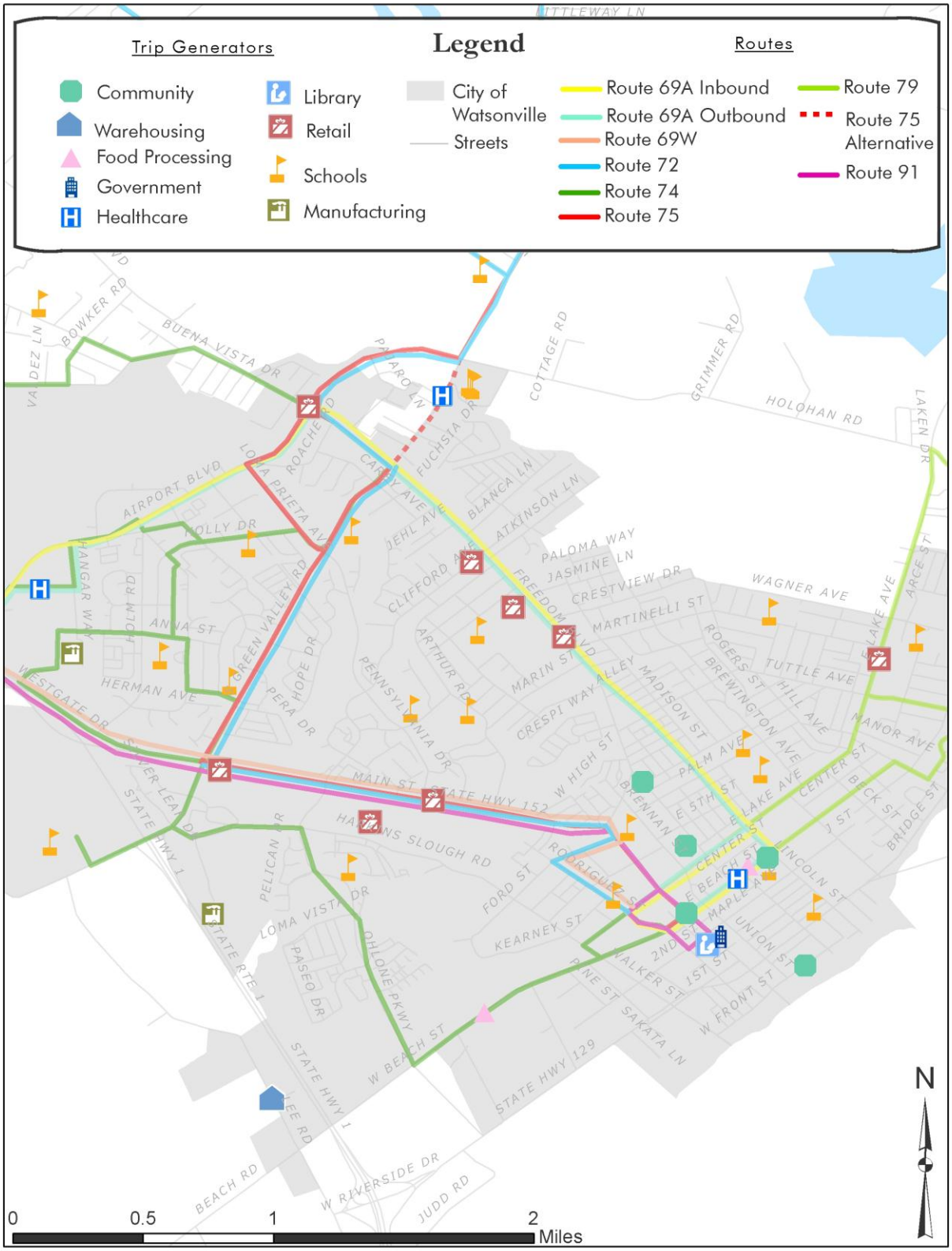
Employer	Industry	Number of Employees
Pajaro Valley Unified School District	Government/Education	2061
Watsonville Community Hospital	Health & Human Services	693
Fox Racing Shox	Sporting Goods	400
City of Watsonville	Government	374
West Marine	Marine Equipment	279
Target	Retail	211
S. Martinelli & Co.	Food Processing & Distribution	180
Couch Distributing	Alcoholic Beverage Distribution	170
Salud Para La Gente	Health & Human Services	160
Mi Pueblo Food Center	Retail	144

Source: City of Watsonville, "Comprehensive Annual Financial Report", June 2010.

Exhibit 3.17 illustrates the top trip generators in Watsonville and their location relative to existing Santa Cruz METRO routes. Many of the routes serve the identified trip generators, particularly the large employers. What this suggests is the lack of ridership might stem from travel time rather than actual physical connections between home and work. In other words, accessing job on transit does not seem to be a problem insofar as routes are currently connecting population centers and employment centers. Rather the barrier might be travel time caused by circuitous routes or less than optimal on-time performance.

As will be discussed below, there are two significant proposed developments in Watsonville which could have a large impact on demand for travel. Both projects, the Atkinson Lane Specific Plan and Manabe-Ow Business Park Specific Plan, are projected to add a substantial number of residents and jobs respectively. Both projects are adjacent to existing bus routes. However, Santa Cruz METRO may wish to consider adding additional service to these areas following project occupancy.

Exhibit 3.17 Major Trip Generators in Watsonville



Source: City of Watsonville

Future Land Use and Economic Development Changes

There are two large-scale developments which could have the potential to substantially impact travel demand throughout Watsonville. The two projects are the Atkinson Lane Specific Plan and the Manabe-Ow Business Park Specific Plan.

The Atkinson Lane Specific Plan is located east of the Freedom Boulevard and Atkinson Lane intersection. The project is bounded by Atkinson Lane on the north, the Corralitos Creek and Wagner Drive on the east, Brookhaven Lane on the south. The project is planned to consist of 450 residential units on 37.5 acres. This translates to a gross density of approximately 6.8 units per acre or 13 units per net developable space.

Of the 450 units, the Specific Plan proposes a blending of density between high-density (20 units per acre), medium-density (10-12 units per acre), and low-density (eight to 10 units per acre) residential units. The Specific Plan shows the high-density buildings being placed in the western portion of the planning area, which is also closest to Freedom Boulevard. This is promising given Santa Cruz METRO Routes 69A and 71 serve the Freedom Avenue/Atkinson Lane intersection. In addition, the bus stop is approximately one-quarter-mile from the western boundary of the planning area.

In addition to placing the densest portion of the project closest to transit, the Specific Plan also provides the required 20-percent set-aside for affordable housing units. This reflects both 20 percent of for-sale units as well as rental units. As a result, Santa Cruz METRO anticipates a likely increase in demand for public transit from this area reflective of the anticipated increase in transit-dependent population. Another major proposed development is the Manabe-Ow Business Park Specific Plan. The proposed project would be located between West Beach Street and Santa Catalina Avenue with a portion adjacent to Highway 1. As envisioned, the project would include approximately 61 acres of flex-use space for office or industrial uses. In addition, the site also features approximately 25,000 square feet of neighborhood retail.

In terms of the project's potential impact on transit demand, new commercial and industrial space would likely boost demand for travel to and from this area. The primary access point to the project is located on Ohlone Parkway, which is served by Route 74. Currently there is no bus stop at this location, however the Manabe-Ow Business Park Specific Plan recommends Santa Cruz METRO add bus stops on the northeast and southwest corners of the intersection. Doing so would improve access to a significant number of the proposed buildings within the planning area.

A significant portion of the project is greater than one-quarter-mile from the bus stop, which is the traditional distance a person is likely to walk. However, the project does appear to incorporate bicycle lanes and trails which may improve access to the more remote portions of the project area. In order for this project to be completed, an extensive infrastructure investment is needed. As a result, the necessary infrastructure construction as well as market conditions might push the phasing for this project beyond the horizon of this study.

4 RIDE CHECK ANALYSIS

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CHAPTER 4 – RIDE CHECK ANALYSIS

The purpose of the ride check analysis is to provide a comprehensive assessment of those transit services offered by Santa Cruz METRO in Watsonville under actual operating conditions. By analyzing ride check data, a snapshot is formed illustrating the current level of system activity and delivery performance.

This section includes two elements: the system's overall on-time performance and the route productivity (i.e., boarding and alighting activity) by stop, route, and day-part. Following a review of ride check data, we will present key findings and recommendations to address any service performance challenges revealed through this analysis.

ON-TIME PERFORMANCE ANALYSIS

On-time performance is a critical element in the customer's perception of whether a transit operator is providing a reliable service. By evaluating the service at the individual route level and day-part, we are able to pinpoint areas of success as well as areas which may need improvement. Achieving on-time performance standards is imperative, as it not only reflects a healthy transit service but benefits the ride-dependent population as well as attracts "choice riders," or those with other mobility options.

Methodology

To help identify issues potentially impacting the quality of the customer experience as well as possible scheduling issues, Moore & Associates conducted a ride check of fixed-route trips provided by Santa Cruz METRO along routes 69A, 69W, 71, 72, 74, 75, 79, and 91X. Ride checks were conducted from June 8 to June 13, 2011.

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

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

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.

From a provision of service perspective, industry standards suggest on-time performance be at least 90 percent with no early departures. The evaluation revealed 61 percent of Santa Cruz METRO trips operated on-time during the evaluation period. Note, no trips were more than 10 minutes late and consequently there were no missed trips.

On-Time Performance

Exhibit 4.1 shows the on-time performance for the Santa Cruz METRO routes serving Watsonville by day-part. On-time performance fell across the service day with late arrivals as the primary cause of lower on-time performance. Despite the role late arrivals played, early departures also had a significant negative impact on on-time performance.

It is interesting to note there are minor spikes in early departures during the A.M. and P.M. peak day-parts. This is problematic given most riders during this day-part are usually attempting to either get to work or return home. Improving on-time performance during these day-parts would likely boost the perception of reliability for the service as well potentially improve access to employment opportunities.

Exhibit 4.1 Overall On-Time Performance by Day-Part

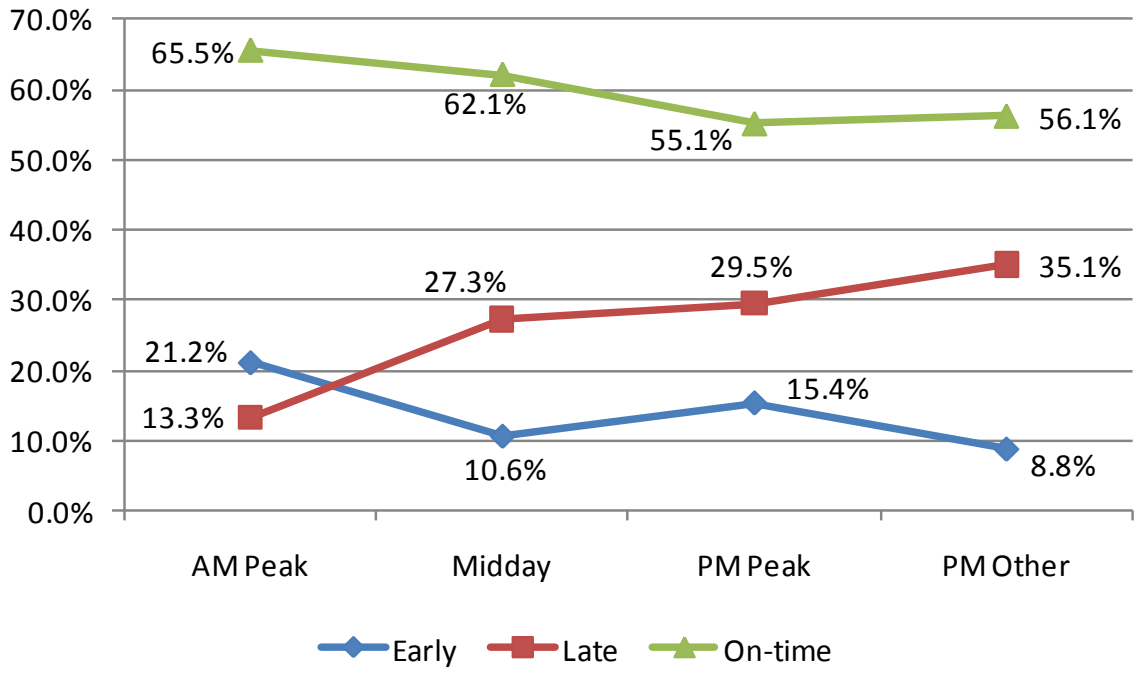


Exhibit 4.2 shows on-time performance for weekday service by day-part. As noted in Exhibit 4.1, late arrivals were typically the largest contributor to lower on-time performance. Late arrivals were particularly prevalent during the P.M. peak day-part. Improving on-time performance for routes serving Watsonville should be a priority for Santa Cruz METRO. This can be attributed in part to the significant peak-hour traffic on Highway 1 and major arterials (i.e., Soquel Drive, Freedom Boulevard) connecting Watsonville with Soquel, Aptos, and Santa Cruz. Late arrivals, particularly in the P.M. peak period, are the result of Santa Cruz METRO buses being caught in congestion related to cars leaving Santa Cruz and heading southeast to commute home, an ongoing severe traffic congestion problem in this highly traveled part of the county.

Exhibit 4.2 Weekday On-time Performance by Day-Part

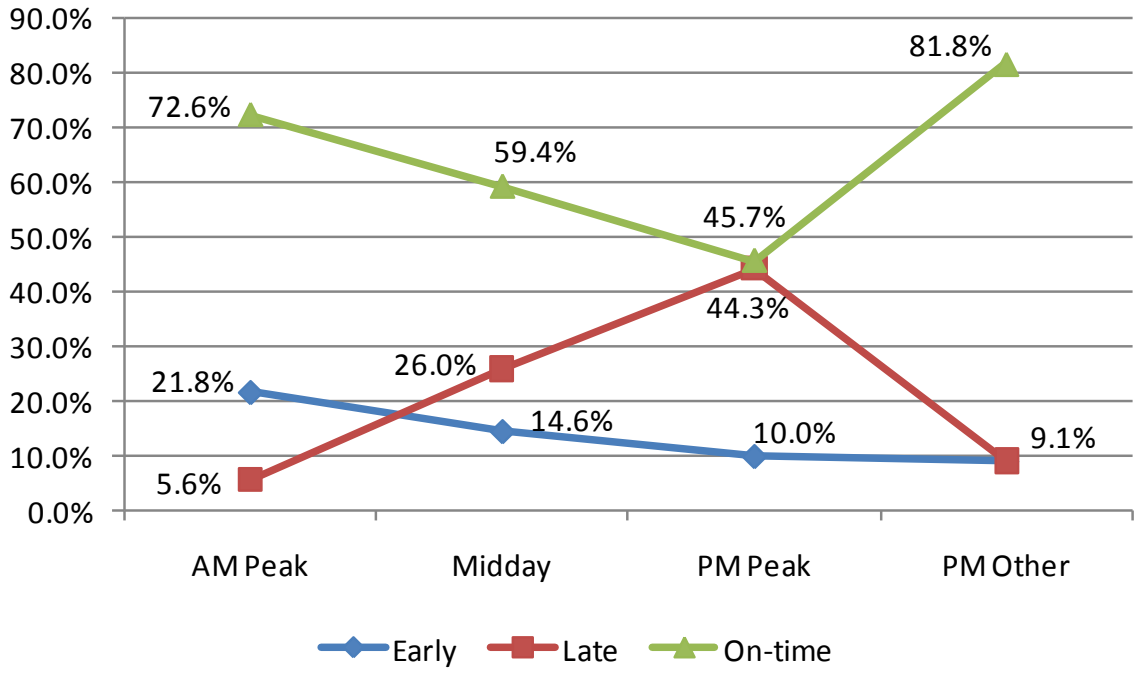


Exhibit 4.3 shows weekend on-time performance by day-part. In contrast to weekday on-time performance, weekend on-time performance remained relatively consistent throughout the ride check given the lack of peak-hour congestion on weekends. However, on-time performance was still below the 90-percent threshold for on-time performance. Of particular concern during the weekend was the high proportion of late arrivals throughout the ride check as well as the near 20 percent of departures which were early. As noted, on-time performance is critical to not only improving perceptions about the service but is also critical in helping customers in accessing destinations in a reliable and timely fashion. As such, improving on-time performance should be a primary focus with regard to better public transit service in Watsonville.

Exhibit 4.3 Weekend On-Time Performance by Day-Part

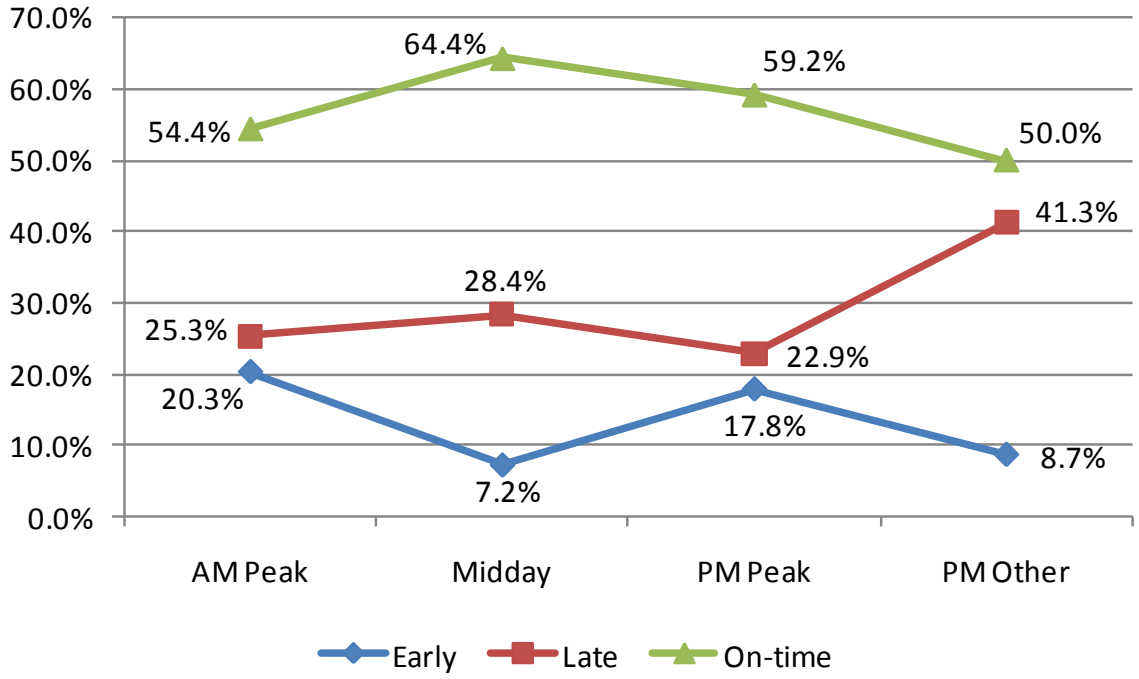


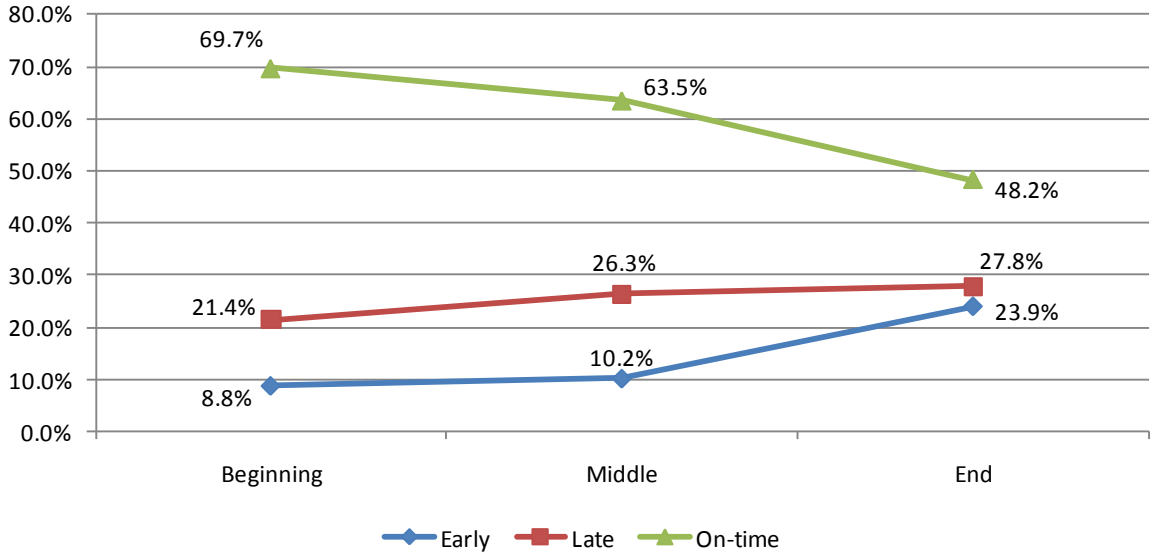
Exhibit 4.4 shows the overall (i.e., weekday and weekend) on-time performance for Santa Cruz METRO routes serving Watsonville. Overall, the on-time performance never reached the 90-percent threshold for on-time departures. On-time performance was best towards the start of the trip with a drop in performance during the middle due to a combination of more late and early departures. On-time performance continued to decline through the end of the trip partially due large increase in early departures. From the middle of the trip to the end of the trip, there was only a small increase in the percentage of late departures.

The ride check revealed an increasing number of early departures from stops. Between the start and middle-trip segments there was only a small increase in the number of early departures. However, between the middle and end-trip segments, there was a 14-percentage point increase in early departures. This is significant because it suggests two possible scenarios. One is drivers are

not readjusting their speed between time points to account for early departures. The second is some time points might have too much time allocated between the stops and thus add unnecessary time to these trips. While this extra run time is valuable during peak hours when congestions and greater passenger volume can lead to delays, Santa Cruz METRO should consider trimming run time from trips during off-peak hours.

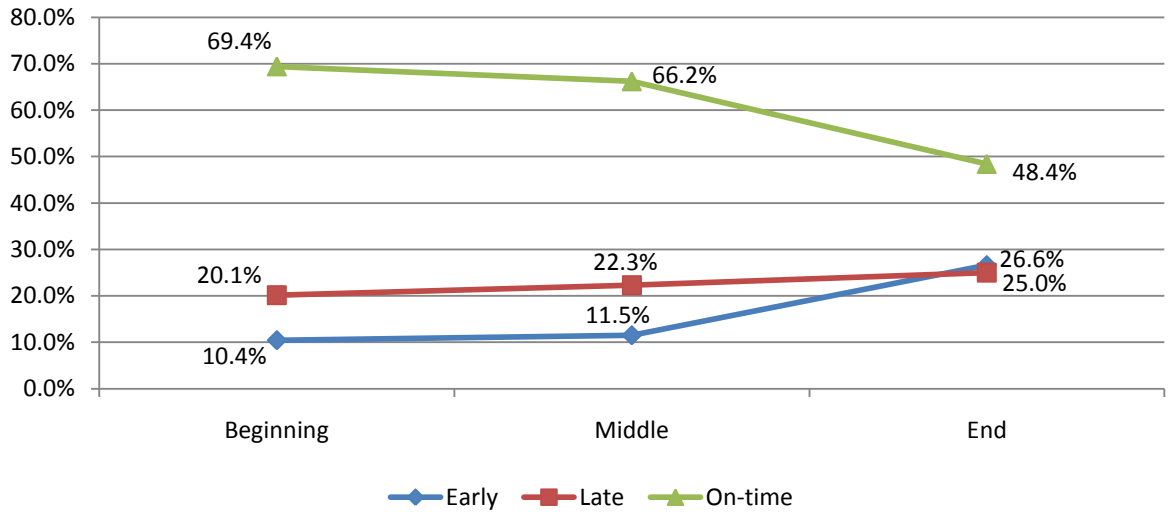
Another significant issue is the number of late departures which had a severe impact on on-time performance. More than one-fifth of departures were late in beginning trip segments. The number of late departures rose to more than one-quarter of all departure times for middle-trip and end-trip segments. In short, the late departures were the largest contributor to the poor on-time performance observed during this ride check.

Exhibit 4.4 Overall On-Time Performance by Trip Segment



The weekday on time performance largely mimics the overall trends seen system-wide, as seen in Exhibit 4.5. None of the trip segments achieve the desired 90-percent threshold for on-time departures. Late departures are still the largest contributor to the low on-time performance, with beginning and middle-trip segments having over one-fifth and end-trip segments having more than one-fourth of all trips departing late. Again with weekday trips, there is a large uptick in early departures from the middle-trip segments to the end-trip segments, again possibly reflecting the drivers not adjusting their speed between time points or having too much time allocated in the published schedule between stops. This is related to the surplus of running time built into schedules to account for peak-hour roadway congestion and passenger volumes on routes traveling along Highway 1 and Soquel Drive, so presents a bit of a Catch-22 to the district.

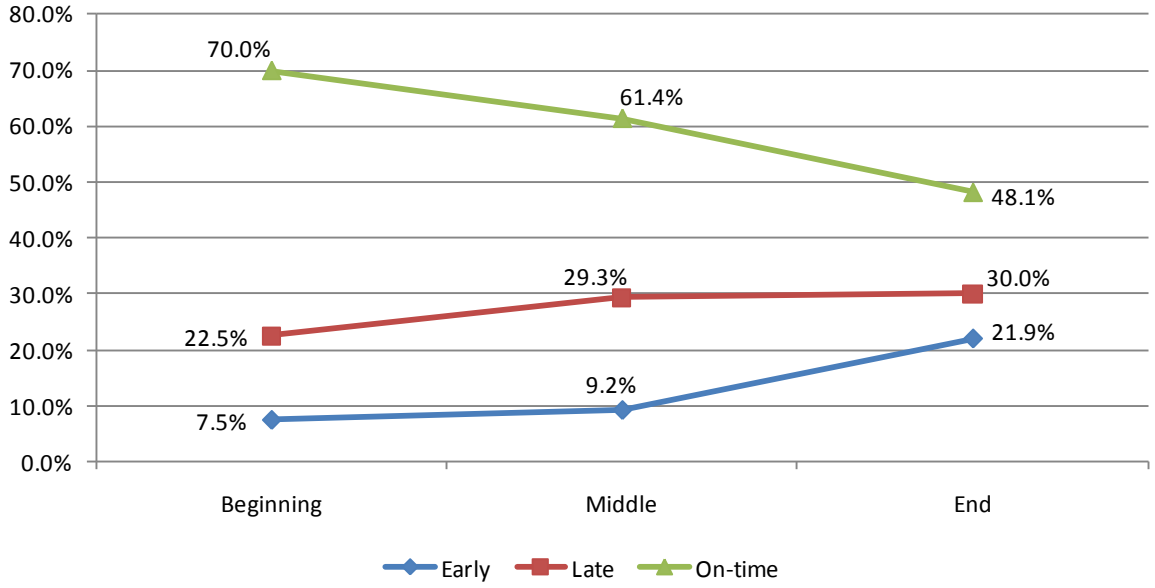
Exhibit 4.5 Weekday On-Time Performance by Trip Segment



Weekend on-time performance is largely the same is the overall on-time performance, only with a larger percentage of trips being late departures, as shown in Exhibit 4.6. Late departures at beginning trips make up over one-fifth of all trip departures, but by middle and end-trip around 30 percent of all trips are late. They are the largest cause of low on-time performance. This shows that the published schedule does not accurately account for the amount of time trips take, and this should be amended to better serve customers.

As with the overall on-time performance and the weekday, there are a large percentage of early-departures on weekend trips, though slightly less than on weekday trips. Again, early departures hold steady at just under 10 percent in beginning and middle-trips, but experience a 12-percentage point jump to almost 22 percent by end-trip. As previously stated, this could represent too much time being allocated between time points.

Exhibit 4.6 Weekend On-Time Performance by Trip Segment



Exhibits 4.7 through 4.9 show the on-time performance for each route by day-part. During the A.M. Peak, Route 72 had the best on-time performance at 87 percent. This was followed by Route 91X Outbound at 86 percent and Route 69A Outbound and Route 69W Inbound at (both at 83 percent). By contrast, Route 91X Inbound and Route 71 Inbound had the lowest on-time performance at 43 percent and 48 percent, respectively. Overall, no route reached the 90-percent threshold throughout the service day. Again this points to the importance of improving on-time performance for the routes serving Watsonville.

Exhibits 4.10 through 4.12 show the on-time performance for each route by trip segment. Generally, each route had declining on-time performance throughout the course of the observed trip. Most routes had good to excellent on-time performance during the beginning of the trip with a sharp decline in on-time performance for the balance of the trip. As shown above, late arrivals were the single largest contributor to lower on-time performance.

Additionally, early departures particularly during the end of the trip had a significant negative impact on on-time performance. Route 91X Inbound departed early from three-quarters of its time points during the ride check. Unlike late arrivals, early departures are completely preventable. We recommend a "no early departure" policy as well as a reexamination of time points along each route, especially during off-peak hours when there is less congestion and lower passenger volumes along Highway 1 and major arterials such as Freedom Boulevard and Soquel Drive.

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Exhibit 4.7 Overall On-time Performance by Route and Day-Part

Route	Day-Part																								
	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	-	-	-	-	-	22.2%	22.2%	0.0%	55.6%	100.0%	4.2%	25.0%	0.0%	70.8%	100.0%	36.8%	10.5%	0.0%	52.6%	100.0%	-	-	-	-	-
Route 69A Outbound	-	-	-	-	-	0.0%	16.7%	0.0%	83.3%	100.0%	14.3%	21.4%	0.0%	64.3%	100.0%	16.7%	37.5%	0.0%	45.8%	100.0%	-	-	-	-	-
Route 69W Inbound	-	-	-	-	-	16.7%	0.0%	0.0%	83.3%	100.0%	13.3%	23.3%	0.0%	63.3%	100.0%	12.5%	20.8%	0.0%	66.7%	100.0%	-	-	-	-	-
Route 69W Outbound	-	-	-	-	-	-	-	-	-	-	4.8%	40.5%	0.0%	54.8%	100.0%	8.3%	33.3%	0.0%	58.3%	100.0%	50.0%	0.0%	0.0%	50.0%	100.0%
Route 71 Inbound	-	-	-	-	-	21.7%	30.0%	0.0%	48.3%	100.0%	10.9%	34.5%	0.0%	54.5%	100.0%	17.5%	47.5%	0.0%	35.0%	100.0%	0.0%	40.0%	0.0%	60.0%	100.0%
Route 71 Outbound	-	-	-	-	-	26.7%	0.0%	0.0%	73.3%	100.0%	13.0%	20.0%	0.0%	67.0%	100.0%	17.5%	30.0%	0.0%	52.5%	100.0%	3.3%	50.0%	0.0%	46.7%	100.0%
Route 72	-	-	-	-	-	4.3%	8.7%	0.0%	87.0%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	62.5%	0.0%	37.5%	100.0%	-	-	-	-	-
Route 74	-	-	-	-	-	28.6%	0.0%	0.0%	71.4%	100.0%	0.0%	28.6%	0.0%	71.4%	100.0%	14.3%	14.3%	0.0%	71.4%	100.0%	-	-	-	-	-
Route 75	-	-	-	-	-	28.6%	0.0%	0.0%	71.4%	100.0%	13.5%	29.7%	0.0%	56.8%	100.0%	8.7%	0.0%	0.0%	91.3%	100.0%	9.1%	9.1%	0.0%	81.8%	100.0%
Route 79	-	-	-	-	-	0.0%	25.0%	0.0%	75.0%	100.0%	-	-	-	-	-	0.0%	100.0%	0.0%	0.0%	100.0%	-	-	-	-	-
Route 91X Inbound	-	-	-	-	-	57.1%	0.0%	0.0%	42.9%	100.0%	14.3%	14.3%	0.0%	71.4%	100.0%	-	-	-	-	-	-	-	-	-	-
Route 91X Outbound	-	-	-	-	-	0.0%	14.3%	0.0%	85.7%	100.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	21.2%	13.3%	0.0%	65.5%	100.0%	10.6%	27.3%	0.0%	62.1%	100.0%	15.4%	29.5%	0.0%	55.1%	100.0%	8.8%	35.1%	0.0%	56.1%	100.0%

Exhibit 4.8 Weekday On-time Performance by Route and Day-Part

Route	Weekday Day-Part																								
	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	-	-	-	-	-	25.0%	16.7%	0.0%	58.3%	100.0%	8.3%	16.7%	0.0%	75.0%	100.0%	42.9%	28.6%	0.0%	28.6%	100.0%	-	-	-	-	-
Route 69A Outbound	-	-	-	-	-	0.0%	16.7%	0.0%	83.3%	100.0%	20.8%	16.7%	0.0%	62.5%	100.0%	0.0%	83.3%	0.0%	16.7%	100.0%	-	-	-	-	-
Route 69W Inbound	-	-	-	-	-	-	-	-	-	-	25.0%	16.7%	0.0%	58.3%	100.0%	0.0%	66.7%	0.0%	33.3%	100.0%	-	-	-	-	-
Route 69W Outbound	-	-	-	-	-	-	-	-	-	-	4.2%	45.8%	0.0%	50.0%	100.0%	0.0%	66.7%	0.0%	33.3%	100.0%	-	-	-	-	-
Route 71 Inbound	-	-	-	-	-	40.0%	0.0%	0.0%	60.0%	100.0%	14.0%	32.0%	0.0%	54.0%	100.0%	-	-	-	-	-	-	-	-	-	-
Route 71 Outbound	-	-	-	-	-	20.0%	0.0%	0.0%	80.0%	100.0%	23.3%	33.3%	0.0%	43.3%	100.0%	-	-	-	-	-	-	-	-	-	-
Route 72	-	-	-	-	-	4.3%	8.7%	0.0%	87.0%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	62.5%	0.0%	37.5%	100.0%	-	-	-	-	-
Route 74	-	-	-	-	-	28.6%	0.0%	0.0%	71.4%	100.0%	0.0%	28.6%	0.0%	71.4%	100.0%	14.3%	14.3%	0.0%	71.4%	100.0%	-	-	-	-	-
Route 75	-	-	-	-	-	27.3%	0.0%	0.0%	72.7%	100.0%	27.3%	0.0%	0.0%	72.7%	100.0%	16.7%	0.0%	0.0%	83.3%	100.0%	9.1%	9.1%	0.0%	81.8%	100.0%
Route 79	-	-	-	-	-	0.0%	25.0%	0.0%	75.0%	100.0%	-	-	-	-	-	0.0%	100.0%	0.0%	0.0%	100.0%	-	-	-	-	-
Route 91X Inbound	-	-	-	-	-	57.1%	0.0%	0.0%	42.9%	100.0%	14.3%	14.3%	0.0%	71.4%	100.0%	-	-	-	-	-	-	-	-	-	-
Route 91X Outbound	-	-	-	-	-	0.0%	14.3%	0.0%	85.7%	100.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	21.8%	5.6%	0.0%	72.6%	100.0%	14.6%	26.0%	0.0%	59.4%	100.0%	10.0%	44.3%	0.0%	45.7%	100.0%	9.1%	9.1%	0.0%	81.8%	100.0%

Exhibit 4.9 Weekend On-time Performance by Route and Day-Part

Route	Weekday Day-Part																								
	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	-	-	-	-	-	16.7%	33.3%	0.0%	50.0%	100.0%	0.0%	33.3%	0.0%	66.7%	100.0%	33.3%	0.0%	0.0%	66.7%	100.0%	-	-	-	-	-
Route 69A Outbound	-	-	-	-	-	-	-	-	-	-	5.6%	27.8%	0.0%	66.7%	100.0%	22.2%	22.2%	0.0%	55.6%	100.0%	-	-	-	-	-
Route 69W Inbound	-	-	-	-	-	16.7%	0.0%	0.0%	83.3%	100.0%	5.6%	27.8%	0.0%	66.7%	100.0%	16.7%	5.6%	0.0%	77.8%	100.0%	-	-	-	-	-
Route 69W Outbound	-	-	-	-	-	-	-	-	-	-	5.6%	33.3%	0.0%	61.1%	100.0%	16.7%	0.0%	0.0%	83.3%	100.0%	50.0%	0.0%	0.0%	50.0%	100.0%
Route 71 Inbound	-	-	-	-	-	12.5%	45.0%	0.0%	42.5%	100.0%	8.3%	36.7%	0.0%	55.0%	100.0%	17.5%	47.5%	0.0%	35.0%	100.0%	0.0%	40.0%	0.0%	60.0%	100.0%
Route 71 Outbound	-	-	-	-	-	40.0%	0.0%	0.0%	60.0%	100.0%	8.6%	14.3%	0.0%	77.1%	100.0%	17.5%	30.0%	0.0%	52.5%	100.0%	3.3%	50.0%	0.0%	46.7%	100.0%
Route 75	-	-	-	-	-	29.4%	0.0%	0.0%	70.6%	100.0%	7.7%	42.3%	0.0%	50.0%	100.0%	5.9%	0.0%	0.0%	94.1%	100.0%	-	-	-	-	-
Total	-	-	-	-	-	20.3%	25.3%	0.0%	54.4%	100.0%	7.2%	28.4%	0.0%	64.4%	100.0%	17.8%	22.9%	0.0%	59.2%	100.0%	8.7%	41.3%	0.0%	50.0%	100.0%

Exhibit 4.10 Overall On-time Performance by Route and Trip Segment

Route	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	14.8%	29.6%	0.0%	55.6%	100.0%	6.3%	12.5%	0.0%	81.3%	100.0%	38.9%	11.1%	0.0%	50.0%	100.0%
Route 69A Outbound	8.3%	25.0%	0.0%	66.7%	100.0%	12.5%	16.7%	0.0%	70.8%	100.0%	20.8%	37.5%	0.0%	41.7%	100.0%
Route 69W Inbound	5.0%	25.0%	0.0%	70.0%	100.0%	15.0%	15.0%	0.0%	70.0%	100.0%	20.0%	20.0%	0.0%	60.0%	100.0%
Route 69W Outbound	0.0%	37.5%	0.0%	62.5%	100.0%	12.5%	37.5%	0.0%	50.0%	100.0%	16.7%	29.2%	0.0%	54.2%	100.0%
Route 71 Inbound	16.7%	21.2%	0.0%	62.1%	100.0%	8.0%	42.0%	0.0%	50.0%	100.0%	21.2%	42.4%	0.0%	36.4%	100.0%
Route 71 Outbound	8.3%	23.3%	0.0%	68.3%	100.0%	13.8%	23.8%	0.0%	62.5%	100.0%	21.7%	23.3%	0.0%	55.0%	100.0%
Route 72	0.0%	6.7%	0.0%	93.3%	100.0%	0.0%	20.0%	0.0%	80.0%	100.0%	7.1%	28.6%	0.0%	64.3%	100.0%
Route 74	7.1%	7.1%	0.0%	85.7%	100.0%	0.0%	4.8%	0.0%	95.2%	100.0%	42.9%	35.7%	0.0%	21.4%	100.0%
Route 75	5.6%	11.1%	0.0%	83.3%	100.0%	11.1%	11.1%	0.0%	77.8%	100.0%	30.6%	13.9%	0.0%	55.6%	100.0%
Route 79	0.0%	50.0%	0.0%	50.0%	100.0%	0.0%	75.0%	0.0%	25.0%	100.0%	0.0%	50.0%	0.0%	50.0%	100.0%
Route 91X Inbound	0.0%	0.0%	0.0%	100.0%	100.0%	33.3%	16.7%	0.0%	50.0%	100.0%	75.0%	0.0%	0.0%	25.0%	100.0%
Route 91X Outbound	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	33.3%	0.0%	66.7%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total	8.8%	21.4%	0.0%	69.7%	100.0%	10.2%	26.3%	0.0%	63.5%	100.0%	23.9%	27.8%	0.0%	48.2%	100.0%

Exhibit 4.11 Weekday 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	23.5%	35.3%	0.0%	41.2%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%	37.5%	0.0%	0.0%	62.5%	100.0%
Route 69A Outbound	16.7%	16.7%	0.0%	66.7%	100.0%	16.7%	16.7%	0.0%	66.7%	100.0%	8.3%	50.0%	0.0%	41.7%	100.0%
Route 69W Inbound	16.7%	33.3%	0.0%	50.0%	100.0%	16.7%	16.7%	0.0%	66.7%	100.0%	16.7%	50.0%	0.0%	33.3%	100.0%
Route 69W Outbound	0.0%	58.3%	0.0%	41.7%	100.0%	8.3%	66.7%	0.0%	25.0%	100.0%	0.0%	33.3%	0.0%	66.7%	100.0%
Route 71 Inbound	14.3%	14.3%	0.0%	71.4%	100.0%	14.3%	28.6%	0.0%	57.1%	100.0%	38.1%	23.8%	0.0%	38.1%	100.0%
Route 71 Outbound	13.3%	20.0%	0.0%	66.7%	100.0%	15.0%	20.0%	0.0%	65.0%	100.0%	40.0%	20.0%	0.0%	40.0%	100.0%
Route 72	0.0%	6.7%	0.0%	93.3%	100.0%	0.0%	20.0%	0.0%	80.0%	100.0%	7.1%	28.6%	0.0%	64.3%	100.0%
Route 74	7.1%	7.1%	0.0%	85.7%	100.0%	0.0%	4.8%	0.0%	95.2%	100.0%	42.9%	35.7%	0.0%	21.4%	100.0%
Route 75	7.1%	7.1%	0.0%	85.7%	100.0%	27.3%	0.0%	0.0%	72.7%	100.0%	28.6%	0.0%	0.0%	71.4%	100.0%
Route 79	0.0%	50.0%	0.0%	50.0%	100.0%	0.0%	75.0%	0.0%	25.0%	100.0%	0.0%	50.0%	0.0%	50.0%	100.0%
Route 91X Inbound	0.0%	0.0%	0.0%	100.0%	100.0%	33.3%	16.7%	0.0%	50.0%	100.0%	75.0%	0.0%	0.0%	25.0%	100.0%
Route 91X Outbound	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	33.3%	0.0%	66.7%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total	10.4%	20.1%	0.0%	69.4%	100.0%	11.5%	22.3%	0.0%	66.2%	100.0%	26.6%	25.0%	0.0%	48.4%	100.0%

Exhibit 4.12 Weekend On-time Performance by Route and Trip Segment

Route	Weekend 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%	20.0%	0.0%	80.0%	100.0%	10.0%	20.0%	0.0%	70.0%	100.0%	40.0%	20.0%	0.0%	40.0%	100.0%
Route 69A Outbound	0.0%	33.3%	0.0%	66.7%	100.0%	8.3%	16.7%	0.0%	75.0%	100.0%	33.3%	25.0%	0.0%	41.7%	100.0%
Route 69W Inbound	0.0%	21.4%	0.0%	78.6%	100.0%	14.3%	14.3%	0.0%	71.4%	100.0%	21.4%	7.1%	0.0%	71.4%	100.0%
Route 69W Outbound	0.0%	16.7%	0.0%	83.3%	100.0%	16.7%	8.3%	0.0%	75.0%	100.0%	33.3%	25.0%	0.0%	41.7%	100.0%
Route 71 Inbound	17.8%	24.4%	0.0%	57.8%	100.0%	5.0%	48.3%	0.0%	46.7%	100.0%	13.3%	51.1%	0.0%	35.6%	100.0%
Route 71 Outbound	6.7%	24.4%	0.0%	68.9%	100.0%	13.3%	25.0%	0.0%	61.7%	100.0%	15.6%	24.4%	0.0%	60.0%	100.0%
Route 75	4.5%	13.6%	0.0%	81.8%	100.0%	0.0%	18.8%	0.0%	81.3%	100.0%	31.8%	22.7%	0.0%	45.5%	100.0%
Total	7.5%	22.5%	0.0%	70.0%	100.0%	9.2%	29.3%	0.0%	61.4%	100.0%	21.9%	30.0%	0.0%	48.1%	100.0%

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Santa Cruz METRO must improve on-time performance. As stated earlier, the industry standard suggests on-time performance be at least 90 percent with no early departures. Santa Cruz METRO has an on-time performance of no more than 70 percent at any time based on this ride check, with on-time performance falling below 50 percent by end of the trip. Although the industry standard suggests no early departures, Santa Cruz METRO consistently has a large percentage of trips leaving early, particularly with respect to departures in the middle and end of trips.

Having poor on-time performance makes the bus less usable for both ride-dependent and "choice" riders. The Santa Cruz METRO published schedule should be reexamined and reworked to better reflect actual time it takes to complete trips. This should include the amount of time needed between published time points, differences in trip time during different times of the day, and differences in weekday and weekend trip times. Having a more accurate published schedule that reflects the actual on-time performance would improve the service to Santa Cruz METRO customers. Beginning in March 2012, Santa Cruz METRO will use the Hastus/Giro system to automate the scheduling and run-cutting process. This will assist with efforts to optimize service and achieve better on time performance by using Hastus to update the runtime network and reflect more realistic run times.

BOARDING AND ALIGHTING ANALYSIS

This section discusses overall fixed-route boarding and alighting counts observed during the ride check. Boarding and alighting data collected from the ride check were recorded on the same trip sheet as on-time performance data. Data were then imported into Microsoft Excel and segregated by route, stop, and day-part. Note, all exhibit data reflect "activity" which is defined as combined boardings and alightings for weekday, Saturday, and Sunday service.

Boarding by Day-Part

Evaluating a system by day-part is critical to assessing existing ridership trends not apparent through the use of traditional performance measures. This snapshot of productivity (i.e., boardings and alightings) provides valuable insight for potential service changes and recommendations (i.e., elimination of trip segments, addition of route segments, or stops).

Boarding and alighting data were collected across a representative sample of weekday, Saturday, and Sunday service. Bear in mind that the accuracy of data may be influenced by external factors (i.e., school schedules, weather, etc.) occurring during the ride check, potentially impacting or skewing results and trends.

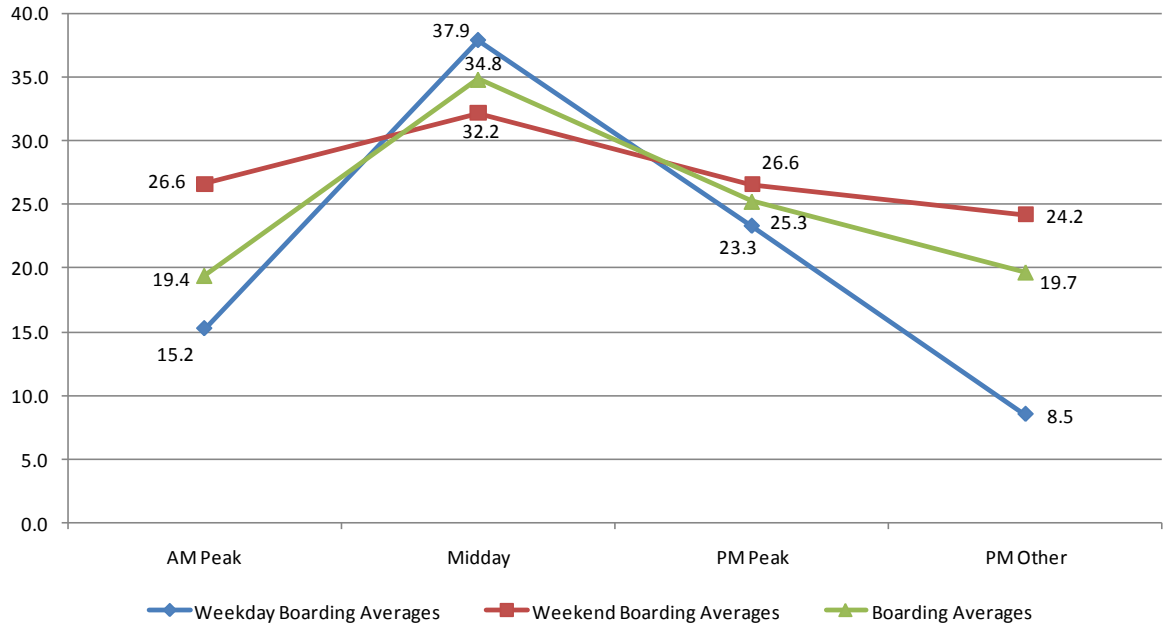
As defined in the previous section (On-Time Performance), route analysis will be divided into five separate day-parts (A.M. Other, A.M. Peak, Midday, P.M. Peak, and P.M. Other). To more accurately assess productivity by time of day, boarding averages were derived from total boardings divided by

the number of trips during the specified day-part. This approach shows the average boardings per trip per day-part, versus to total boardings which are skewed by the number of trips offered.

Exhibit 4.13 shows the overall boarding averages by day-part for routes serving Watsonville. Comparatively, the weekend had more average boardings than the weekday with the exception of the midday day-part. Since the data do not reflect a 100-percent ride check, this is likely due to the sampling distribution of trips rather than typical boarding trends. This, however, does suggest a significant number of patrons do use the service on weekends.

Another important finding from the ride check is the spike in average boardings during the midday day-part. This is expected given the large number of students who use the service to get to school. This conclusion is further supported by the fact many of the routes offer direct service to Cabrillo College or primary education sites.

Exhibit 4.13 Boarding Averages by Day-Part



The aggregate of boarding averages by day-part is shown in Exhibit 4.14. Overall, the routes had 28 average boardings per trip. Boardings were primarily concentrated during the midday day-part with Route 71 Inbound (towards Santa Cruz) having the highest average boardings at 46 passengers per trip, which is extremely productive.

The ride check also revealed the routes providing service between Santa Cruz and Watsonville (Routes 69A, 69W, and 71) had the highest boarding averages of the surveyed routes. This suggests a strong demand for travel between Santa Cruz and Watsonville, and points in between. This finding was reinforced through extensive focus groups conducted with target populations in Watsonville, who all indicated using the bus to travel to locations beyond Watsonville, even as far as San Jose.

By contrast, the routes providing local service within the Watsonville area had much lower productivity. This may be caused by the fact these routes generally serve fewer major trip generators than the long-line routes do.

Exhibit 4.14 Overall Boarding by Route and Day-Part

Boarding Averages						
Route	AM Other	AM Peak	Midday	PM Peak	PM Other	Route Average
Route 69A Inbound	-	32.7	37.8	29.8	-	32.9
Route 69A Outbound	-	22.0	30.0	39.3	-	32.2
Route 69W Inbound	-	24.0	39.6	24.0	-	31.8
Route 69W Outbound	-	-	43.7	29.3	20.0	36.9
Route 71 Inbound	-	32.5	46.3	20.3	22.0	36.7
Route 71 Outbound	-	19.3	33.5	31.8	26.3	30.0
Route 72	-	10.0	11.0	15.0	-	11.2
Route 74	-	5.0	15.0	10.7	-	10.3
Route 75	-	14.6	23.3	17.8	8.5	18.0
Route 79	-	2.0	-	9.0	-	5.5
Route 91X Inbound	-	6.0	7.0	-	-	6.5
Route 91X Outbound	-	7.0	-	-	-	7.0
Total	**-**	**19.4**	**34.8**	**25.3**	**19.7**	**28.0**

Alighting by Day-Part

As shown in Exhibit 4.15, alighting averages closely mirrored the boarding averages shown in Exhibit 4.13. The weekend tended to average more alightings than the weekday with the exception of the midday day-part. Again this is likely due to the sampling distribution. However, it should be noted there appears to be significant passenger activity during the weekend. For example, all routes operating during the weekend averaged at least 20 passengers per trip.

Alighting averages also peaked during the midday day-part which is likely due to the number of students who use the service. Based on this finding, Santa Cruz METRO may want to concentrate service during this time to either reduce potential overcrowding on vehicles or to attract additional riders. The public outreach efforts revealed a strong demand for increased frequency. The midday day-part seems to be the most likely day-part to support increased service frequency.

Exhibit 4.15 Alighting Averages by Day-Part

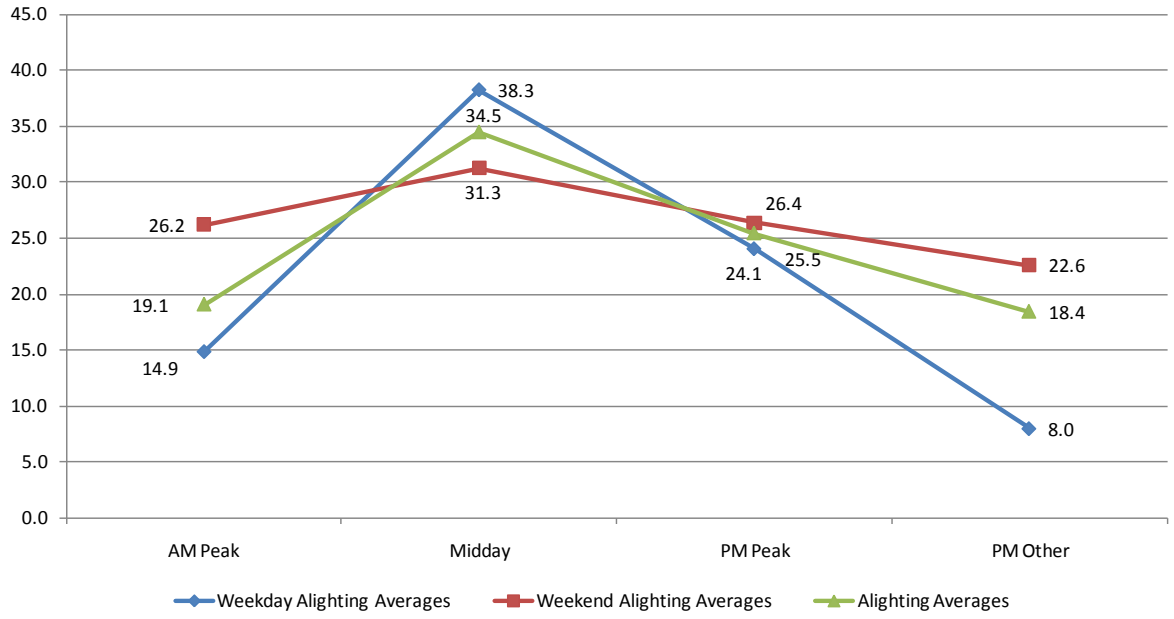


Exhibit 4.16 shows the alighting averages by day-part. As with the alighting averages, Route 71 Inbound had the highest number of alightings per trip at 46. As with the average boardings, the routes providing service between Santa Cruz and Watsonville had much higher average alightings than routes providing service in and around Watsonville.

Exhibit 4.16 Overall Alighting by Route and Day-Part

Alighting Averages						
Route	**AM Other**	**AM Peak**	**Midday**	**PM Peak**	**PM Other**	**Route Average**
Route 69A Inbound	-	29.7	35.3	29.7	-	31.4
Route 69A Outbound	-	22.0	30.6	40.3	-	32.9
Route 69W Inbound	-	24.0	39.6	23.8	-	31.7
Route 69W Outbound	-	-	43.1	32.8	20.0	37.8
Route 71 Inbound	-	32.3	45.9	18.8	17.0	36.0
Route 71 Outbound	-	19.3	33.4	31.0	25.3	29.6
Route 72	-	9.3	11.0	15.0	-	10.8
Route 74	-	5.0	14.0	10.7	-	10.0
Route 75	-	14.6	23.1	17.8	8.0	17.9
Route 79	-	2.0	-	9.0	-	5.5
Route 91X Inbound	-	6.0	7.0	-	-	6.5
Route 91X Outbound	-	9.0	-	-	-	9.0
Total	**-**	**19.1**	**34.5**	**25.5**	**18.4**	**27.7**

Boarding and Alighting by Trip Segment

Exhibit 4.17 shows the average boarding and alighting by trip segment for each route. Overall boardings were concentrated during the beginning trip segment while alightings were concentrated at the end of the trip. This suggests most patrons are riding each route from end-to-end.

In terms of a route-by-route comparison, there was some deviation from the overall boarding and alighting activity. For example, the routes which provide service between Santa Cruz and Watsonville (Routes 69A, 69W, and 71) have a large proportion of boarding occurring during the beginning and middle- trip segments while alightings are heavily concentrated at the end-trip segment. One reason for this is the Capitola Mall stop which is located near the midsection of these routes. As will be shown below, the Capitola Mall is a major passenger activity point for these routes.

Of the routes providing local service in and around Watsonville, many of these routes had a more even distribution of average boardings and alightings. This could be due to the fact many of these routes operate as loops and are possibly used to complete shorter trips. However, average boardings were the highest during the beginning-trip segment while average alightings were concentrated in the end-trip segment.

Exhibit 4.17 Boarding and Alighting by Trip Segment

Route	Boarding			Alighting		
	Beginning	Middle	End	Beginning	Middle	End
Route 69A Weekday Inbound	16.8	11.3	6.1	3.8	10.6	18.6
Route 69A Weekday Outbound	21.2	12.2	5.7	4.7	14.3	21.3
Route 69A Weekend Inbound	14.4	10.2	6.4	2.6	8.4	17.8
Route 69A Weekend Outbound	16.4	7.3	2.7	1.7	9.1	15.7
Route 69W Weekday Inbound	12.0	14.7	5.3	1.0	8.0	24.7
Route 69W Weekday Outbound	22.7	15.3	1.0	6.0	18.2	17.2
Route 69W Weekend Inbound	12.3	12.6	6.9	1.6	8.7	20.6
Route 69W Weekend Outbound	18.8	14.7	1.3	3.2	16.7	14.3
Route 71 Weekday Inbound	19.1	17.6	12.6	9.6	7.0	32.7
Route 71 Weekday Outbound	16.8	7.6	5.4	4.0	11.2	14.6
Route 71 Weekend Inbound	13.5	9.9	7.4	4.0	5.5	20.2
Route 71 Weekend Outbound	18.7	6.4	4.9	4.1	12.6	12.9
Route 72	4.4	2.0	4.8	2.6	1.0	7.2
Route 74	5.1	1.3	3.9	1.3	3.4	5.3
Route 75	6.9	4.9	2.1	3.6	3.7	6.3
Route 79	5.0	0.5	0.0	1.5	3.5	0.5
Route 91X Inbound	4.0	1.5	1.0	0.0	0.0	6.5
Route 91x Outbound	6.0	1.0	0.0	0.0	3.0	6.0
Total	**14.2**	**8.9**	**4.8**	**3.8**	**8.7**	**15.2**

Route-Segment Analysis

The goal of the route-segment analysis is to identify key bus stops and points of significant activity. 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 the combined total stop activity of weekday, Saturday, and Sunday data.

Route 69A Boarding and Alighting Counts

Local Route 69A provides service connecting Watsonville to Santa Cruz with service running between 7:07 a.m. and 7:10 p.m. for the Santa Cruz to Watsonville (outbound) alignment and between 6:45 a.m. and 7:48 p.m. for the Watsonville to Santa Cruz (inbound) alignment during weekdays. Saturday and Holiday service span is from 8:07 a.m. to 7:10 p.m. for outbound service and from 8:50 a.m. to 7:48 p.m. for inbound service. The weekday, Saturday, and Holiday service operate on one-hour headways with a run-time of between 57 minutes and 1 hour 17 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 the 69A travels from the Santa Cruz METRO Center at Pacific Station down Soquel Avenue to Capitola Road to 41st Avenue to Highway 1 to Airport Boulevard to Freedom Boulevard to Lincoln Street, ending up on West Lake Avenue.

Exhibits 4.18 and 4.19 show the top five boarding and alighting stops for Route 69A Inbound. The Watsonville Transit Center, which is the starting point of the trip, had the highest total number of boardings at 57, closely followed by the Capitola Mall transit center at 56. The Santa Cruz Metro Center at Pacific Avenue, the end point of the trip, had the highest number of alightings at 63, followed by Capitola Mall transit center with 50. This shows that the existing Santa Cruz METRO transit centers are heavily used. Santa Cruz Metro Center at Pacific Avenue, Watsonville Transit Center, and Capitola Mall are all located near areas of employment, services, and shopping. The transit centers also offer ample opportunities for transfer to other routes.

Exhibit 4.18 Route 69A Weekday Inbound Top Boarding Points

Route 69A Weekday Inbound		
Rank	Stop	Boardings
1	Watsonville Transit Center Lane 1	57
2	Capitola Mall Lane 1	56
3	Airport Blvd. & Freedom Centre	17
4	Neilson Blvd. & Watsonville Hospital	14
5	Freedom & Crestview (Courthouse)	12

Exhibit 4.19 Route 69A Weekday Inbound Top Alighting Points

Route 69A Weekday Inbound		
Rank	Stop	Alightings
1	Santa Cruz Metro Center	63
2	Capitola Mall Lane 1	50
3	Soquel Ave & Front (Longs)	25
4	41st & 41st Liquors	14
5	Soquel Ave & Ocean	13

Exhibits 4.20 and 4.21 show the top five boarding and alighting stops for Route 69A Outbound. The Santa Cruz METRO Center at Pacific Avenue, which is the starting point of the trip, had the highest total number of boardings at 69, followed by the Capitola Mall transit center at 46. The Capitola Mall transit Center had the highest number of alightings at 43, followed by the Watsonville Transit Center, the end point of the trip, with 39. As with the inbound trips, this shows that the existing Santa Cruz METRO transit centers are heavily used. These three transit centers are all located near employment and services.

Exhibit 4.20 Route 69A Weekday Outbound Top Boarding Points

Route 69A Weekday Outbound		
Rank	Stop	Boardings
1	Santa Cruz Metro Lane 4	69
2	Capitola Mall	46
3	Soquel Ave & Front	15
4	Soquel Ave & Hagemann	15
5	Freedom & Crestview	9

Exhibit 4.21 Route 69A Weekday Outbound Top Alighting Points

Route 69A Weekday Outbound		
Rank	Stop	Alightings
1	Capitola Mall	43
2	Watsonville Transit Center Lane 1	39
3	Lincoln St & California St	13
4	Capitola Rd & 30th	11
5	Freedom & Crestview	9

Exhibits 4.22 and 4.23 show the top five boarding and alighting stops for Route 69A Inbound on weekends. Results were very similar to that of weekday trips, with a few changes. The Capitola Mall transit center had the highest total number of boardings at 46, followed by the Watsonville Transit Center, which is the starting point of the trip, at 22. The Santa Cruz Metro Center at Pacific Avenue, the end point of the trip, had the highest number of alightings at 59, followed by Capitola Mall transit center with 30. As with the weekday trips, this shows that the existing Santa Cruz METRO transit centers are heavily used and are all located near large employment areas as well as retail and service areas.

Exhibit 4.22 Route 69A Weekend Inbound Top Boarding Points

Route 69A Weekend Inbound		
Rank	Stop	Boardings
1	Capitola Mall Lane 1	46
2	Watsonville Transit Center Lane 1	22
3	Airport Blvd. & Freedom Centre	12
4	Freedom & Crestview (Courthouse)	9
5	Lincoln st. & E. High St.	9

Exhibit 4.23 Route 69A Weekend Inbound Top Alighting Points

Route 69A Weekend Inbound		
Rank	Stop	Alightings
1	Santa Cruz Metro Transit Center Lane 4	59
2	Capitola Mall Lane 1	30
3	Soquel Ave & Front (Longs)	17
4	Soquel Ave & Ocean	10
5	Soquel Ave & Benito	6

Exhibits 4.24 and 4.25 show the top five boarding and alighting stops for Route 69A Outbound on weekends. Again, results were very similar to that of weekday trips, with a few changes. The Santa Cruz METRO Transit Center at Pacific Avenue had the highest total number of boardings at 69, followed by the Capitola Mall transit center at 35. The Watsonville Transit Center had the highest number of alightings at 38, followed by Capitola Mall transit center with 32. As with the weekday and inbound trips, this shows that the existing Santa Cruz METRO transit centers are heavily used, likely because of the wide range of employment, retail, and services surrounding them.

Exhibit 4.24 Route 69A Weekend Outbound Top Boarding Points

Route 69A Weekend Outbound		
Rank	Stop	Boardings
1	Santa Cruz Metro Transit Center Lane 4	69
2	Capitola Mall	35
3	Soquel Ave & Front	13
4	Freedom & Crestview	8
5	Soquel Ave & Ocean	7

Exhibit 4.25 Route 69A Weekend Outbound Top Alighting Points

Route 69A Weekend Outbound		
Rank	Stop	Alightings
1	Watsonville Transit Center Lane 1	38
2	Capitola Mall	32
3	E Lake & Sudden	12
4	Capitola Rd & 41st	11
5	Capitola Rd & 30th	11

Exhibit 4.26 Route 69A Inbound Passenger Boarding and Alighting by Stop (Weekday)

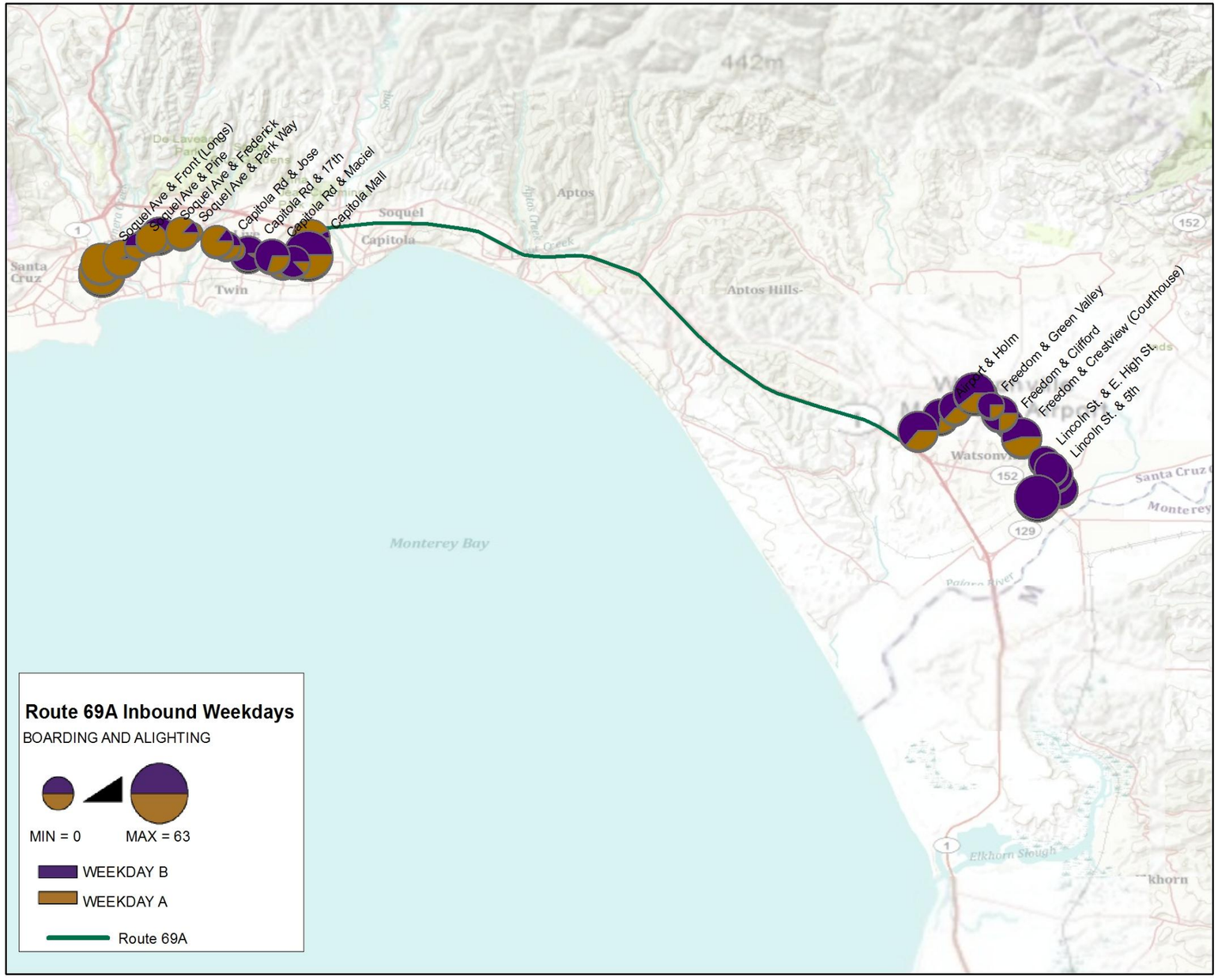


Exhibit 4.27 Route 69A Inbound Passenger Boarding and Alighting by Stop (Weekend)

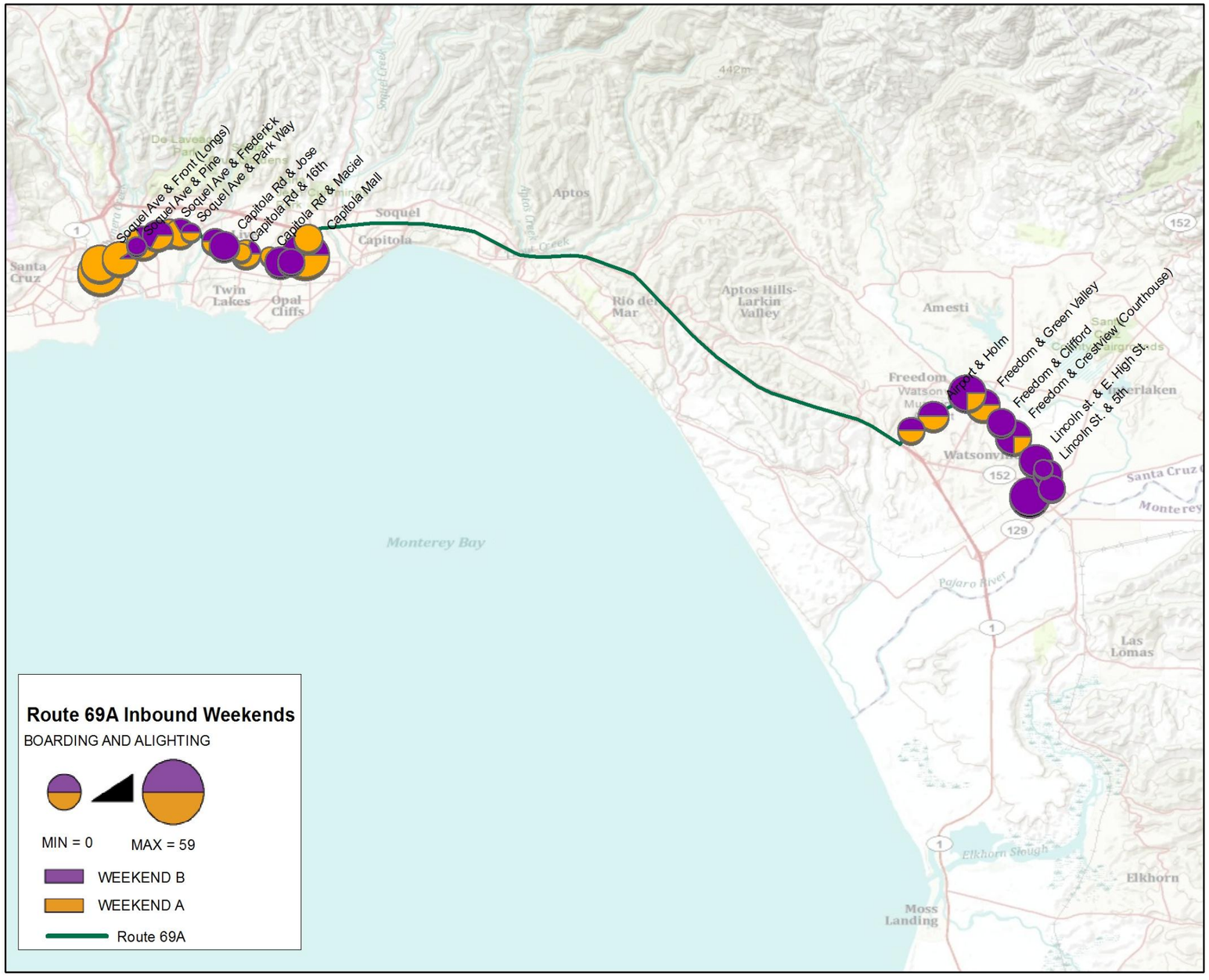


Exhibit 4.28 Route 69A Outbound Passenger Boarding and Alighting by Stop (Weekday)

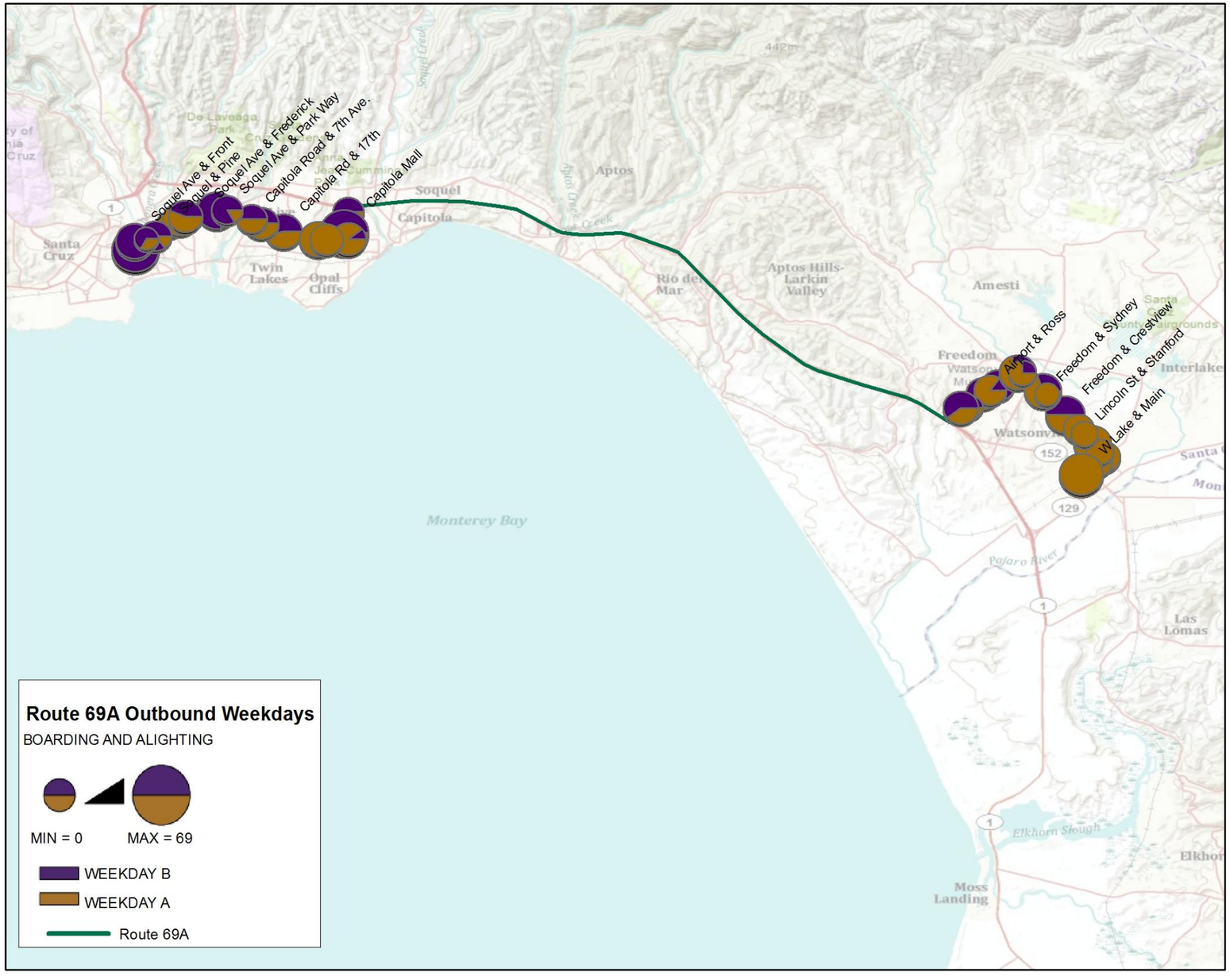
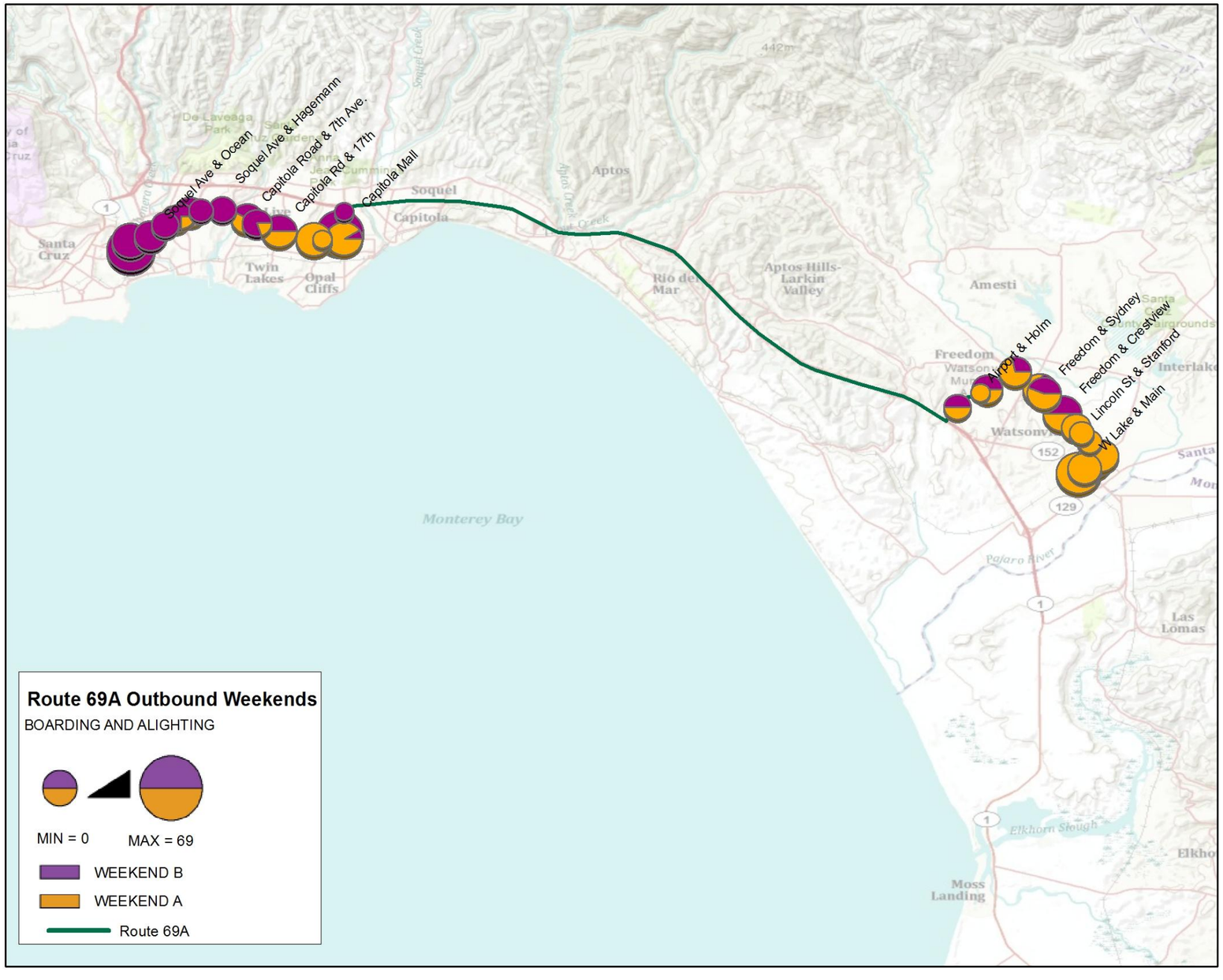


Exhibit 4.29 Route 69A Outbound Passenger Boarding and Alighting by Stop (Weekend)



Route 69W Boarding and Alighting Counts

Local Route 69W provides service connecting Watsonville to Santa Cruz with service running between 6:37 a.m. and 7:37 p.m. for the Santa Cruz to Watsonville (outbound) alignment and between 6:20 a.m. and 7:18 p.m. for the Watsonville to Santa Cruz (inbound) alignment during weekdays. Saturday and Holiday service span is from 8:37 a.m. to 9:34 p.m. for outbound service and from 7:50 a.m. to 7:18 p.m. for inbound service. The weekday, Saturday, and Holiday service operate on one-hour headways with a run-time of between 57 minutes and 1 hour 10 minutes.

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

Exhibits 4.30 and 4.31 show the top five boarding and alighting stops for Route 69W Inbound. The Watsonville Transit Center, which is the starting point of the trip, had the highest total number of boardings, closely followed by the Capitola Mall transit center. The Santa Cruz Metro Center at Pacific Avenue, the end-point of the trip, had the highest number of alightings, followed by Soquel Avenue at Front Street (Longs). This shows that the existing Santa Cruz METRO transit centers are heavily used.

Exhibit 4.30 Route 69W Weekday Inbound Top Boarding Points

Route 69W Weekday Inbound		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center Lane 1	23
2	Capitola Mall Lane 1	21
3	Soquel Dr & Daubenbiss	13
4	Main & Green Valley	6
5	Main & Clifford	5

Exhibit 4.31 Route 69W Weekday Inbound Top Alighting Points

Route 69W Weekday Inbound		
Rank	Stop	Alightings
1	Santa Cruz Metro Transit Center Lane 4	36
2	Soquel Ave & Front (Longs)	18
3	Capitola Mall Lane 1	13
4	Soquel Ave & Ocean	4
5	Soquel Dr & Cabrillo College	3

Exhibits 4.32 and 4.33 show the top five boarding and alighting stops for Route 69W Outbound. The Santa Cruz METRO Center at Pacific Avenue, which is the starting point of the trip, had the highest total number of boardings at 95, followed by the Capitola Mall transit center at 43. The Watsonville Transit Center, the end point of the trip, had the highest number of alightings at 59, followed by the Capitola Mall transit center with 35. As with the inbound trips, this shows that the existing Santa Cruz METRO transit centers are heavily used, likely because of the wide range of employment, retail, and services surrounding them.

Exhibit 4.32 Route 69W Weekday Outbound Top Boarding Points

Route 69W Weekday Outbound		
Rank	Stop	Boardings
1	Santa Cruz Metro Transit Center Lane 4	95
2	Capitola Mall Lane 1	43
3	Soquel Dr & Cabrillo College	9
4	Soquel Ave & Front	7
5	Capitola Rd & 17th	6

Exhibit 4.33 Route 69W Weekday Outbound Top Alighting Points

Route 69W Weekday Outbound		
Rank	Stop	Alightings
1	Watsonville Transit Center Lane 1	59
2	Capitola Mall Lane 1	35
3	Main & Green Valley	18
4	Capitola Rd & 41st	14
5	Main & Ohlone Parkway (Clifford Ave.)	11

Exhibits 4.34 and 4.35 show the top five boarding and alighting stops for Route 69W Inbound on weekends. Results were very similar to that of weekday trips, with a few changes. The Watsonville Transit Center and the Capitola Mall transit center tied for the highest total number of boardings at 56. The Santa Cruz Metro Center at Pacific Avenue, the end point of the trip, had the highest number of alightings at 63, followed by Capitola Mall transit center with 34. As with the weekday trips, this shows that the existing Santa Cruz METRO transit centers are heavily used, again likely because of the wide range of employment, retail, and services surrounding them.

Exhibit 4.34 Route 69W Weekend Inbound Top Boarding Points

Route 69W Weekend Inbound		
Rank	Stop	Boardings
1	Capitola Mall Lane 1	56
2	Watsonville Transit Center Lane 1	56
3	Main & Green Valley	13
4	Capitola Rd & Live Oak Senior Ctr	12
5	Main & Clifford	10

Exhibit 4.35 Route 69W Weekend Inbound Top Alighting Points

Route 69W Weekend Inbound		
Rank	Stop	Alightings
1	Santa Cruz Metro Transit Center Lane 4	63
2	Capitola Mall Lane 1	34
3	Soquel Ave & Front (Longs)	26
4	Soquel Ave & Ocean	15
5	Capitola Rd & Live Oak Senior Ctr	8

Exhibits 4.36 and 4.37 show the top five boarding and alighting stops for Route 69W Outbound on weekends. Again, results were very similar to that of weekday trips, with a few changes. The Santa Cruz METRO Transit Center at Pacific Avenue had the highest total number of boardings at 69, followed by the Capitola Mall transit center at 54. The Watsonville Transit Center had the highest number of alightings at 52, followed by Capitola Mall transit center with 26. As with the weekday trips, this shows that the existing Santa Cruz METRO transit centers are heavily used, likely because of the wide range of employment, retail, and services surrounding them.

Exhibit 4.36 Route 69W Weekend Outbound Top Boarding Points

Route 69W Weekend Outbound		
Rank	Stop	Boardings
1	Santa Cruz Metro Transit Center	69
2	Capitola Mall	54
3	41st & Hwy 1	12
4	Soquel Ave & Front	10
5	Soquel Ave & Darwin	9

Exhibit 4.37 Route 69W Weekend Outbound Top Alighting Points

Route 69W Weekend Outbound		
Rank	Stop	Alightings
1	Watsonville Transit Center	52
2	Capitola Mall	26
3	Soquel Dr & Cotton (41st)	18
4	Capitola Rd & 41st	14
5	Main & Pennsylvania	12

Exhibit 4.38 Route 69W Inbound Passenger Boarding and Alighting by Stop (Weekday)

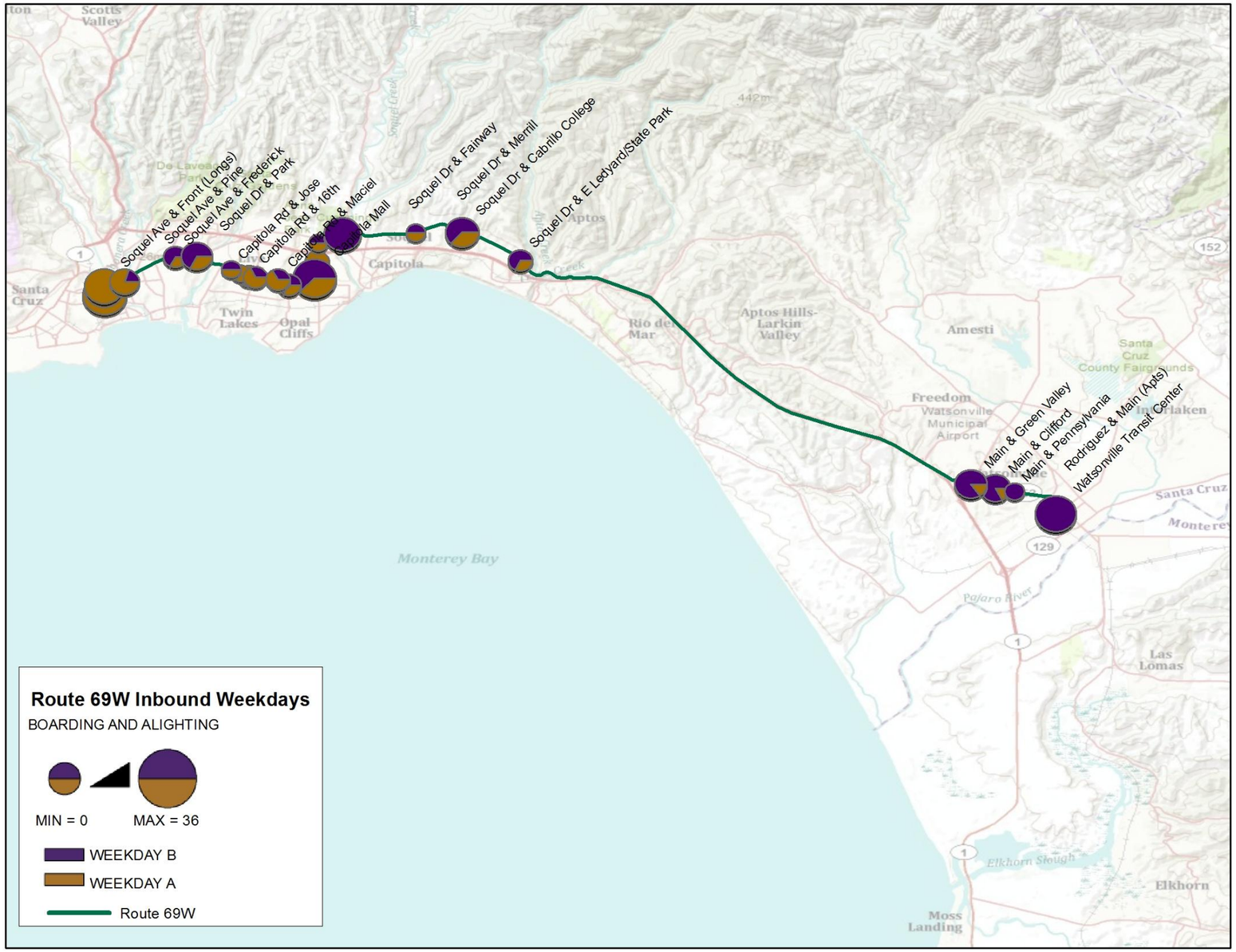


Exhibit 4.39 Route 69W Inbound Passenger Boarding and Alighting by Stop (Weekend)

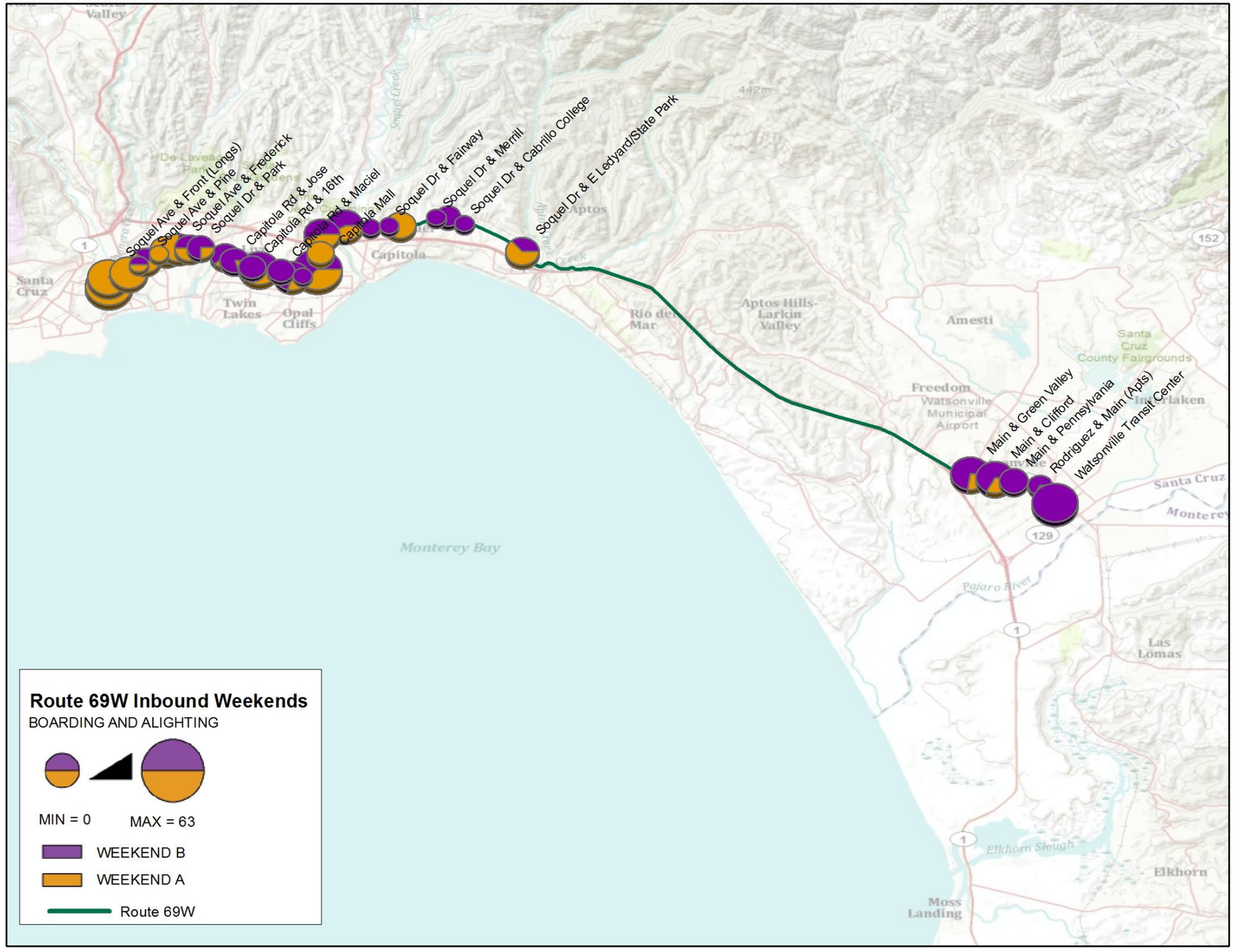


Exhibit 4.40 Route 69W Outbound Passenger Boarding and Alighting by Stop (Weekday)

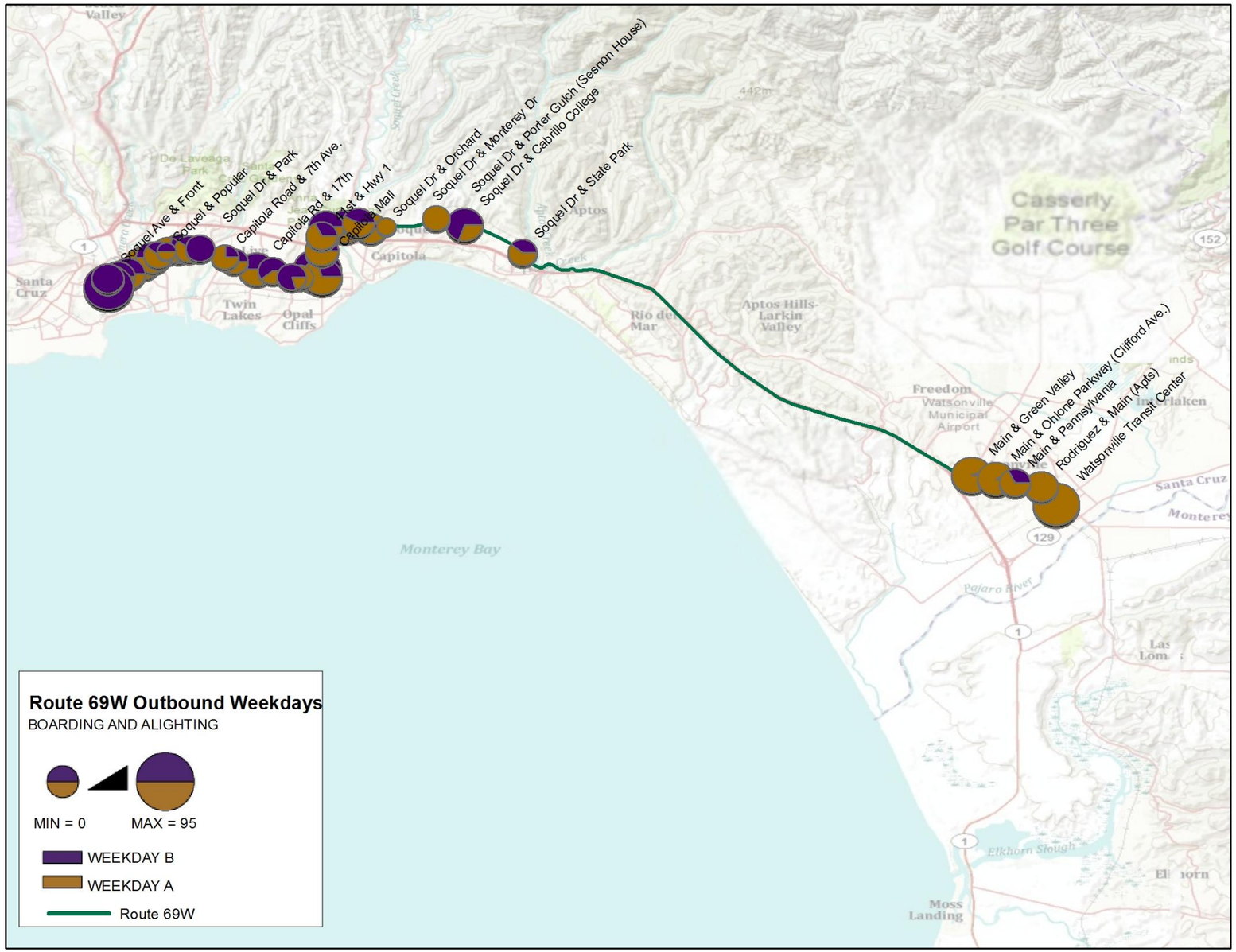
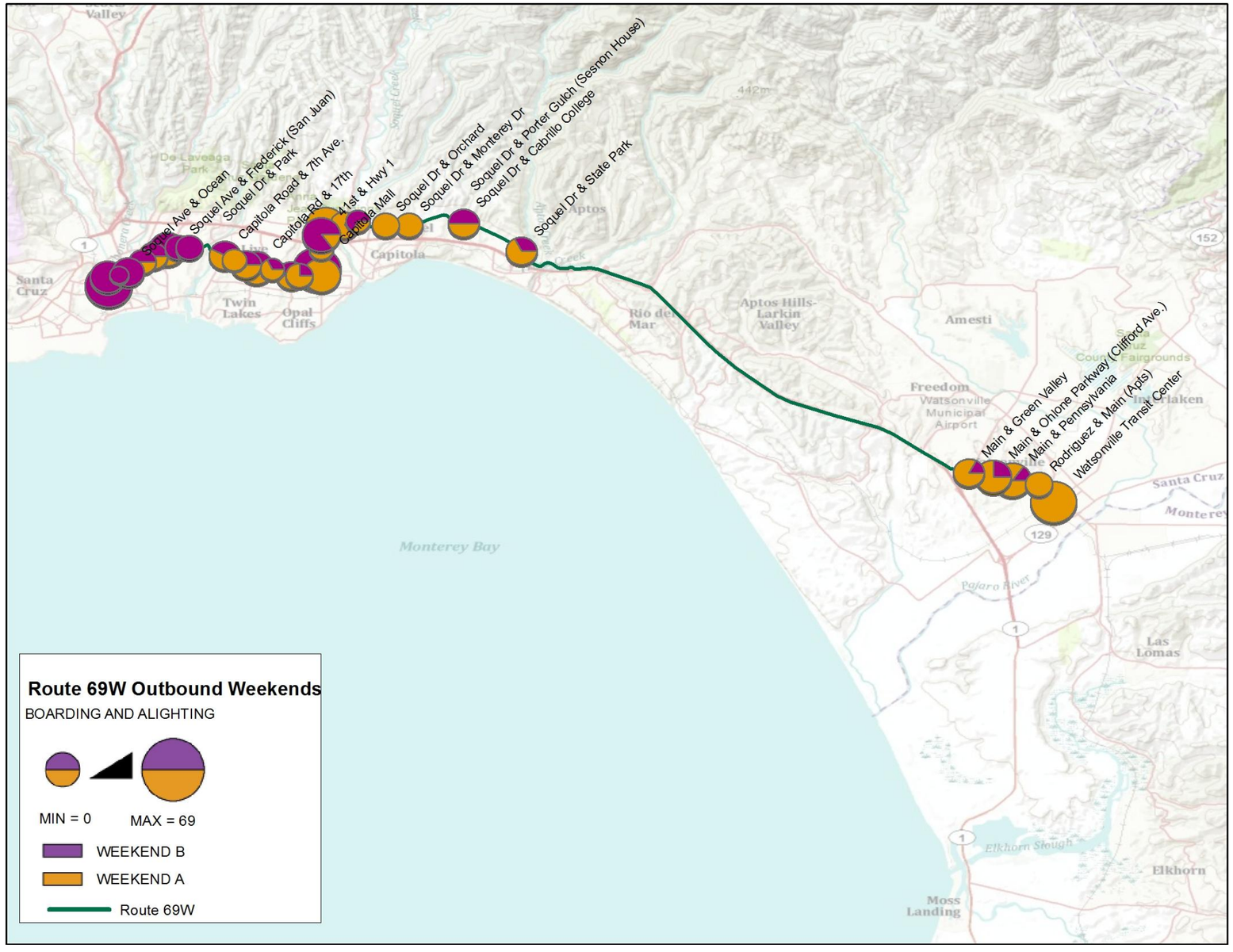


Exhibit 4.41 Route 69W Outbound Passenger Boarding and Alighting by Stop (Weekend)



Route 71 Boarding and Alighting Counts

Local Route 71 has the highest annual ridership of any Santa Cruz METRO fixed-route lines operating into Watsonville. It provides service connecting Watsonville to Santa Cruz with service running between 6:10 a.m. and 12:45 a.m. for the Santa Cruz to Watsonville (outbound) alignment and between 5:35 a.m. and 11:30 p.m. for the Watsonville to Santa Cruz (inbound) alignment during weekdays. Saturday and Holiday service span is from 7:15 a.m. to 12:45 a.m. for outbound service and from 6:05 a.m. to 10:30 p.m. for inbound service.

Outbound trips on Route 71 trips originate from the Santa Cruz METRO transit center on Pacific Avenue and terminate at the Watsonville Transit Center on Rodriguez Street. Service on Route 71 travels from the Santa Cruz METRO Center down Soquel Avenue to Freedom Boulevard and then either down Main Street, Crestview Street, Pennsylvania Street, Arthur Street, or Clifford Street terminiating 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 headways from 1:15 p.m. to 6:15 p.m., 30-minute headway from 6:15 p.m. to 9:45 p.m., and one-hour 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 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 one-hour headway from 9:30 p.m. to 10:30 p.m. The run time on weekday Route 71 Inbound trips range from 60 to 80 minutes.

Saturday, and Holiday service operate on a 30-minutes headway. Saturday and Holiday service run-time averages 75 minutes.

Exhibits 4.42 and 4.43 show the top five boarding and alighting stops for Route 71 Inbound. The Watsonville Transit Center, which is the starting point of the trip, had the highest total number of boardings at 72, followed by Cabrillo College at 40. The Santa Cruz Metro Center, the end point of the trip, had the highest number of alightings at 72, followed by River Street and River Street Extension with 33. This shows that the existing Santa Cruz METRO transit centers are heavily used. In addition, it is likely that many of the boardings at Cabrillo College were students who use the bus to attend classes. As with the Route 69W, it is likely that passengers alight at River Street and River Street Extension because of its proximity to the opposite end of downtown from Metro Center.

Exhibit 4.42 Route 71 Weekday Inbound Top Boarding Points

Route 71 Weekday Inbound		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center	72
2	Cabrillo College	40
3	Soquel Dr & Winkle	19
4	Soquel Dr. & Dominican Hospital	17
5	Soquel & State Park	13

Exhibit 4.43 Route 71 Weekday Inbound Top Alighting Points

Route 71 Weekday Inbound		
Rank	**Stop**	**Alightings**
1	Santa Cruz Metro Transit Center	72
2	River & River St Extension	33
3	Front & Soquel Ave	26
4	Water & Ocean	15
5	Freedom & Davis (K-Mart)	13

Exhibits 4.44 and 4.45 show the top five boarding and alighting stops for Route 71 Outbound. The Santa Cruz METRO Center at Pacific Avenue, which is the starting point of the trip, had the highest total number of boarding's at 36, followed by the Cabrillo College at 13. The Watsonville Transit Center, the end point of the trip, had the highest number of alightings at 25, followed by Airport Boulevard at Freedom Center with 16. As with the inbound trips, this shows that the existing Santa Cruz METRO transit centers are heavily used. As with the inbound Route 71 trips, it is likely that many of the boardings at Cabrillo College were students who use the bus to attend classes. The large number of alightings at Airport Boulevard at Freedom Center is likely due to the variety of shopping and services available, including a grocery store, drug store, hardware store, post office, and bank among other uses.

Exhibit 4.44 Route 71 Weekday Outbound Top Boarding Points

Route 71 Weekday Outbound		
Rank	**Stop**	**Boardings**
1	Santa Cruz Metro Transit Center	36
2	Cabrillo College	13
3	Water & Ocean	10
4	Soquel Ave & Frederick	7
5	Crestview Center	6

Exhibit 4.45 Route 71 Weekday Outbound Top Alighting Points

Route 71 Weekday Outbound		
Rank	**Stop**	**Alightings**
1	Watsonville Transit Center	25
2	Airport Blvd. & Freedom Centre	16
3	Main & W 5th	8
4	Soquel Dr & Winkle	7
5	Soquel Dr. & Domincan Hospital	6

Exhibits 4.46 and 4.47 show the top five boarding and alighting stops for Route 71 Inbound on weekends. The Watsonville Transit Center had the highest number of boardings at 105, followed by Soquel and State Park with 24. The Santa Cruz Metro Center at Pacific Avenue , the end point of the trip, had the highest number of alightings at 82, followed by Soquel Drive and 41st Avenue (Greenbrae) and Front & Soquel, each with 34. As with the weekday trips, this shows that the existing Santa Cruz METRO transit centers are heavily used. In addition, it is likely that the Soquel at State Park stop is popular for boarding because it connects to mid-County routes 54, 55, and 56 and provides access to Santa Cruz. Soquel Drive at 41st Avenue could be popular for alighting because of its proximity to various retail uses, including grocery, hardware, and electronics, at the shopping center across the street. As stated previously, it is likely that Front Street at Soquel Avenue is a popular alighting location because it is located on the opposite end of downtown from Metro Center.

Exhibit 4.46 Route 71 Weekend Inbound Top Boarding Points

Route 71 Weekend Inbound		
Rank	Stop	Boardings
1	Watsonville Transit Center	105
2	Soquel & State Park	24
3	Soquel Dr & Winkle	23
4	Soquel Dr & 41st (Greenbrae)	19
5	Airport Blvd. & Freedom Centre	17

Exhibit 4.47 Route 71 Weekend Inbound Top Alighting Points

Route 71 Weekend Inbound		
Rank	Stop	Alightings
1	Santa Cruz Metro Transit Center	82
2	Soquel Dr & 41st (Greenbrae)	34
3	Front & Soquel Ave	34
4	River & River St Extension	32
5	Soquel Dr & Winkle	29

Exhibits 4.48 and 4.49 show the top five boarding and alighting stops for Route 71 Outbound on weekends. The Santa Cruz METRO Transit Center had the highest total number of boardings at 161, followed by Front Street at Soquel Avenue and Water Street at Ocean Street, each at 25. The Watsonville Transit Center had the highest number of alightings at 41, followed by West Lake and Main Street with 33. Again, this shows that the existing Santa Cruz METRO transit centers are heavily used, and as stated previously it is likely that Front Street at Soquel Avenue is a popular stop because it is located at the opposite end of downtown from Metro Center. Water Street and Ocean Street could be a well-used location to board because of the number of routes it connects to, including routes 4, 8, 17, 30, 35, and 66. West Lake and Main Street could be a popular location to alight because it is the stop prior to the transit center and is located just off of many shopping and service uses on Main Street.

Exhibit 4.48 Route 71 Weekend Outbound Top Boarding Points

Route 71 Weekend Outbound		
Rank	**Stop**	**Boardings**
1	Santa Cruz Metro Transit Center	161
2	Front & Soquel Ave (Longs)	25
3	Water & Ocean	25
4	Soquel Dr & Winkle	23
5	Soquel Dr & Cotton (41st)	20

Exhibit 4.49 Route 71 Weekend Outbound Top Alighting Points

Route 71 Weekend Outbound		
Rank	**Stop**	**Alightings**
1	Watsonville Transit Center	41
2	W Lake & Main	33
3	Soquel Dr & Winkle	21
4	Soquel Dr & Cotton (41st)	21
5	Soquel Dr. & Daubenbiss	21

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Exhibit 4.50 Route 71 Inbound Passenger Boarding and Alighting by Stop (Weekday)

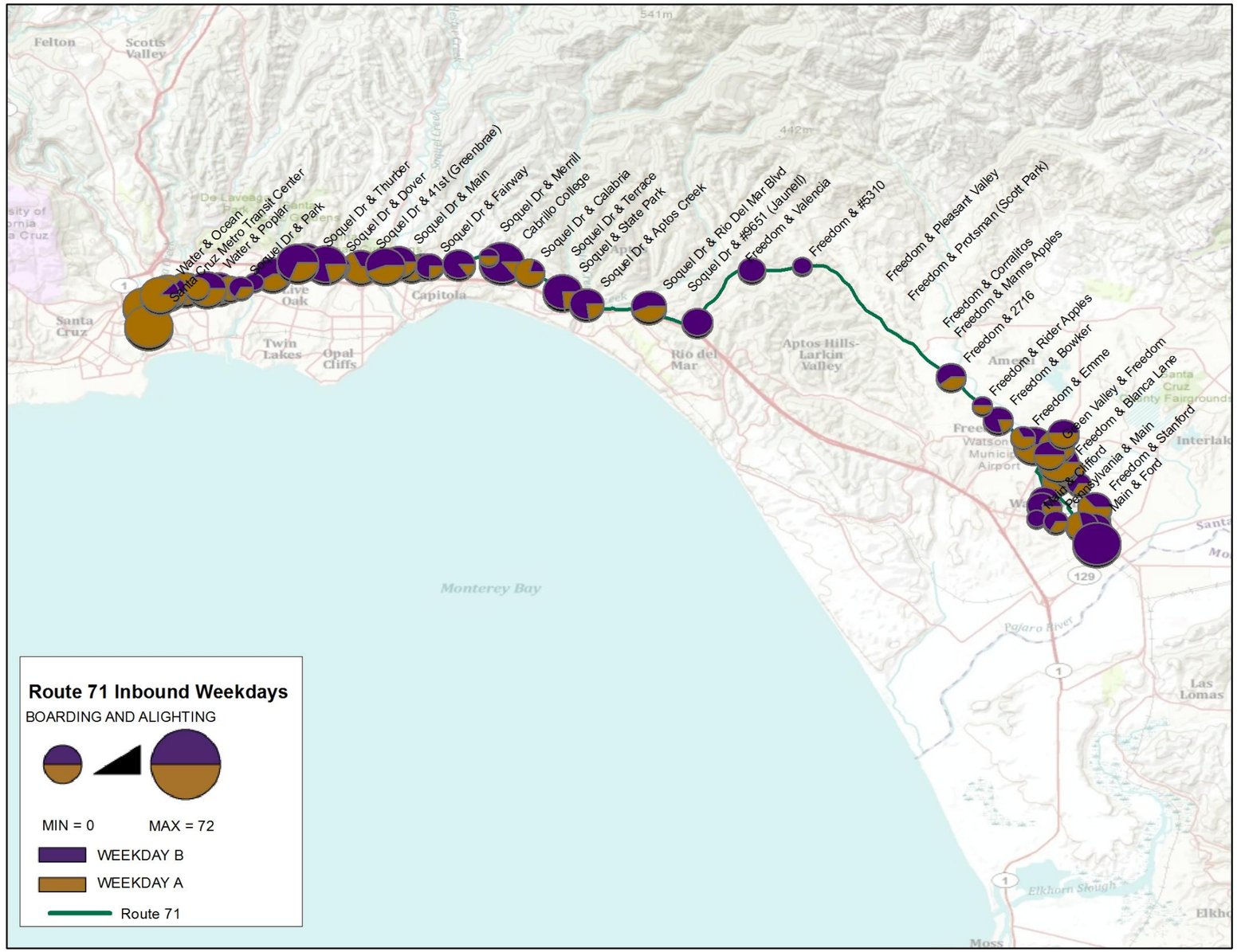


Exhibit 4.51 Route 71 Inbound Passenger Boarding and Alighting by Stop (Weekend)

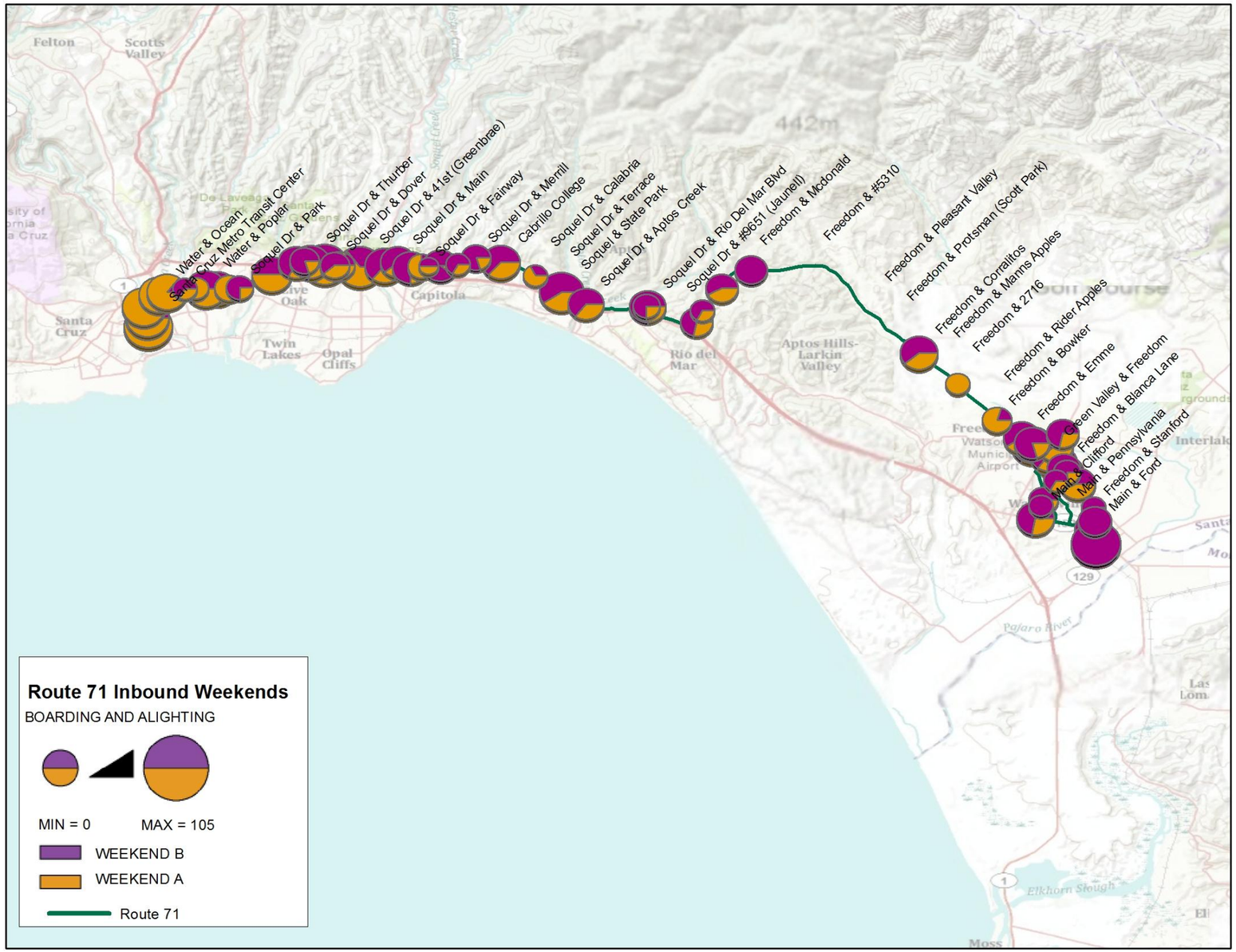


Exhibit 4.52 Route 71 Outbound Passenger Boarding and Alighting by Stop

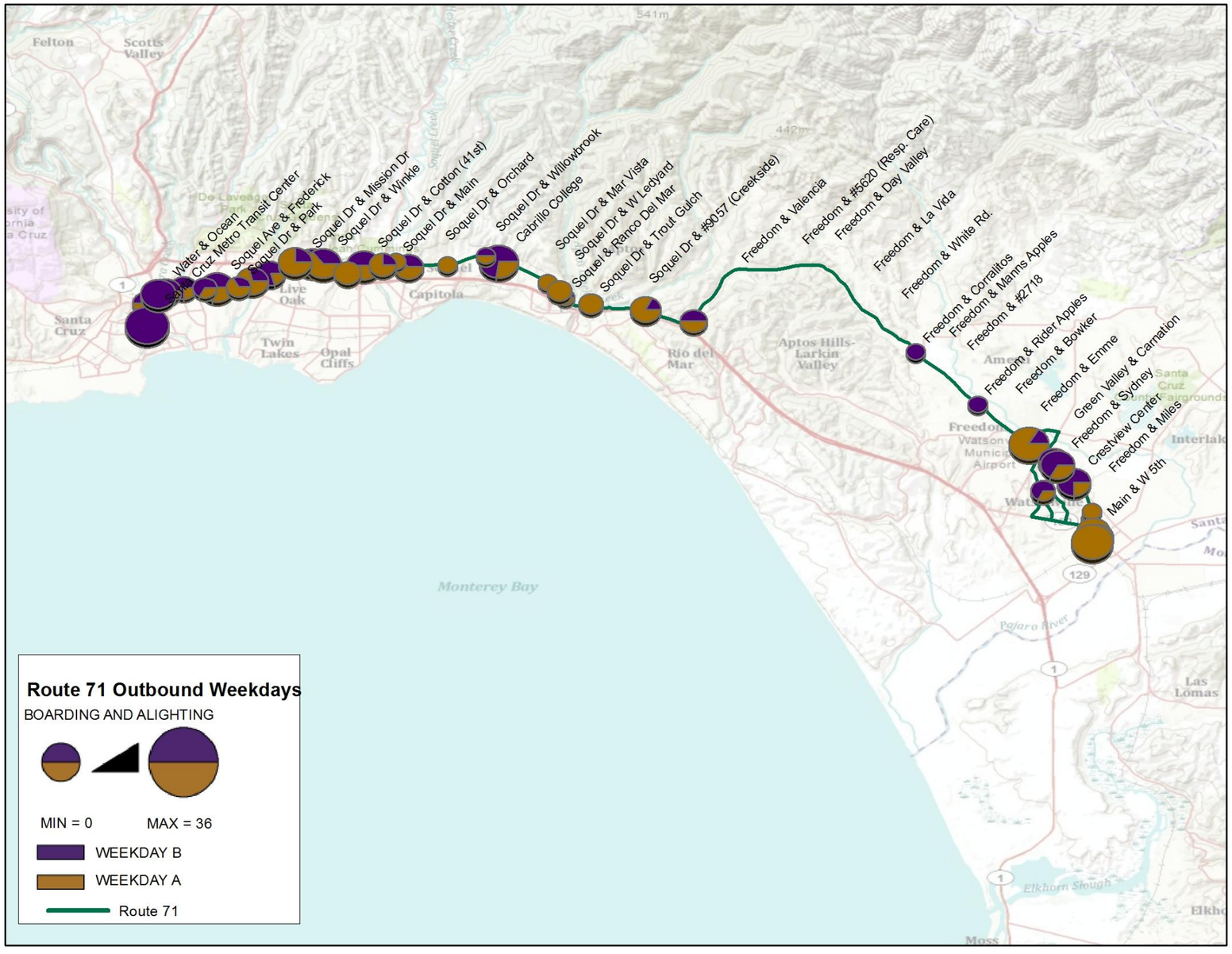
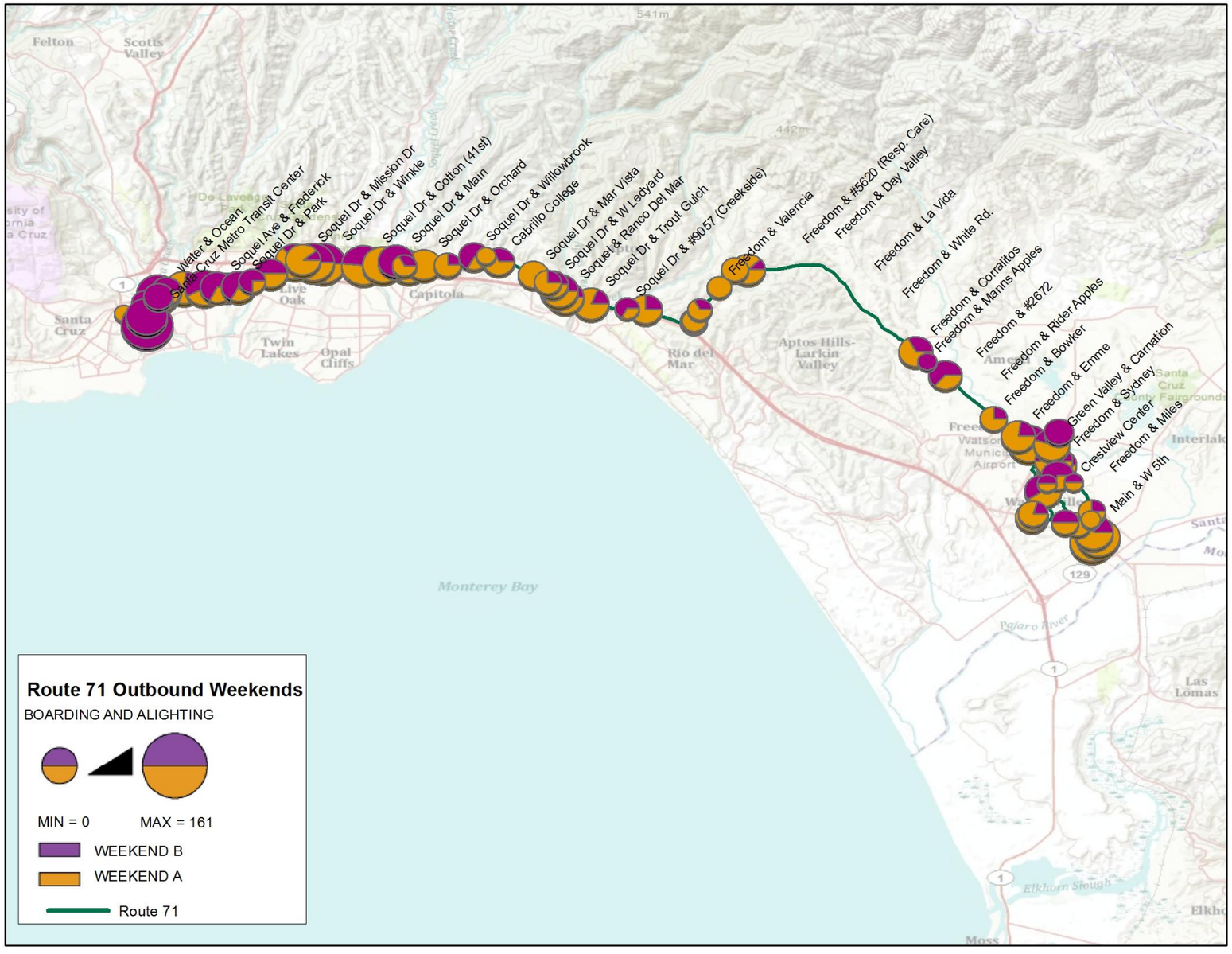


Exhibit 4.53 Route 71 Outbound Passenger Boarding and Alighting by Stop



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 has service running between 5:40 a.m. and 7:38 p.m. during weekdays. There is no Saturday, Sunday or Holiday service. The weekday service operates on one-hour headways. The run time on weekday Route 72 trips is between 51 minutes and 57 minutes.

Route 72 trips originate and terminate at the Watsonville Transit Center on Rodriguez Street. Service on the Route 72 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 before it arrives at the Watsonville Transit Center.

Exhibits 4.54 and 4.55 show the top five boarding and alighting stops for Route 72. The Watsonville Transit Center, which is the starting point of the trip, had the highest total number of boardings, followed by Main Street at Ohlone Parkway. The Watsonville Transit Center, the end-point of the trip, had the highest number of alightings, followed by Airport Boulevard and Freedom Center. It is likely that many of the boardings at Main Street at Ohlone Parkway are from people who had been shopping at the Overlook Center, which includes discount shopping, a grocery store, an office supply store, and restaurants. The alightings at Airport Boulevard and Freedom Center are likely due to the diverse array of retail and services located at Freedom Center, including a grocery store, drug store, hardware store, post office, and bank among other uses.

Exhibit 4.54 Route 72 Top Boarding Points

Route 72 Weekday		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center (Start)	10
2	Main & Ohlone Parkway	6
3	Main & Clifford	5
4	Amesti & Paraiso Drive	3
5	Amesti & Bollinger	3

Exhibit 4.55 Route 72 Top Alighting Points

Route 72 Weekday		
Rank	**Stop**	**Alightings**
1	Watsonville Transit Center (End)	16
2	Airport Blvd. & Freedom Centre	11
3	Freedom & Airport	3
4	Green Valley & Pennsylvania	3
5	Green Valley & Devon Ln (Celia)	2

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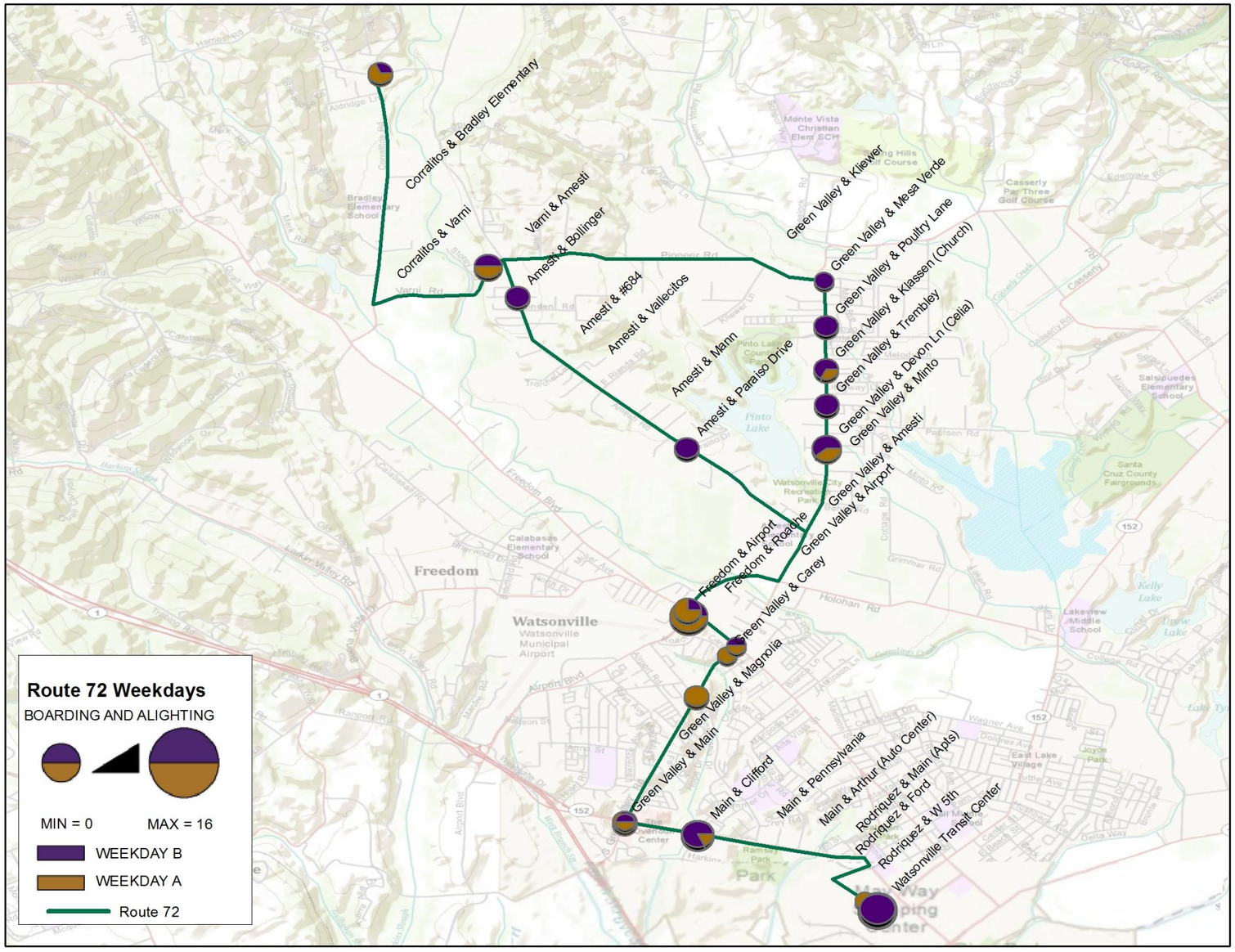
Exhibit 4.56 Route 72 Passenger Boarding and Alighting by Stop



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Route 74 Boarding and Alighting Counts

Local Route 74 provides local service in Watsonville, running in a loop from the Watsonville Transit Center. Route 74 serves Pajaro Valley High School, the Social Security Administration Office, Watsonville Hospital, and neighborhoods surrounding the Watsonville Airport. Route 74 has service running between 6:50 a.m. and 6:35 p.m. during weekdays. There is no Saturday, Sunday or Holiday service. The Route 74 service operates on one-hour headways. The run time on weekday Route 74 trips is between 45 and 50 minutes.

Route 74 trips originate and terminate at the Watsonville Transit Center on Rodriguez Street. Service on the Route 74 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, 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 4.57 and 4.58 show the top five boarding and alighting stops for Route 74. The Watsonville Transit Center, which is the starting point of the trip, had the highest total number of boardings at 29, followed by Nielson at Airport (Watsonville Hospital) at 12. The Watsonville Transit Center, the end point of the trip, had the highest number of alightings at 20, followed by Green Valley Road at Main Street with seven. It is likely that many of the boardings at Nielson at Airport are from people who were at the hospital. The alightings at Green Valley and Main are likely due to the both the wide array of retail, restaurant and service uses located nearby as well as the large number of connecting routes that serve that stop.

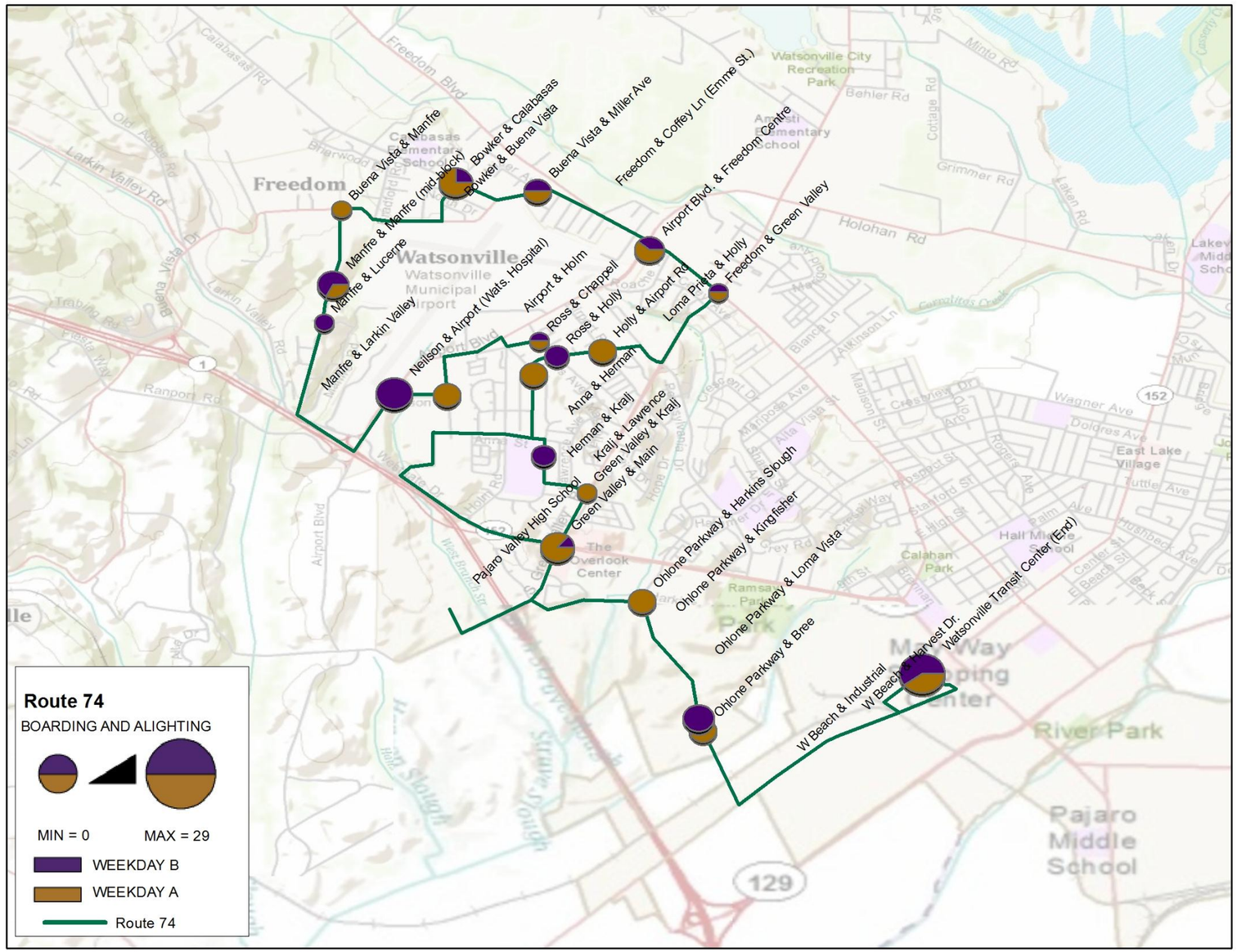
Exhibit 4.57 Route 74 Top Boarding Points

Route 74 Weekday		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center (Start)	29
2	Neilson & Airport (Wats. Hospital)	12
3	Ohlone Parkway & Lighthouse	6
4	Manfre & Manfre (mid-block)	4
5	Ross & Holly	3

Exhibit 4.58 Route 74 Top Alighting Points

Route 74 Weekday		
Rank	**Stop**	**Alightings**
1	Watsonville Transit Center (End)	20
2	Green Valley & Main	7
3	Bowker & Calabasas	6
4	Sunny Hills & Shady Oaks	4
5	Holly & Airport Rd	4

Exhibit 4.59 Route 74 Passenger Boarding and Alighting by Stop



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Route 75 Boarding and Alighting Counts

Local Route 75 provides local service in Watsonville, running in a loop from the Watsonville Transit Center up and down Green Valley Road. Route 75 has service running between 6: 09 a.m. and 9:02 p.m. during weekdays. Saturday, Sunday and Holiday service runs between 9:09 a.m. to 7:57 p.m. Route 75 operates on one-hour headways with a run time between 53 minutes and 58 minutes.

Route 75 trips originate and terminate at the Watsonville Transit Center on Rodriguez Street. Route 75 travels from the Watsonville Transit Center to West 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 back down Main Street to the Watsonville Transit Center.

Exhibits 4.60 and 4.61 show the top five boarding and alighting stops for Route 75 on weekdays. The Watsonville Transit Center, which is the starting point of the trip, had the highest total number of boardings, followed by Airport Boulevard at Freedom Center. The Watsonville Transit Center, the end point of the trip, had the highest number of alightings, followed by Airport Boulevard at Freedom Center. It is likely the heavy use of the stop at Airport Boulevard at Freedom Center is due to the variety of retail and services at Freedom Center, including a grocery store, drug store, hardware store, post office, and bank.

Exhibit 4.60 Route 75 Weekday Top Boarding Points

Route 75 Weekday		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center (Start)	22
2	Airport Blvd. & Freedom Centre	14
3	Main & Pennsylvania	8
4	Green Valley & Hope Dr	5
5	Green Valley & Minto	4

Exhibit 4.61 Route 75 Weekday Top Alighting Points

Route 75 Weekday		
Rank	**Stop**	**Alightings**
1	Watsonville Transit Center (End)	25
2	Airport Blvd. & Freedom Centre	9
3	Main & Clifford	7
4	Freedom & Airport	6
5	Main & W 5th	6

Exhibits 4.62 and 4.63 show the top five boarding and alighting stops for Route 75 on weekends. The weekend patterns on Route 75 mimic those of the weekday. The Watsonville Transit Center, which is the starting point of the trip, had the highest total number of boardings at 54, followed by Airport Boulevard at Freedom Center at 25. The Watsonville Transit Center, the end point of the trip, had the highest number of alightings at 33, followed by Airport Boulevard at Freedom Center with 20. It is likely the heavy use of the stop at Airport Boulevard at Freedom Center is due to the variety of retail and service uses at Freedom Center, including a grocery store, drug store, hardware store, post office, and bank among other uses.

Exhibit 4.62 Route 75 Weekend Top Boarding Points

Route 75 Weekend		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center (Start)	54
2	Airport Blvd. and Freedom Centre	25
3	Green Valley & Klassen (Church)	14
4	Main & Ford (NB)	11
5	Green Valley & Hope Dr (Kingdom Hall)	10

Exhibit 4.63 Route 75 Weekend Top Alighting Points

Route 75 Weekend		
Rank	**Stop**	**Alightings**
1	Watsonville Transit Center (End)	33
2	Airport Blvd. and Freedom Centre	20
3	Green Valley & Hope Dr (Kingdom Hall)	13
4	Freedom & Green Valley	13
5	Main & Clifford	11

Exhibit 4.64 Route 75 Passenger Boarding and Alighting by Stop (Weekday)

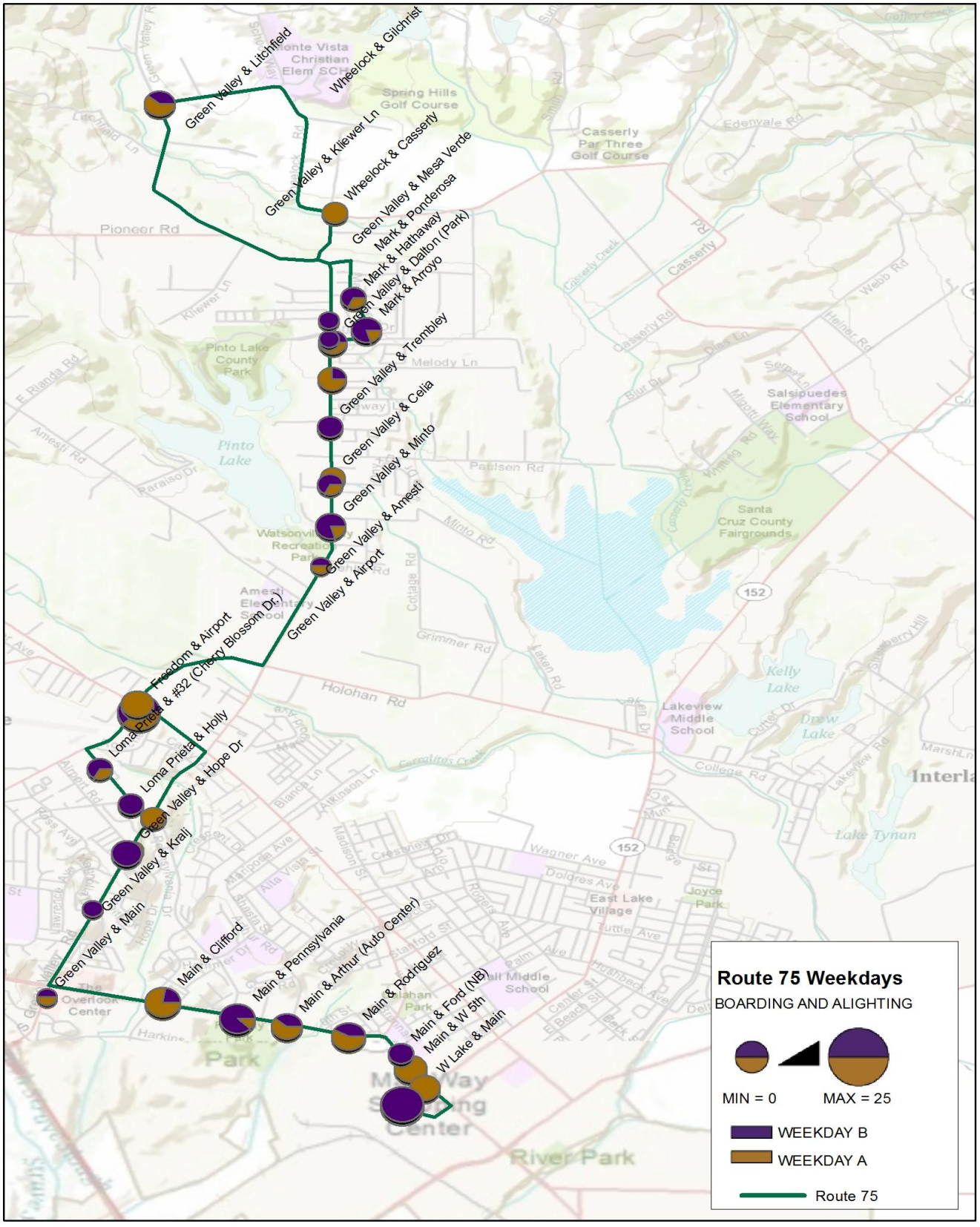
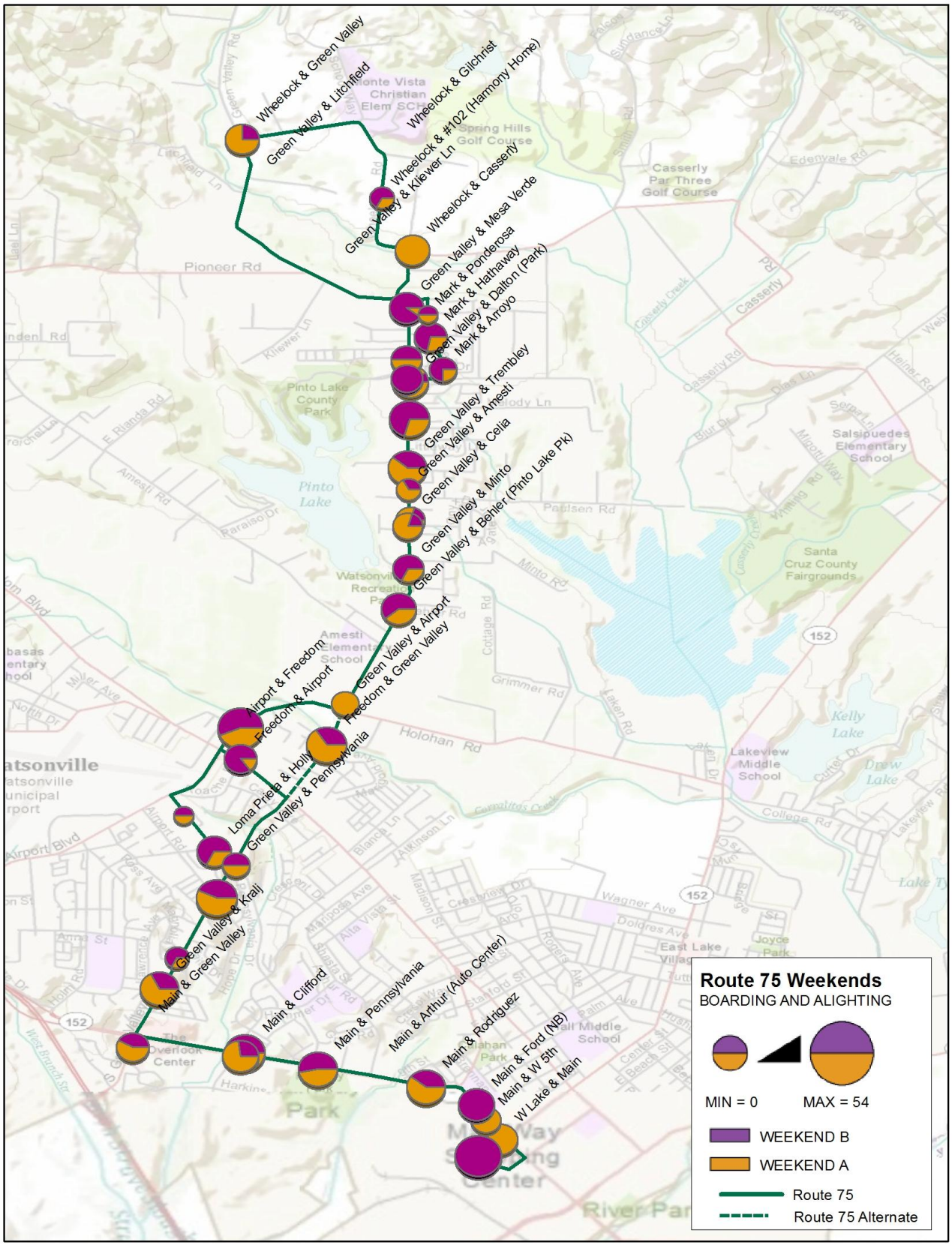


Exhibit 4.65 Route 75 Passenger Boarding and Alighting by Stop (Weekend)



Route 79 Boarding and Alighting Counts

Local Route 79 provides local service in Watsonville, running in a loop from the Watsonville Transit Center through the East Lake and East Beach areas. Route 79 has service running between 7:10 a.m. and 5:35 p.m. during weekdays. There is no Saturday, Sunday or Holiday service. Route 79 operates on one-hour headways with a run time of 45 minutes.

Route 79 trips originate and terminate at the Watsonville Transit Center on Rodriguez Street. Service on the Route 79 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 heading back to the Watsonville Transit Center.

Exhibits 4.66 and 4.67 show the top three boarding and top five alighting stops for Route 79, respectively. The Watsonville Transit Center, which is the starting point of the trip, had the highest total number of boardings at nine, followed by East Beach Street at Marchant at one. East Lake at Martinelli and College Road at East Lake Avenue tied for the highest number of alightings at one. The large number of boardings at that Watsonville Transit Center show high use of the facility to access this route. The alightings at East Lake at Martinelli could be due to the East Lake Village Shopping Center. Alightings at College Road and East Lake could be because this stop is the farthest up East Lake that you can get using Santa Cruz METRO service.

Exhibit 4.66 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 4.67 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

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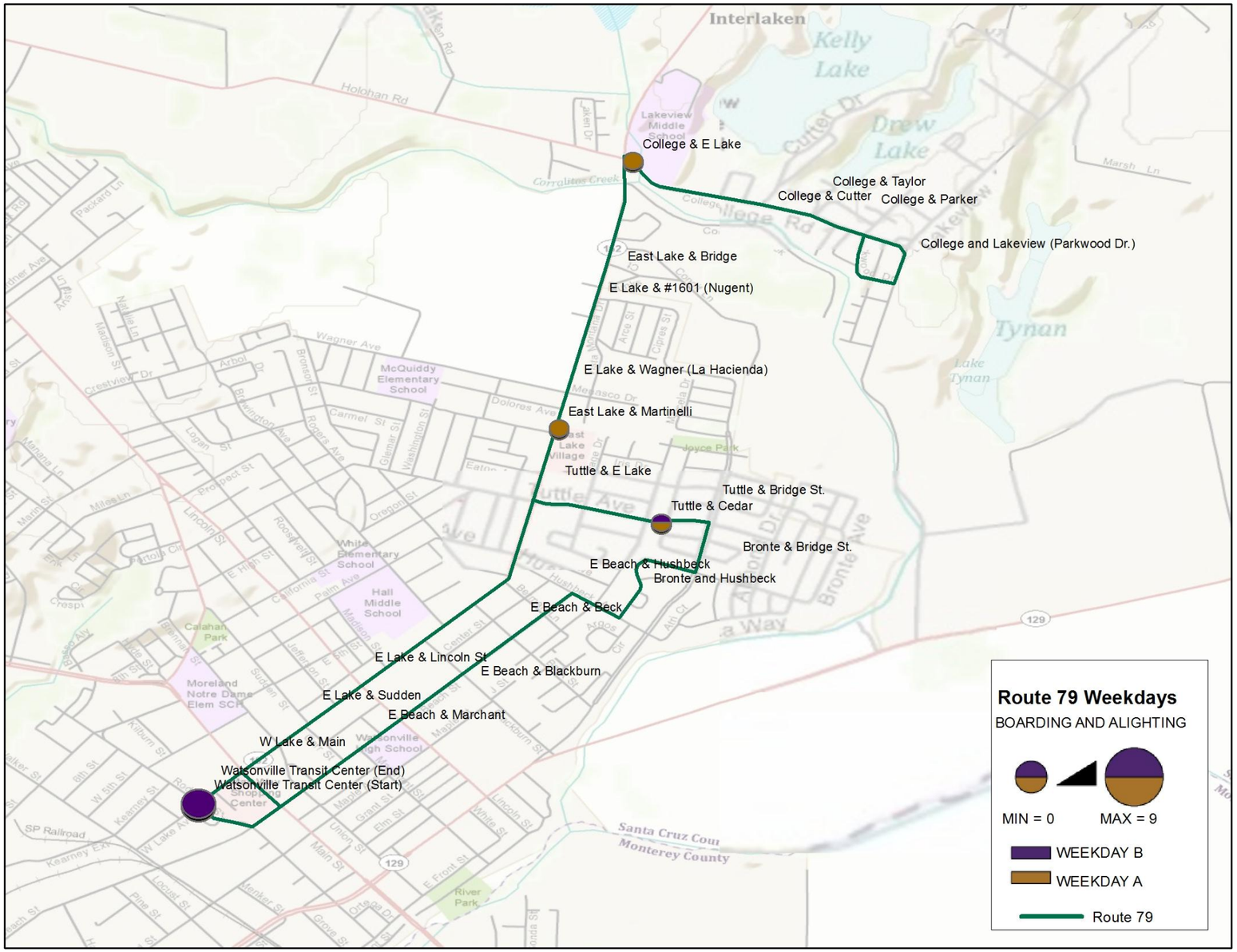
Exhibit 4.68 Route 79 Passenger Boarding and Alighting by Stop



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Route 91X Boarding and Alighting Counts

Route 91X provides express limited-stop service connecting Watsonville to Santa Cruz with service running between 6:35 a.m. and 9:12 a.m. and 3:30 p.m. to 5:25 p.m. for the Santa Cruz to Watsonville (outbound) alignment and between 5:55 a.m. and 10:19 a.m. and 4:30 p.m. to 6:19 p.m. for the Watsonville to Santa Cruz (inbound) alignment during weekdays. Saturday and Sunday service is not offered on the Route 91X.

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

The weekday outbound service operates on one-hour headways. The run time on weekday Route 91X Outbound trips is between 36 minutes and 55 minutes, depending upon the time of day. This is largely related to congestion along Highway 1, which can result in significant delays during peak hours as commuters travel to and from work. To alleviate congestion, the Santa Cruz County Regional Transportation Commission (SCCRTC) is considering a project which would involve widening Highway 1 to accommodate an extension of the auxiliary lane, a High-Occupancy Vehicle (HOV) Lane, as well as enhanced pedestrian and bicycle infrastructure. The project would include a phased approach given uncertainty regarding the future of transportation funding at the federal and state levels.

The stage of SCCRTC's project currently under deliberation is a stretch of Highway 1 from Soquel Drive to 41st Avenue and as a bicycle/pedestrian bridge at Chanticleer Avenue. Santa Cruz METRO believes that completion of this project (as well as future stages of the overall Highway 1 improvement project) could result in improved on-time performance for Santa Cruz METRO buses traveling along Highway 1 as well as adjacent arterials. However, it is also possible the widening project could result in diminished ridership as automobile travel along an improved Highway 1 could conceivably become more attractive to "choice" riders currently riding Santa Cruz METRO buses.

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., one-hour headways from 7:30 a.m. to 9:30 a.m., and one-hour headway from 4:30 p.m. to 5:30 p.m. The run time on weekday Route 91X Inbound trips is between 47 and 65 minutes.

Exhibits 4.69 and 4.70 show the top five boarding and top alighting stops for Route 91X Inbound, respectively. The Watsonville Transit Center, which is the starting point of the trip, had the highest total number of boardings at four, followed by Main at Pennsylvania and Green Valley at Main, each with two. The Santa Cruz Metro Center on Pacific Avenue, the end point of the trip, had the highest

number of alightings at five, followed by Water Street at Ocean Street with four. As this is a commuter express, it is likely that travel patterns along this route reflect those traveling to and from job centers. It is likely that many of the boardings at Main at Pennsylvania and Green Valley at Main were because those people lived in the neighborhoods surrounding those stops and use the bus to access employment. It is likely that passengers alight at the Santa Cruz Metro Center to access downtown employment or connections to other routes serving the community. In addition, many people likely alight at Water Street and Ocean Street because of its proximity to the County Governmental Center (County Building).

Exhibit 4.69 Route 91X Inbound Top Boarding Points

Route 91X Inbound		
Rank	**Stop**	**Boardings**
1	Watsonville Transit Center	4
2	Main & Pennsylvania	2
3	Green Valley and Main	2
4	Watsonville Civic Plaza	1
5	Main & Rodriguez	1

Exhibit 4.70 Route 91X Inbound Top Alighting Points

Route 91X Inbound		
Rank	**Stop**	**Alightings**
1	Santa Cruz Metro Transit Center	5
2	Water and Ocean	4
3	41st & Hwy 1 (AM only)	3
4	Soquel Dr. and Dominican Hospital (AM only)	1

Exhibits 4.71 and 4.72 show the top four boarding and top three alighting stops for Route 91X outbound, respectively. The Santa Cruz METRO Center , which is the starting point of the trip, had the highest total number of boarding's at three, followed by Water Street at the County Building at two. The Watsonville Transit Center, the end point of the trip, had the highest number of alightings at six, followed by Soquel Drive at Cabrillo College with two. As with the inbound trips, this shows that the existing Santa Cruz METRO transit centers are heavily used. The higher number of boardings at Water and the County Building could be from County workers returning to South County. The higher number of alightings at Cabrillo College shows that students use the bus to attend classes.

Exhibit 4.71 Route 91X Outbound Top Boarding Points

Route 91X Outbound		
Rank	Stop	Boardings
1	Santa Cruz Metro Transit Center	3
2	Water & (County Bldgs)	2
3	Water and Ocean	1
4	Water & Poplar (Catalpa)	1

Exhibit 4.72 Route 91X Outbound Top Alighting Points

Route 91X Outbound		
Rank	Stop	Alightings
1	Watsonville Transit Center	6
2	Soquel Dr & Cabrillo College	2
3	Soquel Dr & Porter Gulch (Sesnon House)	1

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Exhibit 4.73 Route 91X Inbound Passenger Boarding and Alighting by Stop (Weekday)

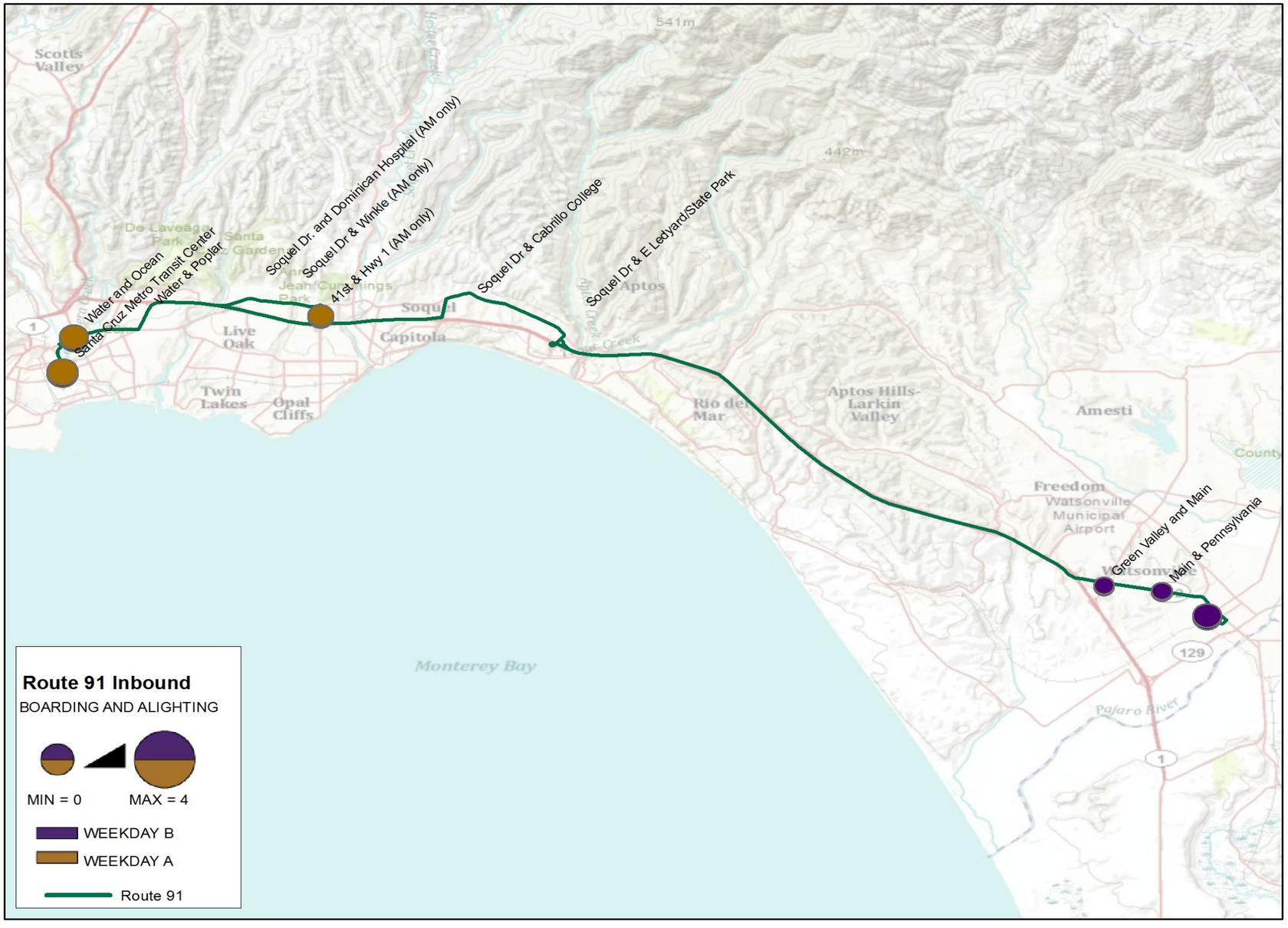
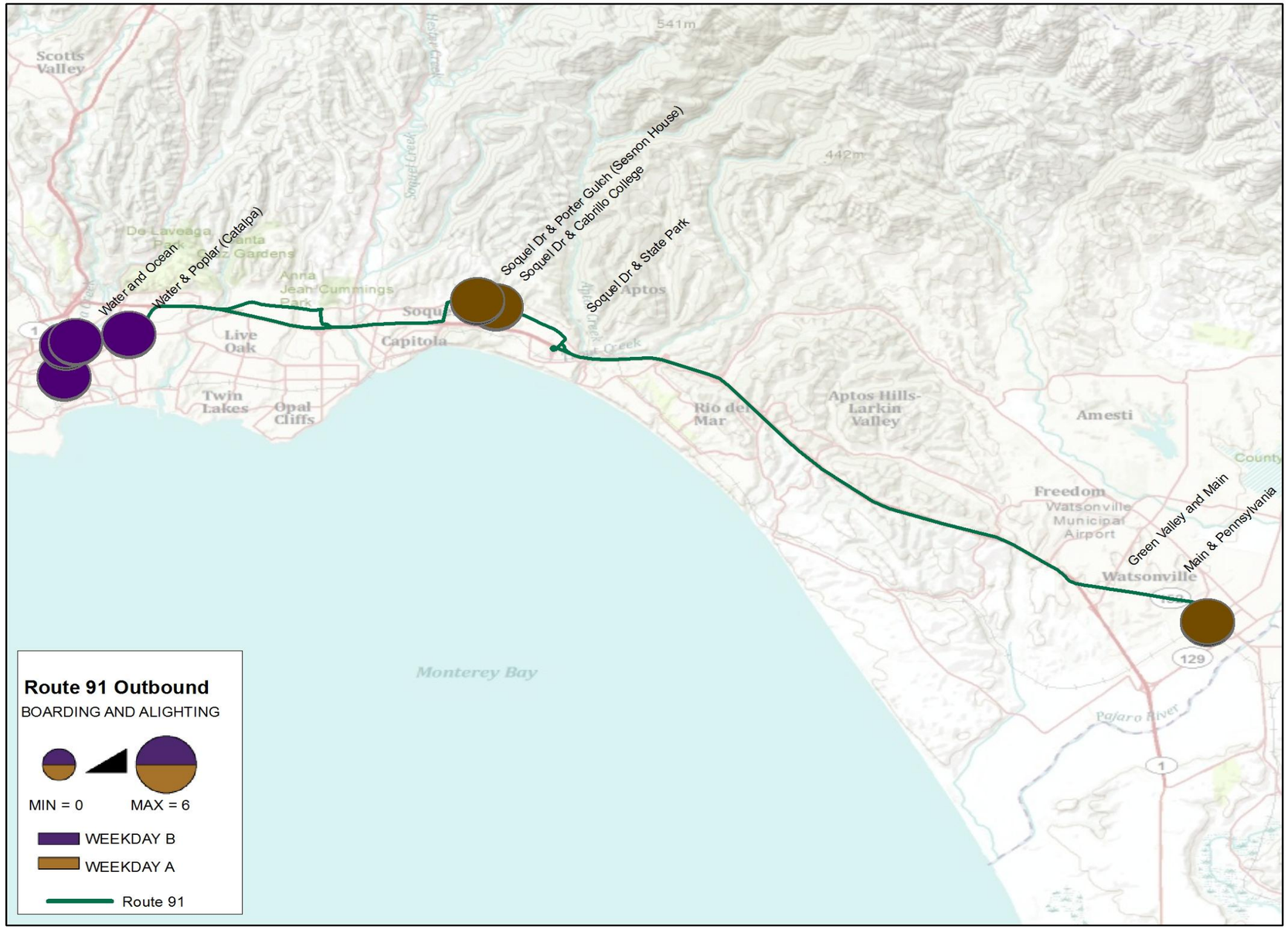


Exhibit 4.74 Route 91X Outbound Passenger Boarding and Alighting by Stop (Weekend)



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5 PUBLIC INVOLVEMENT

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CHAPTER 5 - PUBLIC INVOLVEMENT

COMMUNITY SURVEY ANALYSIS

Methodology

The Community Survey was fielded across a four-week period, from April 21, 2011 and May 21, 2011. The survey had three core objectives:

- Identify mobility needs of the community,
- Gauge the effectiveness of the existing services, and
- Identify opportunities for attracting choice riders (i.e., persons with multiple mobility options).

The survey was conducted using two distinct survey methodologies. This approach targeted the often Limited English Proficiency transit riders in Watsonville and required the project team to develop innovative approaches toward obtaining input and building support for Santa Cruz METRO's plans in the target community.

The first approach was an intercept methodology by which Moore & Associates along with Santa Cruz METRO staff visited several locations throughout Watsonville to collect surveys in-person. Locations included major shopping centers, Farmers' Market, post office, libraries, transit center, and churches.

The second approach was an onboard methodology which was conducted solely by Santa Cruz METRO staff. The methodology required the surveyors to canvas potential respondents onboard those Santa Cruz METRO lines serving Watsonville. This approach allowed for direct contact with transit-dependent populations as well as other potentially Limited English Proficiency individuals.

The project team collected 354 survey responses via the intercept and onboard methodologies. The 354 valid survey responses represent a statistically-valid sampling with a 95-percent confidence level. In other words, the data gleaned from this survey can be considered reflective of the Watsonville population at-large.

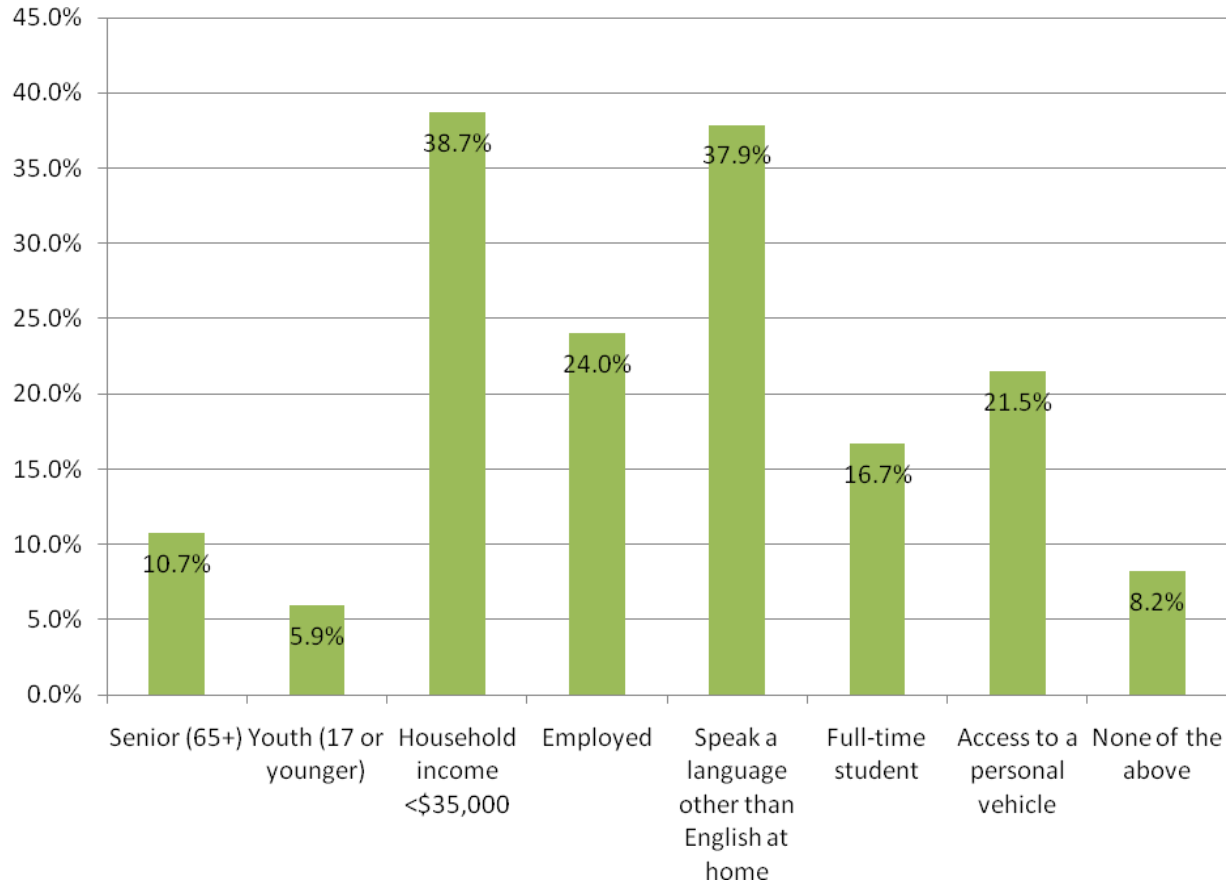
To analyze the survey responses, the consultant entered the data into Statistical Package for the Social Sciences (SPSS) software. Next, simple frequencies and cross-tabulations (potential relationships between data points) were generated. The data were then exported into Microsoft Excel to create charts and graphs.

Mobility Needs Assessment

Survey respondents were asked questions about themselves in order to create a demographic profile. These questions aimed to discover if respondents belonged to a traditionally ride-dependent populations (i.e., low-income, senior, youth, etc.) Exhibit 5.1 shows the results of these questions. Of note, 38.7 percent of respondents stated they had an annual household income of less than $35,000, which suggests this group would be particularly sensitive to changes in the Santa Cruz METRO fare structure. In addition, 37.9 percent indicated they speak a language other than English at home.

Only 21.5 percent of respondents indicated they had access to a personal vehicle. While this does not imply *ease* of using the personal vehicle, in combination with the high incidence of low-income residents observed in this survey, a higher rate of unemployment, and the tough economic climate, operating a personal vehicle could be a financial burden for many Watsonville residents with the price of gasoline approaching four dollars/gallon.

Exhibit 5.1 Ride Dependent Category



Only 24 percent of survey respondents indicated being employed, as shown in Exhibit 5.1. Of these, more than 80 percent stated working in zip code 95076, which includes Watsonville and adjacent areas. Given the large number of survey respondents who work within Watsonville, it is important to ensure adequate transit access to employment centers, especially during peak hours.

Exhibit 5.2 Employment ZIP Code

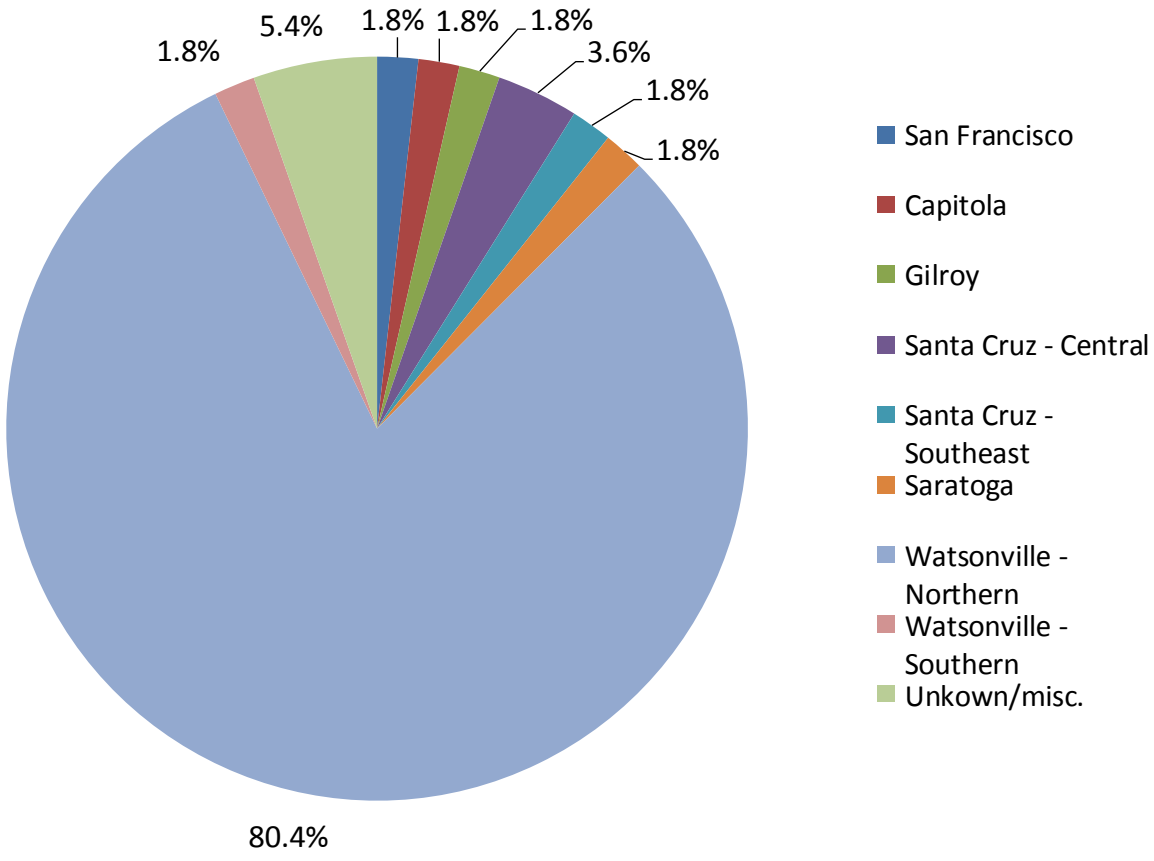


Exhibit 5.3 illustrates survey respondents' primary mode of travel. Santa Cruz METRO is the most common mode of travel, attracting nearly half of all respondents. This large percentage may be attributable to the fact many of the surveys were collected on board buses or at major bus stop locations. Nonetheless, this confirms significant reliance within the Watsonville community upon Santa Cruz METRO for basic and discretionary mobility.

Exhibit 5.3 Mode of Travel

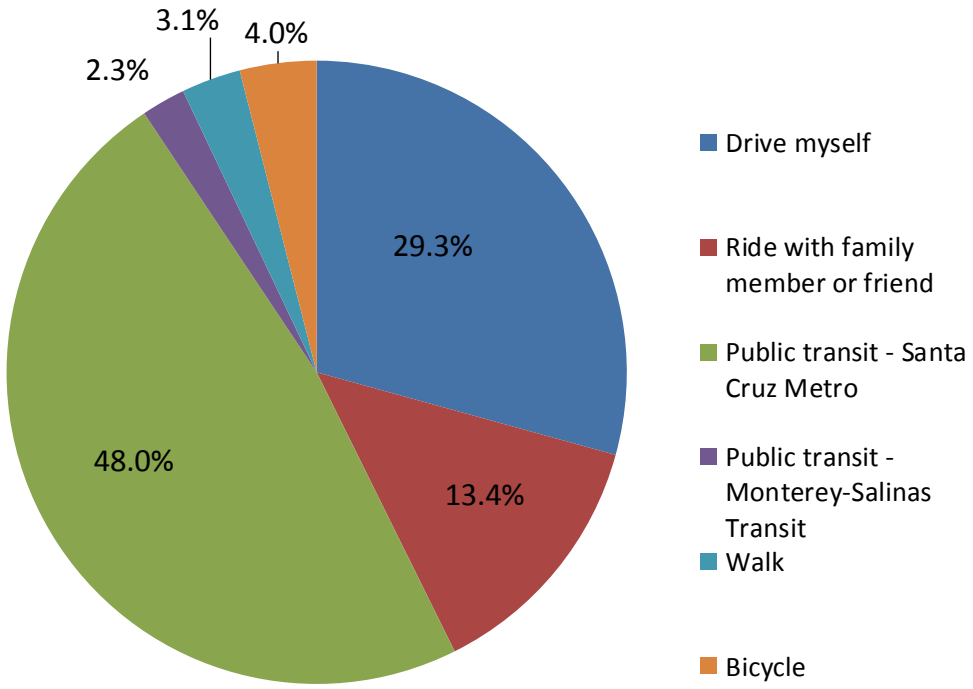
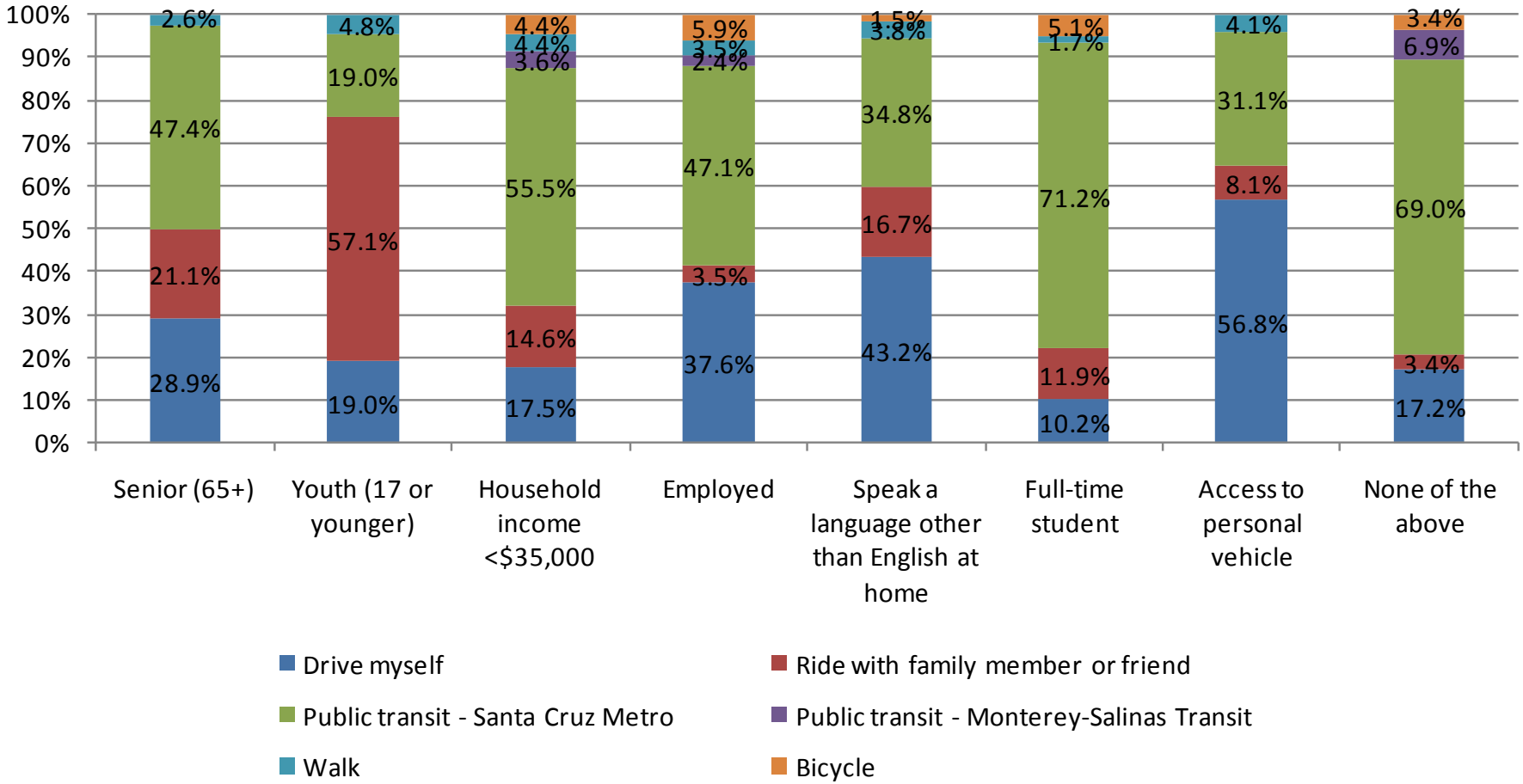


Exhibit 5.4 illustrates the typical mode of travel for each demographic group. As expected, historically transit-dependent groups like seniors, low-income individuals, and students rely heavily on public transit for basic mobility. Additionally, it is common to see a significant portion of youth using public transit, bicycling, or relying on friends and family to complete their trips, due to the lack of access to a car.

What is surprising is the proportion of respondents (31 percent) who have access to a personal vehicle yet also take public transit. This suggests the cost associated with vehicle ownership (e.g., regular commuting to work) represents a sufficient financial barrier where utilizing public transit becomes a viable or in some cases the only transportation option.

Exhibit 5.4 Demographics versus Mode of Travel



Survey respondents were asked if the absence of affordable and reliable transportation had negatively impacted their ability to access healthcare, school or vocational training, social service programs, shopping and recreation, or employment. Exhibit 5.5 shows that the majority of all residents stated they did not have a difficult time accessing same.

Nonetheless, 35 percent of respondents indicated they had a difficult time accessing healthcare. This confirms Santa Cruz METRO should focus attention on serving Watsonville Hospital, Santa Cruz County's Health Services building, Dominican Hospital, and other community health clinics such as Salud Para La Gente. In addition, trips that connect Watsonville to Santa Cruz should be timed to interline with the Routes 4 and 8 which serve the County of Santa Cruz Health Services Agency's Emeline Complex.

Additionally, just over 35 percent of respondents stated they had difficulties accessing employment. This suggests a potential for Santa Cruz METRO to target trips to employment areas within and outside Watsonville. These areas include agricultural worker camps just outside Watsonville as well as within Santa Cruz. Therefore, Santa Cruz METRO should target service enhancements to serve areas of high employment during peak periods in order to increase transit access at these locations and also to attract "choice riders". Such enhancements could include increased frequency during peak hours and service to locations not currently served.

Exhibit 5.5 Impacted Mobility

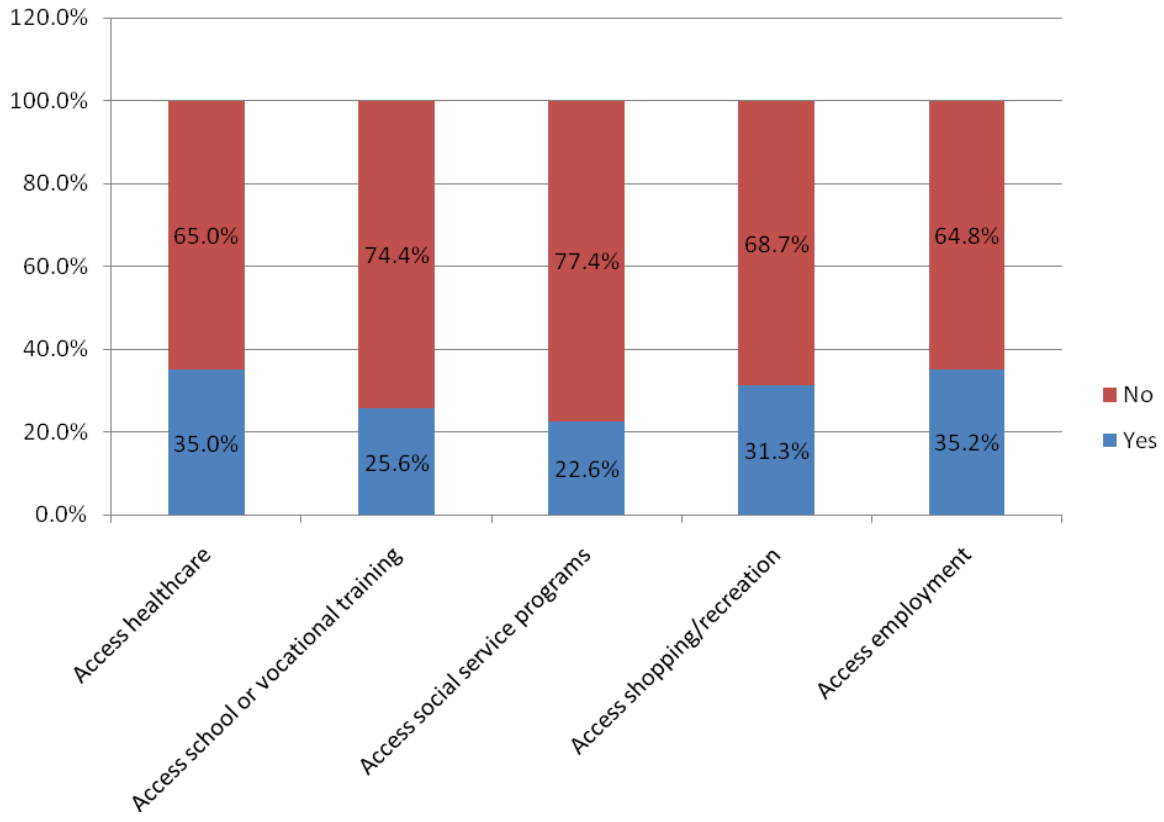
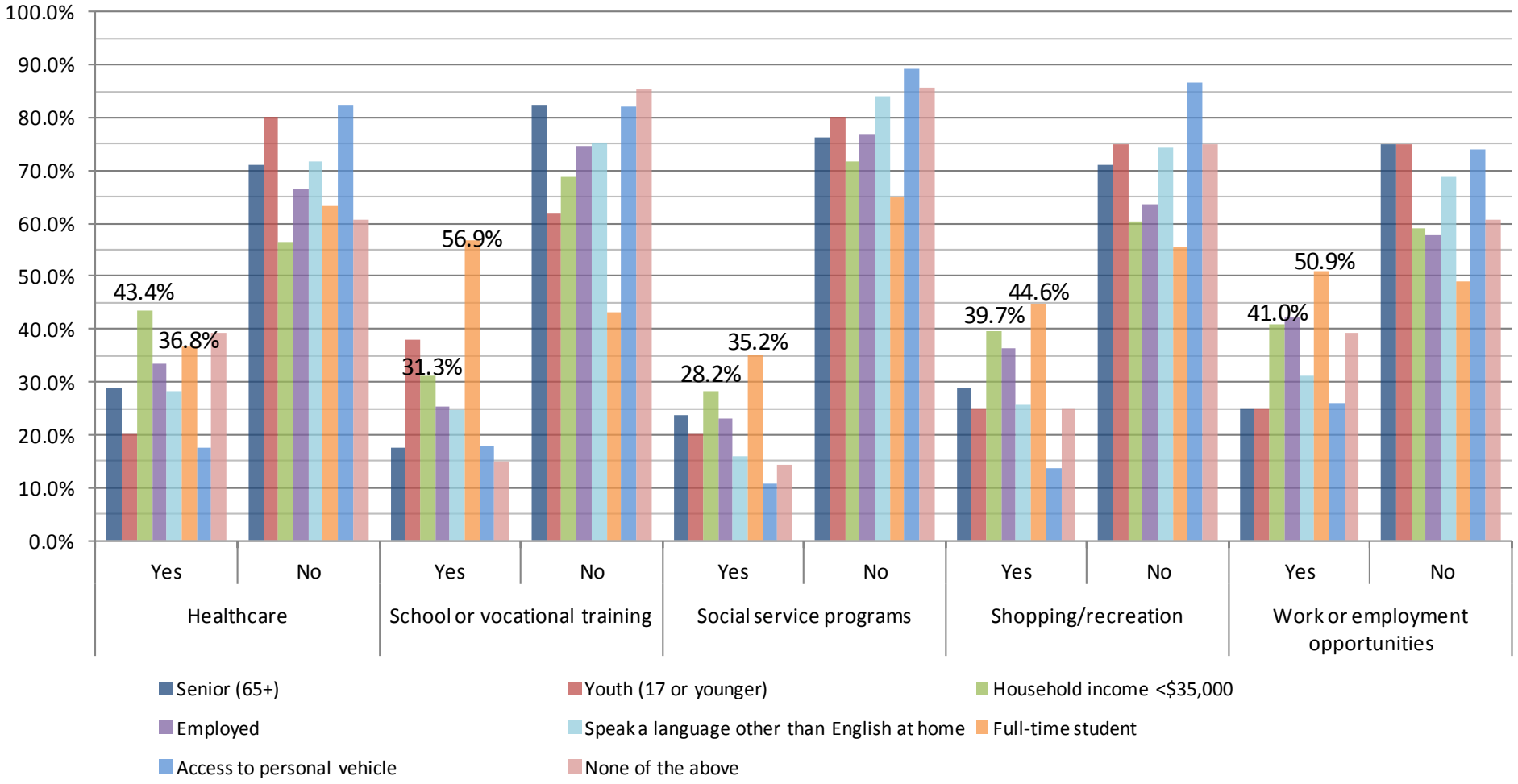


Exhibit 5.5 explores the potential relationship between the demographic characteristics of the survey respondents and any potential difficulty in accessing certain locations or services. Full-time students appeared to have the greatest difficulty accessing school or vocational training (57 percent), work or employment opportunities (51 percent), and shopping/recreational destinations (45 percent). Since this group is historically reliant on public transit (see Exhibit 5.1), Santa Cruz METRO may wish to consider making strategic enhancements to bus routes serving schools as well as areas with high proportions of youth.

In addition to full-time students, low-income families also had difficulty access healthcare (43 percent), work or employment opportunties (41 percent), and shopping/recreational destinations (40 percent). This exhibit reveals there is presently a high barrier to mobility within this group which is typically transit-dependent or has difficulty affording a personal vehicle. This may warrant a review of the existing route structure, headways, and other operational factors to ensure low-income workers can reach their destinations in a timely fashion.

Exhibit 5.6 Demographics vs. Impacted Mobility



Transit Service Assessment

Exhibit 5.7 shows the breakdown of survey respondents who had and had not used transit service in the 90 days prior to the survey contact. Approximately 74 percent of survey respondents indicated use of public transit in the prior 90 days.

Exhibit 5.7 Transit Use in Prior 90 Days

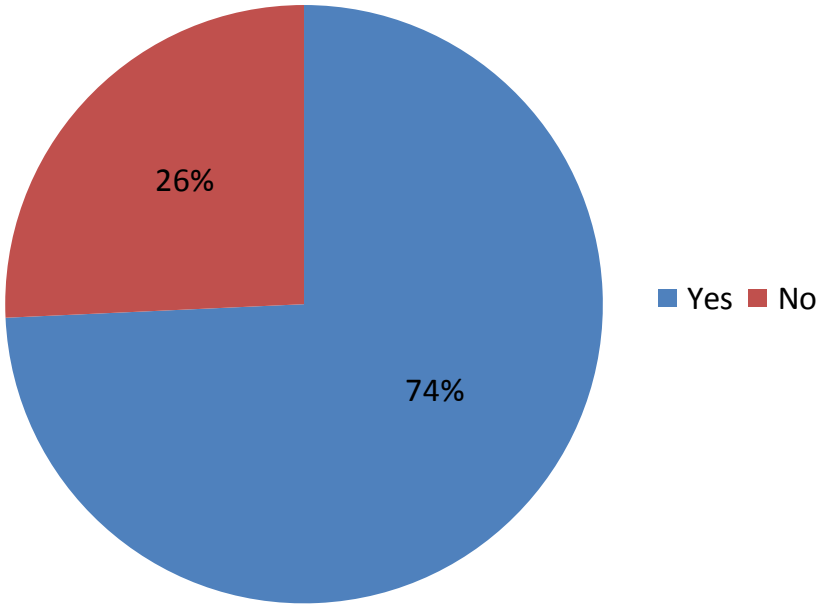


Exhibit 5.8 shows the frequency of transit use among the 74 percent of survey respondents who had used transit service in the 90 days prior to the survey contact. Most customers ride Santa Cruz METRO at least once per week. This frequency of use suggests Santa Cruz METRO serves either as the primary or frequent mode of transportation for respondents who do not own a car. The results may have been influenced by the location(s) at which the data was collected (i.e., surveys were collected on board buses and at the transit center in addition to other locations throughout the community).

Exhibit 5.8 Patronage Frequency

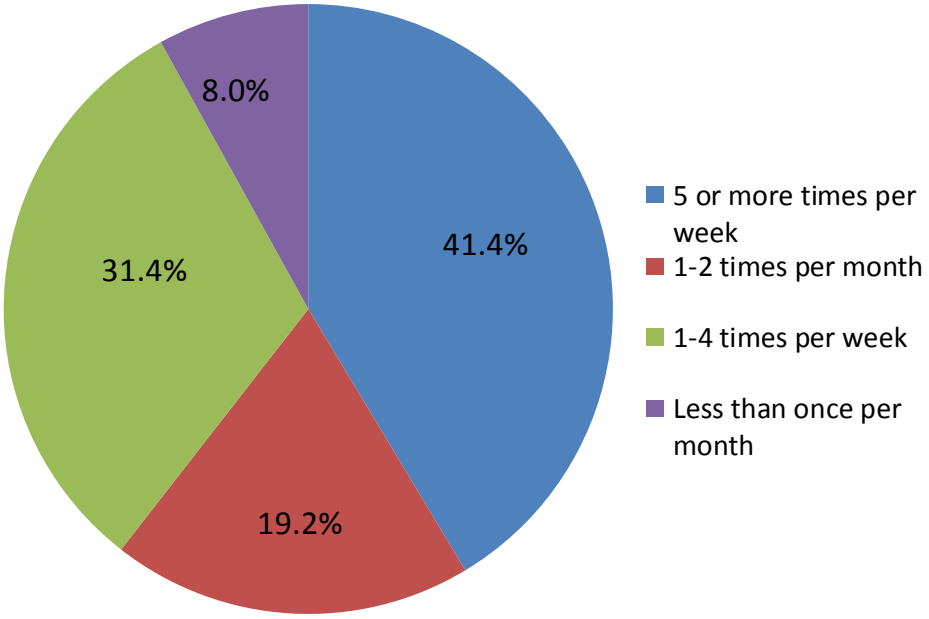
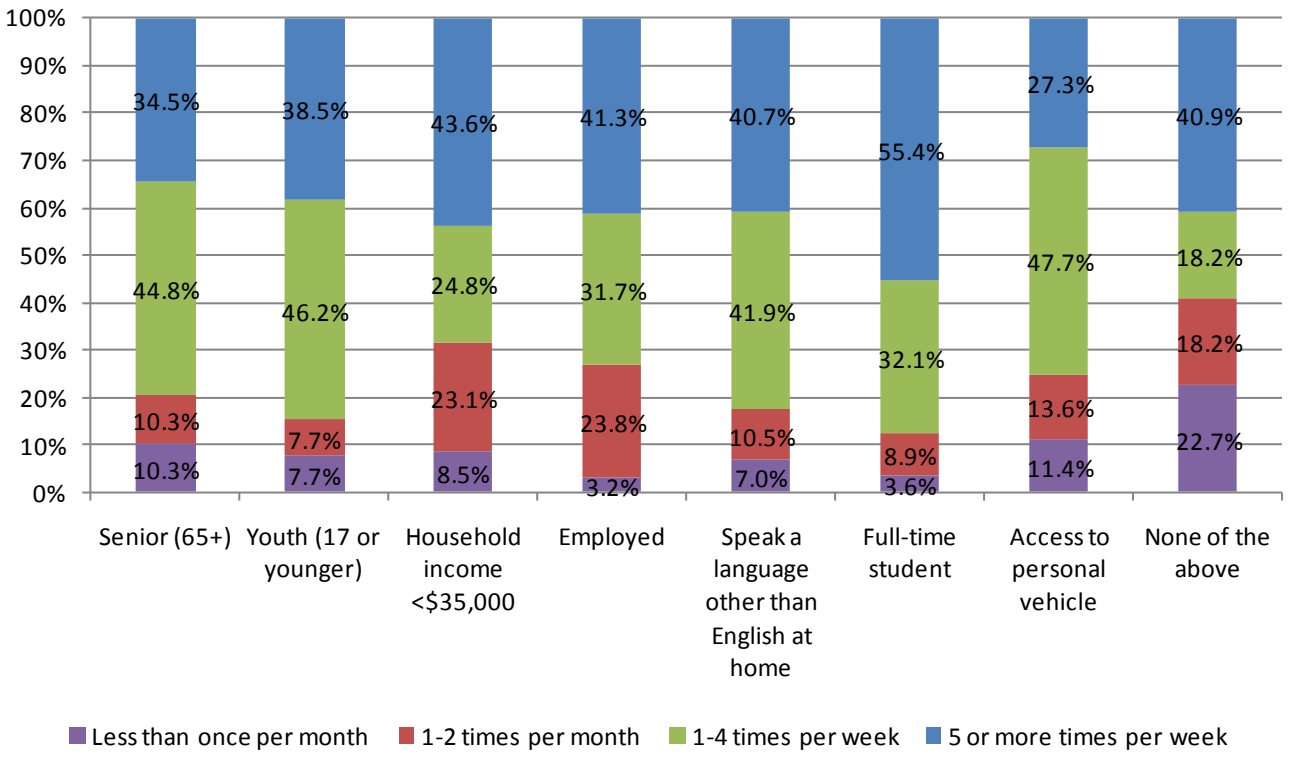


Exhibit 5.9 illustrates the possible relationship between the demographic groups participating in the survey and their frequency of use of public transit. What stands out from this exhibit is the high proportion of respondents in each demographic grouping which use transit service at least once weekly. What is also important is the large proportion of full-time students which use the service five or more times per week. What this exhibit confirms is students in Watsonville are highly dependent on public transit to meet their mobility needs.

This is also true for low-income households as well as those who are employed. Given the challenges for low-income households to access work or employment opportunities, we believe a strong correlation exists between low-income households, those who are employed, and their frequency of use. In other words, many of the transit riders in Watsonville who use the service to commute to work are also likely from low-income households.

Exhibit 5.9 Demographics vs. Frequency of Use



Customer Satisfaction

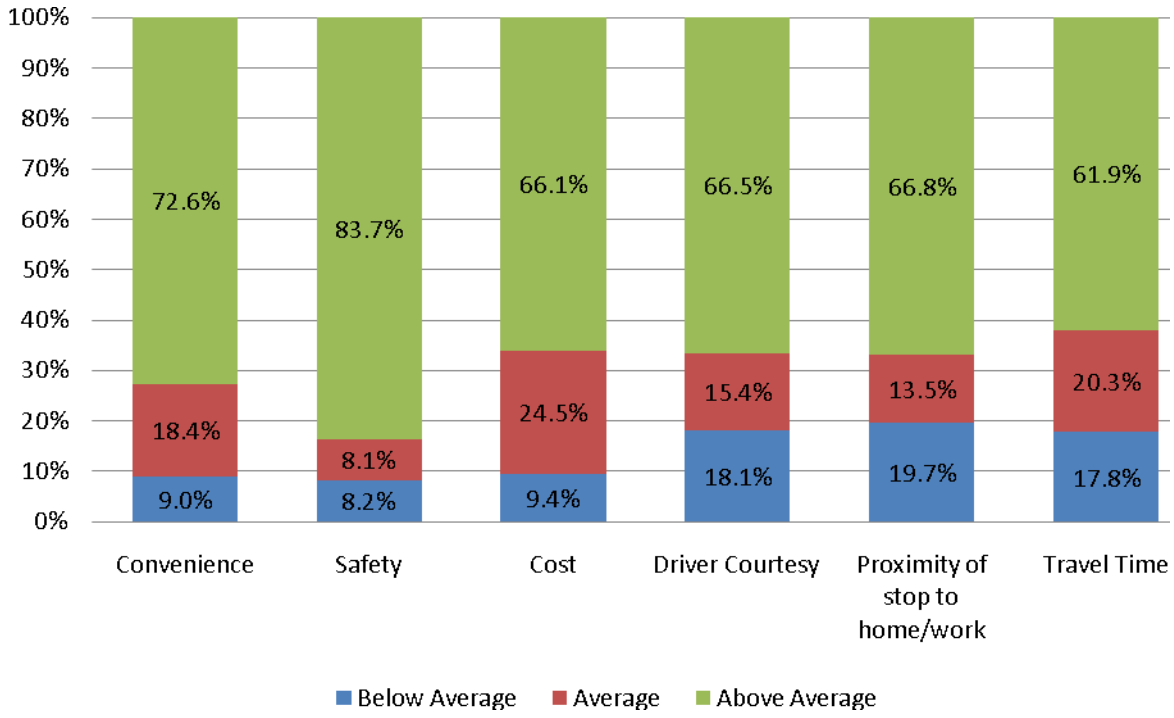
Surveys conducted both onboard Santa Cruz METRO buses and throughout Watsonville asked respondents to indicate whether they had used transit service within the past 90 days; and if so, to rate six service attributes using a five-point numerical rating scale (1 = poor, 5 = excellent). Exhibit 5.10 shows the rankings.

As a whole, riders were satisfied with all six service attributes. While service was overall shown to be adequate, there are areas that customers identified as either strengths or weaknesses that Santa Cruz METRO should use as input to improve customer satisfaction.

Riders were overwhelmingly satisfied with the safety of transit service in Watsonville. In addition, transit users were also fairly satisfied with the convenience and cost or Santa Cruz METRO service. Maintaining customer satisfaction with respect to these qualities is important in preserving the quality of the rider experience as well as to encouraging new and "choice riders" to begin using transit versus personal vehicles.

Despite this, there were a number of transit users who were displeased with the time it took to complete a trip, the proximity of a stop to their home or work, and the perceived courtesy of Santa Cruz METRO drivers. These factors are obstacles to increasing ridership and should be remedied in order to make the service more attractive. Many riders were dissatisfied with the time it took to complete a trip and, of them, a large number mentioned buses that did not run on-time. Santa Cruz METRO may wish to adjust the published schedule to more accurately reflect bus run times during different times of day. In addition, Santa Cruz METRO may want to explore more limited stop routes on high travel corridors during peak periods to decrease travel time and make bus travel more competitive with other modes. Because many riders indicated there was not a stop near their home or work, Santa Cruz METRO should focus any service expansion near areas of high population density as well as large employment centers. Another barrier to ridership that Santa Cruz METRO may want to focus on is the perception that some drivers are not courteous to riders. This is often an issue that can be resolved through educating the public to limit communicating with drivers given the top priority of safe vehicle operation.

Exhibit 5.10 Attribute Rankings



Non-Rider Assessment

This section analyzes the habits of non-riders. Exhibit 5.11 shows that almost 58 percent of survey respondents do not patronize public transit because they have access to a personal vehicle. This, combined with the feeling that the service is inconvenient and complicated, indicates local residents do not perceive public transit to be a competitive alternative (to the personal vehicle).

Exhibit 5.11 Reason for Not Riding

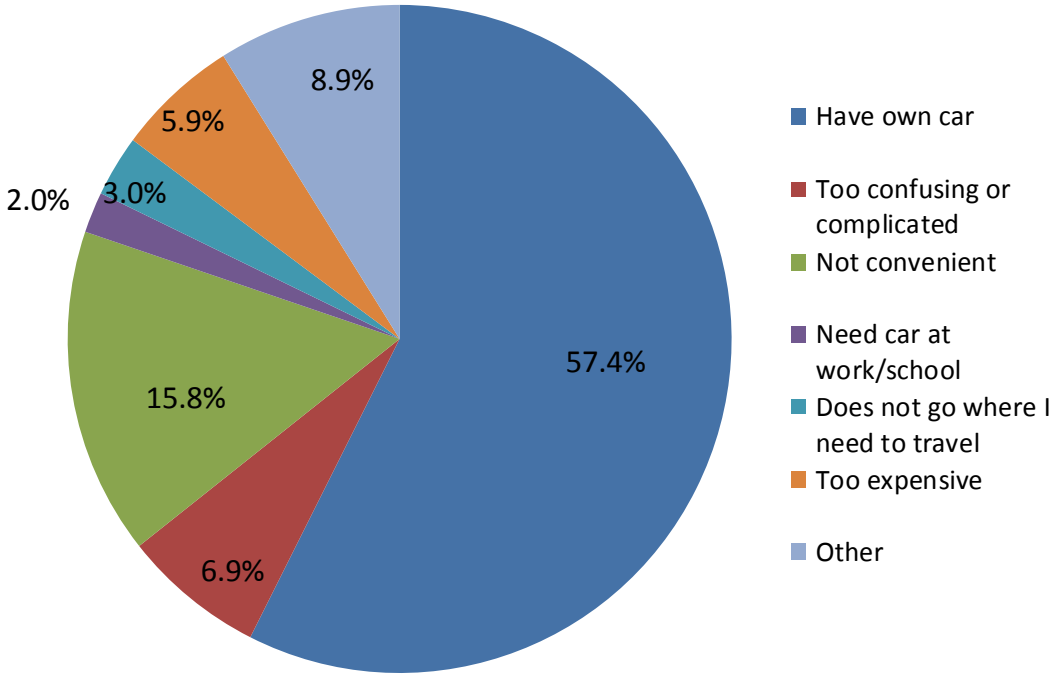


Exhibit 5.12 shows which service enhancements survey respondents said would encourage them to take transit. While there were many different enhancements identified, nearly 24.3 percent indicated they would not use public transit regardless of whether service enhancements were implemented.

In terms of preferred service enhancements, respondents identified later service and better connections to destinations outside of Watsonville as the most preferred enhancements. Lower cost (i.e., reduced fares) and earlier service were also identified as preferred enhancements. Taken together, this suggests Santa Cruz METRO may wish to expand service hours in Watsonville and increase the number of routes and/or frequency of trips connecting Watsonville to other portions of the county.

Exhibit 5.12 Preferred Service Enhancement

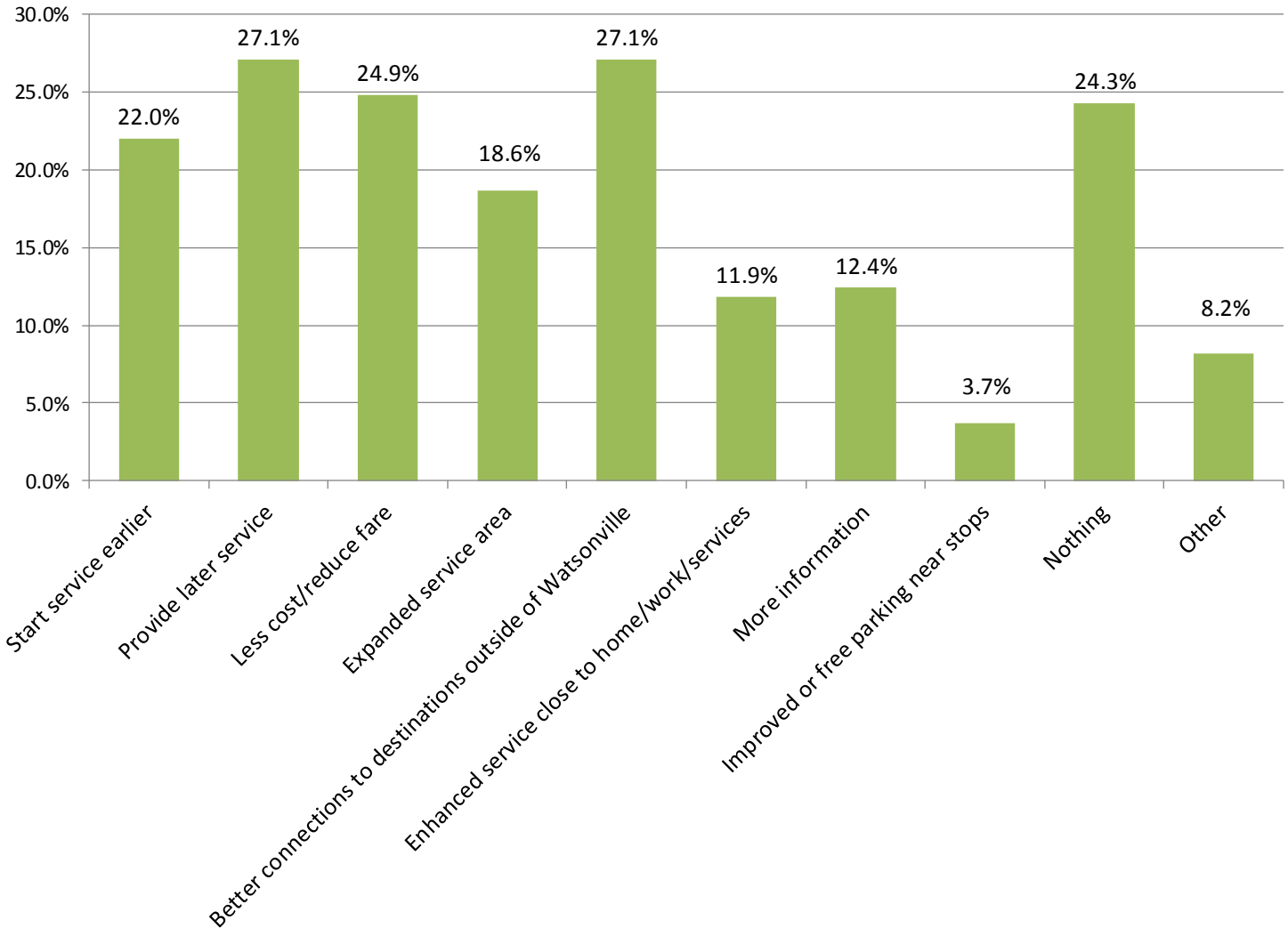
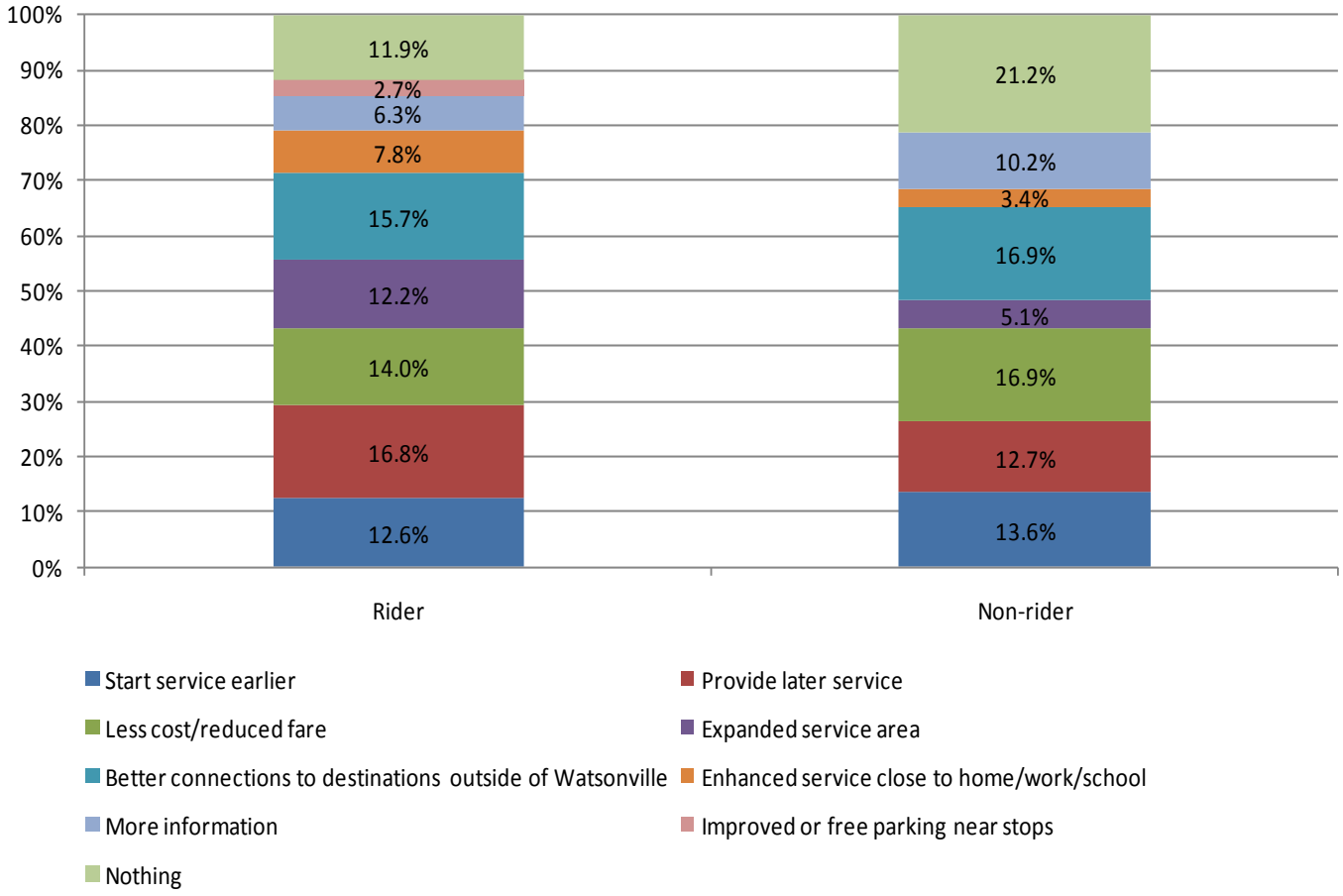


Exhibit 5.13 explores the potential relationship between riders and non-riders and their preferred service enhancements. Across both groups there is little consensus regarding a preferred service enhancement. For example, riders wanted later service, better connections to destinations outside Watsonville, and less cost/reduced fares.

Conversely, about 21 percent of non-riders indicated no desire for any service enhancements which likely represents those in the community who would not ride public transit under any circumstance. With respect to persons who indicated a preferred service enhancement, non-riders selected better connections to destinations outside Watsonville, less cost/reduced fare, and earlier service.

Exhibit 5.13 Rider vs. Non-Rider Preferred Service Enhancement

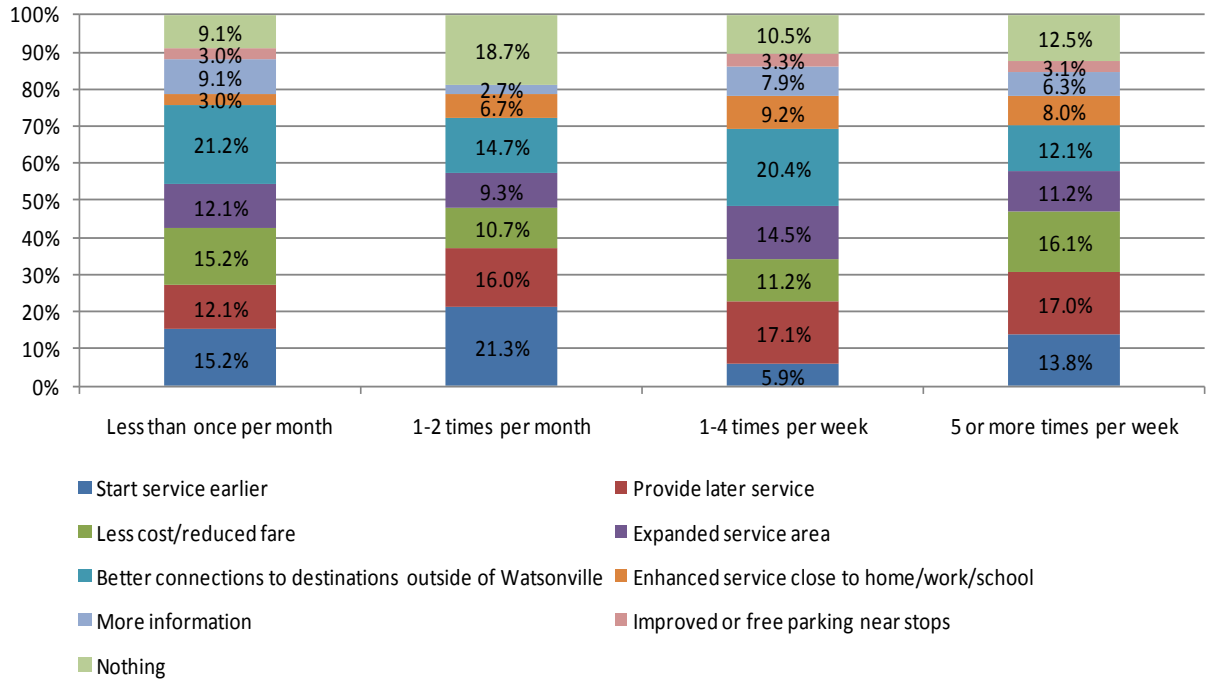


As with Exhibit 5.13, there is little consensus amongst rider groups regarding a preferred service enhancement. As Exhibit 5.14 illustrates, for those who ride infrequently, earlier service and better connections to destinations outside of Watsonville were the most popular. However, it should be noted a significant proportion of infrequent riders indicated there was no service enhancement which would encourage them to use the service more frequently.

Conversely, respondents who ride at least once per week shared a desire for better connections to destinations outside of Watsonville, later service, and less cost/reduced fare.

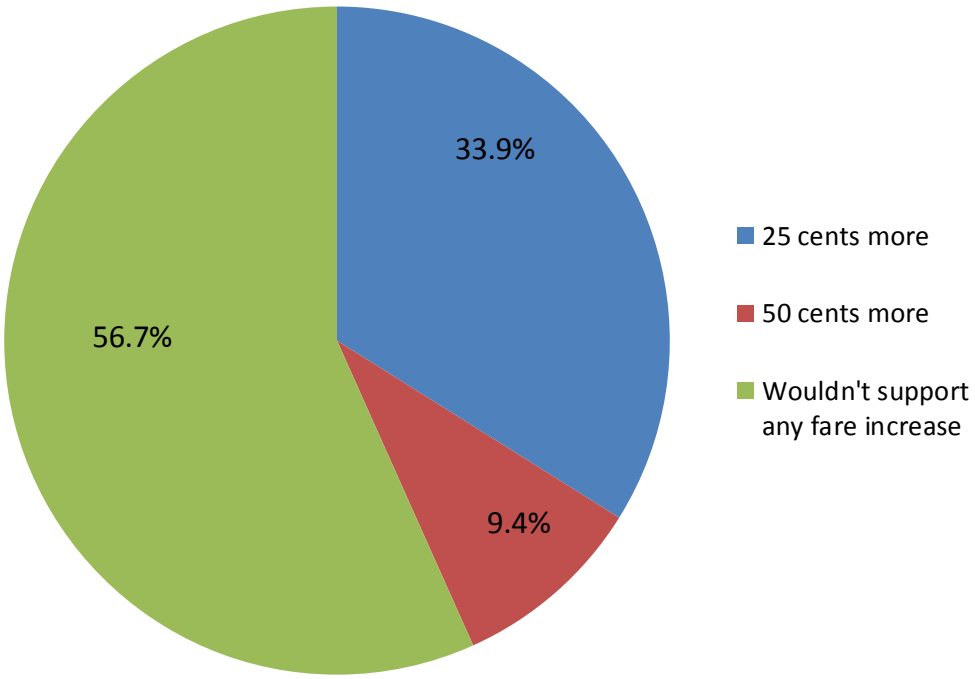
Exhibits 5.13 and Exhibit 5.14 revealed some riders feel the cost of service is high. Given Santa Cruz METRO has the same pricing scheme as Monterey-Salinas Transit, we recommend Santa Cruz METRO consider a marketing/educational campaign educating riders and potential riders about the cost savings and benefits of riding transit. Additionally, more long-haul service seems to be the only recommendation which garners significant interest amongst all rider groups as well as non-riders.

Exhibit 5.14 Frequency of Use vs. Preferred Service Enhancement



After identifying preferred service enhancements, survey respondents were asked how much they would be willing to pay should their service enhancement be implemented. Exhibit 5.15 depicts how much additional fare respondents indicated they would be willing to pay for enhanced service. Nearly 57 percent of survey respondents stated they would not support any fare increase, even if it would result in the service enhancements. This may be due to either an unwillingness or inability to pay more. In contrast, slightly over a third or respondents indicated they would be willing to pay 25 cents more for enhanced service. This indicates that although enhanced transit service is desired, the majority respondents feel as though it should happen without a fare increase. This is understandable given nearly 22 percent of Watsonville households are at or below the federal poverty level (annual income below $22,050 for a family of four).

Exhibit 5.15 Additional Fare



PUBLIC OUTREACH SUMMARY

In addition to the quantitative analysis of transit services currently operating in and through Watsonville, Moore & Associates undertook broad-ranging public outreach to assess community awareness and perception of Santa Cruz METRO, quantify unmet needs and demand, and prioritize transit service enhancements. This chapter presents the summary of those outreach activities associated with this project. The goal of the public outreach component was to actively engage the Watsonville community in the transit planning process and, in doing so, identify sustainable, market-driven recommendations which could translate to improved transit service performance.

Outreach Methodology

To gather public input, the project team facilitated six focus groups. The focus groups were held across several weeks, from July 20, 2011 through August 24, 2011. The focus groups targeted seniors, low-income residents, residents with limited-English proficiency, youth, and recently-released non-violent jail inmates recently released for drug- and alcohol-related offenses who were transit dependent usually because they were not allowed to drive. The focus groups addressed each attendee's perspective on public transit in Watsonville. These meetings yielded important feedback regarding service issues and potential enhancements to address these shortcomings.

To promote the focus groups, Santa Cruz METRO contracted with a number of social service agencies including the Volunteer Center which helped coordinate with two separate groups - the Friends Outside and Community Connection, Meals on Wheels, and La Manzana Community Resource Center, which were in turn responsible for all publicity for each meeting as well as providing food and drink, securing a location, and scheduling the meeting. In turn, Santa Cruz METRO and Moore & Associates jointly facilitated the meetings with translation available through the social service agency as needed. Each of the six meetings focused on a different demographic, and as such each focused on different issues. The two meetings organized by La Manzana took place at its facility (521 Main Street in Watsonville) and had 25 and 13 attendees, respectively. The meetings associated with the Meals on Wheels program took place at the Senior Center and attracted 25 and 21 attendees, respectively. The Volunteer Center meetings took place at its facility (12 Carr Street) and attracted 15 and 18 attendees, respectively. In general, the issues raised by focus group attendees fell into four categories:

- New service areas,
- Enhancements to existing services,
- Capital/Technology, and
- Policy.

New Areas to Serve

The following points are related to new areas not currently served by Santa Cruz METRO.

- There is considerable demand for transit services to Marintelli's and Labor Ready.
- The jail off Buena Vista has no bus service.
- Bus service should be provided along Riverside Drive.
- Las Lomas and Aromas are rural and lack bus service.
- A route to the beach would be a good idea.
- Second Harvest's food bank and the fairgrounds are critical areas to serve.
- Connections should be available to San Juan Bautista/Hollister.
- Schools should be able to use Santa Cruz METRO for field trips to the beach.
- Labor camps need service.
- Field workers along Beach Street toward the ocean need transit service.

Enhancements to Existing Service

The following points focus on improvements that could be made to existing Santa Cruz METRO services.

- The west side of the community is growing faster than the rest of Watsonville.
- Lots of people are going to schools and Cabrillo College (mostly the Aptos campus).
- There needs to be enhanced service on existing routes (more frequency).
- Graveyard work shifts can be difficult with current bus operating schedules.
- Service should be improved near Home Depot and Ramsey Park, in East Lake, and to Pajaro High School.
- Evening service to the Target/Grocery Outlet/Save Mart is lacking.
- Routes 79 and 69A are redundant.
- Route 74 is a good service but doesn't run late enough in the evening.
- Important areas needing more service include the Capitola Mall, Soquel, Dominican Hospital, Harbor High, and Santa Cruz Gardens.
- Service to the hospital in Watsonville is confusing.
- Emeline service ends too early.
- There's a clinic at Crestview Center that's important to serve.
- Frequent service on Route 71 should begin earlier in the day. There is significant crowding due to Cabrillo classes.
- Route 20 goes near the Housing Authority, but not directly to it, and the connection is difficult.
- Sometimes Route 71 runs very late.
- Green Valley needs more service.
- Route 91X is too crowded in the morning.
- Connections should be improved to local schools.
- There should be direct service to the Santa Cruz Boardwalk.
- It is too expensive to get to Salinas.
- There needs to be a direct connection to San Jose.

- Route 69 is always full, needs more capacity.
- Social Security office is difficult to reach, the bus should serve it more frequently.
- Crestview needs enhanced service.
- Broaden the availability of ParaCruz service to supplement Lift-Line.
- Need improved service to the fairgrounds area.
- Arthur Road needs more frequent service from Route 71.

Capital/Technology

The following points are related to capital aspects of Santa Cruz METRO, including rolling stock, facilities, bus stop improvements, and technology.

- More bike racks on buses.
- Commuter parking is lacking in Watsonville.
- There is not enough lighting along Freedom Boulevard (all the way out to Aptos High).
- Internet service on the bus would be a good perk.
- Crosswalks near bus stops should be improved.
- There should be benches at stops on Lincoln Street.
- Some stations don't have the correct signage (Beach Street in front of the high school).
- There are no sidewalks, shelter, or bench near the Social Security office.
- Bus stops need improvements along Green Valley, Lincoln, Pennsylvania, Freedom, Clifford, and at the high school.
- Bus stops need improvements along Route 69.

Policy

The following points are related to Santa Cruz METRO policies regarding fare, coordination with other agencies, and customer service.

- Transfers can be difficult.
- $50 is a very steep price for a monthly pass.
- There should be better coordination with MST.
- There should be a family pass or a way to register children and give them ID cards to ride at a discount.
- There is a desire for lower fares.
- Maybe implement 5-day, 7-day, or 10-day passes. (Note: Multi-day passes were being implemented in early 2012.)
- A multi-month pass would be less of a hassle. (Note: Multi-day passes were being implemented in early 2012.)
- Cleaner buses running more often would attract more "choice riders."
- Some pass outlets are sold out.
- Maybe a phone line to call for Nextbus.
- Announcements should be in Spanish all the time.

- Marketing should be improved.
- An information packet should be given to schools and teachers to make sure students have information about bus service.
- A Cabrillo bus pass would attract more riders
- Student passes should be more affordable or easily accessible.
- Not enough awareness regarding the correct phone numbers to call for information.

Some of the most often-repeated recommendations for new service were related to Sunset Beach, the fairgrounds, and labor camps. Service enhancements that were cited repeatedly include increases in frequency along existing high-traffic routes (Route 69 and 71), as well as expanded service hours along some of the local Watsonville routes. Most capital-related issues focused on bus stops, and were raised at all meetings. In particular, riders made it clear shelters and lighting would be a significant improvement. (Note: At the time of report completion, Santa Cruz METRO was in the process of installing bus shelters and lighting at 107 bus stops county-wide.) As expected, lower fares were a universal request, but failing that, making it easier for families to pre-register children so they could lower the cost of riding as a family was raised repeatedly.

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.

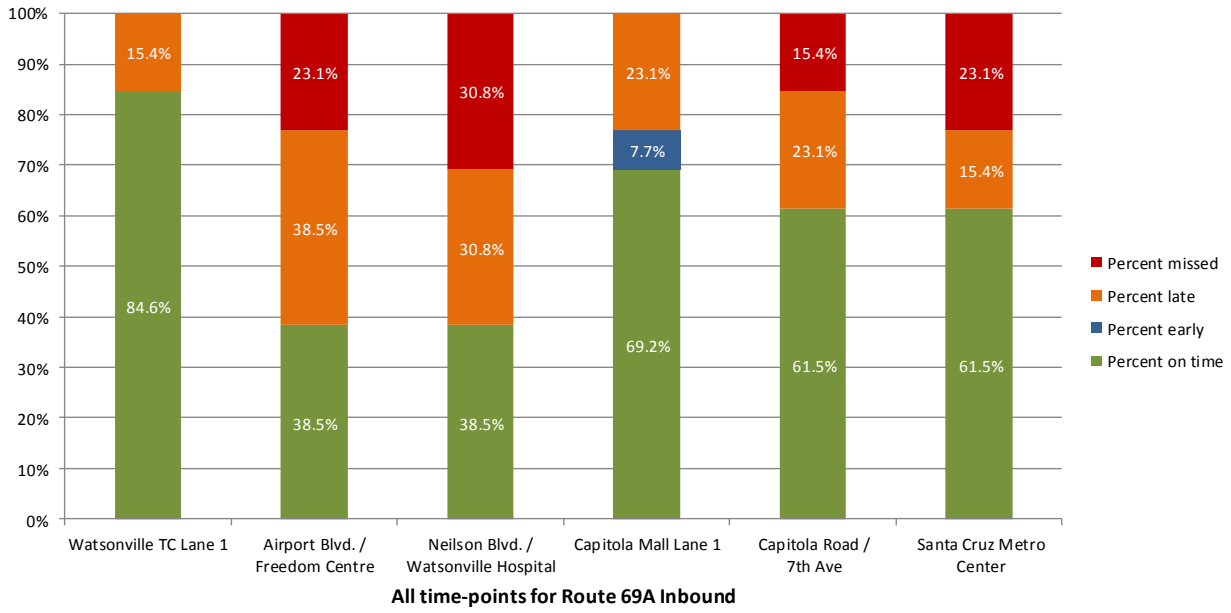
Exhibit 6.2 Proposed Route 69A Schedule

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

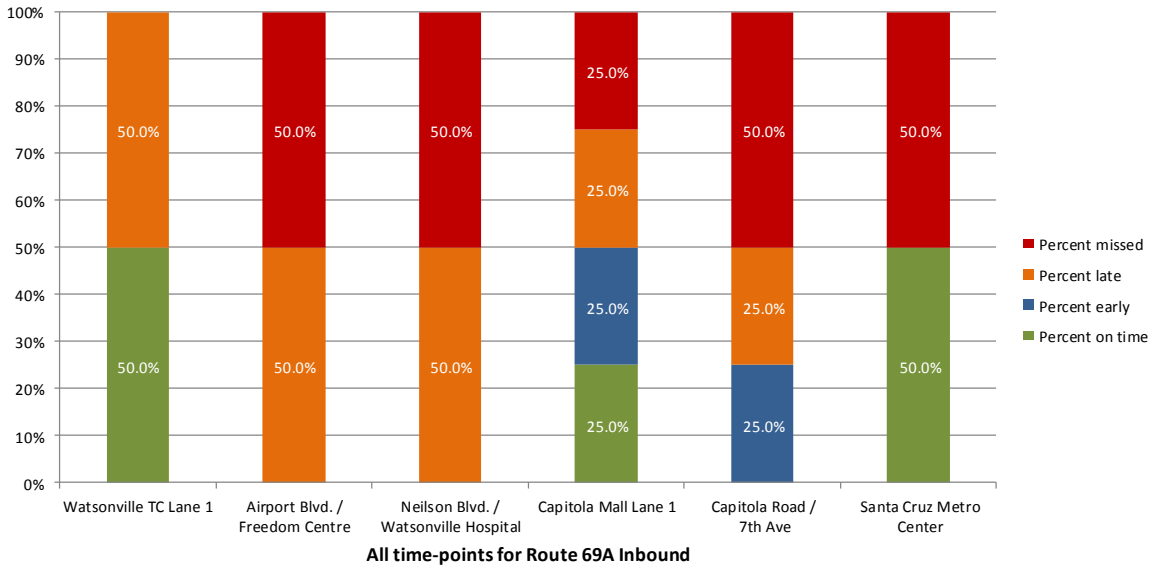
OUTBOUND M-F								
	A	B	C	D	E	F	G	H
69W	6:37:00 AM	6:52:00 AM	7:07:00 AM	7:25:00 AM	7:39:00 AM	---	---	7:46:00 AM
69W	7:47:00 AM	8:02:00 AM	8:17:00 AM	8:35:00 AM	8:49:00 AM	---	---	8:56:00 AM
69W	8:57:00 AM	9:12:00 AM	9:27:00 AM	9:45:00 AM	9:59:00 AM	---	---	10:06:00 AM
69W	10:07:00 AM	10:22:00 AM	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



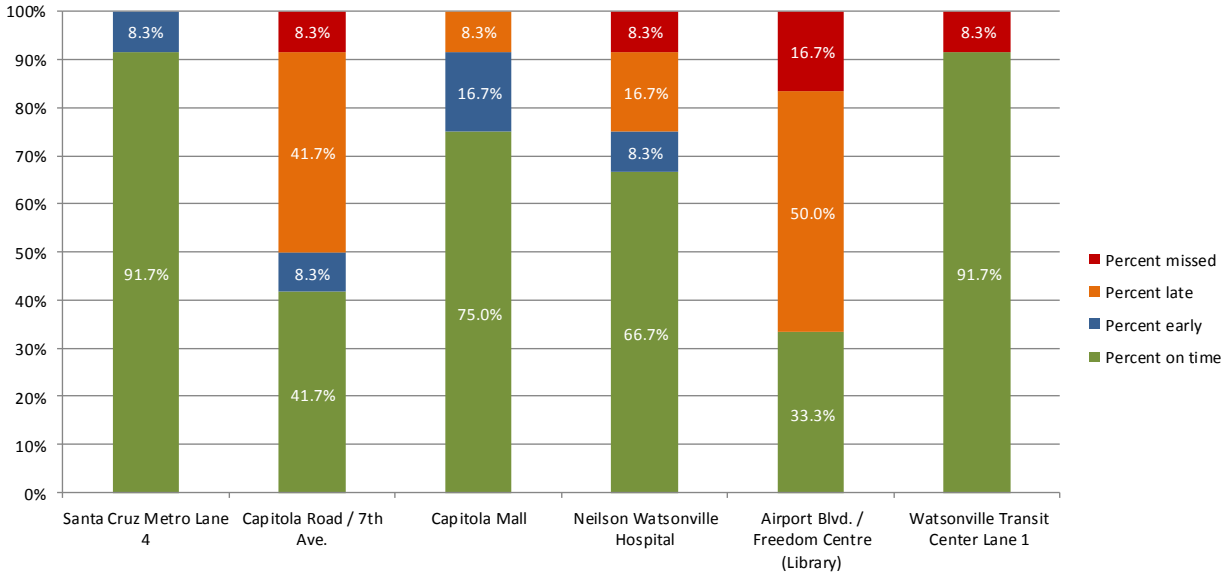
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.

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.

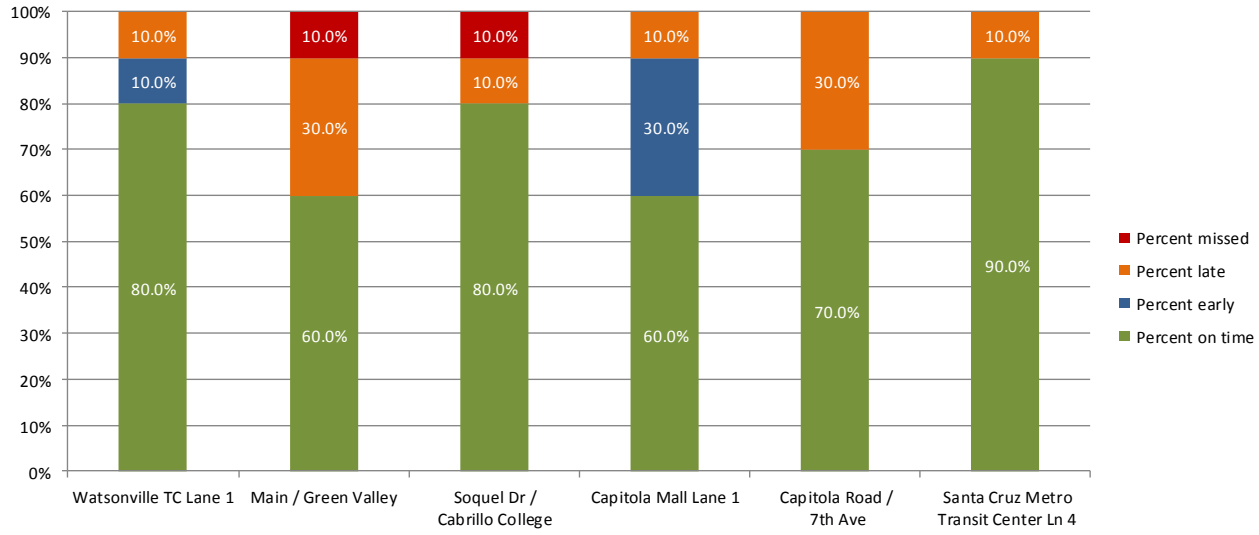
Exhibit 6.6 Route 69A Outbound On-Time Performance



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.

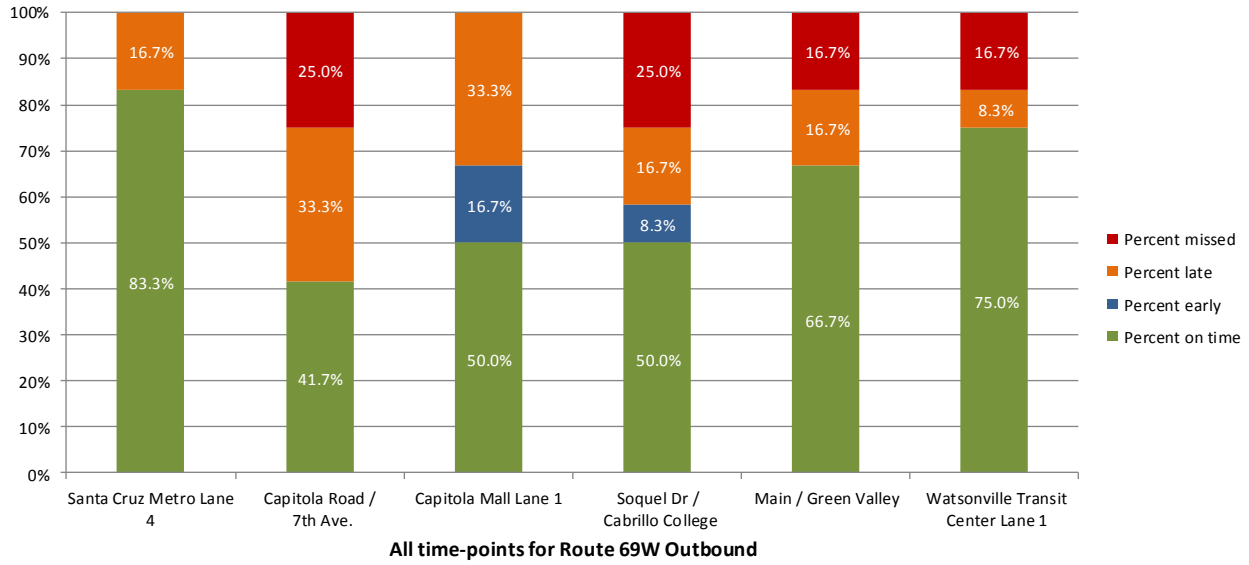
Exhibit 6.7 Route 69W Inbound On-Time Performance



All time-points for Route 69W Inbound

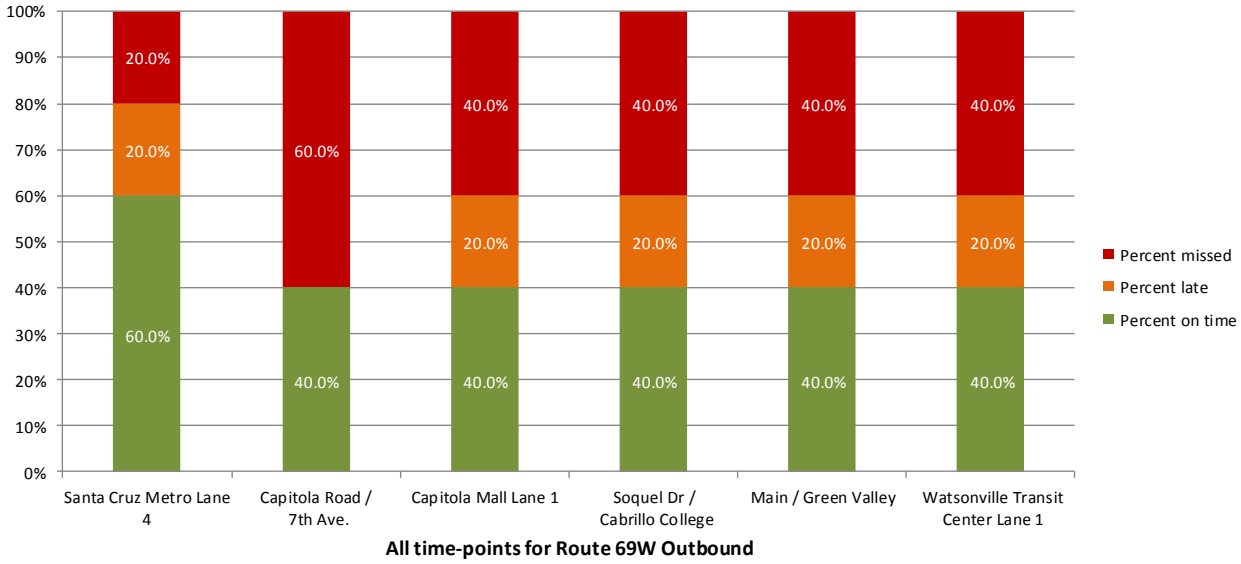
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.

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.

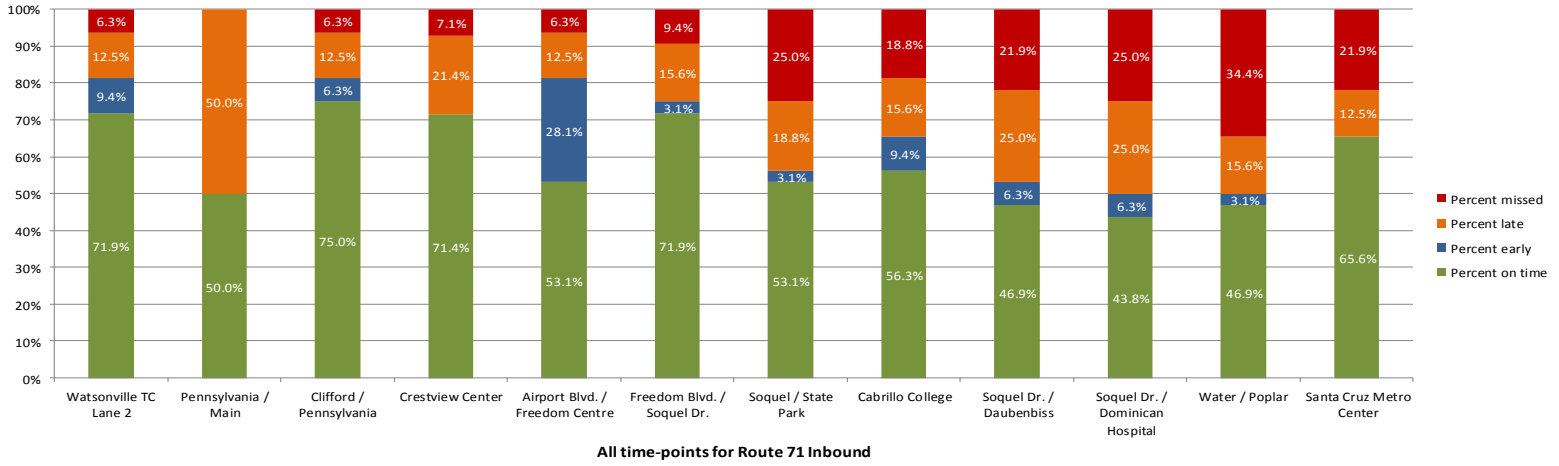
Exhibit 6.10 Proposed Outbound Route 71 and Route 71X Schedule

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
71	6:15:00 PM	6:24:00 PM	6:30:00 PM	6:36:00 PM	6:45:00 PM	6:48:00 PM	6:55:00 PM	7:08:00 PM	7:15:00 PM				7:25:00 PM
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
71	8:15:00 PM	8:22:00 PM	8:27:00 PM	8:33:00 PM	8:40:00 PM	8:43:00 PM	8:49:00 PM	9:00:00 PM	9:06:00 PM				9:15:00 PM
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

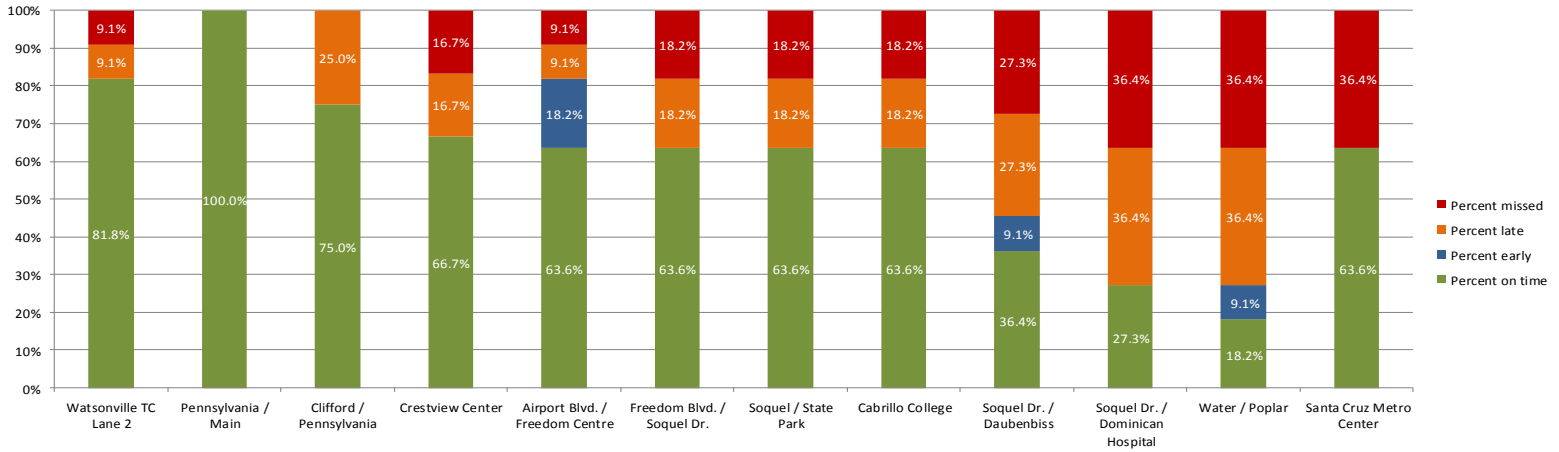
INBOUND M-F													
	M	I	J	K	L	H	G	F	E	D	C	O	A
71	5:35:00 AM		5:42:00 AM			5:50:00 AM	6:00:00 AM	6:05:00 AM	6:10:00 AM	6:14:00 AM	6:19:00 AM	6:23:00 AM	6:35:00 AM
71	6:10:00 AM	6:15:00 AM				6:25:00 AM	6:40:00 AM	6:46:00 AM	6:50:00 AM	6:57:00 AM	7:03:00 AM	7:08:00 AM	7:25:00 AM
71	6:40:00 AM		6:49:00 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



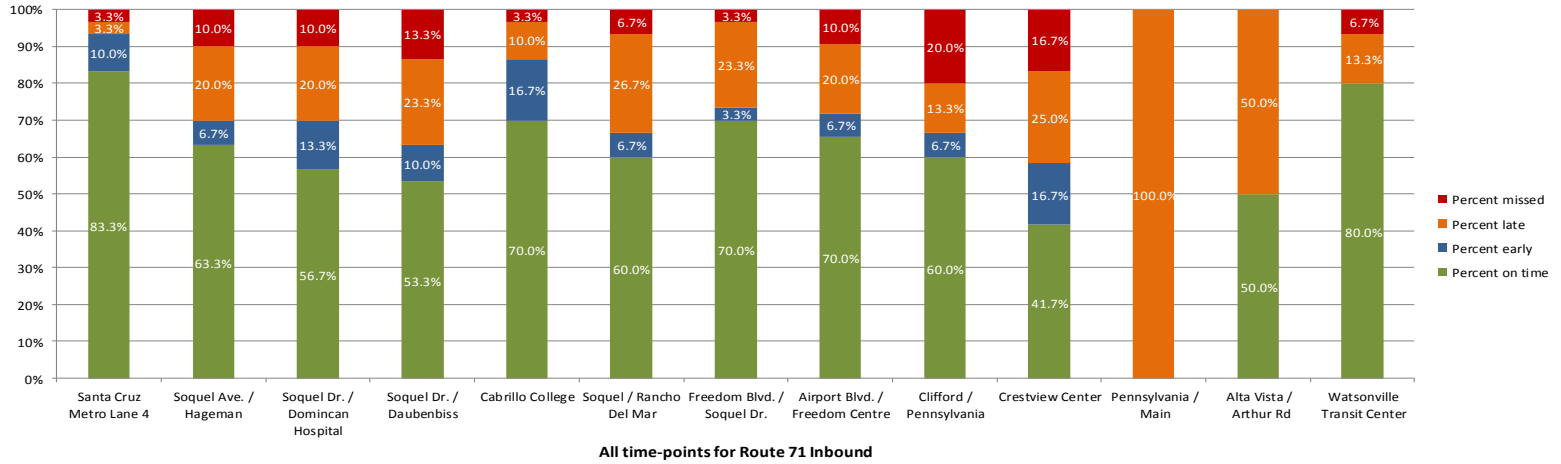
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Moore & Associates.

Exhibit 6.13 Route 71 Inbound On-Time Performance



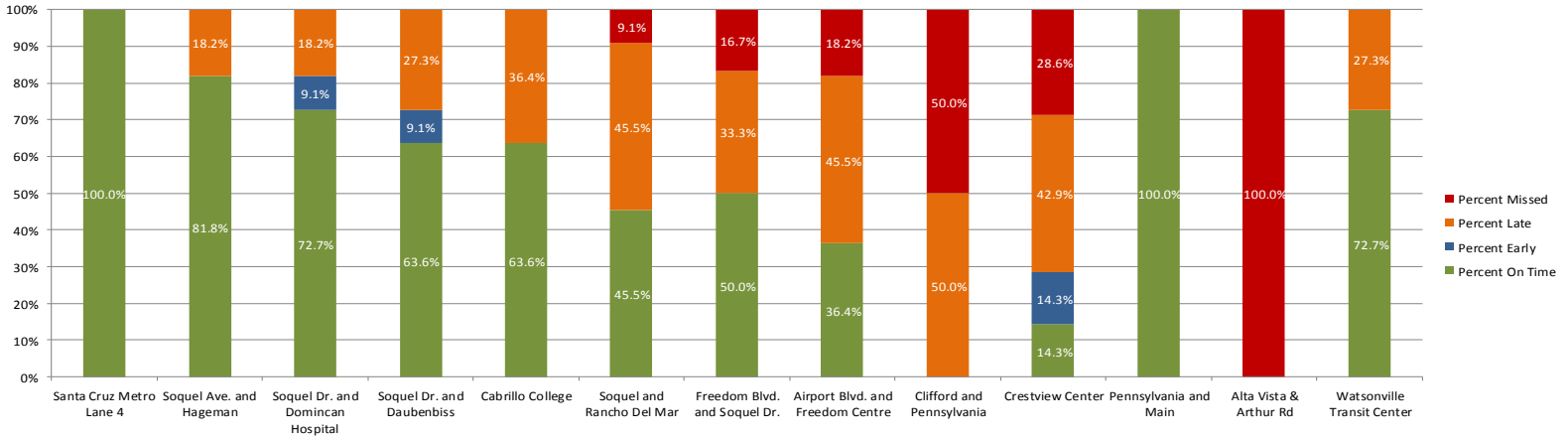
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

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



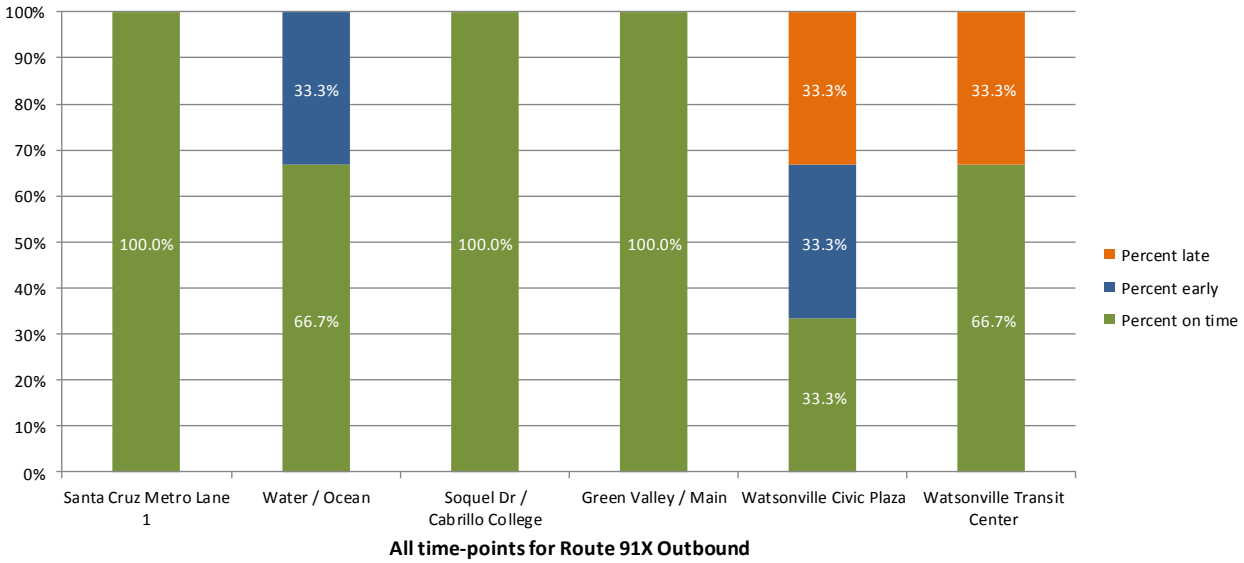
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

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.

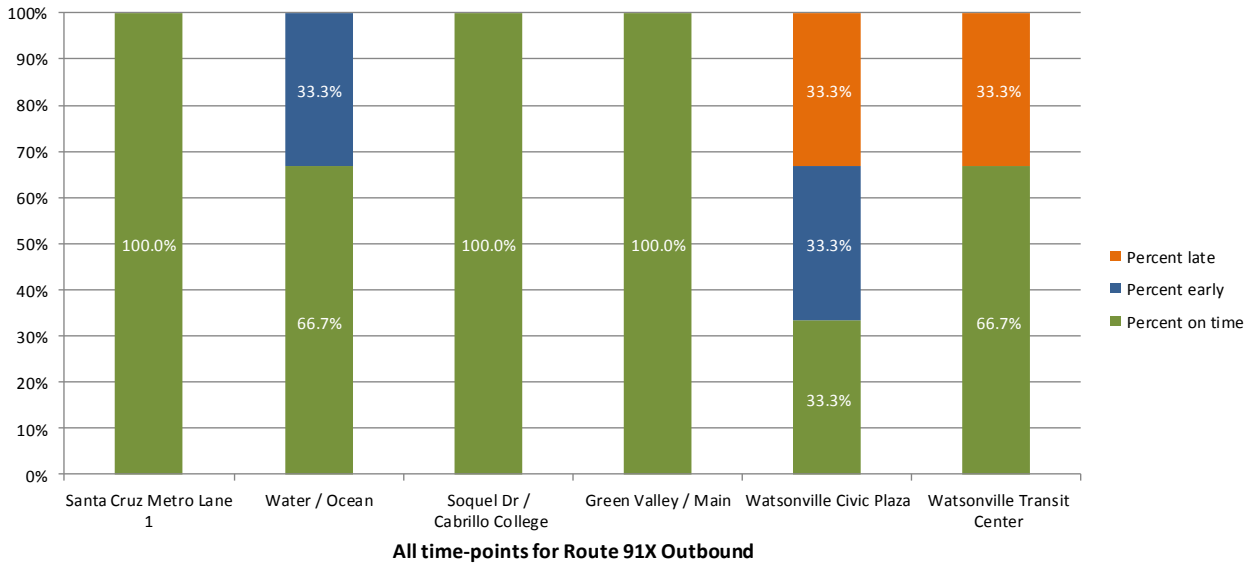
Based on customer input and discussion arising at Watsonville focus groups, we also recommend introducing an additional weekday outbound trip in the evening. This would allow customers departing Santa Cruz after 4:30 p.m. to return to Watsonville. The run would depart Santa Cruz at 5:30 p.m. and in arrive 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

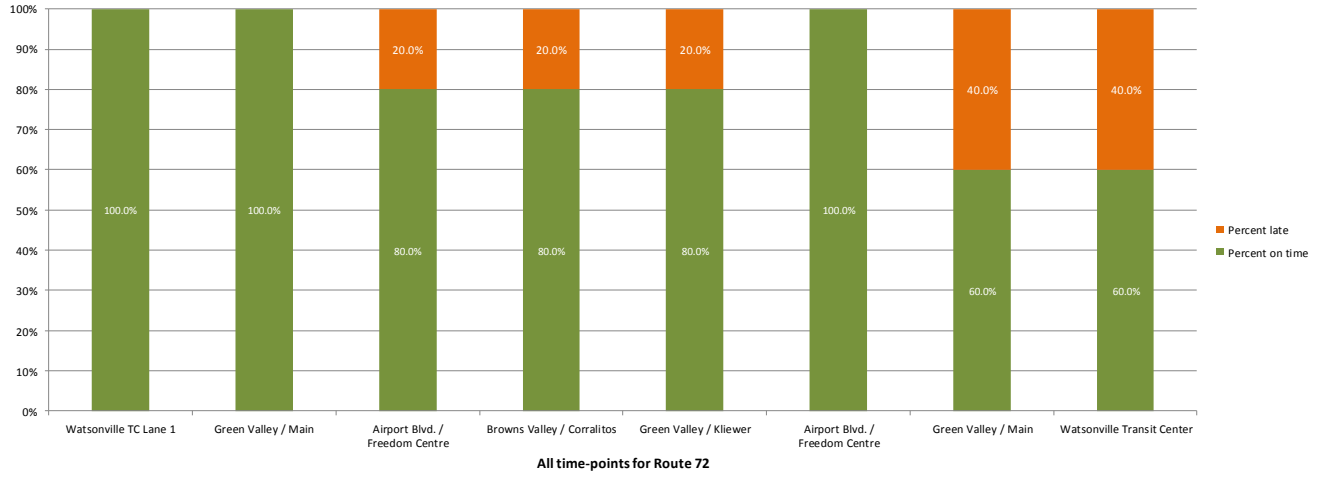


Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

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.

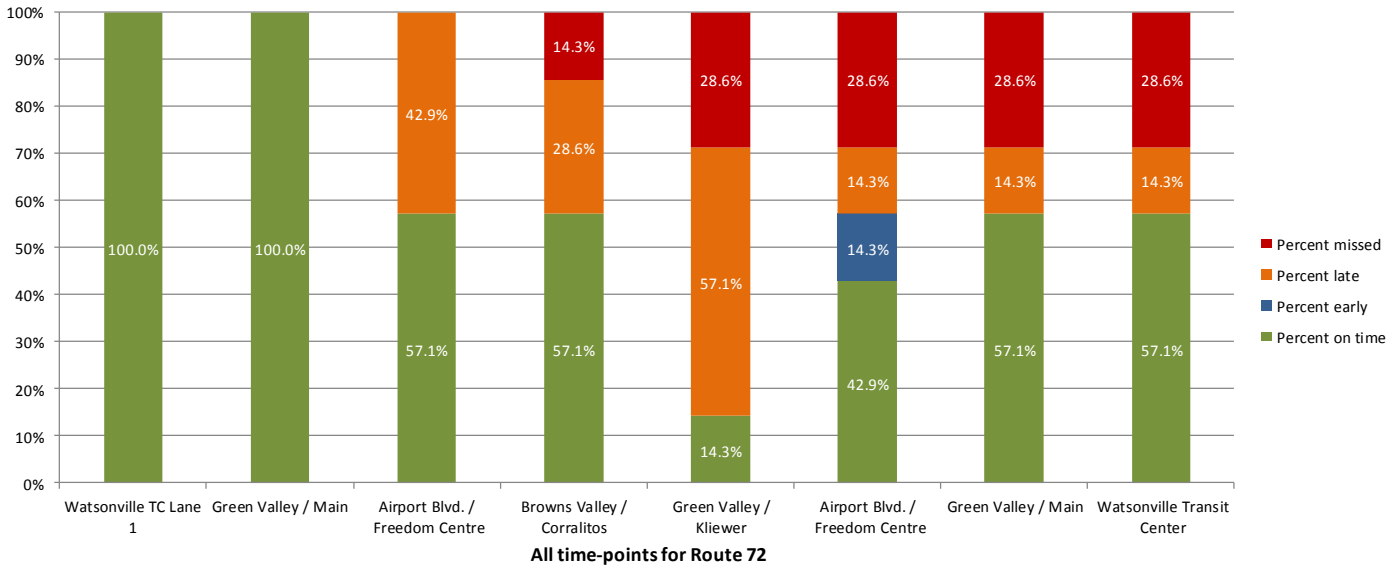
Late arrivals also occurred at the Watsonville Transit Center, largely resulting from delays during the "start of trip" segments. We recommend adjusting the schedule by a minimum of seven minutes to alleviate delays across each day-part, especially during Midday service. The following graphs represent 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

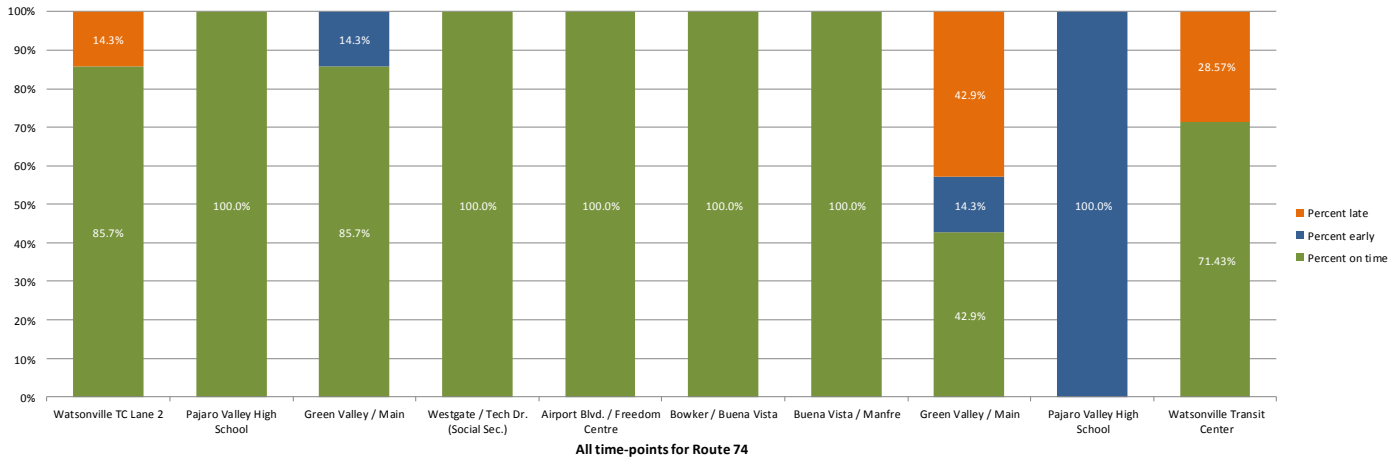


Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

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.

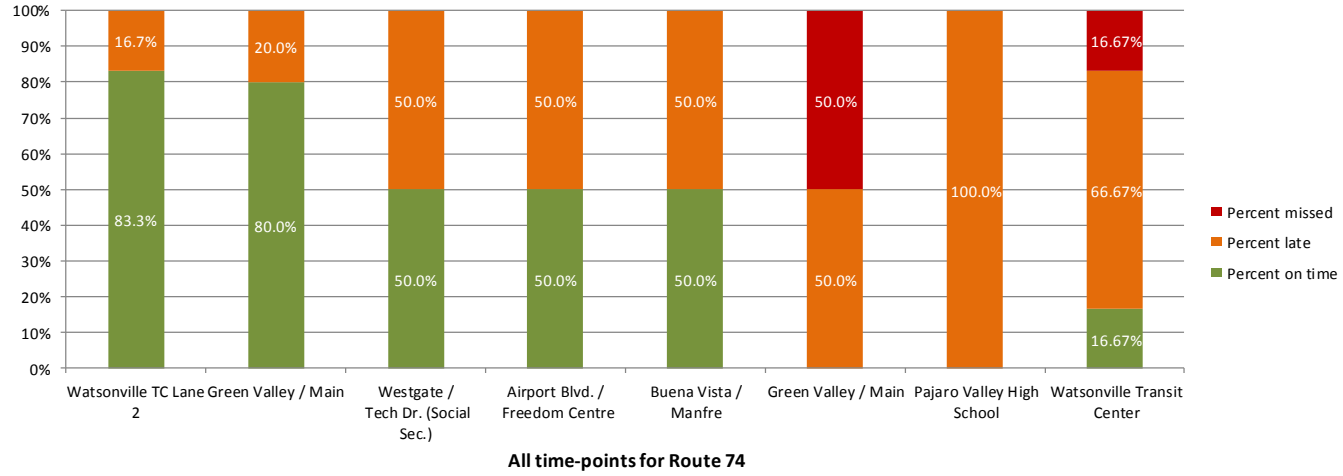
Based on the ride check data, Route 74 (see Chapter 4 – Ride Check chapter for data segregated by day-part) shows a higher propensity for late departures during Midday service, specifically at the Green Valley and Main stop (inbound to Watsonville Transit Center). Moore & Associates and Santa Cruz METRO 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



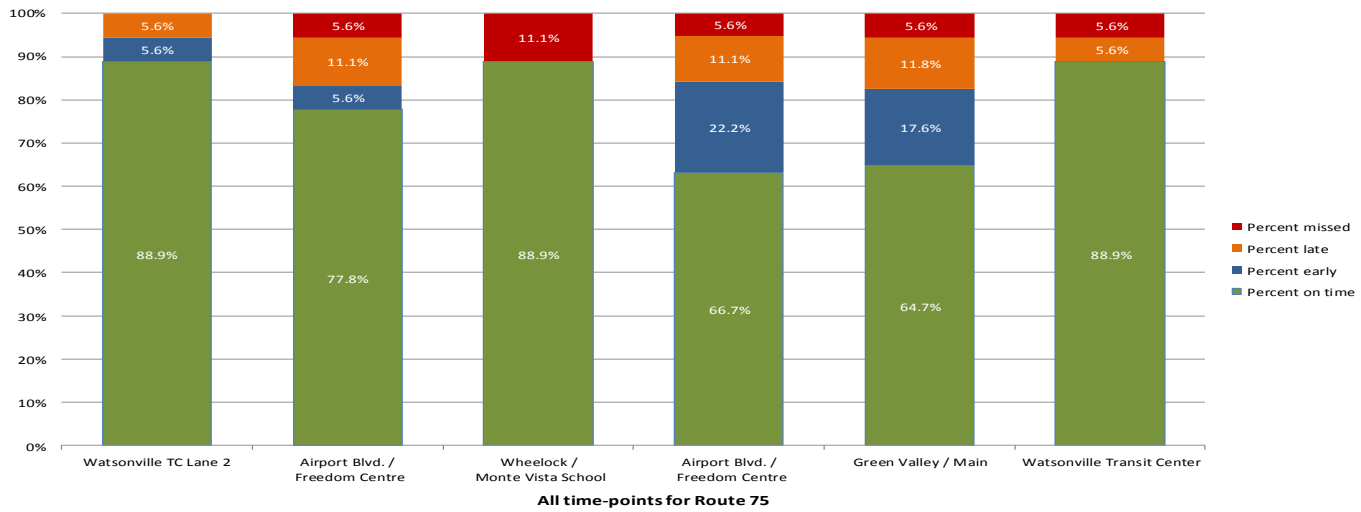
Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

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

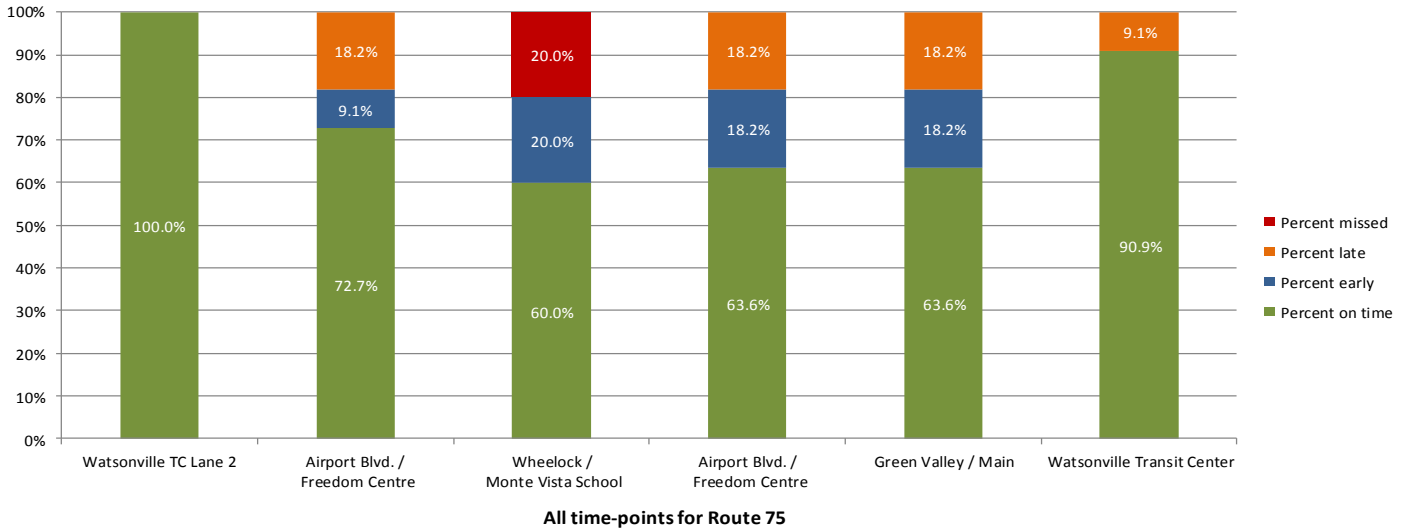
before the published schedule time (indicating possible surplus running time). Additionally, early departures/arrivals may also be the result of route interlining, as the variations in route pairings may cause variations in travel time. "Running hot" or early departures from a stop are never acceptable 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

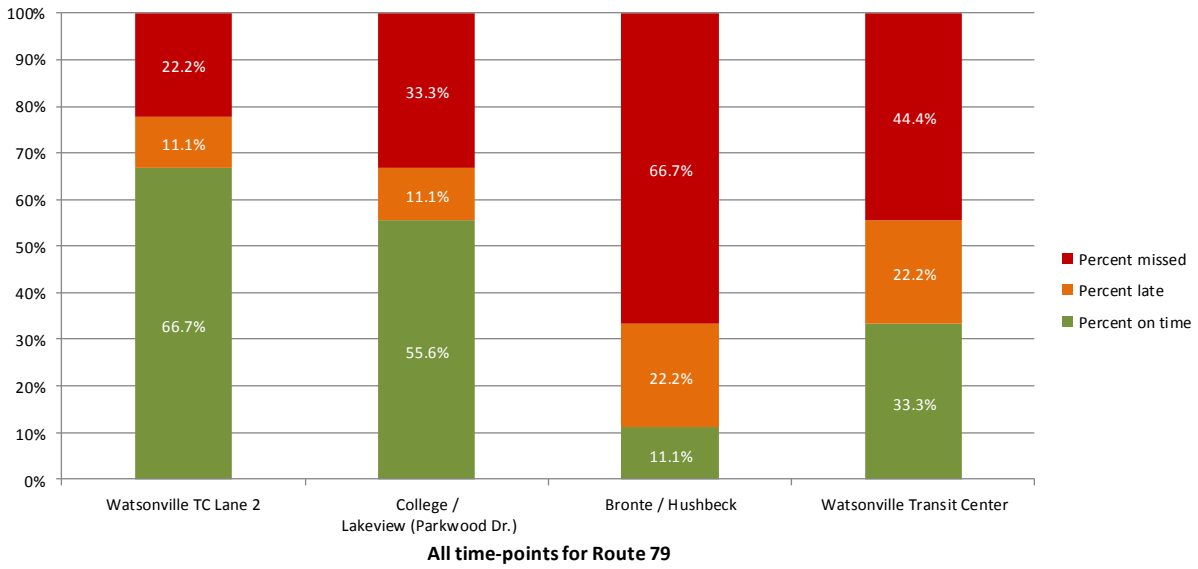


Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

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

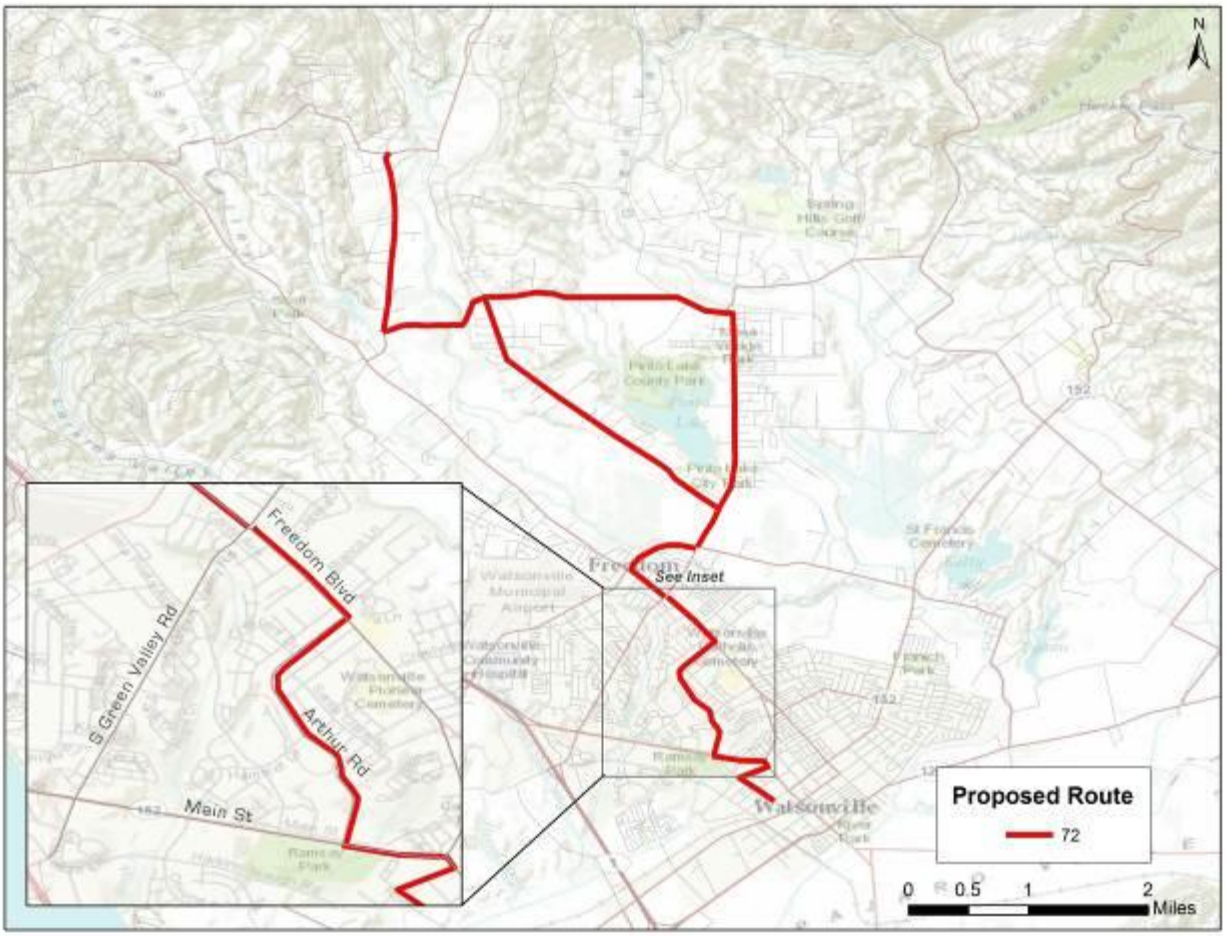


Does not reflect a 100-percent ride check sample. Chart includes only those trips surveyed by Santa Cruz METRO staff.

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

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

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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 Survellance 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

Continued on next page

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 Survellance 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.

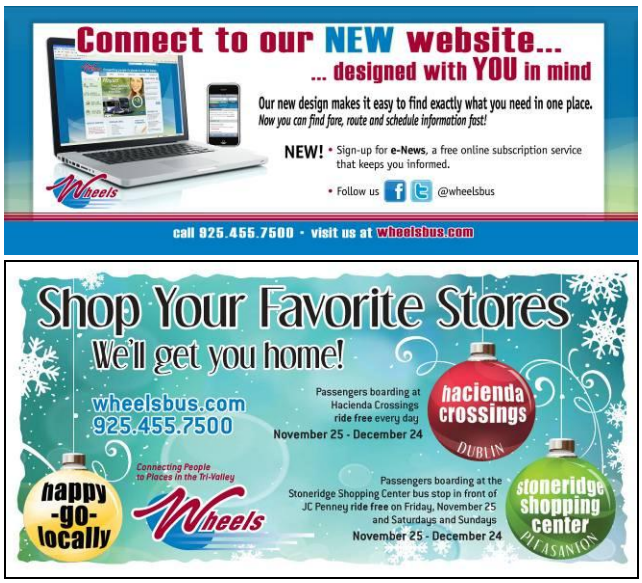
Onboard notices regarding service changes. We recommend continuing the use of car cards to communicate service changes to Santa Cruz METRO customers. The messages should clearly explain changes in a friendly and positive manner in English and Spanish. Car cards can also be used to promote the Santa Cruz 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.*

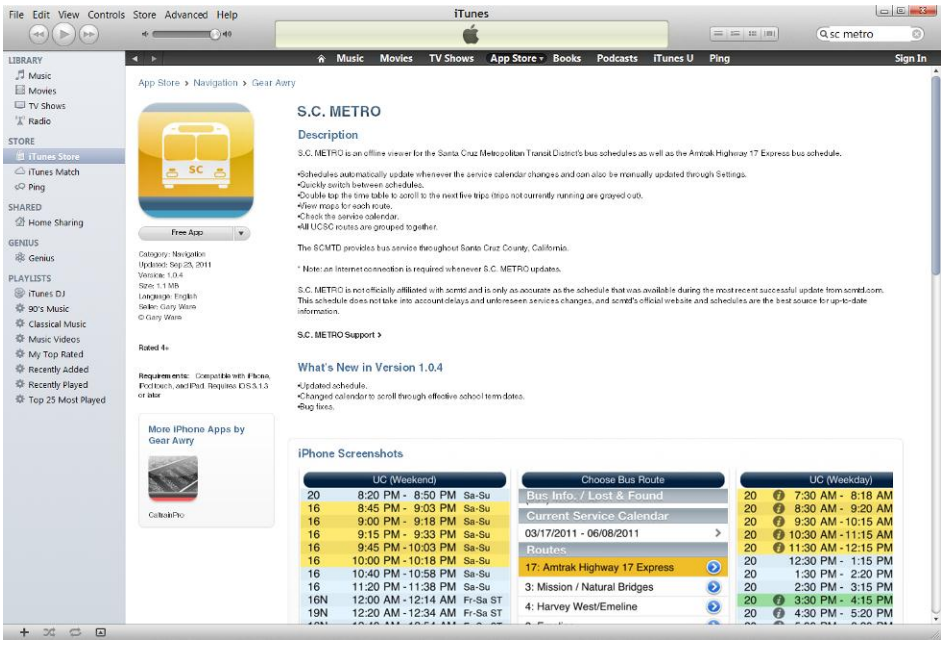
Several pages under the "Agency Information" tab indicate that information is only available in English and include a link to redirect to the English page. If the above pages cannot be translated, the agency may wish to place a similar statement on those pages and/or provide an alternative solution (i.e.,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

A

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

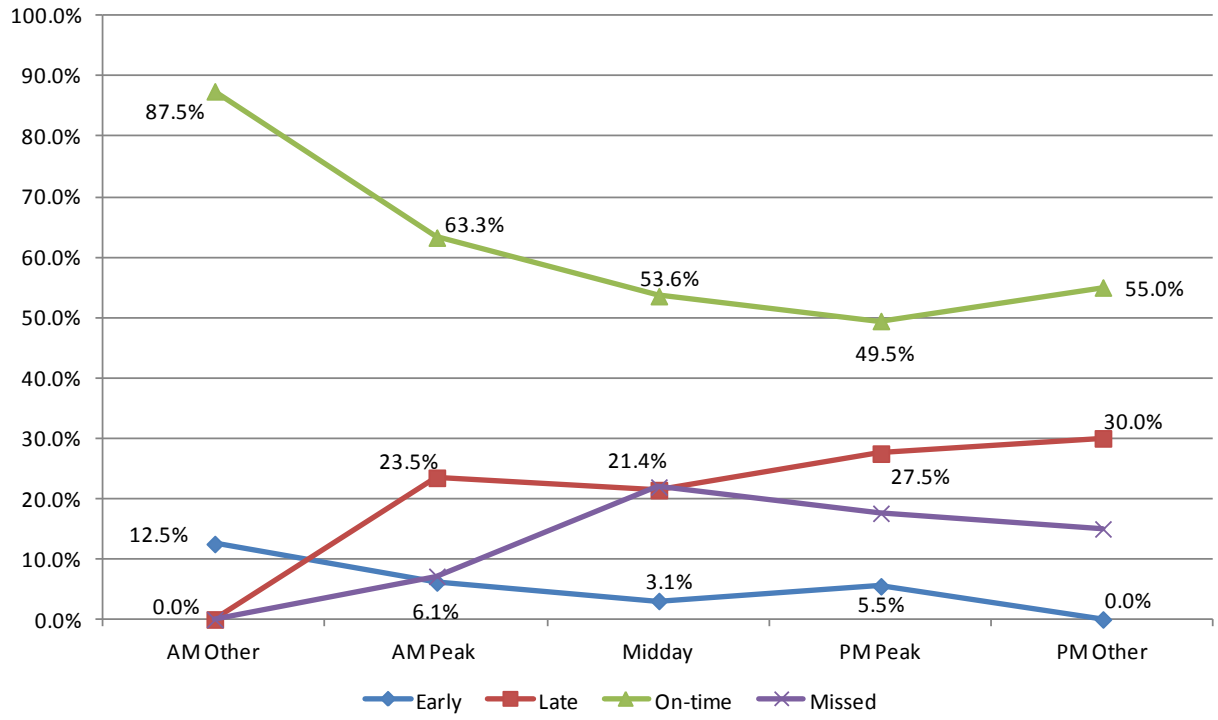
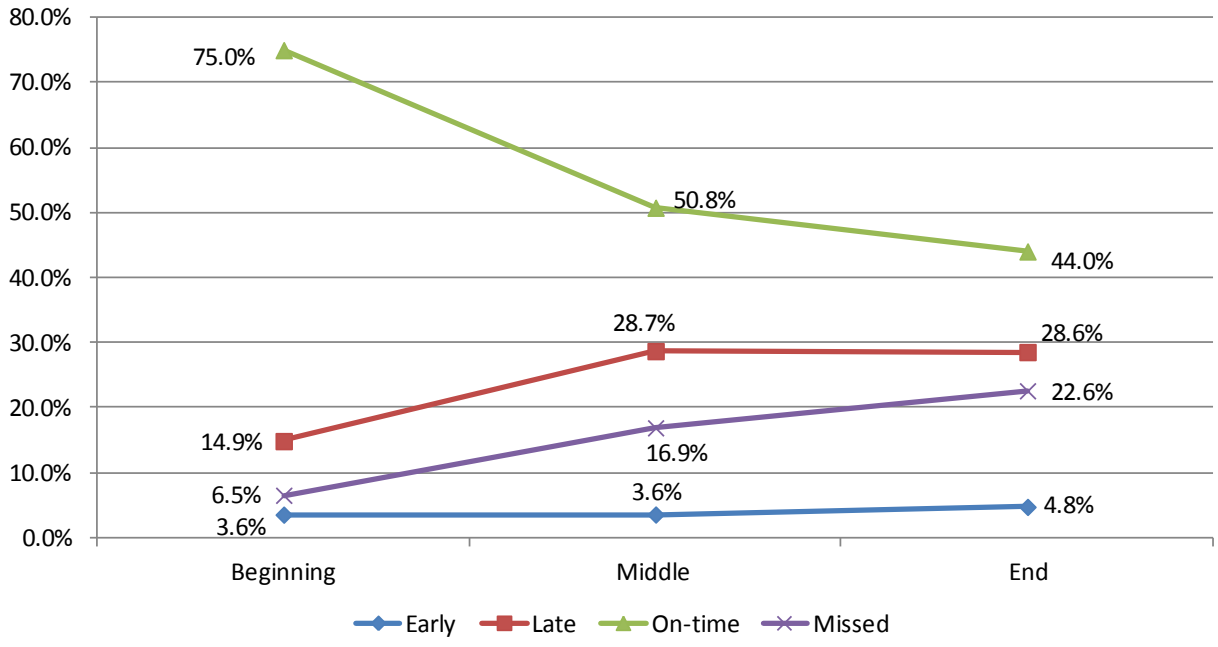


Exhibit A.2 shows the overall weekday on-time performance for the sampling of trips for Santa Cruz METRO routes serving Watsonville. As noted in the June ride checks, the on-time performance never reached the 90-percent threshold for on-time departures for the surveyed trips in the fall/winter period. 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.

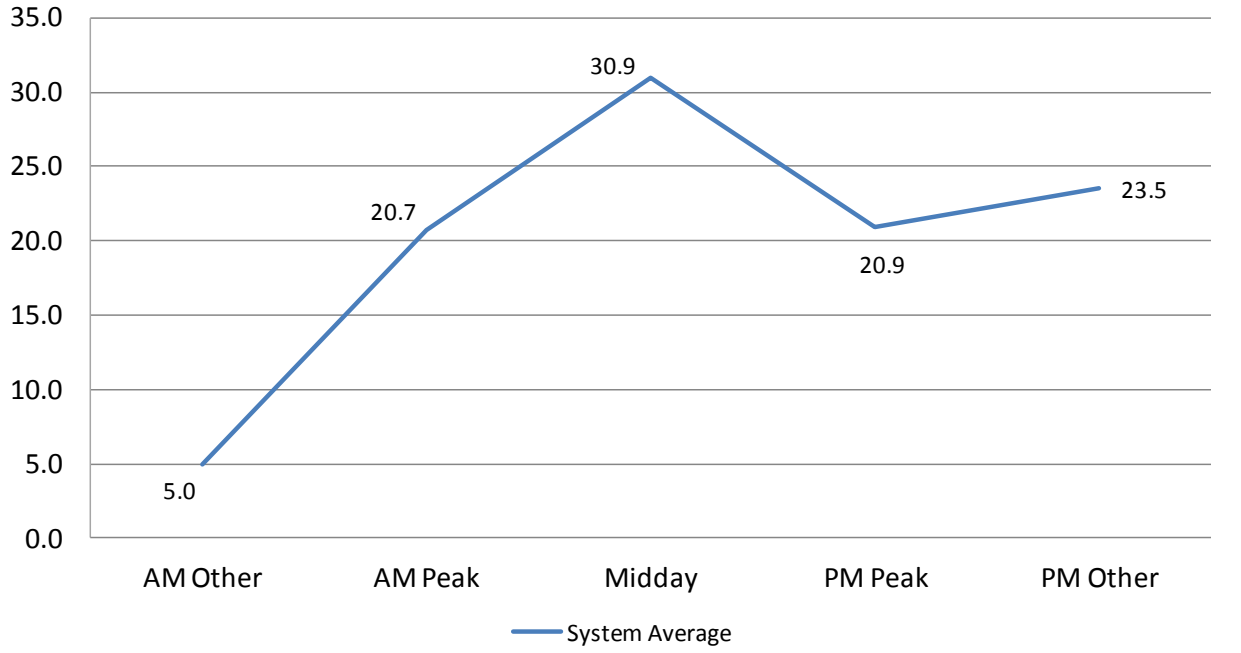
Boarding by Day-Part

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

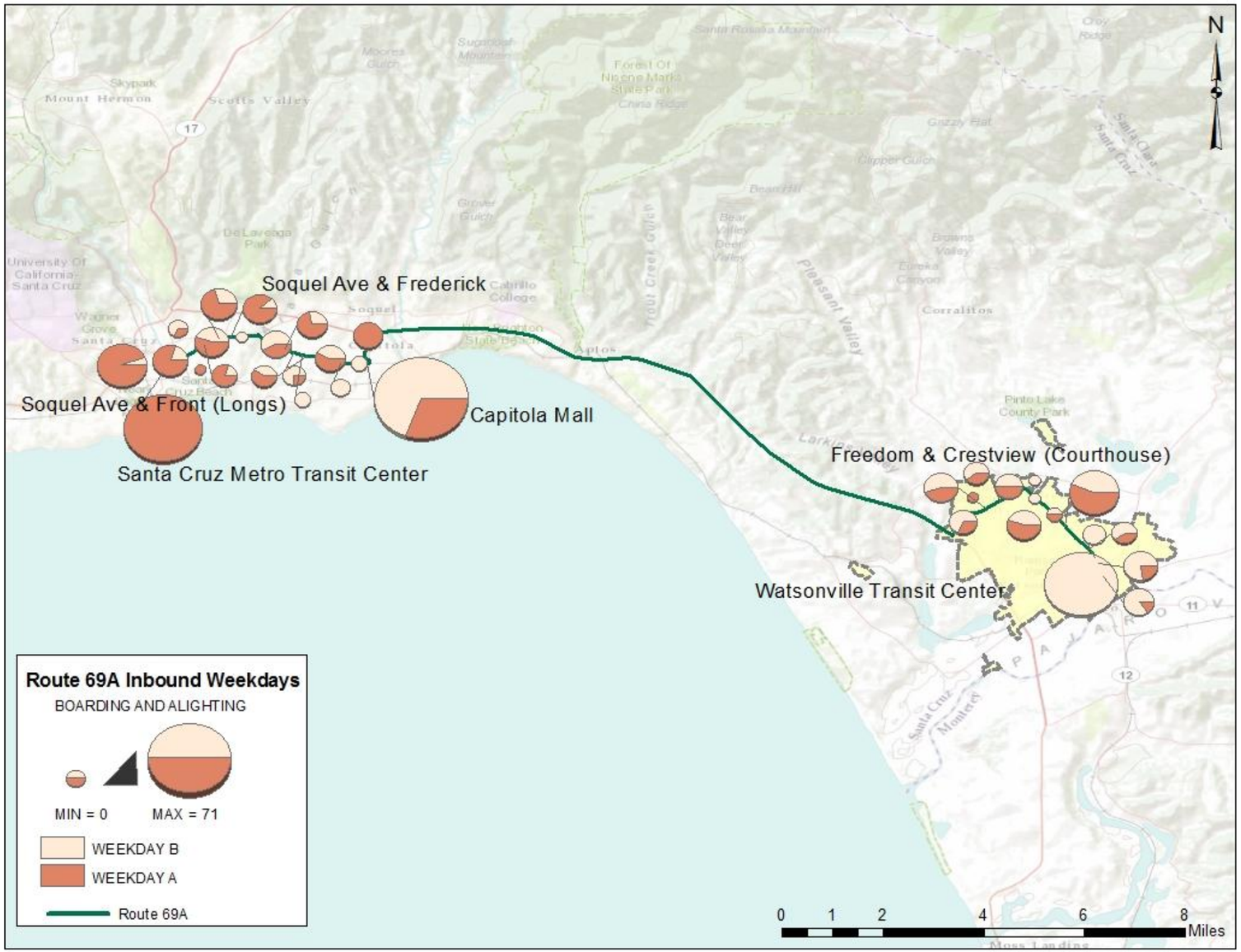
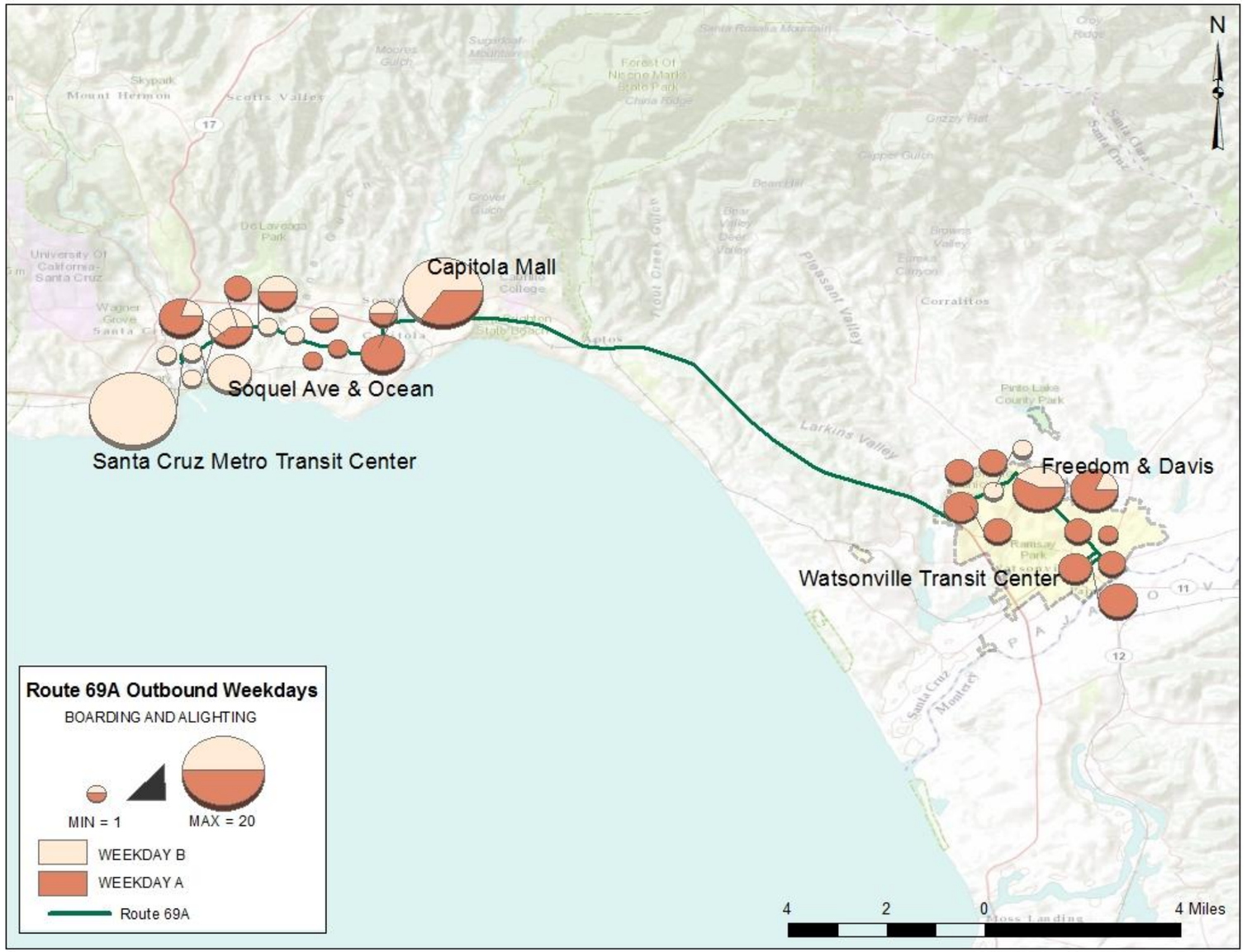


Exhibit A.13 Route 69A Outbound Passenger Boarding and Alighting by Stop



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

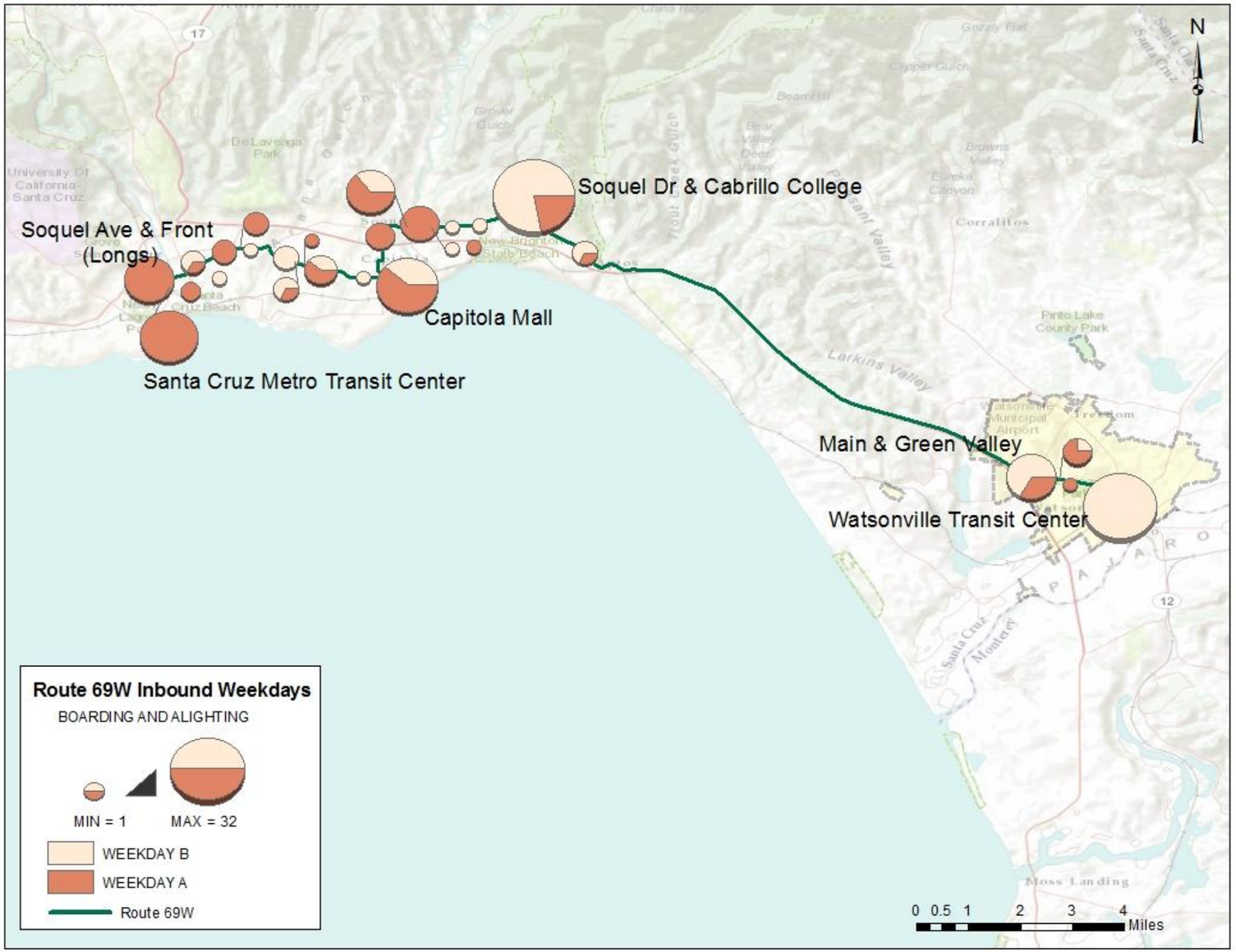
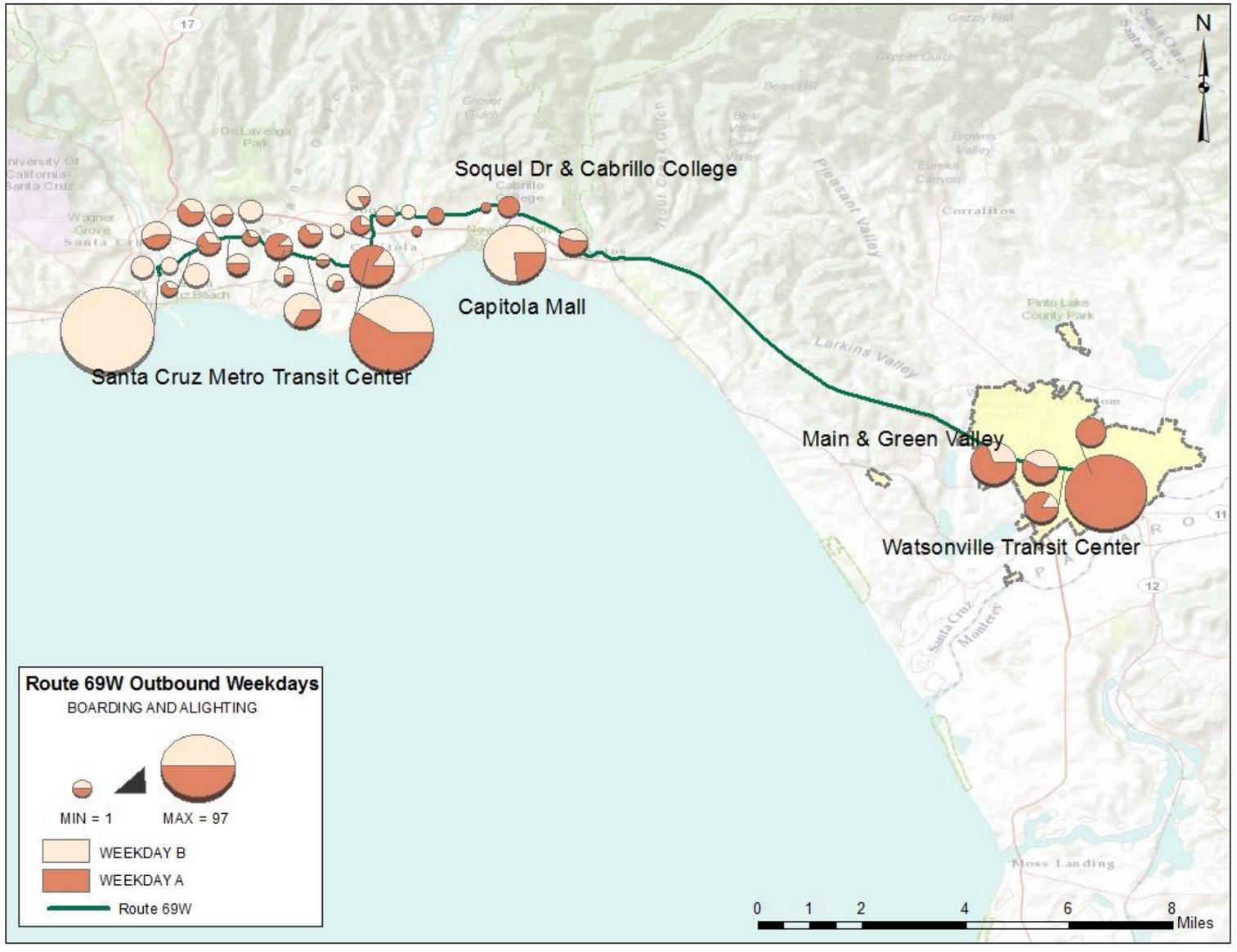


Exhibit A.19 Route 69W Outbound Passenger Boarding and Alighting by Stop



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

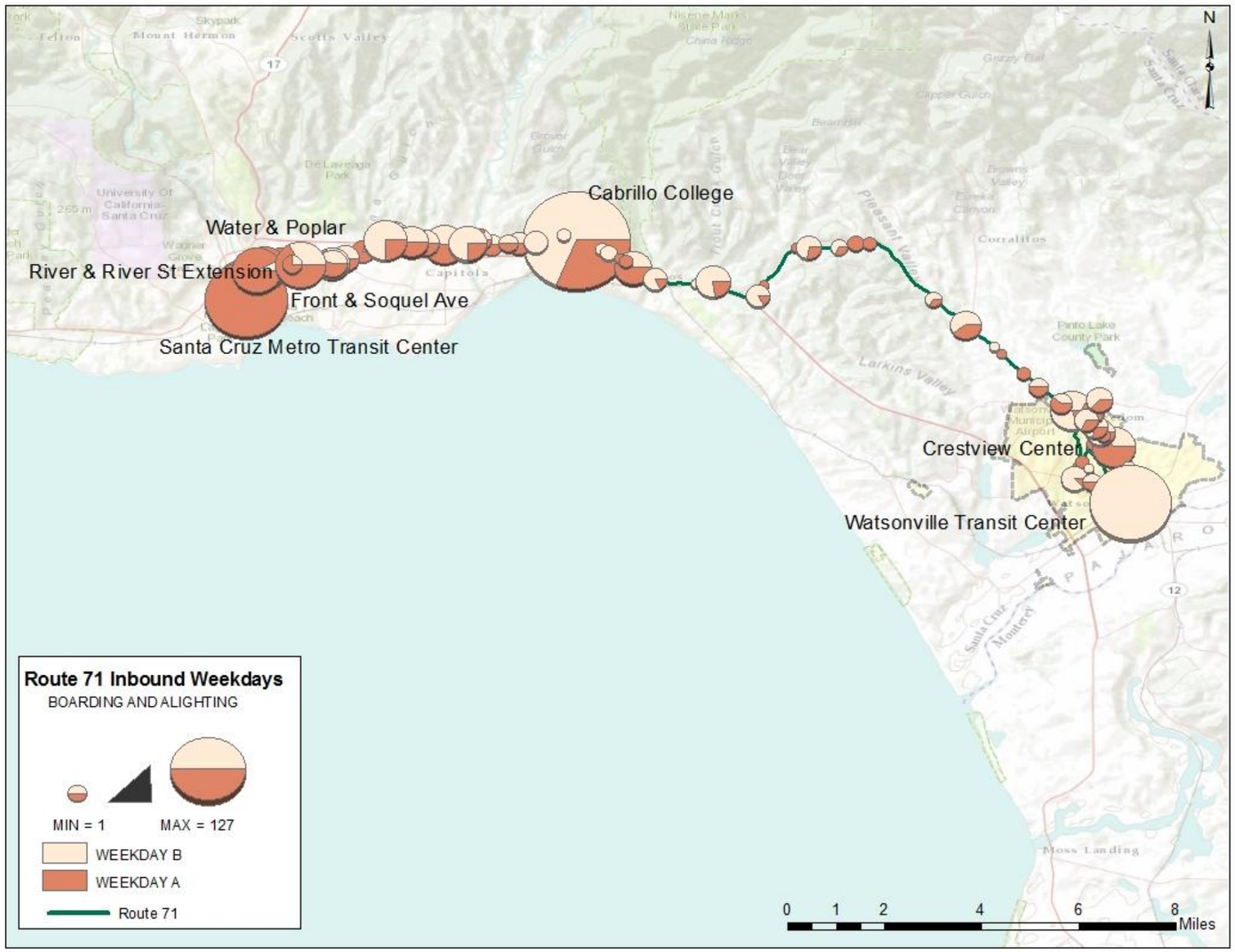


Exhibit A.25 Route 71 Outbound Passenger Boarding and Alighting by Stop

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.

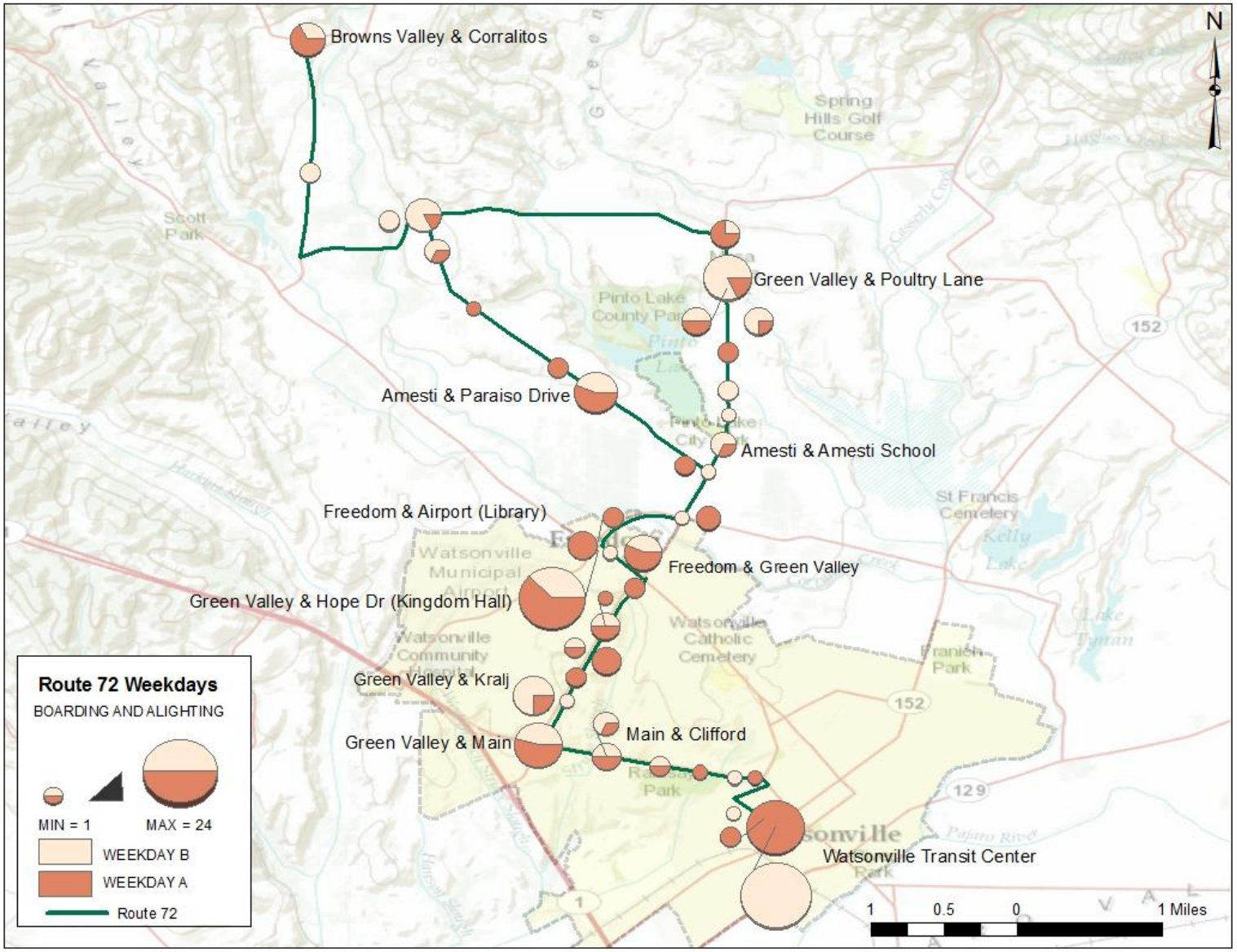
Exhibit A.26 Route 72 Top Boarding Points

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.

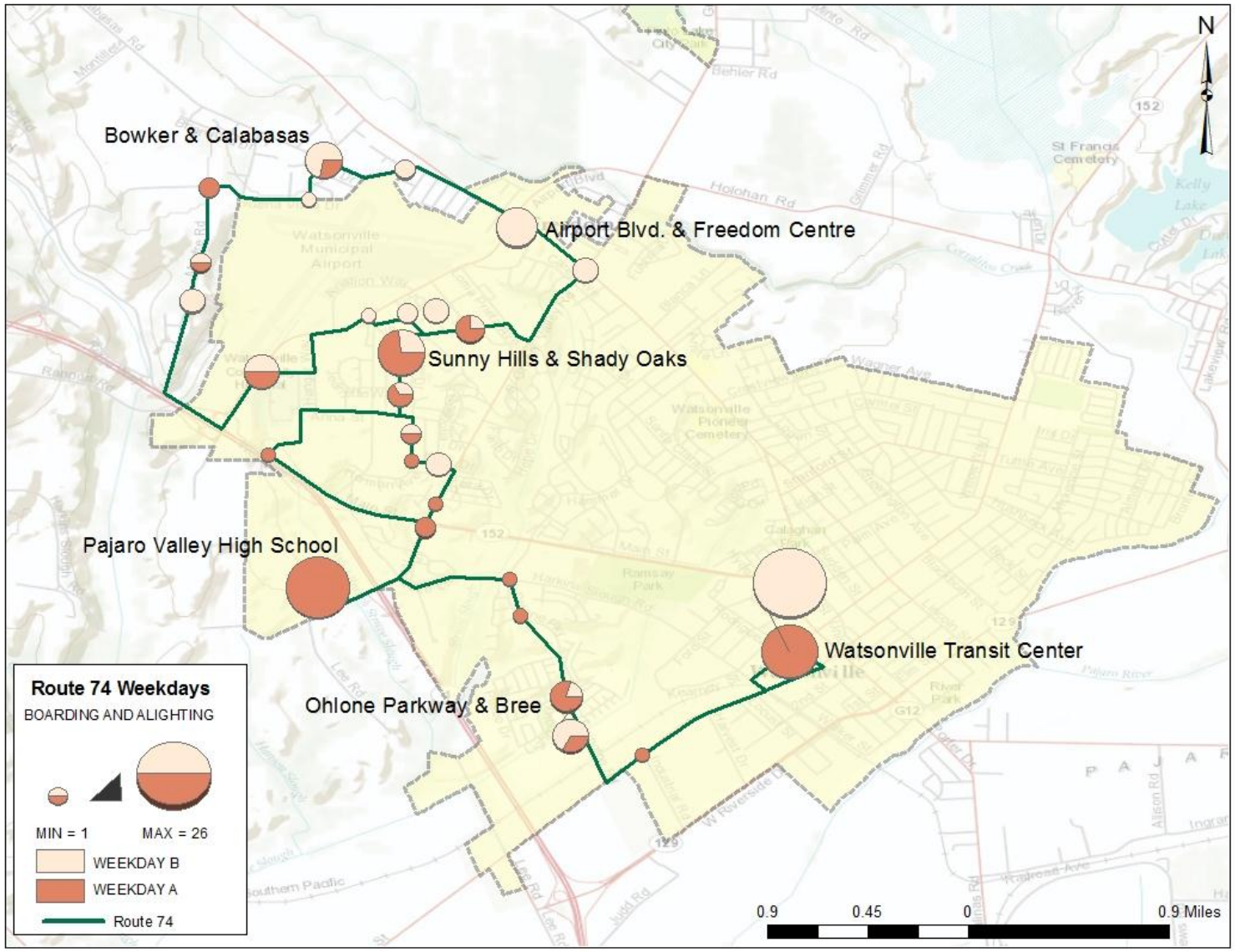
Exhibit A.29 Route 74 Top Boarding Points

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.

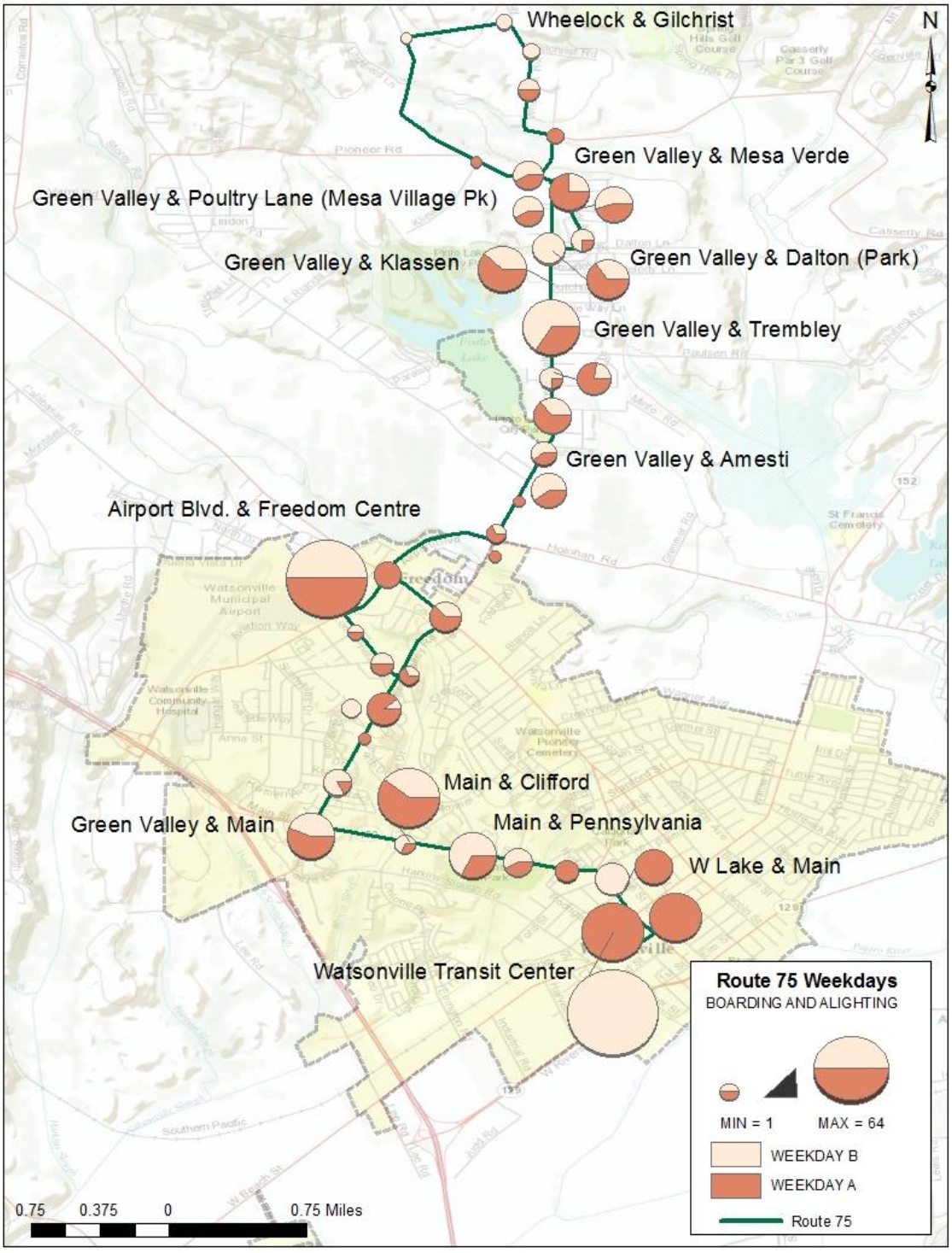
Exhibit A.32 Route 75 Weekday Top Boarding Points

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.

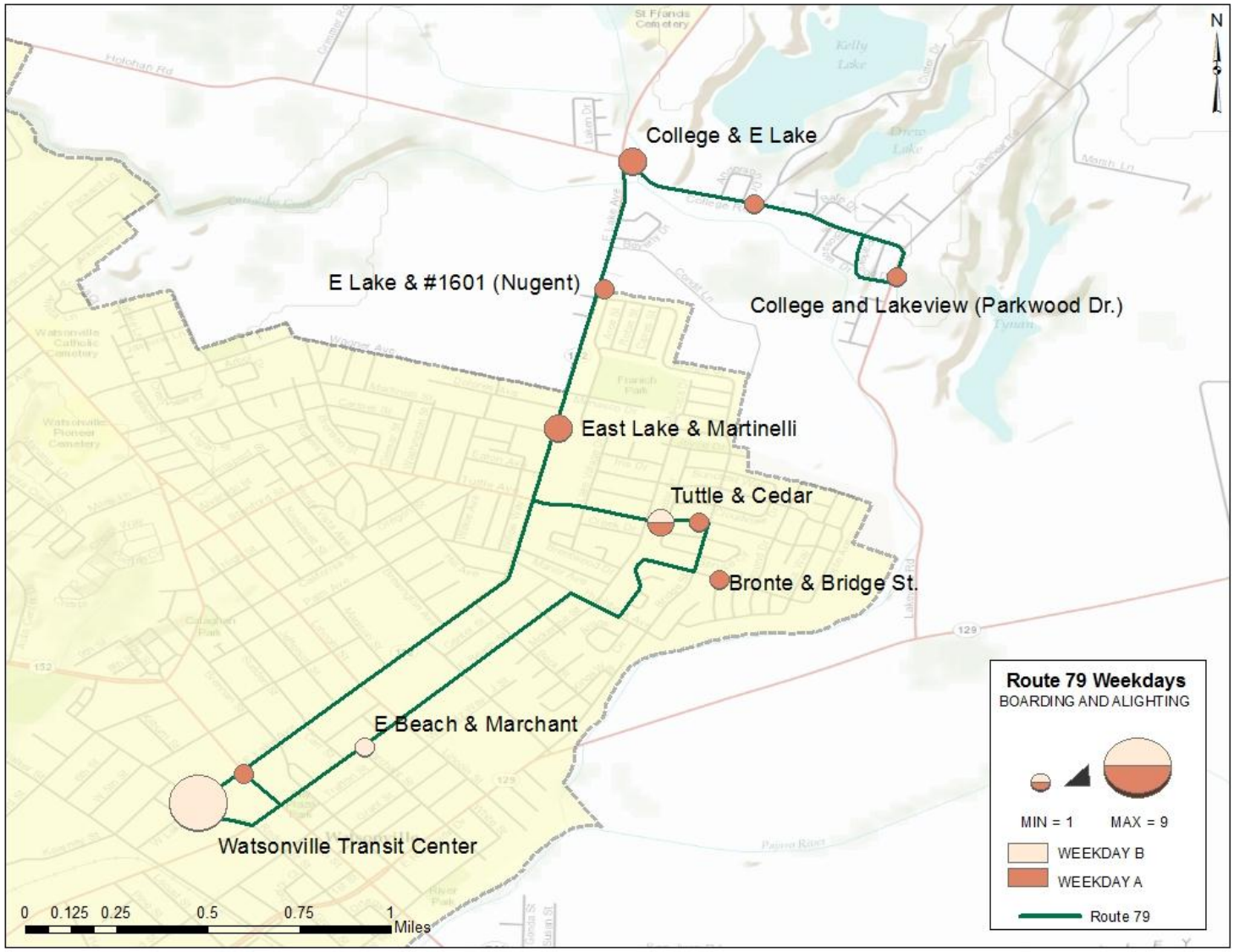
Exhibit A.35 Route 79 Top Boarding Points

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