



MONTEREY-SALINAS TRANSIT

SALINAS AREA SERVICE ANALYSIS - II

Final Report

August 2012



EXECUTIVE SUMMARY

The Salinas Area Service Analysis-II is the successor study to SASA-I, completed in 2005. That study resulted in a number of changes to Monterey-Salinas Transit (MST) service in and near the city of Salinas. Ridership increased, but starting in 2008 it declined, due to the recession but also to several rounds of service cuts made necessary by reduced funding. It is in this context that SASA-II was conceived.

The objective of SASA-II, as described in the project Request for Proposals, is:

... to evaluate how well MST's bus services in and around the Salinas area are meeting passenger demand with regards to on-time performance, safety and convenience; to examine present and anticipated development and travel patterns; and to subsequently propose a series of new and adjusted bus routes that would better serve existing and future public transit customers as well as increase overall ridership.

SASA-II was initiated in December 2011. A draft Existing Conditions Technical Memorandum was delivered in March 2012, a draft Service Plan Memorandum in April, and a draft Final Report incorporating revised versions of both in June. This Final Report represents the study's completion. The MST Board of Directors has approved service changes based on the recommendations in this report, and implementation is scheduled for September 2012.

A brief summary of the recommendations of this Report follows.

RECOMMENDED SERVICE PLAN

These recommendations were developed after examining existing route performance, existing travel patterns, demographics, and outreach data. Through discussions with MST staff, a recommended service plan was then developed. The plan seeks to achieve the following objectives:

- Cost-effective deployment of resources
- Financial sustainability
- Access to key destinations
- Simplified service

Major recommendations are described in detail in Chapter 3, and summarized in Figure ES-1. While it was not an original goal of the study, the recommendations would reduce operating costs.

In addition to reducing costs, a number of improvements would be made, including those identified in Figure ES-1 as well as establishment of a weekend service pattern similar to the weekday pattern. Service in the East Salinas, in particular, would be simplified, as the route structure would be identical on weekdays and weekends, and one-seat rides (no transfers) would be possible from East Salinas to both the Harden Ranch Walmart and Westridge Walmart.

A map of the proposed weekday service (excluding military routes and commuter routes) is shown in Figure ES-2 on the following page.

Figure ES-1 Summary of Major Recommendations

Route	Recommendation
41	Extend to Harden Ranch Plaza Walmart via loop using Boronda
42	Eliminate; Route 47 will provide additional service on East Alisal Street, Route 48 will provide new service between Natividad Medical Center and East Salinas
43	Eliminate E San Joaquin/Pajaro diversion; restore 30-minute service along entire route; eliminate route deviations
44	Restore weekday service to Northridge Mall; interline with Route 45
45	Restore hourly headways; add mid-day short turn service; interline with Route 44
46	Replace Route 46 with revised Route 48 service
47	Establish new service between Hartnell campuses via Alisal Street
48	Realign to operate between Salinas Transit Center, Natividad Medical Center, and One-Stop Career Center
49	Add mid-day trips
20	Make adjustments to diversions
21	Eliminate; Route 68 to take place in afternoon
23	Eliminate some diversions
25	Realign to operate more directly between Salinas Transit Center and California State University, Monterey Bay; eliminate Marina segment; establish new route between CSUMB East and main campuses
28	No changes
29	No changes

Figure ES-2 Proposed Weekday System Map (Salinas Only)



SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figures ES-3 and ES-4 show proposed service spans and typical headways for each route.

Figure ES-3 Proposed Span of Service

Route	Monday-Friday	Saturday	Sunday
	Span	Span	Span
41	5:25 am – 11:14 pm	6:15 am – 10:38 pm	7:10 am – 7:09 pm
43	6:45 am – 6:11 pm	--	--
44	6:15 am – 7:10 pm	9:15 am – 7:10 pm	9:15 am – 7:10 pm
45	6:35 am – 7:10 pm	9:15 am – 7:10 pm	9:15 am – 7:10 pm
47	6:53 am – 6:52 pm	--	--
48	6:45 am – 6:39 pm	--	--
49	6:15 am – 10:02 pm	6:15 am – 10:02 pm	6:15 am – 10:02 pm
20	5:08 am – 12:05 pm	5:45 am – 12:03 pm	6:15 am – 9:07 pm
23	5:23 am – 8:58 pm	7:55 am – 9:02 pm	7:55 am – 9:02 pm
25	6:15 am – 10:09 pm	--	--
CSUMB Shuttle	6:30 am – 10:27 pm	--	--
28	6 am – 10:40 pm	6 am – 10:40 pm	6:45 am – 8 pm
29	5:34 am – 8:39 pm	5:34 am – 8:39 pm	5:34 am – 8:39 pm

Figure ES-4 Proposed Frequency of Service (Minutes)

Route	Monday-Friday		Saturday		Sunday	
	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak
41	30	30	20	30	20	30
43	30	30	--	--	--	--
44	60	60	60	60	60	60
45	60	30-60	60	60	60	60
47	60	60	--	--	--	--
48	60	60	--	--	--	--
49	60	30-60	60	60	60	60
20	30	30-60	60	60	60	60
23	60	60-120	60	60-180	60	60-180
25	60	60	--	--	--	--
CSUMB Shuttle	30	30	--	--	--	--
28	60	120	60	120	60	120
29	60	120	60	120		120

Figure ES-5 shows estimated annual operating costs for MST service in the Salinas area under the schedule changes implemented in April 2012. Note that the revenue hours shown here vary somewhat from the figures in the Existing Conditions chapter, as those were calculated for purposes of determining productivity and thus did not include layover and recovery time.

Figure ES-5 Existing Service Hours

Line	Daily Revenue Hours			Annual Revenue Hours
	Weekday	Saturday	Sunday/Holiday	
41	58.3	42.3	39.0	19,245
42	6.5	29.0	29.0	4,940
43	11.5	--	--	2,879
44	9.7	11.3	8.9	3,574
45	12.2	10.4	10.4	4,250
46	9.7	--	--	2,435
48	23.8	--	--	5,966
49	17.8	14.2	12.4	5,983
20	72.3	60.4	29.8	23,144
21	3.2	--	--	803
23	41.7	23.6	23.6	13,159
25*	31.1	--	--	6,288
28/29 interline	36.7	33.5	31.2	12,880
TOTAL All Routes	334.5	224.6	184.4	105,546

* Operates during CSUMB fall, winter and spring semesters only. Numbers of days based on the 2012-2013 schedule.

Figure ES-6 shows estimated costs for proposed service. The proposed changes should reduce operating costs on these routes by approximately 2 percent; costs to operate the Route 40-series service within Salinas would be reduced by approximately 6 percent.

Figure ES-6 Proposed Service Hours

Line	Daily Revenue Hours			Annual Revenue Hours
	Weekday	Saturday	Sunday/Holiday	
41	58.3	65.6	57.9	21,626
43	11.4	--	--	2,861
44	8.3	6.5	6.5	2,824
45	18.6	13.0	13.0	6,151
47	12.0	--	--	2,420
48	11.9	--	--	2,987
49	20.8	14.2	12.4	6,736
20	72.3	60.4	29.8	23,144
23	41.7	23.6	23.6	13,159
25*	15.9	--	--	3,212
CSUMB shuttle*	16.0	--	--	3,222
28/29 interline	36.7	33.5	31.2	12,880
TOTAL All Routes	323.9	216.8	174.4	103,369

* Assumes operation during CSUMB fall, winter and spring semesters only. Numbers of days based on the 2012-2013 schedule.

Fiscally Unconstrained Scenario

While the focus of SASA-II has been on short-term changes to make service more cost-effective, MST staff has requested that a few additional issues be explored, issues for which solutions might require additional funding. Following are a few preliminary concepts for addressing these issues (these are described in more detail in Chapter 3).

- *Service to Southeast Salinas.* If the City and MST wish to serve this area, a non-traditional transit solution should be explored, such as a taxi-voucher system. The administrative functions of such a program would be very similar to the existing senior taxi vouchers in Salinas. However, to ensure that vouchers are only used for work trip purposes, the vouchers should only be valid for trips between the industrial area and the STC.
- *Additional capacity for South County service.* MST staff members have expressed an interest in purchasing 60-foot articulated coaches to replace the 40-foot vehicles now used. Alternatively, double-decker vehicles might be suitable.
- *Reduced need to transfer/pay additional fares.* Because MST does not provide free or discounted transfers, Salinas' radial, pulse-based route network, which relies heavily on timed connections between routes, can result in riders having to pay significantly more for some trips than others. Currently, many routes are interlined, and MST staff members have indicated that passengers do not necessarily have to pay a second fare if they are not changing buses. However, under the recommendations, interlining would be reduced, as

the practice can have significant impacts on reliability. For this reason, we would urge caution in considering opportunities for additional interlining; nonetheless, because all routes operate on headways that are identical or are multiples of one another and because all routes meet at the Salinas Transit Center, it would be possible to link routes together in a variety of configurations.

- *Increased frequencies.* Based on historic service levels and ridership, the strongest candidate for additional service is Route 41. The second corridor where additional frequency might be warranted is North Main Street.

Table of Contents

	Page
Executive Summary	ES-1
Recommended Service Plan.....	ES-1
1 Introduction.....	1
2 Existing Conditions	2
Context.....	2
Agency	19
Ridership	21
Routes.....	24
Outreach.....	42
3 Recommended Service Plan.....	63
Route Recommendations	63
Recommended Operating Route Characteristics	75
Estimated Operating Costs	80
Fiscally Unconstrained Scenario.....	82
Appendix A Passenger Survey	APX-1
Appendix B Ridership Maps	APX-3
Appendix C Conceptual Schedules	APX-32

Table of Figures

	Page
Figure ES-1 Summary of Major Recommendations	ES-2
Figure ES-2 Proposed Weekday System Map (Salinas Only)	ES-3
Figure ES-3 Proposed Span of Service	ES-4
Figure ES-4 Proposed Frequency of Service (Minutes)	ES-4
Figure ES-5 Existing Service Hours	ES-5
Figure ES-6 Proposed Service Hours.....	ES-6
Figure 2-1 Zoning Map.....	4
Figure 2-2 Walk Times to MST Bus Stops	5
Figure 2-3 Salinas Population Density.....	7
Figure 2-4 Salinas Employment Density	8
Figure 2-5 Northern Monterey County Employment Density.....	9
Figure 2-6 Salinas Households Below Poverty Level.....	10
Figure 2-7 Salinas Households without Vehicles	11
Figure 2-8 Salinas Renter-Occupied Housing Units.....	12
Figure 2-9 Salinas Percentages of Seniors.....	13
Figure 2-10 Salinas Percentages of College-Age Persons.....	14
Figure 2-11 Commute Mode Share	15
Figure 2-12 Locations of Salinas Residents' Workplaces.....	16
Figure 2-13 MST Fare Structure	19
Figure 2-14 Boardings by Route, October 2011	21
Figure 2-15 Boardings per Hour by Route, October 2011	22
Figure 2-16 Boardings per Mile by Route, October 2011	22
Figure 2-17 Weekday Boardings per Hour by Route and Time Period, October 15-November 15, 2011	23
Figure 2-18 Revenue Service Hours by Route, October 2011	25
Figure 2-19 Revenue Service Miles by Route, October 2011	26
Figure 2-20 Schedule Adherence by Route, October 2011	26
Figure 2-21 Average Speed (Miles per Hour) by Route, October 2011	27
Figure 2-22 Numbers of MST Passenger Survey Responses	42
Figure 2-23 Q2: How did you get to the bus when you started your trip?	43
Figure 2-24 Q4: How will you get to the end of this trip?	43
Figure 2-25 Transfer Matrix	44
Figure 2-26 Detailed Transfer Matrix	45
Figure 2-27 Q3.3: And how long did you wait for this bus? minutes.....	46
Figure 2-28 Q6: What is your main trip purpose (either coming from or going to)?	46
Figure 2-29 Q8: Does Monterey-Salinas Transit serve the right areas in Salinas?.....	47
Figure 2-30 Q9: Does Monterey-Salinas Transit provide the right amount of service in Salinas?.....	47
Figure 2-31 Q11: How satisfied are you with the service on this route?.....	48
Figure 2-32 Q10: Please rank the following potential service improvements, in terms of the relative importance to you. Rank from 1 (most important) to 10 (least important)...	49
Figure 2-33 Q12: Since MST service was changed in September, do you think it has gotten better, worse, or remained about the same?.....	52

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figure 2-34	Q13: If the September service changes affected your usual travel patterns, how? (Check all that apply.)	53
Figure 3-1	Recommended Route 41 Alignment	63
Figure 3-2	Recommended Route 43 Alignment	65
Figure 3-3	Recommended Route 44 Alignment	66
Figure 3-4	Recommended Route 45 Alignment	67
Figure 3-5	Recommended Route 47 Alignment	68
Figure 3-6	Recommended Route 48 Alignment	69
Figure 3-7	Recommended Route 49 Alignment	70
Figure 3-8	Recommended Route 20 Alignment	71
Figure 3-9	Recommended Route 23 Alignment	72
Figure 3-10	Recommended Route 25 Alignment	73
Figure 3-11	Alternate Route 25 Alignment.....	74
Figure 3-12	Summary of Major Recommendations	75
Figure 3-13	Vehicles Required for Weekday Operation.....	76
Figure 3-14	Proposed Weekday System Map (Salinas Only).....	77
Figure 3-15	Proposed Span of Service	78
Figure 3-16	Proposed Frequency of Service (Minutes)	79
Figure 3-17	Existing Service Hours	80
Figure 3-18	Proposed Service Hours.....	81
Figure A-1	English Survey	APX-1
Figure A-2	Spanish Survey	APX-2
Figure B-1	Route 41 Ridership Map (Southbound)	APX-4
Figure B-2	Route 41 Ridership Map (Northbound)	APX-5
Figure B-3	Route 42 Ridership Map (Eastbound).....	APX-6
Figure B-4	Route 42 Ridership Map (Westbound).....	APX-7
Figure B-5	Route 43 Ridership Map (Northbound)	APX-8
Figure B-6	Route 43 Ridership Map (Southbound)	APX-9
Figure B-7	Route 44 Ridership Map (Southbound)	APX-10
Figure B-8	Route 44 Ridership Map (Northbound)	APX-11
Figure B-9	Route 45 Ridership Map (Southbound)	APX-12
Figure B-10	Route 45 Ridership Map (Northbound)	APX-13
Figure B-11	Route 46 Ridership Map (Southbound)	APX-14
Figure B-12	Route 46 Ridership Map (Northbound)	APX-15
Figure B-13	Route 48 Ridership Map (Eastbound).....	APX-16
Figure B-14	Route 48 Ridership Map (Westbound).....	APX-17
Figure B-15	Route 49 Ridership Map (Southbound)	APX-18
Figure B-16	Route 49 Ridership Map (Northbound)	APX-19
Figure B-17	Route 20 Ridership Map (Eastbound).....	APX-20
Figure B-18	Route 20 Ridership Map (Westbound).....	APX-21
Figure B-19	Route 21 Ridership Map (Eastbound).....	APX-22
Figure B-20	Route 21 Ridership Map (Westbound).....	APX-23
Figure B-21	Route 23 Ridership Map (Northbound)	APX-24
Figure B-22	Route 23 Ridership Map (Southbound)	APX-25
Figure B-23	Route 25 Ridership Map (Eastbound).....	APX-26

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figure B-24	Route 25 Ridership Map (Westbound).....	APX-27
Figure B-25	Route 28 Ridership Map (Southbound)	APX-28
Figure B-26	Route 28 Ridership Map (Northbound).....	APX-29
Figure B-27	Route 29 Ridership Map (Southbound)	APX-30
Figure B-28	Route 29 Ridership Map (Northbound).....	APX-31
Figure C-1	Route 41 Conceptual Schedule (Weekends).....	APX-32
Figure C-2	Route 43 Conceptual Schedule (Weekdays)	APX-34
Figure C-3	Route 44 Conceptual Schedule (Daily).....	APX-35
Figure C-4	Route 45 Conceptual Schedule (Daily).....	APX-36
Figure C-5	Route 47 Conceptual Schedule (Weekdays)	APX-37
Figure C-6	Route 48 Conceptual Schedule (Weekdays)	APX-38
Figure C-7	North Main Street Service Conceptual Schedule	APX-39
Figure C-8	Route 25 Conceptual Schedule (Weekdays)	APX-41
Figure C-9	New CSUMB Service Conceptual Schedule (Weekdays).....	APX-42

1 INTRODUCTION

The Salinas Area Service Analysis-II (SASA-II) was initiated by Monterey-Salinas Transit (MST) in late 2011. It was intended:

... to evaluate how well MST's bus services in and around the Salinas area are meeting passenger demand with regards to on-time performance, safety and convenience; to examine present and anticipated development and travel patterns; and to subsequently propose a series of new and adjusted bus routes that would better serve existing and future public transit customers as well as increase overall ridership.

SASA-II was preceded in 2005 by SASA-I. For some time after SASA-I, ridership rose, but it has declined in recent years due to the recession and service reductions. It is good transit planning practice to regularly review routes and schedules to ensure that they reflect evolving land use, demographic, and economic conditions. In this case, the conditions under which transit service operates in Salinas had changed dramatically since the previous study.

SASA-II was initiated in December 2011. A draft Existing Conditions Technical Memorandum was delivered in March 2012, a draft Service Plan Memorandum in April, and a draft Final Report incorporating revised versions of both in June. This Final Report represents the study's completion. The MST Board of Directors has approved service changes based on the recommendations in this report, and implementation is scheduled for September 2012.

2 EXISTING CONDITIONS

This chapter describes MST service in Salinas, as well as contextual conditions that have an effect on that service. The analysis summarized in this chapter served as a basis for development of the Recommended Service Plan in Chapter 3.

CONTEXT

Land Use

As of the 2010 U.S. Census, the City of Salinas had an official population of just over 150,000. This was a slight decrease from the 2000 Census¹. However, in the previous decade the city grew by close to one-third, and for many decades before the millennium, the city had been growing at a steady pace: in 1950, it had a population of about 14,000.

The City of Salinas is largely defined by postwar architecture and urban design: it is primarily auto-oriented, with a predominance of broad streets and single-family detached homes. However, Salinas is also a predominantly Latino community (as of the 2010 census, 75 percent of residents identified as Hispanic or Latino of any race) with a relatively large average household size of 3.55, 23 percent higher than the California average². The *built density* of the city, then, is not necessarily a reliable indicator of its population density. This is particularly true in the immigrant communities of East Salinas: within the 93905 zip code, where 87.6 percent of the population is of Mexican origin, the average household size is 4.84. For the City of Salinas as a whole, the average population density in 2010 was 6,490 persons per square mile.

Despite patterns of development indicative of suburban sprawl, Salinas has retained a relatively compact, well-defined form. A handful of streets form a ring around much of the city, separating homes and businesses on one side of the street from farmland on the other: East Boronda Road to the northeast, Blanco Road to the south, and Davis Road to the west. The city limits, encompassing an area of 23.2 square miles, envelop nearly the entire built area, with only the exclaves of Boronda, to the west, and Bolsa Knolls, to the north, lying just outside the city (but within its sphere of influence). This overall form has remained relatively intact since the millennium (see "City of Salinas General Plan" in the following section, "Planning and Policy").

In general, the layout of the city might be described as follows:

- Oldtown (downtown) Salinas is southwest of the city's geographic center, and just southwest of Highway 101;
- North Salinas (including the Harden Ranch and Santa Rita neighborhoods in the far north) lies east and north of Highway 101 (which enters the city near its northwestern corner, then proceeds south and southeast);
- the Creekbridge and Williams Ranch neighborhoods are in the northeast;

¹ According to the 2010 City of Salinas Consolidated Plan, the 2000 Census count incorrectly accounted for the Salinas Valley state prison population, and when adjusted, the actual population of the city at the time was approximately 144,000 – meaning that the city actually may have actually grown by about 4 percent over the decade of the 2000s.

² Communities with large numbers of immigrants, including Latino immigrants and undocumented immigrants, have historically been undercounted by the Census, suggesting that the actual population, average household size and Hispanic population of Salinas may be greater than official Census figures.

- East Salinas is due east of Oldtown;
- between Oldtown, North Salinas, the northeast and East Salinas is a large undeveloped agricultural area occupying the historic site of Carr Lake;
- Salinas Municipal Airport takes up much of the southeast;
- South Salinas is to the south and southwest of Oldtown;
- the Rossi-Rico neighborhood, Westridge Center area, Boronda neighborhood, and Salinas Auto Mall area lie just south and west of Highway 101 to the north of Oldtown; and
- an industrial and commercial corridor follows the Union Pacific/Amtrak railroad tracks, which enter the city from the west before turning southeast to parallel Highway 101.

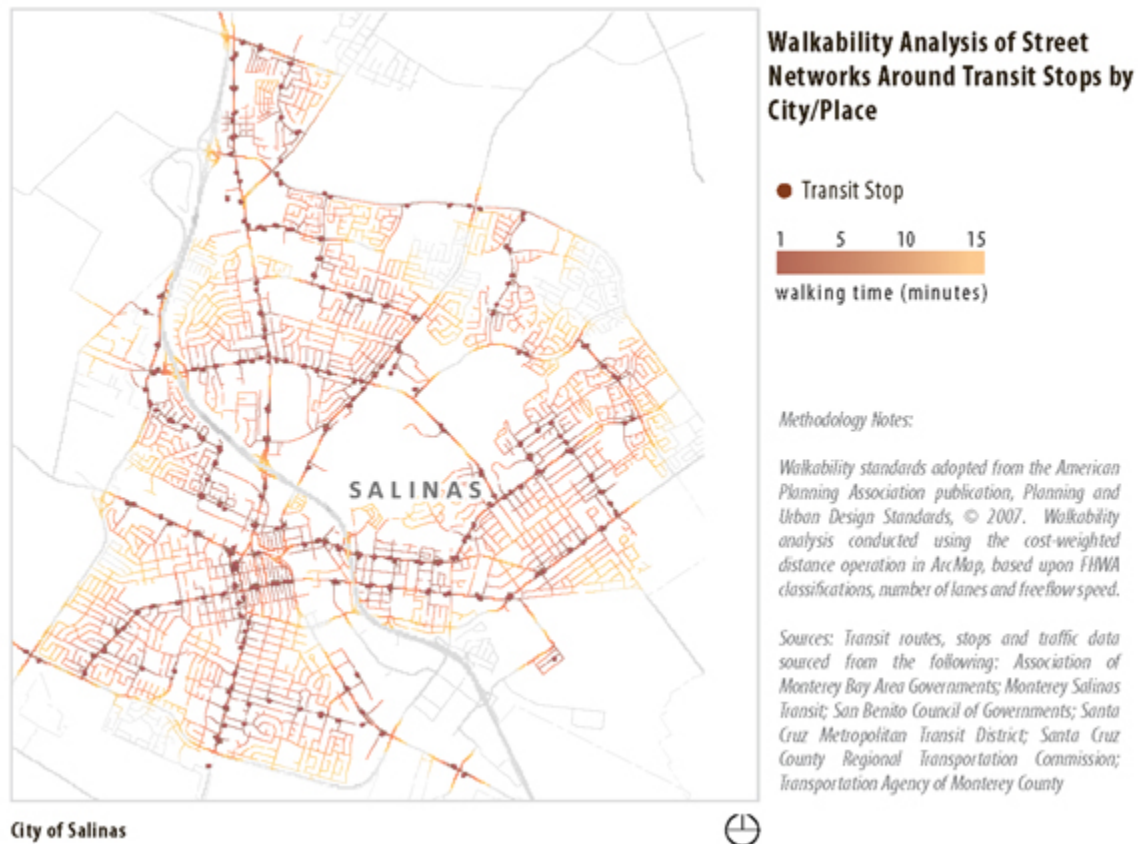
While industrial uses are largely concentrated in the corridor along the railroad tracks, residential and commercial uses are scattered throughout the city. In addition to Oldtown, which contains many office buildings as well as retail storefronts, major retail nodes can be found at and around the Northridge Mall near the city's northern edge and just east of Highway 101, and at and around the Westridge Center just west of Highway 101 between Northridge and Oldtown. There are also major retail corridors located along Main Street (both south and north of downtown) and East Alisal Street. Pockets of relatively high-density residential (defined by the Salinas General Plan as greater than 15 units per acre) can be found throughout the city.

There are also major activity nodes at Natividad Medical Center in the near northeast (between the Carr Lake area and Creekbridge), at Salinas Valley Memorial Hospital in South Salinas, and at Hartnell College just southwest of downtown. Hartnell is a community college with total enrollment of close to 10,000 (including attendees at the satellite Alisal Campus in East Salinas).

Figure 2-1 is the official zoning map for the City of Salinas. In general, yellow and brown areas are residential (darker colors denote higher densities), while commercial zones are pink and red and industrial parcels are purple. The large gray area to the north is a "New Urbanism Interim" zone; this area is further described under "City of Salinas General Plan."

Figure 2-2, excerpted from the Association of Monterey Bay Area Government's (AMBAG) Envisioning the Monterey Bay Area document, illustrates that most of the city is within a 15-minute walk of an MST bus stop³. However, there are unserved pockets in Bolsa Knolls, Creekbridge, the southeastern industrial corridor, in far South Salinas and at the Auto Mall. In some cases, locations are actually quite close to stops, but are more than 15 minutes away on foot due to indirect paths or barriers (such as Gabilan Creek in Creekbridge).

Figure 2-2 Walk Times to MST Bus Stops



While Salinas is the largest city in Monterey County, the combined population of the coastal cities along Monterey Bay (Marina, Seaside, Sand City, Del Rey Oaks, Monterey and Pacific Grove), roughly 10 to 20 miles to the west and the southwest, is nearly 100,000. The population of Watsonville, 20 miles to the northwest in Santa Cruz County, is slightly more than 50,000. Castroville, nine miles to the northwest, has a population of about 6,000, while the communities between 11 and 47 miles to the southeast along Highway 101 (Chualar, Gonzales, Soledad, Greenfield and King City) are of similar size.

Normally, a report of this kind would provide information about projected growth; however, projections developed by AMBAG just prior to the current economic recession are now in the process of being updated, and the agency has stated that the earlier projections may no longer be

³ Route 48 has since been realigned to serve the Williams Ranch neighborhood in the east, to the far-right of the image, and the Salinas Municipal Airport area in the southwest (near the bottom-right). Also, stops served by Routes 42 and 44 in the Boronda neighborhood, to the west (far-left) are not shown.

considered reliable. For this reason, much of the information about future growth in this chapter can be found under "Stakeholder Interviews," in which land use planners provide general information about projected growth trends.

Economic

Generally speaking, Salinas' largest employers are in the agricultural sector, including locally owned companies such as Taylor Farms, Tanimura and Antle, D'Arrigo Bros., and Fresh Express (one notable exception is the credit card company Capital One, which employs close to 1,000 at its Salinas facility). While many work on area farms, most employees in the sector work in processing plants (known colloquially as "coolers") in Salinas's southeastern industrial corridor. According to 2006-2010 data from the U.S. Census Bureau's American Community Survey, 19.1 percent of Salinas residents work in agriculture, forestry, fishing and hunting, or mining, compared to 1.9 percent statewide. These jobs are generally seasonal in nature.

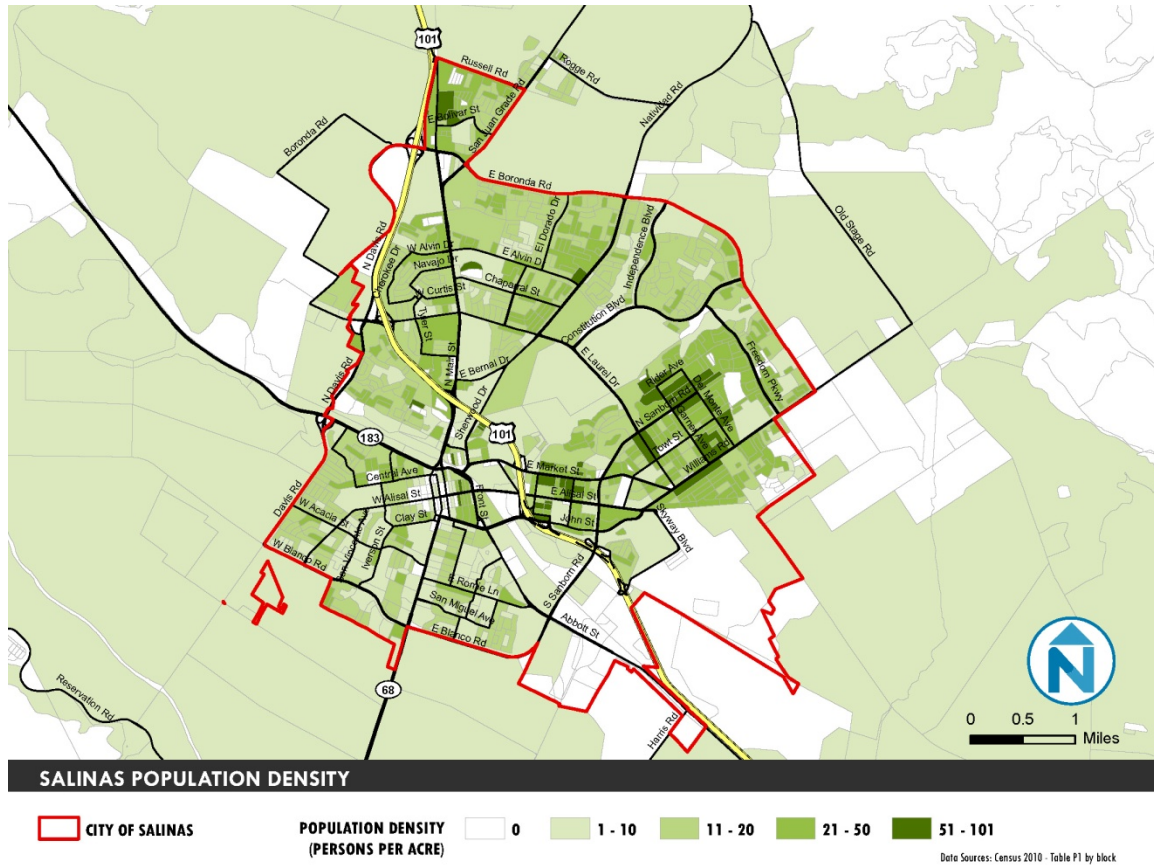
According to the California Employment Development Department, the non-seasonally adjusted unemployment rate in the City of Salinas in December 2011 was 20.6 percent. For Monterey County as a whole, it was 14.9 percent; for the City of Monterey, it was just 6.9 percent. However, as agriculture is the dominant economic sector in Salinas, employment trends are highly seasonal: in September, unemployment in the city was 14.3 percent. In 2006, before it began to climb, the unemployment rate (for the year) was 9.9 percent; in January 2010, it reached 24.2 percent.

Similarly, median home prices have increased slightly following a dramatic decline during the recession. In 2005-2006, the median exceeded \$620,000; in 2009, it fell below \$185,000 but it has since increased and was approximately \$219,000 in the fourth quarter of 2011. By comparison, the median home price in the City of Monterey in the fourth quarter was \$425,000.

Demographic

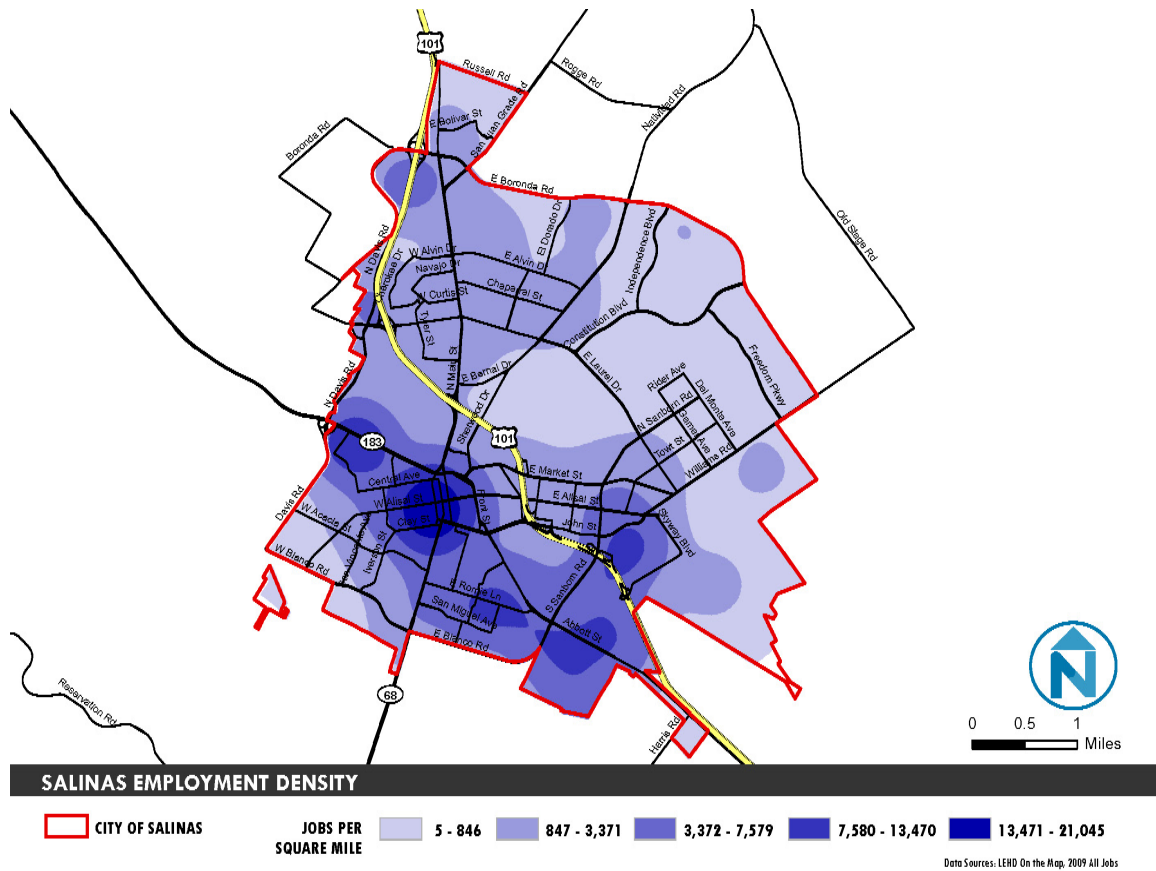
Figures 2-3 through 2-10 on the following pages illustrate various relevant components of the demographic makeup of the population of the City of Salinas.

Figure 2-3 Salinas Population Density



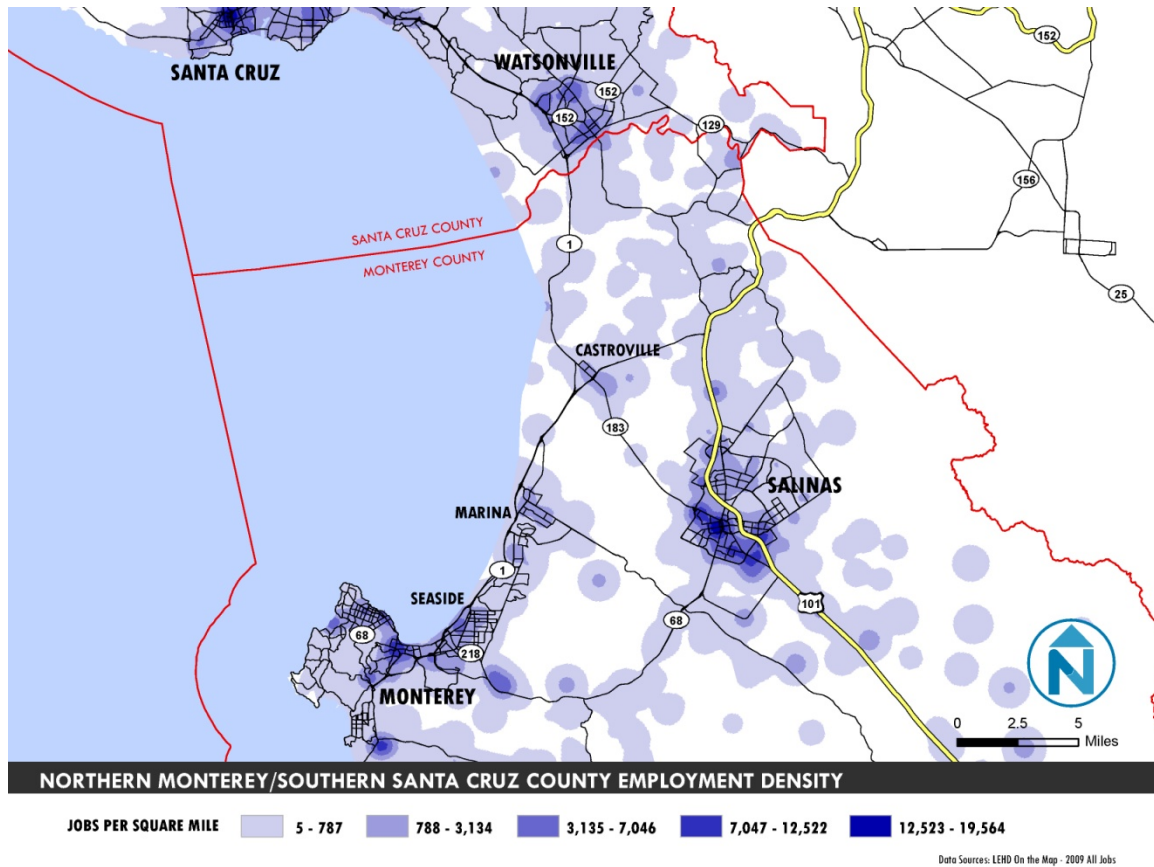
As the figure indicates, average population densities of most Salinas blocks are between 11 and 50 persons per gross acre (7,040 to 32,000 persons per square mile). However, there are pockets of higher density, primarily in East Salinas but in parts of North Salinas as well. The busiest MST route, Route 41 (see “Routes” section later in this document), is within walking distance of the high-density pockets in East Salinas.

Figure 2-4 Salinas Employment Density



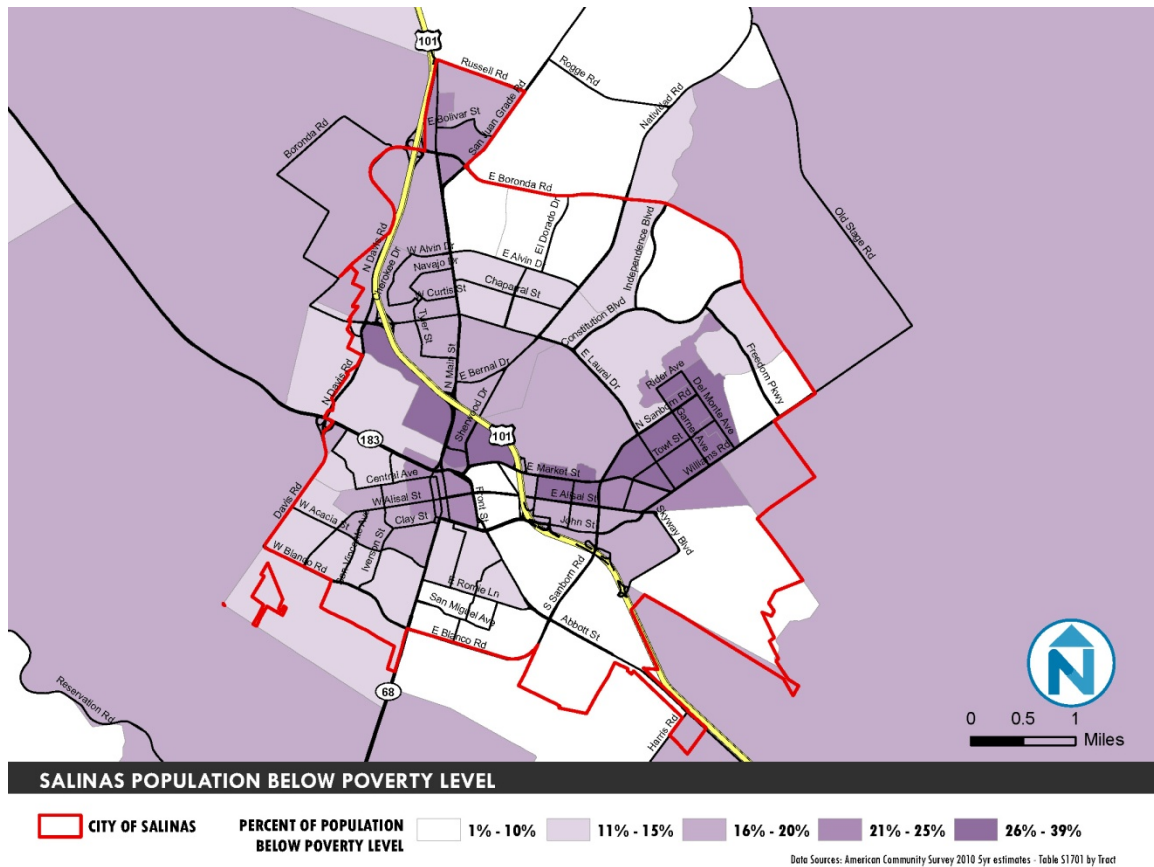
The employment patterns described in the previous sections are clearly illustrated here: a concentration of employment in Oldtown Salinas, but also in industrial areas to the southeast and west, as well as at the Salinas Auto Mall to the north.

Figure 2-5 Northern Monterey County Employment Density



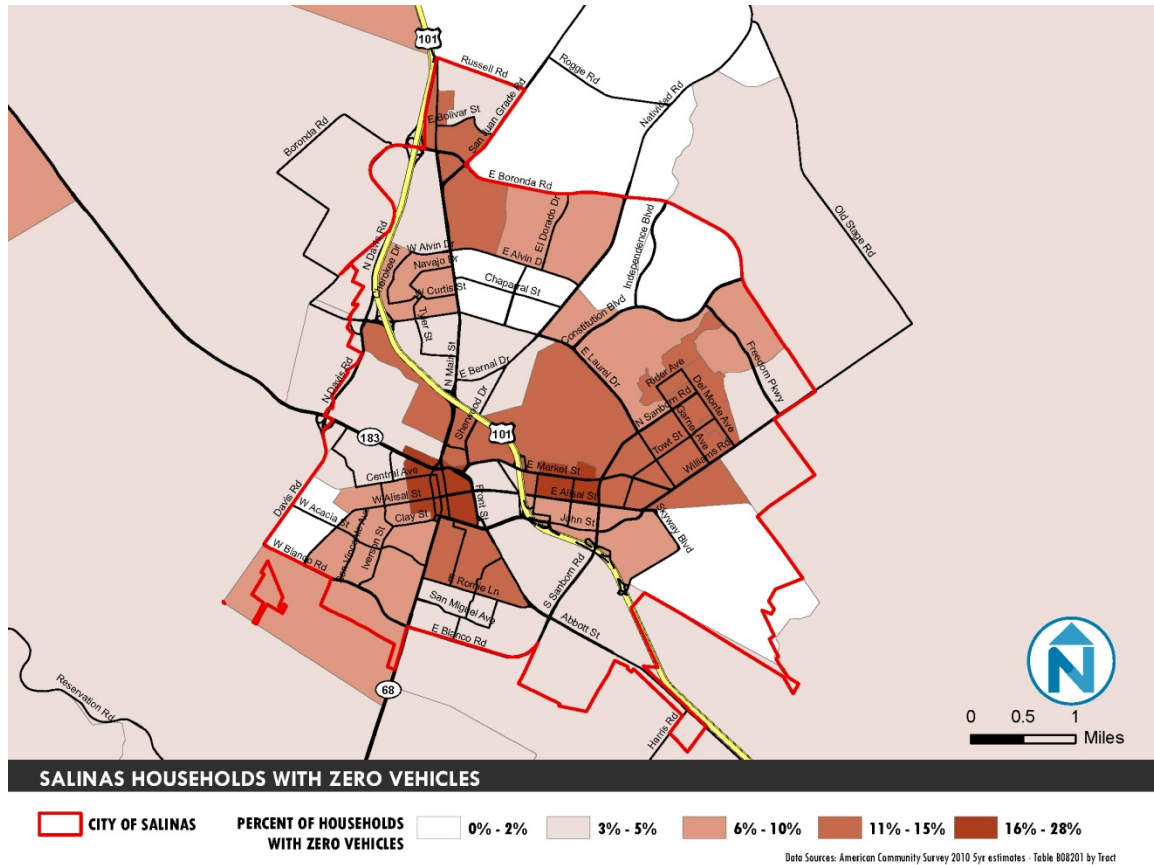
As one would expect, employment in the region is largely clustered within cities (although there are many agricultural jobs in the rural areas, only at lower densities). The figure serves to illustrate, however, that there are a number of cities within the region, separated by 10 or 20 miles – and residents commute between them. The “Mobility” section further describes regional commuting patterns.

Figure 2-6 Salinas Households Below Poverty Level



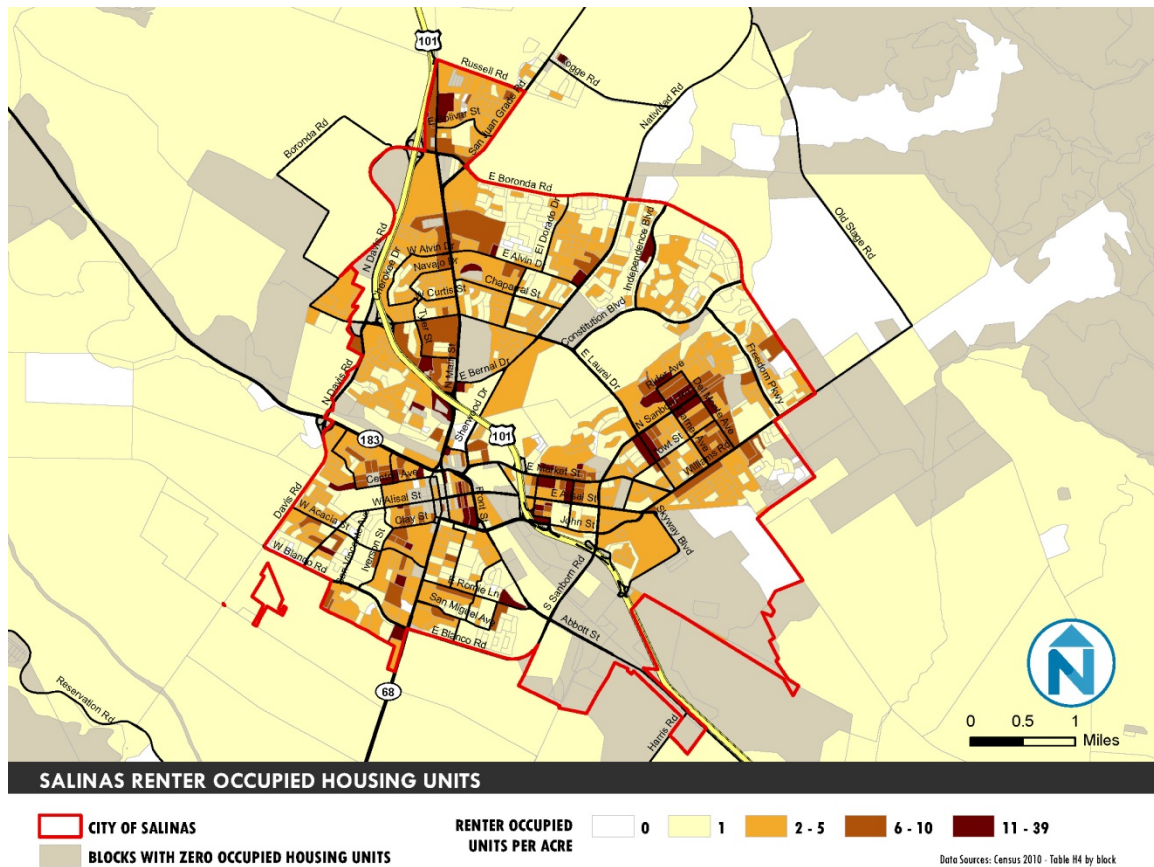
Pockets of relatively severe poverty (greater than one-quarter of households with incomes below the poverty level) are largely concentrated in East Salinas, although census tracts north of Old Town extending toward Westridge Center and just northeast of Northridge Mall also fall into this category.

Figure 2-7 Salinas Households without Vehicles



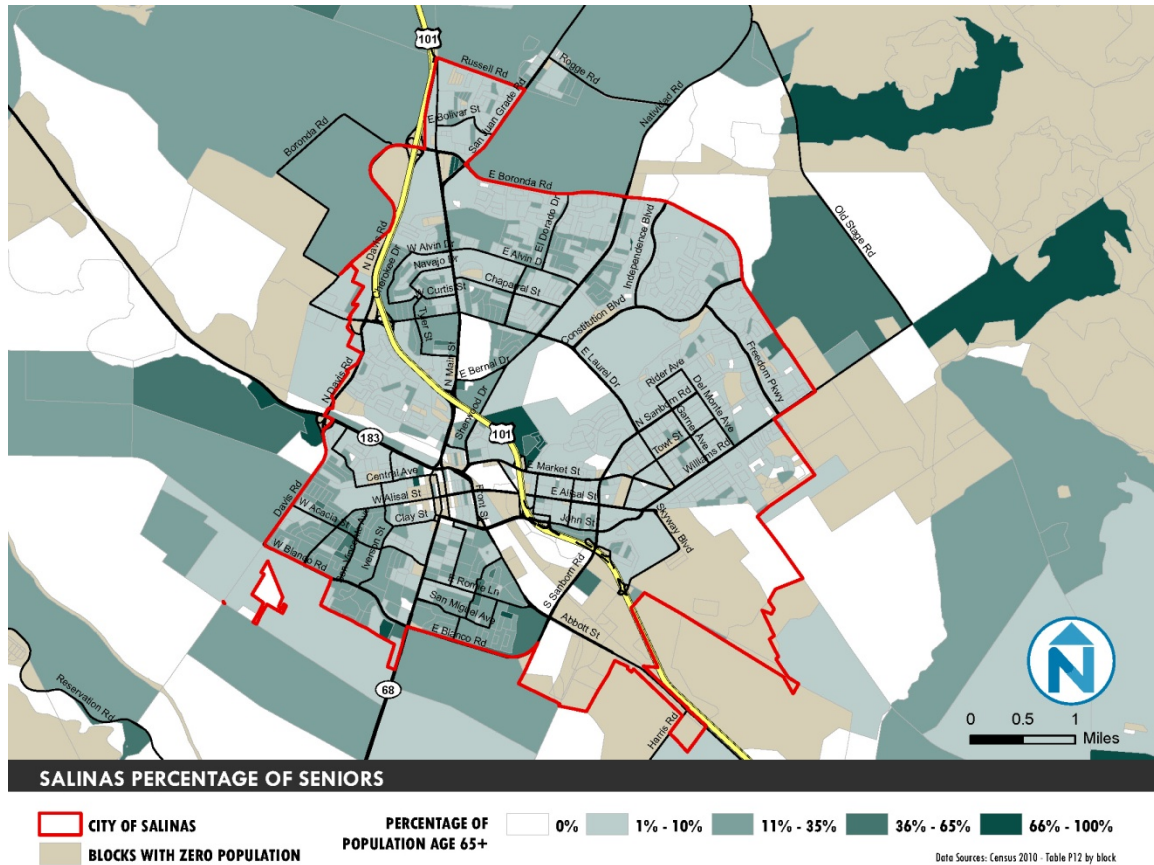
Households without vehicles are distributed according to a similar pattern, although the greatest concentrations are in East Salinas near Old Town, and in Old Town itself. In these areas, each of which are relatively well served by existing MST routes, between about one in six and one in four households have no private transportation.

Figure 2-8 Salinas Renter-Occupied Housing Units



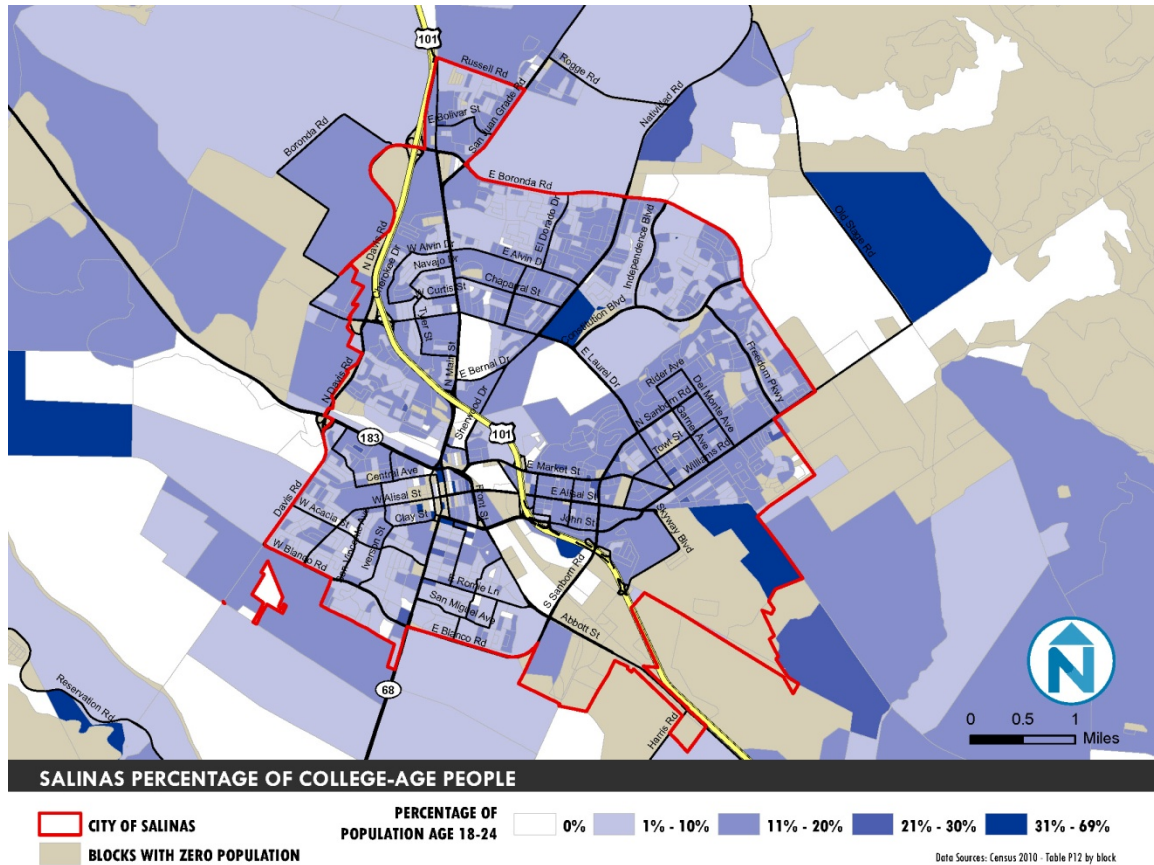
Rental housing follows a more complex pattern; while there are numerous blocks in East Salinas with between 11 and 39 renter-occupied units per acre, rental housing is scattered throughout the city (like poverty and car-free households, it is less common in the newer areas to the northeast and in portions of South Salinas).

Figure 2-9 Salinas Percentages of Seniors



Similarly, persons age 65 and older can also be found throughout the city; however, there are notable clusters at the Sherwood Lake Mobile Home Park north of East Market Street, at the Villa Serra retirement facility in South Salinas and at the La Canada Mobile Estates in North Salinas. The first two of these are approximately 1,000 and 2,000 feet, respectively, from the nearest MST stop with all-day service.

Figure 2-10 Salinas Percentages of College-Age Persons



Persons between the ages of 18 and 24 are likewise distributed throughout the city. An apparent pocket in the northeast is a primarily institutional area including Natividad Medical Center but perhaps more importantly in this instance, Juvenile Hall Community School, while a pocket in the southeast is the site of Hartnell College's Alisal Campus. Proportionately fewer persons of college age live in South Salinas, near Hartnell College's main campus, than in East and North Salinas.

Mobility

Perhaps unsurprisingly given its postwar patterns of development, most travel in Salinas is by private automobile. While no data on mode share for all trips were available, according to Census Bureau American Community Survey 2006-10 data, mode share for work trips is as shown in Figure 2-11.

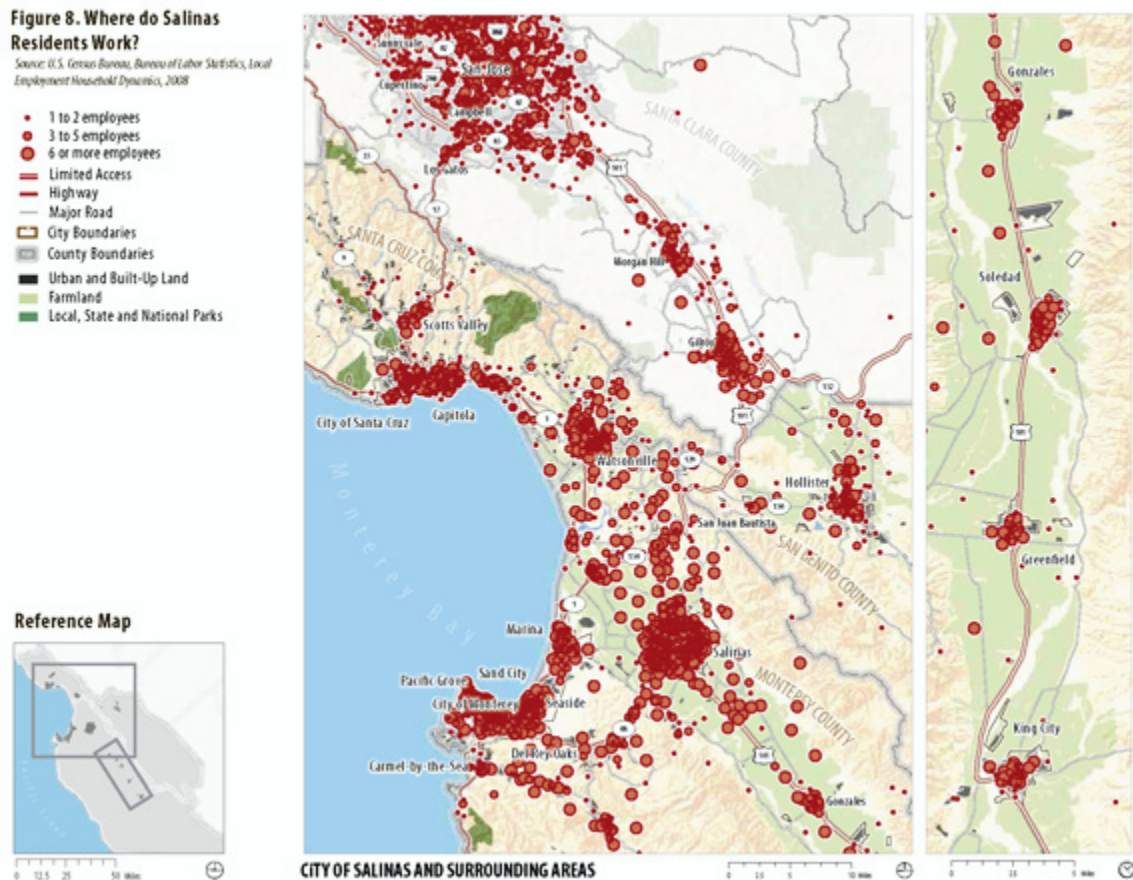
Figure 2-11 Commute Mode Share

Drive Alone	Carpool	Transit	Walk	Other	Work at Home
70.9%	15.7%	2.4%	1.7%	6.1%	3.3%

Notably, the commute mode share for carpools of 15.7 percent is substantially higher than the California average of 11.9 percent. Anecdotal evidence (see "Stakeholder Interviews") suggests that carpooling is an especially attractive option for residents of East Salinas commuting to shifts at "coolers" in Southeast Salinas.

Regional mobility suffers from a "jobs-housing imbalance" within Monterey County and the surrounding area, with disproportionate numbers of jobs located in coastal cities with relatively high housing prices and disproportionate numbers of more affordable homes in inland cities. This phenomenon is reflected in the high average travel times to work for Salinas residents (24.2 minutes) as compared to residents of the city of Monterey (15.7 minutes), and is illustrated by Figure 2-12, which is excerpted from AMBAG's Envisioning the Monterey Bay Area document. While MST intercity routes serve neighboring communities, there is no service from Salinas to San Jose and the Silicon Valley.

Figure 2-12 Locations of Salinas Residents' Workplaces



Planning and Policy

Monterey Bay Area Mobility 2035

Monterey Bay Area Mobility 2035 is the most recent (2010) Long Range Transportation Plan, or LRTP, by AMBAG, the federally designated Metropolitan Planning Organization (MPO) for Monterey, Santa Cruz and San Benito counties. (AMBAG refers to its LRTP as an "MTP," or Metropolitan Transportation Plan.) LRTPs are regional policy documents serving primarily to project transportation revenues and identify priorities for funding. Regional Transportation Plans or RTPs, meanwhile, are county-level documents developed by county Transportation Management Agencies such as the Transportation Agency for Monterey County, or TAMC (see "TAMC Long Range Plan," following).

The MTP's Constrained Project List devotes 27 percent of all spending to transit, and 29 percent within Monterey County. Among the "regionally significant" capital projects identified is the Frank J. Lichtanski Monterey Bay Operations Center (FJL Center) described under the "Administrative Context" section. Monterey County is not a transportation "self-help" county under California law, with no dedicated sales tax for transportation. For this reason, MST must rely on the other local, state and federal funding sources identified under "Administrative Context."

An update of the LRTP featuring a Sustainable Communities Strategy, or SCS, is planned for this year. SCS's are integrated transportation and land use plans designed to reduce greenhouse gas emissions, as required under state Senate Bill 375 and California Air Resources Board (CARB) regulations.

TAMC Long Range Plan

Like the regional LRTP, the 2010 Regional Transportation Plan (RTP) or Long Range Plan (LRP) for Monterey County identifies available transportation revenues and priorities for funding through 2035. The LRP devotes 20 percent of “constrained” funding to transit; of this, one-quarter is for rail projects, and three-quarters for buses. In Salinas, major projects include:

- establishment of peak-only commuter rail service between Salinas and Santa Clara County (see “Agency Overview,” following);
- purchase of new buses for MST; and
- construction of the Frank J. Lichtanski Monterey Bay Operations Center (FJL Center) for MST (see “Agency Overview,” following).

The LRP also outlines a number of objectives and policies, including the following.

- Increase ridership on Monterey-Salinas Transit (MST) service routes at a rate as fast or faster than the growth in county licensed drivers.
- Work with Monterey-Salinas Transit to secure increased funding.
- Support Amtrak and the Coast Rail Coordinating Council in the implementation of new intercity (rail) service between San Francisco and Los Angeles called the Coast Daylight.
- Administer a Transportation for Livable Communities (TLC) Transit-Oriented Development Incentive Program to encourage land use jurisdictions that support Transit-Oriented Development, and reward jurisdictions that approve new housing and other development near transit hubs.

Envisioning the Monterey Bay Area

This 25-year “Blueprint for Sustainable Growth and Smart Infrastructure” was adopted by AMBAG in Summer 2011. Its preferred “Sustainable Growth Pattern” emphasizes Transit-Oriented Development and increased transit service. While the document is non-binding, it was developed in collaboration with local governments and other regional agencies, and is intended to serve as the basis for development of the region’s first Sustainable Communities Strategy (see previously, under “Monterey Bay Area Mobility 2035”).

Under current growth patterns, Monterey County is projected to experience population growth through 2035 that is moderate relative to other California counties; yet under any scenario, there will be a major increase in the elderly population as the Baby Boomer generation continues to enter into retirement age. Under current growth patterns, subdivisions of single-family homes would continue to displace prime farmland around the edges of cities, and would increase strain on limited water supplies relative to multifamily housing, which is more efficient. The existing jobs-housing imbalance would worsen, forcing increasing numbers of workers to commute outside the region, to the San Francisco Bay Area, or to commute long distances within the region. Greenhouse gas emissions, meanwhile, would increase by 13 percent; under CARB regulations, the region is expected to *reduce* its emissions by 5 percent over the same period.

Under the Sustainable Growth Pattern scenario, much of Salinas is designated as a "Blueprint Priority Area." These areas include both infill nodes and corridors as well as some greenfield sites adjacent to existing development. In Salinas, this includes areas just north of Boronda Road already targeted by the city for future development (see "City of Salinas General Plan," to follow). The document is optimistic about the potential for accommodating growth within these areas: just 10 percent of the total area within Blueprint Priority Areas (4,400 acres) could accommodate the region's entire projected growth in housing (70,000 units) at a relatively moderate density of 16 units per acre, and a survey conducted for the study found a strong preference among residents for retail and other uses within walking distances of homes. The Blueprint concludes by recommending best practices in terms of both policy and design.

The document also provides some insight into current travel patterns. While more than 50 percent of homes and 65 percent of jobs in Monterey County are within an eight-minute walk of a transit stop, average travel times on transit are 150 percent longer (50 minutes) than by private auto (20 minutes), and transit's commute mode share is just 3 percent.

City of Salinas General Plan

The City of Salinas last updated its General Plan a decade ago, in 2002. While the Plan remains official policy, economic and social conditions have since changed a great deal, so only a brief summary is provided here. Land use context is addressed in greater detail under "Context" and "Stakeholder Interviews."

In the Plan, no growth is designated to take place beyond the existing extent of the City to the south and west. However, a "Future Growth Area" is identified beyond the city's northern and eastern edges, to the northeast of Boronda Road and within a southern extension of the road connecting to Highway 101 to form an "Eastern Bypass." As population growth slowed dramatically during the decade of the 2000's, from a one-third increase in 1990s to a slight decline, this area remains almost wholly undeveloped today.

The Plan also identified five "Focused Growth Areas." These areas are generally located:

- along North Main Street near Laurel Road;
- along North Main Street between Oldtown Salinas and Highway 101;
- along South Main Street between West Acacia Street and Blanco Road;
- along Abbott Street between John Street and East Romie Lane; and
- along East Alisal and Market streets between Highway 101 and Sanborn Road.

The Plan's Circulation Element includes policies supporting transit-oriented development as well as greater integration of bicycles with transit. It also provides standards for roadway dimensions sufficient to accommodate coach operations on all street types except local streets. It states that all future development should be within one-quarter mile of a (current or new) transit route.

Salinas Area Service Analysis-I

This study was preceded in 2005 by SASA-I. At the time of the original analysis, there were 11 MST fixed routes operating in the Salinas area (20, 21, 23, 28, 29, 41, 42, 43, 44, 45 and 46). In its fiscally constrained "Service Reallocation Scenario," the study recommended elimination of Route 21 (which remains today as a skeletal service) and alignment and/or schedule changes to seven of the remaining ten routes, as well as stop relocations. These recommendations were

adopted with some modifications. Because service has been further altered, repeatedly, since the time of SASA-I, no further detail is provided here.

AGENCY

This section provides relevant general information about the Monterey-Salinas Transit District (MST), the public transportation provider for Monterey County and a small portion of Santa Cruz County.

Fares

In April 2011, MST fares were restructured. Previously, fares were zone-based. There were nine zones, including five overlapping zones. Since the changes, there are four categories of service. Figure 2-13 shows the categories and cash fares as of May 2012.

Figure 2-13 MST Fare Structure

	Local	Primary	Regional	Commuter
Adult Cash Fare	\$1.50	\$2.50	\$3.50	\$12
Discount Fare	\$0.75	\$1.25	\$1.75	\$6

Previously, transfers cost 25 cents. Under the new system, there are no transfers and passengers must pay full fares every time they board. Discount fares are available to passengers 18 years old or younger, 65 or older, and with disabilities (as determined by doctors), as well as Medicare card holders and active-duty military personnel. "Basic" 31-day passes valid on Local and Primary routes are available for \$95, or \$47 discount, and "Super" passes valid on all routes for \$190, or \$95 discount (Basic pass holders may use their passes on Regional and Commuter routes, but they must pay the price differential of \$1 for Regional routes or \$8.50 for Commuter routes). Until April 2012, all fares were discounted on Sundays and holidays, but this practice has been discontinued. Hartnell College students boarding at the college and at West Alisal Street and Homestead Avenue adjacent to the college may board for free, and they are provided with special transfers allowing them to complete one-way trips.

While the new fare structure was designed to be revenue-neutral, it has resulted in higher fares for some types of trips, most notably intra-city trips on Regional routes. In some cases, routes operating in the same corridor and making the same stops charge different fares, with the result that passengers may let buses bound for their destination pass in order to take the next, cheaper bus (which, in turn, may not arrive for some time).

Vehicles

Fixed-route service in Salinas is provided primarily by 35- and 40-foot motor coaches. MST's fleet includes 29 low-floor 40-foot vehicles with 36 to 37 seats and eight high-floor 40-foot vehicles with 39 seats. It also includes 10 low-floor 35-foot vehicles with 31 seats and 29 high-floor 35-foot vehicles with 31 to 32 seats. MST operates a number of 17-seat minibuses; in Salinas, these are used on Route 25. Finally, it operates four 45-foot "over the road" coaches with 57 seats. In general, larger, low-floor vehicles are used to the extent possible (given availability and maneuverability along the route) on high-ridership routes with frequent stops and many riders

using mobility devices (including strollers), such as Route 41. On intercity routes where “over the road” coaches are not available, high-floor 40-foot vehicles are used.

The agency recently received a federal grant to purchase new diesel-electric hybrid minibuses. However, some of its coaches are as much as 12 years old, and it is not yet clear when funding might be available for their replacement.

Performance Standards

MST has just two performance standards.

- For schedule adherence, the standard is arrival at timepoints no more than 0 seconds early or 4 minutes, 59 seconds late 87 percent of the time.
- For farebox recovery, the standard is 20 percent, reflecting the state standard for operators receiving Transportation Demand Act (TDA) funding.

Operating Costs and Revenues

MST’s variable operating cost per hour of revenue service for Fiscal Year 2012 is budgeted at \$91.30 (this is *not* a fully allocated cost including vehicle depreciation). For Fiscal Year 2011, it was \$85.86. As of December 2011, the systemwide farebox recovery ratio was 28.5 percent.

Monterey County is not a transportation "self-help" county under California law, with no dedicated sales tax for transportation. Instead, MST relies on a variety of local, state and federal funding sources for operating subsidies and capital funding.

Capital Plans

MST has not produced a Short Range Transit Plan (SRTTP) identifying capital needs since 2006. However, the agency has for some time been planning a new bus base on the former Ford Ord site near Marina. The Frank J. Lichtanski Monterey Bay Operations Center (FJL Center) would replace the Clarence “Jack” Wright (CJW) Operations Facility in Salinas, which suffers from capacity constraints. This would increase operating costs for Salinas service, as most vehicles would have to “deadhead” (travel outside of revenue service) much greater distances. (The CJW facility is located a short distance from both the Salinas Transit Center and Northridge Mall, where many Salinas routes enter into and exit out of revenue service.) However, the project is currently inactive.

Additionally, if Amtrak Capitol Corridor commuter rail service is extended from the San Francisco Bay Area to Salinas, as has been proposed, the Amtrak station on Railroad Avenue, two blocks north of the Salinas Transit Center (or STC), would be converted into an Intermodal Transportation Center (ITC) with five to six dedicated bus bays. MST would continue to use STC as its primary hub in Salinas; however, the ITC could serve as a secondary hub.

There are no plans to replace or remodel STC, despite operational limitations: its bus bays were designed for 35-foot buses, but are now being used by 40-foot coaches. (For a more detailed description of STC, see the "Routes" section.)

Service Changes

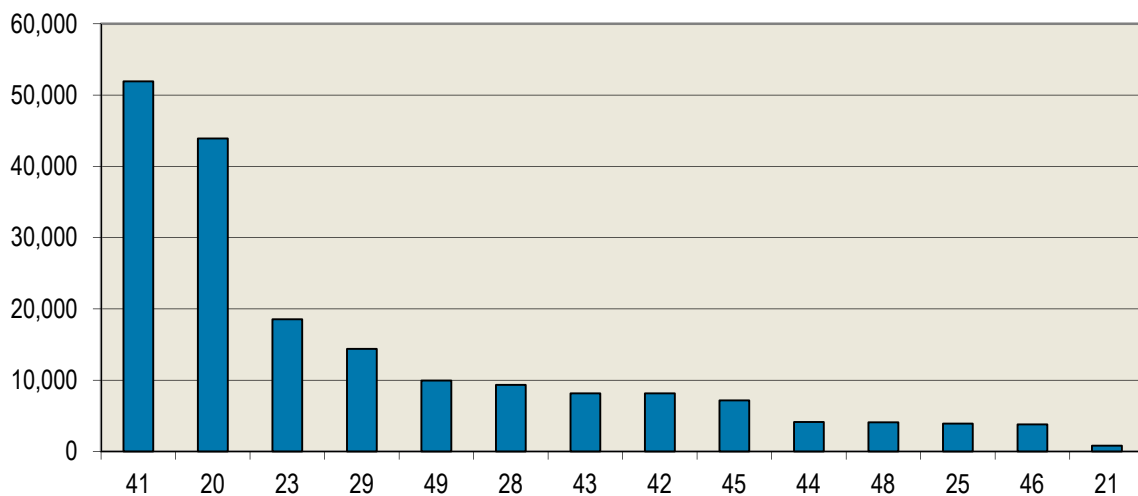
Starting September 17, 2011, service was revised systemwide in order to reduce annual operating costs by approximately \$1 million. These changes included reductions to span and frequency as well as full- and part-time realignments of some routes. Less extensive service reductions followed on February 4 and April 28, 2012, the latter in response to a \$600,000 reduction in state funding. Major changes are described under the “Routes” section of this document.

RIDERSHIP

Individual routes are described in detail in the following section, “Routes.” In this section, routes are compared to one another in terms of ridership.

Figures 2-14, 2-15 and 2-16 shows the 14 Salinas-area MST routes included in this study ranked from highest to lowest in terms of monthly numbers of boardings, average boardings per hour, and average boardings per mile.

Figure 2-14 Boardings by Route, October 2011⁴



⁴ Data in this section and in the following section, “Routes,” are derived from two sources. Monthly data are from MST’s “Operations Summary Report” for the month of October 2011 (the first full month following the September service changes described in the previous section, “Administrative Context,” and the last available month that did not include a major holiday resulting in atypical ridership patterns). Weekday average stop-, route-, and time period-level ridership data, meanwhile, are from weekdays between October 15 and November 15, 2011, and were compiled specifically for this report. This was done because it is essential, for purposes of a study such as this one, that detailed ridership data be as reliable as possible, and ridership patterns can take some time to stabilize after service changes. For this reason, the latest possible one-month period before the Thanksgiving and Christmas holidays was selected.

Figure 2-15 Boardings per Hour by Route, October 2011

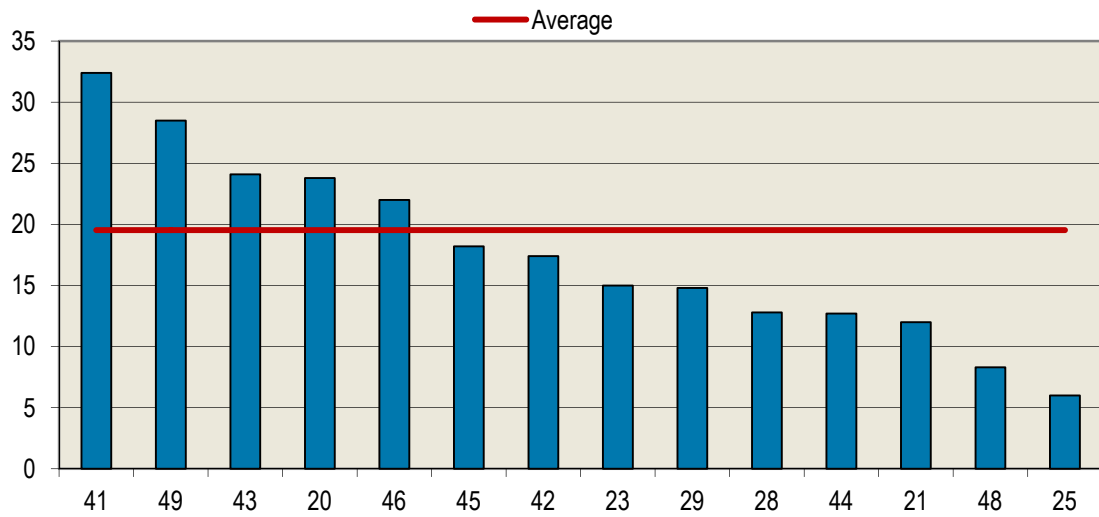


Figure 2-16 Boardings per Mile by Route, October 2011

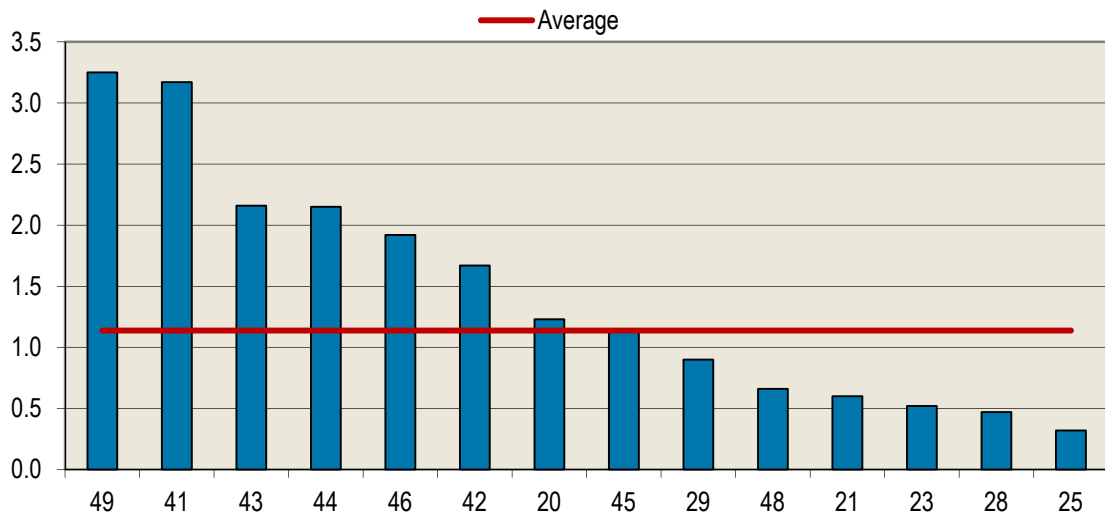


Figure 2-17 shows productivity of the routes by time of day.

Figure 2-17 Weekday Boardings per Hour by Route and Time Period, October 15-November 15, 2011

Route	Time Period					
	Early (before 6am)	AM (6am-9am)	Mid-Day (9am-3pm)	PM (3pm-6pm)	Evening (6pm-9pm)	Late (after 9pm)
41	7.69	38.93	42.78	48.77	14.97	7.48
42	6.14	5.54	18.01	13.47	5.16	
43		28.47	43.21	19.81	8.07	
44		12.43	21.28	23.15	10.27	
45		32.39	27.55	24.68	10.69	
46		36.91	42.30	10.32	6.20	
48		8.61	8.56	9.33	2.91	
49		25.82	59.19	19.04	13.90	
20	19.89	28.40	29.87	27.95	18.13	16.01
21		12.29		13.05		
23	13.90	22.89	16.61	18.03	7.45	
25		4.49	6.37	9.92	7.00	1.87
28		11.52	17.23	19.16	10.56	3.54
29		12.64	19.02	23.78	11.03	

Individual routes are described in detail in the following section, “Routes.” However, a few broad observations may be made about their comparative performance:

- In terms of overall ridership, Routes 41 and 20 are the strongest performers by far, followed by Routes 23 and 29. Route 21 (a peak period-only service) is by far the weakest.
- Due to their distinct characteristics – inter-city routes must travel long distances without stopping (albeit at higher speeds than intra-city routes are capable of) – intra-city routes are generally more productive than inter-city routes in terms of both passengers per hour and per mile.
- In terms of passengers per hour and per mile, Routes 41, 49, 43 and 46 are generally the strongest-performing intra-city routes (Route 44 performs well in terms of passengers per mile, but not in terms of passengers per hour). Route 48 is the weakest performer by both measures.
- Route 20 is by far the best-performing inter-city route in terms of productivity. The weakest is Route 25.
- Among all routes, ridership patterns vary significantly by time of day and route. These are described under the Route Profile for each service.

A few further general observations may also be made.

- The strongest factors in ridership are adjacent land uses and demographic characteristics of the corridor – as reflected in the strong performance of Routes 41 and 20.

- However, service design also matters. Routes 46 and 49, both strong performers, are the most direct routes in the local network, offering fast trips without diversions. Route 43 also follows a direct alignment along South Main Street before making a one-way loop (a concept generally to be avoided, as loops can take riders well out of direction, but also one that is sometimes necessary, and impacts from which can be limited if the loop is relatively compact).
- Route 48 would appear to provide an example of the drawbacks of a very large one-way loop.
- Both Routes 44 and 42 – relatively poor performers – follow different alignments on weekends than on weekdays. This lack of consistency can contribute to less customer understanding of a route.
- Similarly, ridership in the East Alisal Road/East Salinas corridor served by Route 41 has declined lately, likely due in part to the confusing configuration of other services in the corridor (Route 42 on weekends, and Route 48 – but only along part of the alignment, and in one directly only in one segment – on weekdays).
- College students are a strong market for transit, and Route 25 serves two colleges – yet it performs poorly, likely due in large part to the fact that it is a seasonal (fall, winter and spring only) service, making it less useful for other market segments.

ROUTES

Salinas is served by 20 MST fixed routes⁵. On the following pages are summary profiles of the 14 routes to be analyzed as part of this study⁶. Some data (including boardings per hour, boardings per mile, and schedule adherence) are from the MST Operations Summary Report for the month of October 2011, while daily, time period-based and stop-level ridership data are for weekdays only between October 15 and November 15, 2011. This means that while data take into account the extensive September service changes, they do not take into account the less extensive February and April changes. Stop-level ridership analyses are based on boardings, and do not address alightings. Maps showing numbers of boardings at each stop on each route can be found in Appendix B. Frequencies are typical for time periods shown, and do not necessarily apply to all trips.

In general:

- “40-series” routes (“Primary” or “Local” routes, in terms of fare categories) operate entirely within the City of Salinas throughout the day (some do not operate evenings, Saturdays and/or Sundays); and

⁵ MST also provides Americans with Disabilities Act complimentary paratransit service, called RIDES. As ADA service is provided within a specified distance of fixed routes whenever those routes are in operation, its form is determined by the design of fixed-route services. For this reason, this planning effort was focused on fixed-route services.

⁶ This study does not include the Salinas Trolley (a free, school year-only downtown circulator), Route 2X (a peak period-only service that operates primarily outside of Salinas, in the coastal cities), Route 39 (special event-only Laguna Seca service), or Routes 68, 72 and 82 (“Military Commuter” routes partly funded by the military, and serving the Presidio of Monterey and Fort Hunter Liggett).

- remaining “20-series” routes are inter-city (mostly “Regional”) services operating either throughout the day or during AM and PM peak (commute) periods only (one relatively short intercity route, Route 25, is a Primary route).

One feature common to all Salinas-area routes included in this study is a stop at the Salinas Transit Center (STC) just southeast of Salinas Street and Central Avenue in Oldtown Salinas (within walking distance of the Main Street commercial corridor, National Steinbeck Center, City Hall, and a large mixed-use development planned by the Taylor Farms company). STC features nine stops, seven of them off-street bus bays and two of them curbside along Salinas Street. It provides a number of amenities for passengers, including a staffed customer service window, restrooms, and bicycle racks. It also serves as a terminus and layover/recovery point for most routes, and arrivals and departures are “pulsed” or timed to facilitate transfers. (There is also a secondary hub at the Northridge Mall, served by eight of the 20 routes.)

Another feature common to many routes is “interlining,” or operation of distinct routes as, effectively, a single route, with a single bus and operator serving both routes (or all three routes) on succeeding trips. Historically, several Salinas-area routes have been operated this way, generating operational efficiencies but occasionally causing problems when one route impacts another (e.g., on-time performance problems on Route 45 until recently impacted on-time performance on Route 49, with which it was interlined).

Figures 2-18, 2-19, 2-20 and 2-21 show Salinas-area MST routes included in this study ranked from highest to lowest in terms of monthly numbers of revenue service hours, revenue service miles, schedule adherence and average speed.

Figure 2-18 Revenue Service Hours by Route, October 2011

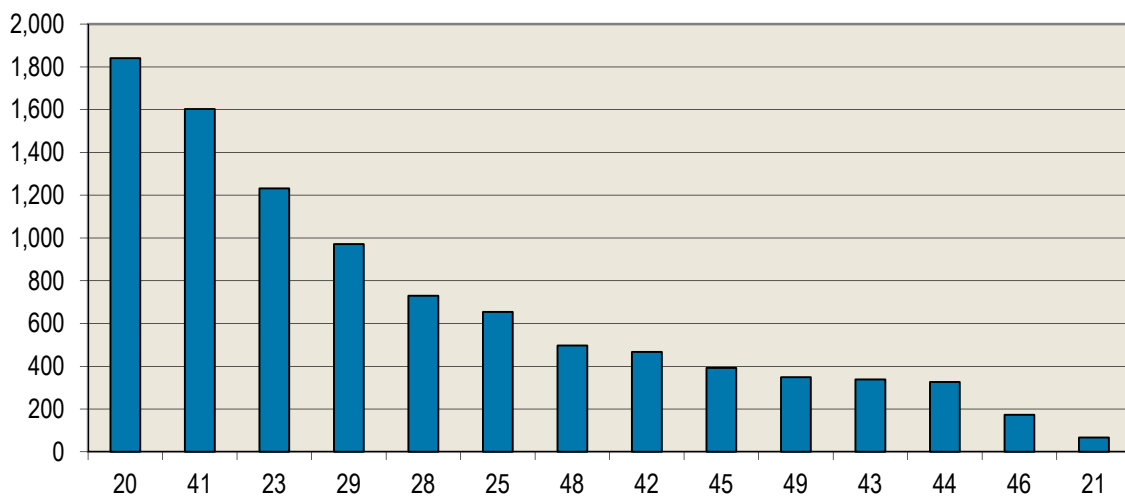


Figure 2-19 Revenue Service Miles by Route, October 2011

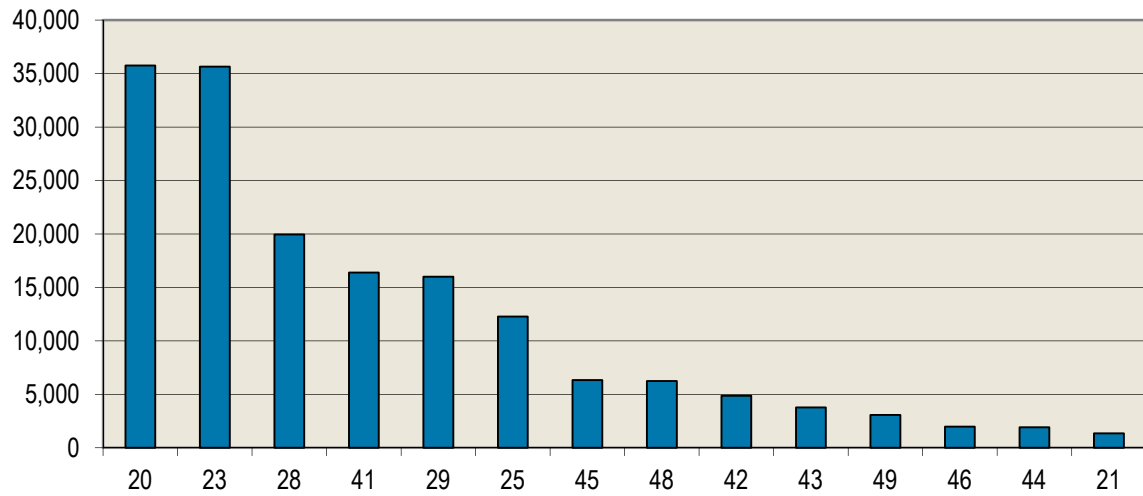


Figure 2-20 Schedule Adherence by Route, October 2011

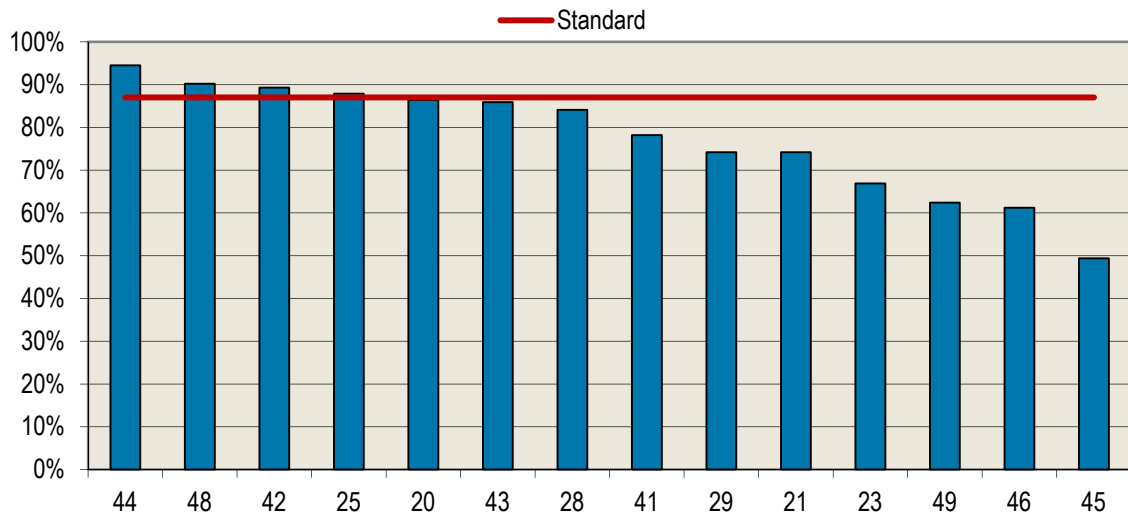
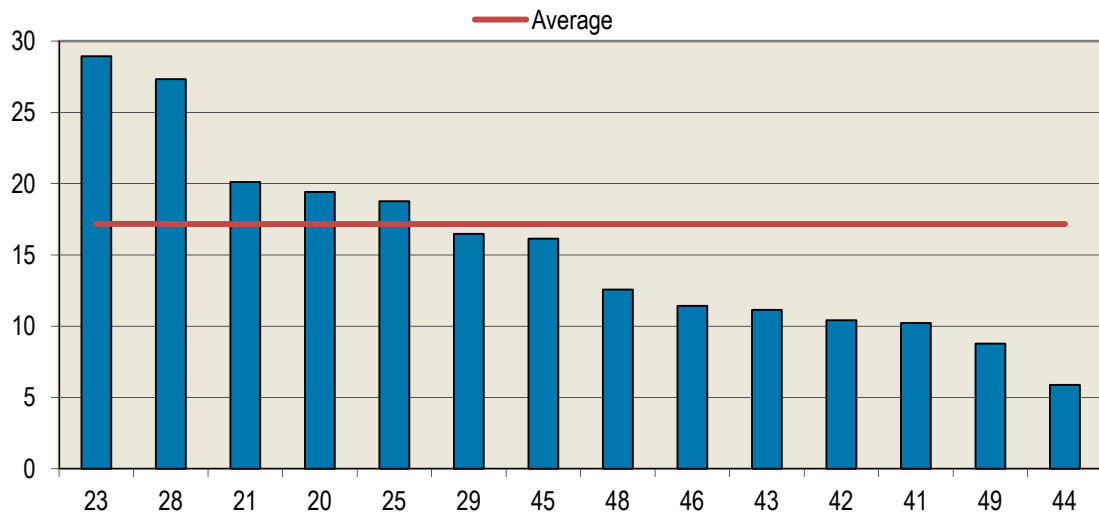


Figure 2-21 Average Speed (Miles per Hour) by Route, October 2011



41 East Alisal-Northridge

Route 41		
Weekday Boardings		1,801
Weekday Revenue Hours		49.05
Boardings per Hour		32.39
Boardings per Mile		3.17
Schedule Adherence		78.2%
Frequency (minutes)	Mon-Fri (Daytime/Evening)	30/60
	Sat-Sun	40
Span	Mon-Fri	5:25 am-10:14 pm
	Sat-Sun	6 am-10:14 pm

Description

Route 41 operates between the Salinas Transit Center and Northridge Mall via East Salinas, with a segment along East Alisal Street, Williams Road, Del Monte Avenue, Rider Avenue, Garner Avenue, North Sanborn Road, and East Laurel Drive (as far north as Natividad Medical Center) that is shared with Route 42 on weekends and partially with Route 48 on weekdays. Prior to the September 2011 service changes, both Routes 41 and 42 served the East Alisal corridor, and Monday through Saturday combined to provide a headway of 15 minutes. Combined headways in the corridor are now 20 minutes on weekends, and on weekdays they are 20 minutes along East Alisal and northbound along Del Monte, Sanborn and Laurel, but just 30 minutes southbound on those streets and in both directions on Williams. Route 41 operates until well into the evening, seven days a week, and serves Oldtown Salinas, the East Alisal commercial corridor, El Sausal Middle School, Alisal High School, Natividad Medical Center, North Salinas High School, Harden Middle School, Harden Ranch Plaza, and Northridge Mall.

Characteristics

Route 41 has historically been among the busiest routes in the MST system. Route 41 is the second most productive route in Salinas, at 32.4 boardings/hour. Ridership increases over the course of day. In the PM peak period productivity reaches nearly 50 boardings per hour.

Ridership is strong throughout Route 41. Passengers are using this route for trips to Northridge Mall and Natividad Medical Center, accessing regional service at the Salinas Transit Center, and for trips within the East Salinas area. The highest ridership stops are at the STC, Northridge, and at the Natividad Medical Center. Transfers to Route 42 are a primary cause for the high ridership numbers at Natividad. Overall, Route 41 is an excellent route.

42 East Alisal-Westridge

Route 42		
Weekday Boardings		82
Weekday Revenue Hours		6.53
Boardings per Hour		17.43
Boardings per Mile		1.67
Schedule Adherence		89.3%
Frequency (minutes)	Mon-Fri	60
	Sat-Sun	40
Span	Mon-Fri	5:35 am-7:08 pm
	Sat-Sun	7:45 am-6:42 pm

Description

Route 42 operates between Natividad Medical Center and Westridge Center via East and West Laurel Drive, with a weekends-only extension to Salinas Transit Center via the alignment described under Route 41. On weekends, it overlaps with Route 41 to provide a combined 20-minute headway within the East Alisal corridor and on Williams Road, Del Monte Avenue, Rider Avenue, Garner Avenue, North Sanborn Road, and East Laurel Drive in East Salinas (a higher level of service than is provided on weekdays, when Route 48 only partially overlaps with Route 41). Route 42 serves the California Department of Motor Vehicles office, the Laurel West Shopping Center, and Westridge Center. On weekdays, Route 42 is interlined with Routes 44 and 46.

Characteristics

Prior to the September service changes, Route 42 served the East Alisal corridor full-time, and was among the busiest routes in the system. Since its truncation and reduction in service, ridership has declined dramatically. Productivity is less than six boardings per hour during the AM peak, although increases in the mid-day to About 18 boardings per hour.

The highest ridership stops on Route 42 are at Westridge Center and at Natividad. The service change to truncate Route 42 has negatively impacted ridership. The transfer at Natividad from East Salinas, which generally includes an additional fare, has contributed to this. One potential reason for the declined in ridership is that passengers may now be accessing Westridge Center via transfers at the Salinas Transit Center instead of Natividad.

43 Memorial Hospital

Route 43		
Weekday Boardings		330
Weekday Revenue Hours		10.51
Boardings per Hour		24.12
Boardings per Mile		2.16
Schedule Adherence		85.9%
Frequency (minutes)	Mon-Fri	30-60
Span	Mon-Fri	6:45 am-6:13 pm

Description

Route 43 operates between the Salinas Transit Center and Blanco Road in South Salinas. Much of the full route is a one-way loop: after departing the Transit Center, buses travel south primarily on Lincoln Avenue and South Main Street before making a clockwise loop using East San Joaquin Street, Pajaro Street, East Romie Lane and Blanco Road. However, since April half of all buses have provided “short turn” service only, remaining on South Main to Blanco, with the result that service to the Romie/Blanco loop is now hourly rather than every 30 minutes (this was done so that Route 43 could operate as a “standalone” route, and no longer be interlined with Route 46, as delays on the latter were impacting the former). Starting in April Route 43 was also replaced (along Romie and South Main) by Route 23 on weekends. Route 43 serves the South Main commercial corridor, the Monterey County Department of Social and Employment Services, and Salinas Valley Memorial Hospital. Select trips serve Brunken Avenue, east of Abbott Street. Other than Route 41, Route 43 is the only route operating entirely within Salinas to run on a 30-minute headway.

Characteristics

Route 43 is among the busier MST routes, and one of its most productive at about 24 boardings per hour. It is most productive on weekdays in the mid-day, at well more than 40 boardings per hour. This indicates a strong social-service market.

Route 43 operates as a large clockwise loop at its south end. Given the street pattern, this is not a large disincentive for riders. The highest ridership stops are at the Salinas Transit Center, Salinas Valley Memorial Hospital, and by the Monterey County Department of Social and Employment Services, suggesting a strong travel market between downtown and these two locations. The loop north on Abbott carries an average of three boardings each weekday.

44 Salinas-Northridge

Route 44		
Weekday Boardings		127
Weekday Revenue Hours		6.67
Boardings per Hour		12.66
Boardings per Mile		2.15
Schedule Adherence		94.5%
Frequency (minutes)	Mon-Sun	60
Span	Mon-Fri	6:11 am-6:34 pm
	Sat-Sun	7:15 am-6:31 pm

Description

On weekdays, Route 44 operates between the Salinas Transit Center and Westridge Center. It serves several northwest neighborhoods and the Laurel West Shopping Center. On weekends, it extends to Boronda Crossing and Northridge Mall via North Davis Road. On weekdays, Route 44 is interlined with Routes 42 and 46.

Characteristics

Prior to the September service changes, Route 44 served Northridge Mall seven days a week. Following its truncation, ridership declined, by 12 percent between August and October. Adult cash fare on the route was also reduced, to \$1. On weekdays, Route 44 productivity improves as the day goes on, from around a dozen boardings per hour in the AM peak period to about double that amount in the PM peak. The highest ridership stops are at the Salinas Transit Center, Westridge Center, and the Laurel West Shopping Center.

Notably, Route 44 is the slowest MST route in Salinas, with an average speed over all time periods in the month of October of just 5.9 miles per hour. This may be attributed at least in part to an alignment that largely follows residential streets rather than arterials. In any case, it is reflected in the route's much stronger performance in terms of boardings per mile than in boardings per hour.

45 Northridge-Salinas

Route 45		
Weekday Boardings		268
Weekday Revenue Hours		10.27
Boardings per Hour		18.25
Boardings per Mile		1.13
Schedule Adherence		49.4%
Frequency (minutes)	Mon-Sun	90
Span	Mon-Fri	6:43 am-6:55 pm
	Sat-Sun	8:30 am-6:55 pm

Description

Route 45 operates between the Salinas Transit Center and Northridge Mall via East Salinas. Route 45 operates around the eastern edge of Salinas: from Oldtown Salinas, it runs east along East Market Street and North Sanborn Road before continuing north through the Creekbridge neighborhood, then west on East Boronda Road and north through the Santa Rita area before returning to Northridge Mall via North Main Street. It serves La Paz Middle School, Everett Alvaraz High School, Bolsa Knolls Middle School and Harden Ranch Plaza.

Characteristics

Prior to February, Route 45 was interlined with Route 49. In order to improve on-time performance, which in October was just 49.5 percent, and reduce operating costs, in February the routes were disconnected, Route 45's Santa Rita diversion was shortened, and headways were reduced from 60 to 90 minutes. All data shown here, including both monthly and average weekday data, are from the fall of 2011, prior to these changes.

In October, Route 45 was near the median among Salinas-only routes in terms of boardings per hour, but near the bottom in terms of boardings per mile. Its productivity declined somewhat over the course of the day, from more than 30 boardings per hour in the AM peak period to fewer than 25 in the PM peak.

The busiest stop along Route 45, by far, is the Salinas Transit Center. Among remaining stops, only the southbound stops at Northridge Mall and by Harden Ranch Plaza have more than 10 daily boardings.

Despite its poor on-time performance, Route 45 was in October the fastest route operating entirely within Salinas, at an average speed over all time periods of 16.1 miles per hour (the average for all intra-city routes was 10.7 mph).

46 Natividad

Route 46		
Weekday Boardings		155
Weekday Revenue Hours		5.2
Boardings per Hour		22.03
Boardings per Mile		1.92
Schedule Adherence		61.2%
Frequency (minutes)	Mon-Fri	60
Span	Mon-Fri	6:47 am-7:11 pm

Description

Route 46 operates between the Salinas Transit Center and Natividad Medical Center primarily via Sherwood Drive and Natividad Road. Along the way, it serves the Salinas Adult School. Routes 42, 44, and 46 are interlined on weekdays.

Characteristics

Route 46 is among the more productive services in Salinas, at slightly more than 22 boardings per hour. However, it suffers from relatively poor on-time performance, with schedule adherence in October of just 61 percent. Productivity is highest during midday with more than 40 boardings per hour.

Route 46 ridership is focused on three locations: its anchors at the Salinas Transit Center and Natividad Medical Center, and mid-route at the Salinas Adult School. Its distinctive ridership pattern – relatively heavy use in the morning and early afternoon, followed by a dramatic drop-off in the late afternoon – may be explained by the natures of these destinations.

48 Natividad-Hartnell

Route 48		
Weekday Boardings		176
Weekday Revenue Hours		21.2
Boardings per Hour		8.25
Boardings per Mile		0.66
Schedule Adherence		90.2%
Frequency (minutes)	Mon-Fri	60
Span	Mon-Fri	6:43am-6:38 pm

Description

Route 48 operates between Hartnell College and Natividad Medical Center. In September, its alignment was dramatically revised, and it now operates along the East Alisal Road corridor (taking the place of Route 42 on weekdays). Its former southernmost segment serving Salinas Municipal Airport and the One-Stop Career Center was made a spur, and a one-way loop in East Salinas/Williams Ranch was made much larger in order to partially replace Route 42 on weekdays. The route also operates between the airport and Northridge Mall via Highway 101 for special events. Route 48 now serves the Salinas Transit Center and Hartnell College's Alisal Campus, in addition to Alisal High School. Its schedule was also adjusted in September, and the cash fare for adults increased to \$2 (it has since been increased to \$2.50).

Characteristics

Historically a poor performer, Route 48 remains so after its realignment. It is the worst-performing intra-Salinas route in terms of both passengers per hour and per mile. During no time period over the course of an average weekday does it exceed 10 boardings per hour.

While care should be taken to analyze route patterns that are only a few months old, several factors with Route 48 stand out. It is an extremely inconvenient route in most segments, as it requires significant out-of-direction travel. Only where Route 48 overlaps with Route 41 in the East Alisal corridor and elsewhere in East Salinas is there any meaningful activity at stops, and then far less than on Route 41. Most of the stops along the large one-way loop – both in the airport business park and outside – have low ridership.

49 Northridge

Route 49		
Weekday Boardings		362
Weekday Revenue Hours		11.85
Boardings per Hour		28.54
Boardings per Mile		3.25
Schedule Adherence		62.4%
Frequency (minutes)	Mon-Sun	60
Span	Mon-Fri	6:15 am-10 pm
	Sat	7:15 am-10 pm
	Sun	7:15 am-8:02 pm

Description

Route 49 operates between the Salinas Transit Center and Northridge Mall via North Main Street, serving the Salinas Sports Complex, Heald College, and Harden Ranch Plaza along the way. Select trips serve the Salinas Amtrak Station, and remaining trips will stop there on request. Route 49 operates seven days a week, until 10 p.m. every day except Sunday.

Characteristics

After Route 41, Route 49 is the most productive MST route serving Salinas. Until recently, it had chronic on-time performance issues, with just 62 percent of trips arriving on-time in October 2011. According to staff, this was because Route 49 was at the time interlined with Route 45, which suffered from delays that "cascaded," impacting Route 49. As part of the changes designed to address this issue, Route 49 was, in February, separated from Route 45, and extended north past Northridge Mall to serve the larger Santa Rita loop previously served by Route 45. This change was also designed to allow Routes 29 and 49 to provide a more evenly spaced combined headway of 30 minutes on North Main Street. This improvement was partially reversed when Route 29 started operating on a two-hour headway in April, resulting in some longer, irregular gaps. Route 29 charges a higher fare than Route 49, limiting the utility of their shared service arrangement on North Main.

Route 49 is a direct route serving a productive corridor, with strong anchors in the Salinas Transit Center and Northridge Mall. As with Route 29, stops along North Main near East Alvin Drive, by Heald College, and at Laurel Drive, where connections can be made to Route 42, are strong performers. Stops at Harden Ranch Plaza (southbound) and Rossi Street (northbound) are also relatively active.

Route 49 productivity is much higher in the mid-day – nearly 60 boardings per hour– than in the AM or PM peak periods.

20 Monterey-Salinas (via Marina)

Route 20		
Weekday Boardings		1,572
Weekday Revenue Hours		59.32
Boardings per Hour		23.84
Boardings per Mile		1.23
Schedule Adherence		86.4%
Frequency (minutes)	Mon-Fri (Peak/Mid-day/Evening)	30/30/60
	Sat-Sun	60
Span	Mon-Fri	5:08 am-12:05 am
	Sat	5:45 am-12:03 am
	Sun	6:15 am-9:07 pm

Description

Route 20 operates between the Salinas Transit Center and Monterey Transit Plaza primarily via West Alisal Street within Salinas, and via Marina and Sand City. It operates seven days a week, well into the evening (past midnight Monday through Saturday), and connects Oldtown Salinas to destinations including Hartnell College, the Marina Transit Exchange, Sand City Station and Downtown Monterey. Select trips serve Palma and Notre Dame High Schools, and the afternoon school trip starts at Brunken Avenue and Malarin Street.

Characteristics

As of October 2011, Route 20 was the second-busiest route in the MST system, and carried nearly half-again as many passengers as the third-busiest route. Route 20 connects all four of MST's hubs in North Monterey County. It remains relatively productive throughout the day on weekdays, averaging close to 30 boardings per hour in both the AM and PM peak periods as well as during the mid-day.

Route 20 is the primary route that carries passengers from Salinas to the coastal communities in Monterey County.

Route 20 is anchored strongly on both ends, by the Monterey Transit Plaza and Salinas Transit Center. Mid- route, the Sand City Station, Marina Transit Exchange, and intersection of Del Monte and Palm in Marina are the busiest stops. Within Salinas, the stops at Alisal and Homestead, by Hartnell College, are relatively busy, and the westbound stop at Alisal and Church, by the Monterey County Courthouse, is also fairly busy.

21 Monterey-Salinas (via Highway 68)

Route 21		
Weekday Boardings		37
Weekday Revenue Hours		2.97
Boardings per Hour		12
Boardings per Mile		0.6
Schedule Adherence		74.2%
Frequency (minutes)	Mon-Fri	2 AM, 1 PM trips
Span	Mon-Fri	6:55-9:09 am, 3:10-4:08 pm

Description

Like Route 20, Route 21 operates between the Salinas Transit Center and Monterey Transit Plaza, but primarily via Highway 68. Route 21 operates a very limited schedule, with one AM peak period round trip and a westbound trip in the late afternoon. The latter serves Palma and Notre Dame High Schools.

Characteristics

Route 21 is among the least-used in the MST system. There are only five daily boardings at the Salinas Transit Center, and one to two per day at most remaining Salinas stops. There also appears to be little activity in the Toro Park area. Correspondingly, productivity is low in both the AM and PM periods. On-time performance is lower than average – primarily due to the variable traffic conditions on Highway 68.

23 Salinas-King City

Route 23		
Weekday Boardings		635
Weekday Revenue Hours		39.68
Boardings per Hour		15.05
Boardings per Mile		0.52
Schedule Adherence		66.9%
Frequency (minutes)	Mon-Fri (Daytime/Evening)	60-120/60
	Sat-Sun	60-180
Span	Mon-Fri	5:23 am-8:58 pm
	Sat-Sun	7:55 am-8:52 pm

Description

Route 23 operates between Salinas and King City via Chualar, Gonzales, Soledad and Greenfield. All trips serve the Salinas Transit Center, and there are two branches in Salinas: on weekdays buses travel west along West Alisal Street, terminating at Hartnell College, while on weekends they divert from Abbott Street at East Romie Lane, and travel via Romie and South Main Street toward the STC before continuing north along Highway 101 to Northridge Mall (the Romie/South Main diversion was instituted in April in order to allow discontinuation of weekend Route 43 service). Select trips serve the Abbott Street Park and Ride, the HSBC Card Services campus on Schilling Place, and Palma and Notre Dame High Schools. Outside of Salinas, the route serves the Soledad Correctional Training Facility, among other destinations. It operates seven days a week, into the evening.

Characteristics

As of October 2011, Route 23 was the sixth-busiest in the MST system. Other than Route 82, a Military Commuter route, Route 23 is the only route connecting South County to North County. Compared to other Salinas routes, productivity as measured by passengers per hour or miles is low, but this is to be expected given the long distances it must cover between stops. Route 23 also suffers from on-time performance problems, with schedule adherence in October of about 67 percent. Route 23 productivity remains relatively constant over the course of the day.

Route 23 is a regional route with boardings clustered in every community along the route. In Salinas, the Salinas Transit Center is busiest by far, with relatively little activity to the south, along Abbott Street, and no activity to the west, toward Hartnell College.

25 Marina-Salinas

Route 25		
Weekday Boardings		168
Weekday Revenue Hours		25.95
Boardings per Hour		5.99
Boardings per Mile		0.32
Schedule Adherence		87.9%
Frequency (minutes)	Mon-Fri	60
Span	Mon-Fri	6 am-10:34 pm

Description

Route 25 operates between the Salinas Transit Center and the Marina Walmart (some trips terminate at the Dunes on Monterey Bay shopping center in Marina) via West Alisal Street, Hartnell College and the California State University, Monterey Bay (CSUMB) campus. It is a weekday-only service, although it runs until relatively late. While it generally runs hourly, in the morning it makes one additional trip from Salinas to CSUMB. Route 25 does not operate during CSUMB summer session.

Characteristics

Despite serving two college campuses, Route 25 is among the least-productive in the MST system, with fewer than six boardings per hour in October 2011. Based on the ridership pattern, Route 25's primary patterns are to provide distribution between the CSUMB campus, student housing areas, the regional service in Marina and Salinas, and shopping in Marina. The Salinas Transit Center is the single highest ridership stop, but overall given the number of trips into Salinas, ridership is low. Because Route 25 does not operate year-round, the market for non-student riders is limited. Its productivity improves over the course of the day, but remains below 10 boardings per hour even in the PM peak period. Route 25 duplicates portions of Route 20 service between Marina and Salinas. It appears that passengers are choosing Route 20 over Route 25.

28 Watsonville-Salinas (via Castroville)

Route 28		
Weekday Boardings		320
Weekday Revenue Hours		22.63
Boardings per Hour		12.79
Boardings per Mile		0.47
Schedule Adherence		84.1%
Frequency (minutes)	Mon-Sun	120
Span	Mon-Sat	6:21 am-10:40 pm
	Sun	6:45 am-8 pm

Description

Both Routes 28 and 29 operate between the Salinas Transit Center and the Watsonville Transit Center, and both provide connections to Santa Cruz Metro buses in Watsonville. Route 28 operates seven days a week, into the evening all days but Sunday. Routes 28 and 29 are “interlined” in Watsonville, so that a Route 28 coming into Watsonville leaves as a Route 29. Since April, service has been dramatically reduced on both routes, from hourly to two-hour headways.

Characteristics

At around 13 boardings per hour, Route 28 is not especially productive, but given the rural nature of large stretches of this route, it is not surprising. On weekdays, its performance improves somewhat over the course of the day, approaching 20 boardings per hour in the PM peak period. The Salinas Transit Center is the highest ridership stop on the route. Of the two routes serving the Watsonville/Salinas market, Route 28 is the least productive.

Route 28 travels within a somewhat less-productive corridor – West Market Street, Castroville and Moss Landing – than does Route 29. The biggest difference in ridership for these two routes is that Route 28 carries very few intra-Salinas trips, whereas Route 29 also serves a major intra-Salinas market between the Northridge Mall and Salinas Transit Center.

29 Watsonville-Salinas (via Prunedale)

Route 29		
Weekday Boardings		494
Weekday Revenue Hours		27.08
Boardings per Hour		14.82
Boardings per Mile		0.9
Schedule Adherence		74.2%
Frequency (minutes)	Mon-Sun	120
Span	Mon-Fri	5:45 am-8:39 pm
	Sat-Sun	5:45 am-8 pm

Description

Route 29 operates between the Salinas Transit Center and the Watsonville Transit Center via North Main Street, Prunedale, Las Lomas and Pajaro. It operates seven days a week and serves destinations including the Salinas Sports Complex, Heald College, Harden Ranch Plaza, and Northridge Mall. At Watsonville, it provides connections to Santa Cruz Metro. Along with Alisal Street, North Main Street between the Salinas Transit Center and Northridge Mall is also served by Route 49. Between Routes 29 and 49, some 30-minute service is currently offered between STC and the Mall (however, since Route 29 frequencies were reduced from one to two hours in April, some longer, irregular gaps now exist). Routes 28 and 29 are interlined in Watsonville.

Characteristics

As of October 2011, Route 29 was the seventh-busiest in the MST system. Unlike Route 28, which operates west along West Market Street in Salinas, Route 29 serves the busy North Main corridor. However, at fewer than 15 boardings per hour, productivity is not especially high. On weekdays it improves over the course of the day from roughly a dozen boardings per hour in the AM peak period to about twice that in the PM peak.

Route 29 has strong anchors at the Watsonville and Salinas Transit Centers, and there is a relatively busy northbound stop in Las Lomas. However, its busiest stop other than the Transit Centers is at Northridge Mall, and the stops along North Main are fairly busy, in particular the southbound stops at North Main and East Alvin Drive, by Heald College, and at Laurel Drive, where connections can be made to Route 42.

A significant fare difference exists between Routes 29 and 49 on the North Main Street corridor between the Mall and the Salinas Transit Center. For this reason, passengers may be opting to ride Route 49 instead of Route 29 for intra-Salinas trips.

OUTREACH

Passenger Survey

An on-board survey of passengers on Salinas-area MST routes was conducted January 24 and 25, 2012. The survey form can be found in Appendix A. The purpose of the survey was to collect information on riders' travel patterns and needs, in order to inform the recommendations development process.

All routes operating entirely within Salinas and relatively frequent, all-day intercity services connecting to Salinas were surveyed; these included Routes 20, 25, 28 and 29. Because much of the ridership base of each route is outside Salinas, Route 20 was surveyed only between Salinas and Marina, and Route 25 was surveyed only within the city of Salinas.

The survey was conducted in "typical" conditions, on days in the middle of the week (Tuesday and Wednesday), during the school year, when the weather was mild.

A total of 581 responses were collected, of which 559 were complete. Routes were surveyed roughly in proportion to their share of the total ridership for all routes. Figure 2-22 shows numbers of responses on each route.

Figure 2-22 Numbers of MST Passenger Survey Responses

Route	Responses	Share of Total	Share of Ridership
41	168	30%	31%
42	30	5%	5%
43	28	5%	5%
44	15	3%	2%
45	42	8%	4%
46	17	3%	2%
48	15	3%	2%
49	32	6%	6%
20	119	21%	26%
25	15	3%	2%
28	33	6%	6%
29	45	8%	9%

The survey was in both English and Spanish. A total of 425 completed responses, or 76 percent, were in English, while 134 or 24 percent were in Spanish (on Routes 41 and 42, 39 percent of responses were in Spanish).

Travel Behavior

Ninety-one percent of respondents walked to the bus stop, and 94 percent said they would walk to their final destinations. This is typical for a transit system such as MST in Salinas, where there are no commuter park-and-ride lots (there are two lots outside of Salinas along Routes 28 and 29.) Seven percent were driven to stops, and four percent said they would be picked up.

Notably, of those who walked to their stops, fully 30 percent had walked four or more blocks, and 29 percent said they would walk four or more blocks to their final destinations. These are unusually high figures.

Responses are in Figures 2-23 and 2-24.

Figure 2-23 Q2: How did you get to the bus when you started your trip?

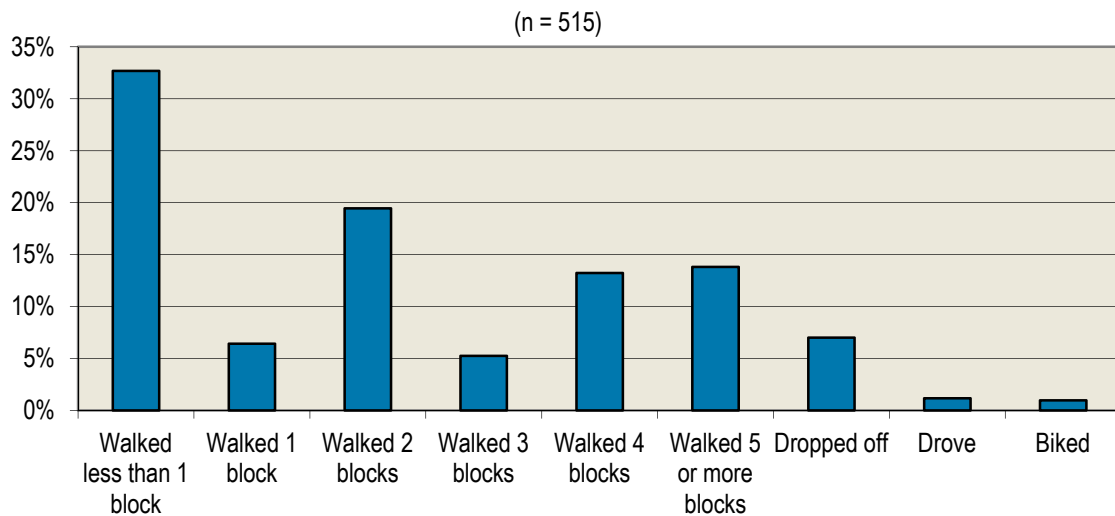
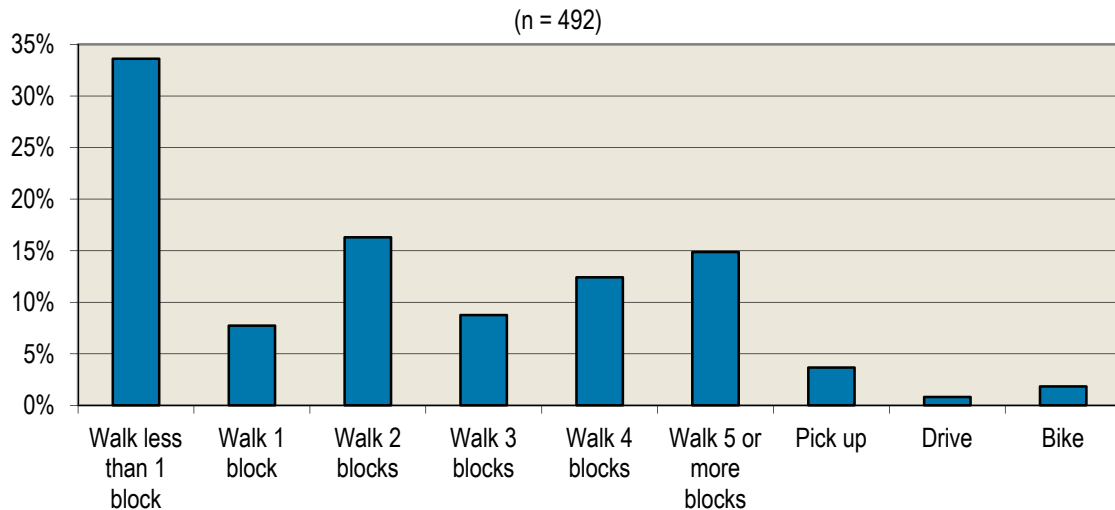


Figure 2-24 Q4: How will you get to the end of this trip?



Forty-one percent of respondents' trips involve a transfer. Given the radial nature of Salinas service, this is to be expected.

Fifty-eight, or 10 percent, said they would require two transfers.

Figure 2-25 shows numbers of transfers identified between the 14 routes included in this study⁷. Connections with more than ten transfers are shown in orange, and those with between five and nine are in yellow.

Figure 2-25 Transfer Matrix

	20	21	23	25	28	29	41	42	43	44	45	46	48	49
20														
21	0													
23	4	0												
25	2	0	1											
28	5	0	1	0										
29	14	0	3	1	3									
41	14	0	2	4	2	8								
42	0	0	0	0	1	0	14							
43	8	0	0	0	0	3	15	0						
44	6	0	3	0	0	0	2	0	1					
45	6	0	2	1	4	1	6	1	3	1				
46	6	0	5	0	2	1	5	1	0	4	0			
48	1	0	2	1	0	0	2	0	0	0	0	0		
49	16	0	0	0	1	0	7	0	7	0	1	1	1	

The heaviest transfer activity can be found along the busiest routes, Routes 20 and 41. Major connections include:

- Routes 20 and 29
- Routes 20 and 41
- Routes 20 and 49
- Routes 41 and 42
- Routes 41 and 43

Figure 2-26 provides an additional layer of detail, showing numbers of transfers *from* and *to* each route in each route pairing. Figures above the grayed-out cells are transfers from the routes listed at left to the routes listed above, while figures below the grayed-out cells are transfers from the

⁷ In some cases, passengers said they would be transferring to one of two or more routes. In these cases, transfers have been "assigned" to, first, the likelier of the two routes given professional judgment; two, the intra-city route rather than the inter-city route; and three, the busier of the two routes.

routes listed above to the routes listed at left. Totals at the right are numbers of transfers *from* a route, while figures at the bottom are numbers of transfers *to* a route.

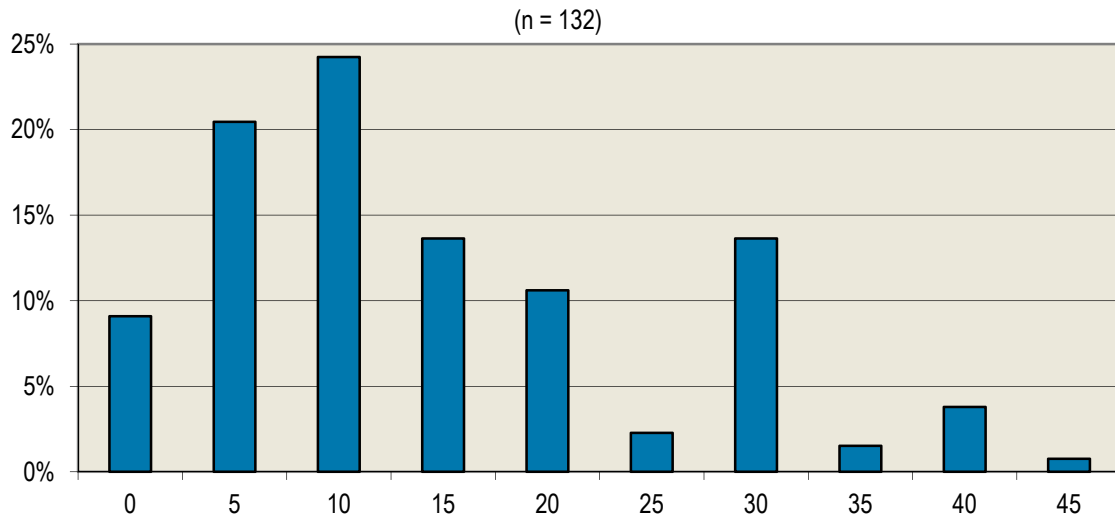
Figure 2-26 Detailed Transfer Matrix

	20	21	23	25	28	29	41	42	43	44	45	46	48	49	SUM
20		0	0	1	1	6	10	0	4	4	0	4	0	11	45
21	0		0	0	0	0	0	0	0	0	0	0	0	0	0
23	4	0		0	1	2	0	0	0	1	2	3	1	0	14
25	1	0	1		0	0	3	0	0	0	1	0	1	0	7
28	4	0	0	0		3	2	0	0	0	4	0	0	0	16
29	8	0	1	1	0		3	0	2	0	1	0	0	0	17
41	4	0	2	1	0	5		8	8	0	3	2	1	3	51
42	0	0	0	0	1	0	6		0	0	0	0	0	0	7
43	4	0	0	0	0	1	7	0		1	2	0	0	5	20
44	2	0	2	0	0	0	2	0	0		1	4	0	0	11
45	6	0	0	0	0	0	3	1	1	0		0	0	1	16
46	2	0	2	0	2	1	3	1	0	0	0		0	0	12
48	1	0	1	0	0	0	1	0	0	0	0	0		1	4
49	5	0	0	0	1	0	4	0	2	0	0	1	0		13
SUM	45	0	9	3	9	19	58	10	17	6	18	15	3	21	

Again, Routes 20 and 41 are, by far, both the largest contributors to (45 and 51) and recipients of (45 and 58) transfer activity.

Participants who transferred were asked how long they had had to wait for the next bus. Responses are shown in Figure 2-27.

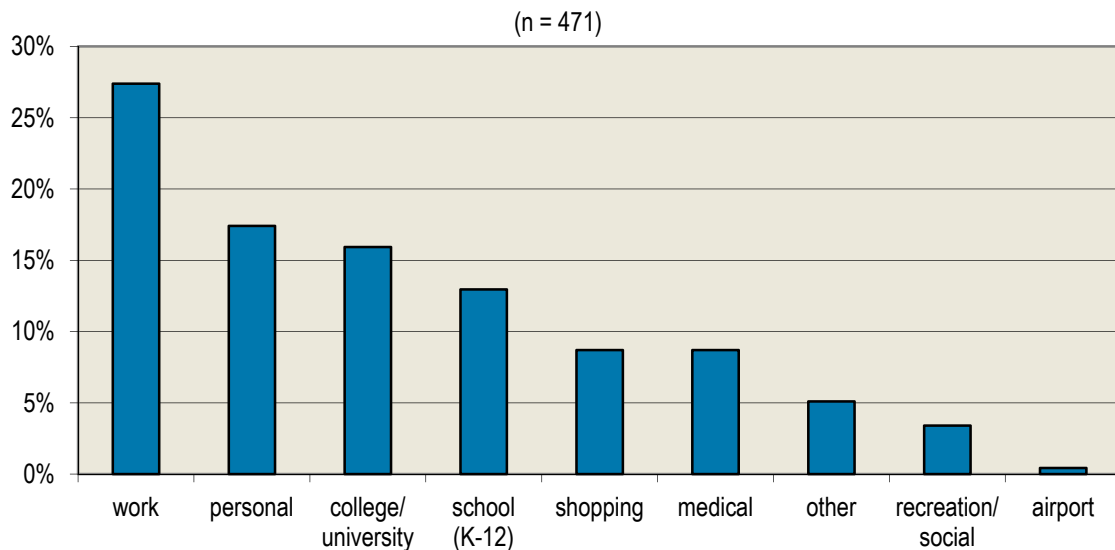
Figure 2-27 Q3.3: And how long did you wait for this bus? ____ minutes



Just more than half of respondents (54 percent) said they had waited 10 minutes or less for their connecting bus, and over three-quarters (78 percent) said they had waited 20 minutes or less. The average was approximately 15 minutes.

Trip purpose responses are shown in Figure 2-28.

Figure 2-28 Q6: What is your main trip purpose (either coming from or going to)?



Of the 471 participants who provided a single answer to this question, 27 percent identified work as the primary purpose of their trips. Twenty-nine percent identified school, either at the K-12 or college level.

An additional 64 respondents selected multiple options, providing insight into “chained” trips, or trips with several legs. “Shopping” was a popular choice, selected by 58 percent of these respondents. Fifty-three percent selected “personal,” and 50 percent chose “work.”

Perceptions of Service

Customer perceptions of the quality of MST service are shown in Figures 2-29, 2-30 and 2-31.

Figure 2-29 Q8: Does Monterey-Salinas Transit serve the right areas in Salinas?

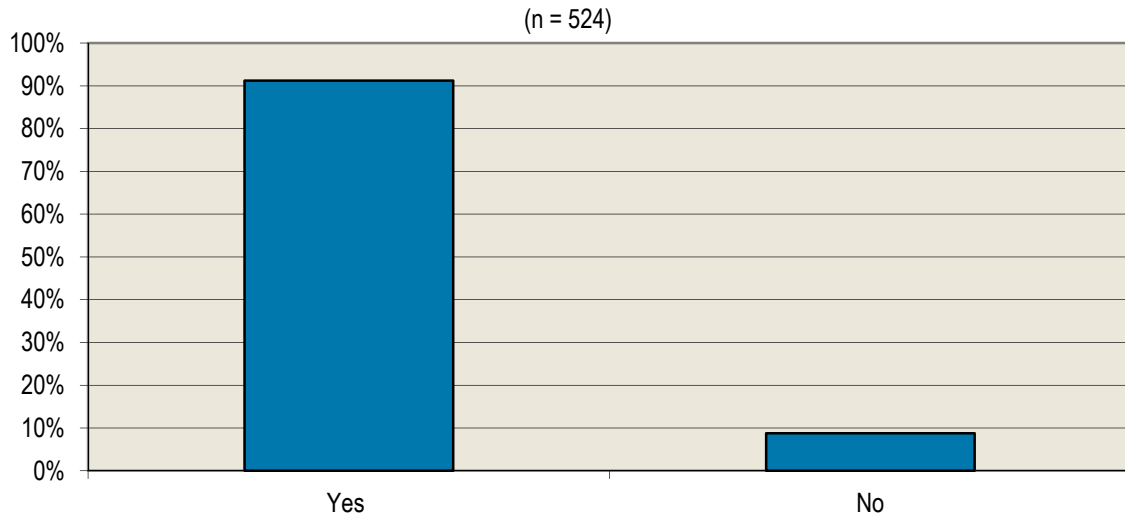


Figure 2-30 Q9: Does Monterey-Salinas Transit provide the right amount of service in Salinas?

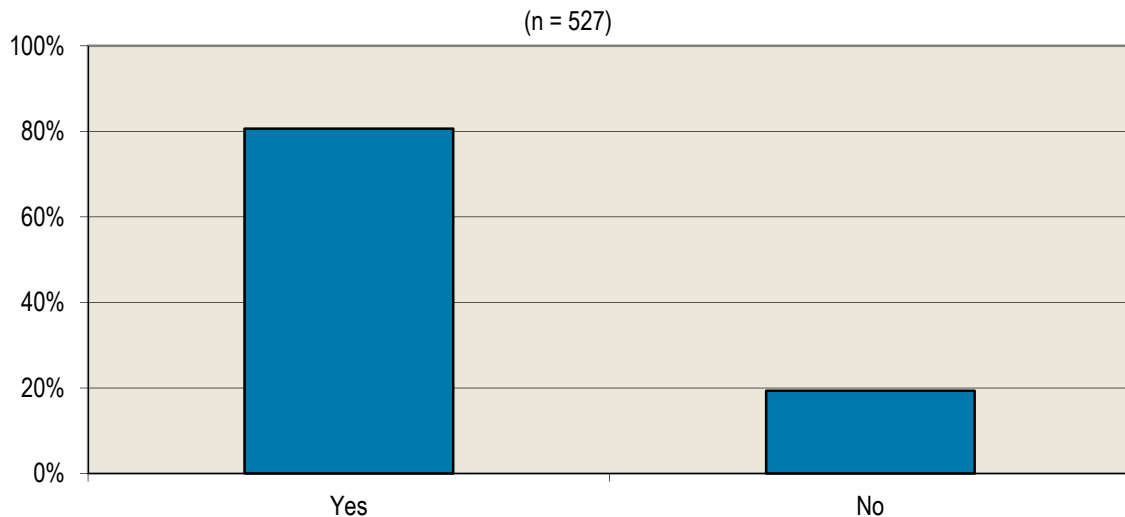
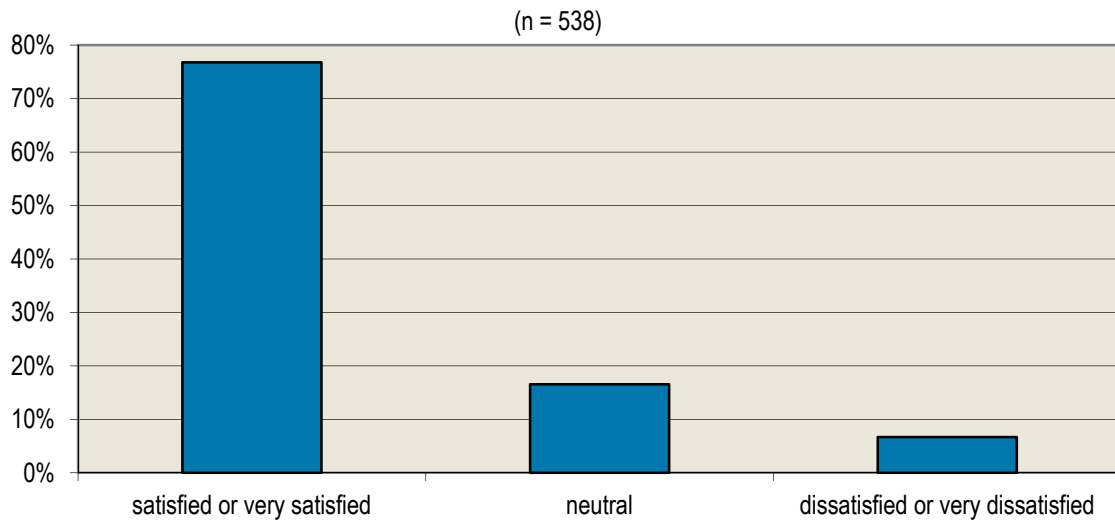


Figure 2-31 Q11: How satisfied are you with the service on this route?



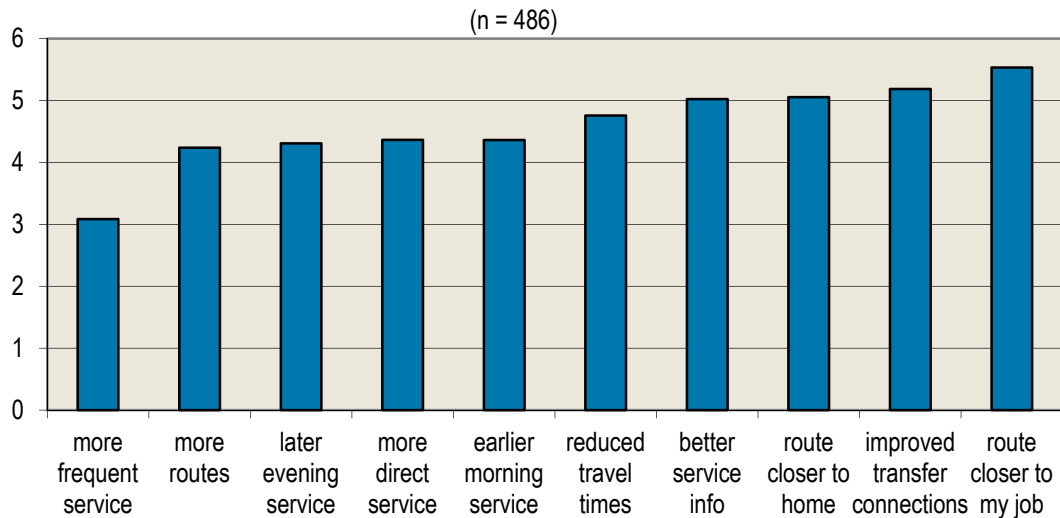
Responses to these questions were positive: 91 percent of respondents believe MST serves the right areas in Salinas, 81 percent believe MST provides the right amount of service in Salinas, and 77 percent said they were either satisfied or very satisfied with the service on their routes (another 17 percent said they were neutral, and just 7 percent were dissatisfied or very dissatisfied⁸).

Priorities for Improvement

Survey respondents were asked to rank possible service improvements, which are shown in Figure 2-32.

⁸ Due to an error, “very dissatisfied” was not provided as an option on the Spanish version of the survey; instead, “very satisfied,” or “muy satisfecho” was repeated in its place. However, just two respondents selected the second “very satisfied,” and both answered yes to both questions 8 and 9, indicating a positive opinion of MST service. It is likely that some of the 10 respondents who chose “dissatisfied” would have chosen “very dissatisfied” if it had been available. For this reason, separate findings for “dissatisfied” and “very dissatisfied” are not presented here.

Figure 2-32 Q10: Please rank the following potential service improvements, in terms of the relative importance to you. Rank from 1 (most important) to 10 (least important).



Participants were asked to rank the improvements from 1 to 10; however, many responded by *rating* improvements (defining 1 as “very important” instead of “most important”). Figure 45, then, shows average scores assigned to each improvement, with lower scores representing higher priorities. With an average score of 3.09, “more frequent service” was the most desired improvement by far. This was followed by “more routes” (4.24), “later evening service” (4.29), “earlier morning service” (4.36) and “more direct service” (4.38). The lowest-priority improvement, at an average score of 5.53, was “route closer to my job.”

Respondents to Question 10 were also given an opportunity to identify other improvements to service they might like to see. Additionally, those who answered no to questions 8 and 9 were asked follow-up questions regarding service improvements (“Where should it serve?” and “What should it provide?”). Finally, in Question 14 participants were asked if there were any other comments they would like to make. Responses to each of these questions are summarized below.

Corridors and areas where new service was requested included:

- arterials including South Sanborn Road and John Street;
- additional segments of streets already served, including Garner Avenue;
- neighborhood streets including Pajaro, San Luis, Parkside and Oregon;
- roads outside Salinas including San Juan Grade (multiple responses) and Old Stage;
- neighborhoods including additional parts of Creekbridge (multiple responses) and Sherwood;
- cities including Hollister.

Types of improvements requested included:

- More frequent service (multiple responses)
- More reliable service (multiple responses)
- Earlier and later service (multiple responses)
- More weekend service (multiple responses)

- More/closer stops (multiple responses)
- Fewer stops/faster service (multiple responses)
- More posted maps and schedules at stops (multiple responses)
- Improved accommodations for bicycles (multiple responses)
- More courteous driver behavior and greater/fairer enforcement of rules aboard buses (multiple responses)
- Reduced fares (multiple responses)
- Local fares for local trips on regional routes
- Elimination of cash fares for Basic pass holders
- Free transfers
- Free fares for college students
- Discounted fares for Monterey Peninsula College students
- More seats on buses
- Consistent headways where routes overlap
- More reliable timed transfers (buses should wait a few minutes if necessary)
- Smaller buses in neighborhoods
- Seat belts and car seats for children on buses
- More guide books on buses
- More advance notice of hearings/service changes
- Greater investment in service rather than administration
- No further reductions in service
- Additional service to retail centers (including Wal-Mart and K-Mart)
- More weekend service to Creekbridge
- Increased service to Soledad, Gilroy and San Jose
- Improvements to specific routes including:
 - Later service on Route 20
 - More service on Route 21 to Monterey Airport (multiple responses)
 - More reliable service on Route 23
 - Reduced fares and more frequent service on Route 29
 - Evenly spaced headways, more frequent and faster service on Routes 29 and 49 on North Main Street
 - More frequent and later service on Route 41
 - Restoration of Route 42 weekday service and more frequent service in East Salinas (multiple responses, especially in Spanish)
 - Restoration of half-hour weekend service on Route 43
 - Restoration of weekday service to Northridge Mall and faster and more frequent service on Route 44 (multiple responses)
 - More frequent, reliable, later and Sunday service on Route 45 (multiple responses)
 - More frequent service on Route 46
 - More frequent and later service on Route 49 (multiple responses)

Finally, Question #7 asked “Is there a bus stop that you think needs improvements such as a better place to stand, a bench, a shelter?” Requests for improvement to stops within Salinas included:

- More shelters and benches generally (multiple responses)
- Improvements at the following locations:
 - Salinas Transit Center
 - Williams Road and Del Monte Avenue (multiple responses)
 - West Rossi Street at Rossi Circle (multiple responses)
 - East Alisal Street at Soledad Street
 - East Alisal at California Street
 - East Alisal at Front Street
 - East Alisal at Filice Street
 - West Alisal Street at Salinas Street
 - West Alisal at College Drive
 - Del Monte Avenue at Sanborn Road
 - North Main Street at Laurel Drive
 - North Main Street at Curtis Street
 - West Laurel Drive at Tyler Street
 - North Davis Road and Westridge Parkway
 - Harden Parkway at Broadway Drive
 - Calle del Adobe at Addington Lane
 - Abbott Street at Merrill Street
 - East Blanco Road at Abbott Street
 - East Romie Lane at Abbott Street
 - West Market Street at Railroad Avenue
 - Van Buren Avenue at Russell Road
 - Freedom Parkway at Constitution Boulevard
 - Freedom Parkway at Nogal Drive
 - East Alvin Drive at Kip Drive
 - West Acacia Street at San Antonio Drive
 - Mesquite Drive at Tumbleweed Drive
 - North Main Street (multiple responses)
 - Laurel Drive (multiple responses)
 - Davis Road (multiple responses)
 - Garner Avenue (multiple responses)
 - Rider Avenue (multiple responses)
 - Boronda Road (multiple responses)
 - Del Monte Avenue
 - West Alisal Street

- North Sanborn Road
- Natividad Avenue
- Independence Boulevard
- Freedom Parkway
- Alvin Drive
- Northridge Mall
- Hartnell College
- Heald College
- Natividad Hospital
- Wal-Mart stores
- 7-11 stores
- Banks (multiple responses, primarily in Spanish)
- Fire stations
- along Routes 28, 41, 42, 45 and 48

Service Changes

Participants were asked if the September service changes had affected their travel behavior, and if so, how. Responses are shown in Figures 2-33 and 2-34.

Figure 2-33 Q12: Since MST service was changed in September, do you think it has gotten better, worse, or remained about the same?

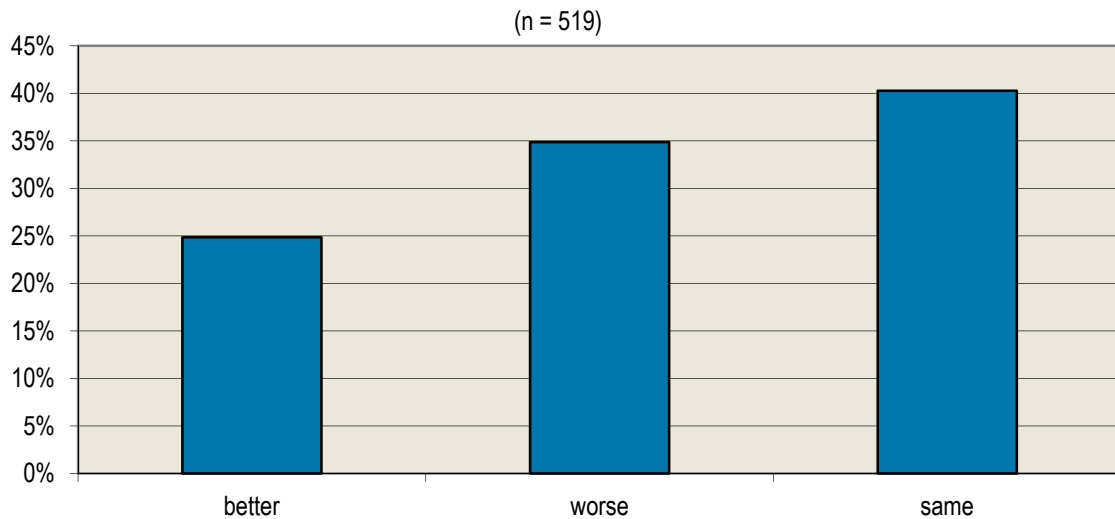
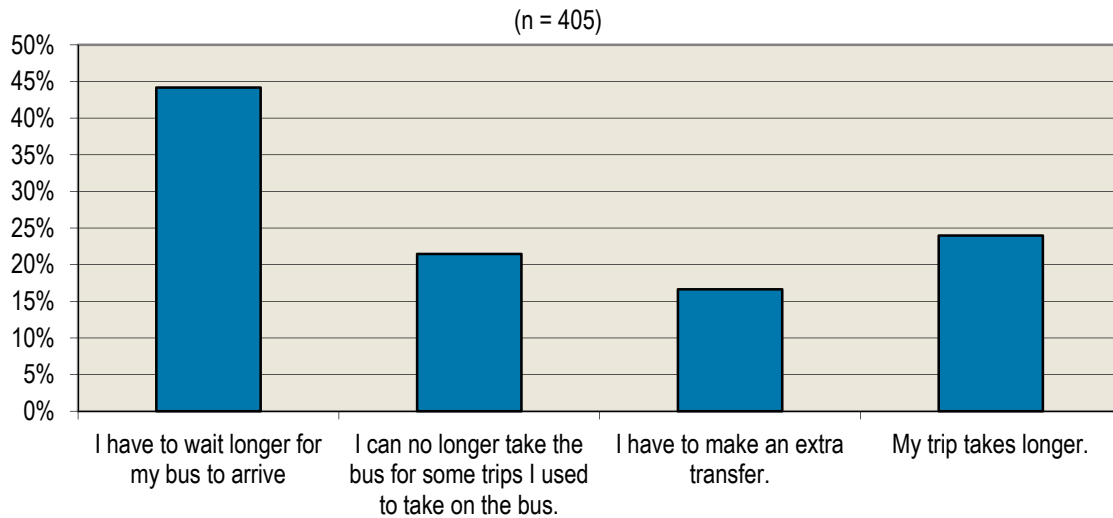


Figure 2-34 Q13: If the September service changes affected your usual travel patterns, how? (Check all that apply.)



Forty percent of respondents to the first question thought service had remained about the same since the September service changes, while 35 percent thought it had gotten worse and 25 percent thought it had gotten better.

Seventy-two percent of participants, meanwhile, responded to the second question, indicating that the September service changes impacted a large majority of customers in some way. Forty-four percent of all survey respondents said they now have to wait longer for their buses, while 24 percent said their trips take longer, 21 percent said they can no longer take the bus for some trips they used to take by bus, and 17 percent said they had to make extra transfers.

The September service changes impacted many routes, but perhaps none more so than Routes 41 and 42, which previously combined to provide 15-minute service in the East Alisal corridor. Since September, Route 42 no longer operates in the corridor on weekdays, and combined headways in the corridor are now 20 to 30 minutes. Thirty-nine percent of the 185 riders on these routes who responded to the first question said that service had gotten worse, and only 18 percent said it had gotten better. Fifty-three percent of all survey respondents on these routes, meanwhile, said they now have to wait longer, 29 percent said they could no longer take some trips on the bus, 25 percent said their trips took longer, and 19 percent said they had to make extra transfers.

Operator Interviews

Concurrent with the passenger survey, brief, informal interviews were conducted with MST operators based at the CJW Operations Facility. About a half-dozen operators were interviewed; a relatively lengthy interview was conducted with 23-year MST veteran (and 2011 Employee of the Year) Steve Colburn.

Generally, operators said that Salinas-area MST routes function reasonably well from an operational perspective. Unlike in many communities, all streets on which buses operate provide sufficient space for safe, efficient operation, including turn movements. Operators also noted that planning staff generally do a good job of listening to and addressing their concerns. However, as

is typical of transit operations, a number of schedule-related and other issues were noted. A few major observations follow.

- Routes serving schools suffer from overcrowding and congestion-related delays around bell times.
- Too little time is provided in the schedule for Route 20 between the Marina Transit Exchange and Salinas Transit Center (STC).
- Route 41 on-time performance has improved since a number of closely-spaced stops were removed a few years ago.
- Most stops along Route 41 are spaced at reasonable intervals; there are relatively long gaps on Williams Road and East Alisal Street, but stops on Del Monte Avenue remain relatively frequent.
- MST proposed, some time ago, to remove the Rider Avenue diversion from Route 41, but the idea was rejected by the community.
- Motorists regularly run red lights along East Alisal Street at Filice and Wood streets (the latter leads to a Highway 101 on-ramp).
- On Sundays, when all fares are half-price, Route 41 experiences severe crowding starting from the beginning of the route eastbound, at Northridge Mall (at other times, most travel is in the segment between Natividad Medical Center and STC).
- Passengers along Route 41 between STC and Natividad Medical Center often let Route 48 buses pass by because they remain unaware that Route 48 now serves much of the Route 41 alignment within this segment on weekdays (Route 42, which for more than two decades had shared the alignment, was truncated in September to operate only between Natividad Medical Center and Westridge Center on weekdays).
- It might be possible to accommodate loads within the Natividad Medical Center-STC segment using just two buses per hour (in parts of the segment where Route 48 does not overlap with Route 42, just two buses per hour operate now) if headways were evenly spaced (for example, Route 41 on the hour, and Route 42 on the half-hour).
- Routes 43 and 46, which are interlined and serve the city's two major hospitals (Salinas Valley Memorial Hospital and Natividad Medical Center), are often delayed by time-consuming wheelchair boardings (in October, Route 43 schedule adherence was poor, but Route 46 performed reasonably well).
- Schedules for Routes 43 and 46 have also historically provided too little recovery time.
- Since the September service changes, the schedule for Route 43 has been particularly problematic, requiring operators to slow down in order to avoid arriving ahead of schedule ("running hot") at the timepoint of South Main Street and East Romie Lane, and resulting in late arrivals at STC, where "pulsed" or timed connections with Routes 20, 28, 29 and 41 are often missed.
- These timed connections are sometimes barely missed; a Route 43 bus may be waiting on Salinas Avenue to pull into STC (Route 45 buses must first clear out of their shared gate), but operators of buses on connecting routes are unable to see it.
- Due to a history of accidents, Central Avenue adjacent to STC cannot be used by buses, requiring vehicles on several routes to travel an additional two blocks (north on Lincoln Avenue to West Market Street before turning right and "doubling back" via Salinas Street) to access STC. This contributes to the on-time performance problems of Routes 43 and 46.

- It might be possible to shorten the Routes 43 and 46 alignments and improve on-time performance simply by having them switch gates at STC.
- Since Route 44 was truncated to no longer serve Northridge Mall on weekdays, travel between Northridge Mall and Westridge Center is highly problematic (two routes must be used, taking riders well out of direction and charging \$4 in combined fares – and if the connection between them is missed, the wait to transfer can be up to an hour).
- Route 45, which has historically suffered from poor on-time performance, regularly falls behind schedule along East Boronda Road, a mostly two-lane street that experiences severe congestion during peak periods.
- Route 49 suffers from delays attempting to turn left into Northridge Mall around noon on weekdays, in part because of a relatively short left-turn signal phase.

Stakeholder Interviews

A number of interviews with important stakeholders, as identified by MST staff, were also conducted, most of them by phone on Thursday, January 26 (a few were conducted in person, and a few were conducted later). Stakeholders that were available for interviews included:

- Tony Barrera, Councilmember, District 2 (East Salinas)
- Alejandro Chavez, Aide to Fernando Armenta, County Supervisor, District 1 (Salinas)
- Andy Cook, Associate Transportation Planner, Transportation Agency for Monterey County (TAMC)
- Randy Deshazo, Principal Planner, Association of Monterey Bay Area Governments (AMBAG)
- Henry Gowin, Aide to Louis Calcagno, County Supervisor, District 2 (North Salinas and Castroville)
- Timothy Miguel, former Student Trustee, Hartnell College
- James Serrano, Transportation Planner, City of Salinas
- Stephanie Shonley, Management Analyst, One-Stop Career Center of Monterey County
- Michelle Slade, Vice President of Impact-Boys & Girls Club of Monterey County
- Christina Watson, Senior Transportation Planner, TAMC

Following are summaries of these interviews.

Tony Barrera

- Mr. Barrera represents East Salinas. His opinion of MST service is generally a good one. He was pleased to learn that service had been extended in September (via Route 48) to Hartnell College's Alisal Campus. He also said that MST staff, and Hunter Harvath in particular, had established a good relationship with the community.
- Community members are concerned, of course, whenever they hear of routing changes. Outreach using Spanish newspapers is problematic; people usually read these for job listings, but little else. Fliers are similarly problematic, as people might view them as "junk mail" and throw them out. He recommended Spanish-language radio as a good way to inform the public of proposed service changes.
- Many East Salinas residents carpool to jobs at agriculture plants in South Salinas. Some take "labor buses," operated by contractors hired by plant owners. One of these,

Escamilla and Sons, operates more than 50 buses in Salinas and Yuma, Arizona (another lettuce-growing region where many Salinas residents work during the fall and winter). Up to 15 or 20 residents of one home may work in the same plant, and one bus may pick up residents of three or four homes. These buses operate on narrow neighborhood streets, early in the morning.

- Many Salinas agricultural workers used to maintain separate residences in Salinas and Yuma, but as this has grown more expensive, many simply remain in Salinas collecting unemployment benefits between September and February (as unemployment is more lucrative than a minimum-wage job). This is why the unemployment rate in winter in Salinas can be over 20 percent.
- South Salinas is a huge economic engine for the city, generating \$5 million annually in tax revenue, as compared to \$340,000 for Old Town (only the Salinas Auto Mall generates more revenue, he said). But, he said, there is a perception that attention and benefits flow disproportionately to Old Town. For years, he said, the community has been asking for an extension of the Salinas Trolley to East Salinas.
- Other primary travel markets for East Salinas residents are the hospitals, shopping centers, and Hartnell College.

Alejandro Chavez

- District 1 includes downtown, South, East, and parts of North Salinas. Mr. Chavez has heard both praise and criticism for MST. Its greatest challenge, he said, is to provide adequate service to medical and shopping centers. He believes route coverage is good, and that MST largely uses its resources wisely.
- Reduced frequency on East Alisal Street has been problematic. Relocating stops would also be problematic, as there is a comfort level in knowing where stops are located. He said that Route 23 is often overcrowded, and that A bus stop by A CHISPA housing complex is uncomfortably close to the freeway.
- He said that any reexamination of the Salinas-area route structure should focus on the triangle formed by Routes 41 and 49 (interlining these two routes would make it possible to provide one-seat rides from East Salinas to North Main Street destinations).
- He believes that the study should look for ways to increase frequency on the most-heavily used routes. The situation is “chicken and egg,” he observed: reducing frequency reduces ridership, which in turn leads to further reductions in frequency. Seniors, college students and service to hospitals should also be prioritized.
- Many people who work in retail live and work in Salinas, making them an attractive market. So do many agricultural plant workers; however, they won’t use transit to get to work, he said.

Randy Deshazo

- Due to the recession, there is a large “shadow inventory” of entitled housing projects in Monterey County that the market may not be able to absorb for years. Overall, the growth rate in Monterey County is slow, and slowing, particularly in the coastal cities, where little housing is being built and the population is aging. Salinas and the other “interior” communities are both younger and more Latino, with larger household sizes.

Mr. Deshazo referred to the inland areas as the county's "foreclosure belt," where the population peaked around 2008 before residents began to leave.

- Based on current growth trends, the "Future Growth Area" in North Salinas is likely to remain largely undeveloped for another five to ten years. There is a limited employment base in Salinas, which is "in the shadow of the Bay Area," with its higher-wage jobs. The "stalwarts" of the local economy are tourist and agriculture-related jobs.
- AMBAG has been able to "chip away" at the county's jobs-housing imbalance using the state Regional Housing Needs Allowance (RHNA) program, which requires all cities to accommodate some affordable housing. One of the greatest challenges facing the county over the long term is a water shortage: the county is currently under state mandates to find replacement sources for much of its water supply.
- Recent increases in fuel prices have not resulted in significant increases in MST ridership.
- Under state Senate Bill 375, MPOs such as AMBAG are required to develop plans to reduce greenhouse gas emission and vehicles miles traveled as part of their Sustainable Communities Strategies. Mr. Deshazo does not believe that transit will be a substantial component of the AMBAG SCS. Land use is more important; however, he is concerned that there is little market incentive for more intense development in Salinas, or for more jobs in the city.
- Until recently, more growth was projected for the county, but this was due in part to aggressive forecasts for a few South County cities. The projected 13 percent growth in greenhouse gas emissions under current trends is, Mr. Deshazo said, unlikely to occur. New growth forecasts now under development will likely show negligible growth through 2015, with some growth between 2015 and 2020 as Baby Boomers "cash out" their equity and retire to the area, bidding up home prices, or simply visit as tourists, contributing to the local economy.

Henry Gowin

- Mr. Gowin expressed concern with the cost-effectiveness of the RIDES paratransit program. He wondered whether it might be possible to use smaller vehicles, or cabs. As for fixed-route services, he has heard no complaints. There are probably outlying areas that aren't well-served; Salinas-Watsonville service seems limited. He said that service should reflect travel patterns, rather than MST internal needs. He also requested that MST study the feasibility of shuttle service to the new Castroville library.

Timothy Miguel

- At Hartnell, many students are unable to take night courses because while they could take buses to class, service ends too early for them to return home.
- The current arrangement between MST and Hartnell, where students are able to ride for free (including a transfer to a second route) away from campus if they show identification, was adapted from a similar program at CSU Monterey Bay starting last August. A student fee-funded pass or discounted fare program was considered, but it was determined that a more limited pilot program should be tried first. The program is funded by the Student Senate, at a cost of about \$30,000 per year. A member of the Student Senate has been collecting data on the program: in the first semester, about 9,000 rides were taken (combined annual boardings at the two campus stops total about 27,000).

- Students live throughout Salinas, but primarily in East and North Salinas, as well as in outlying areas.
- Mr. Miguel has observed few students using the Salinas Trolley despite the free connections it provides to STC. It may be an issue of awareness, he said. For the free fare program, fliers have been posted around campus.
- The main campus stops are at West Alisal Street and Homestead Avenue on the southeast corner of campus. The Salinas Trolley extends into the campus itself.
- Mr. Miguel finds MST buses to be somewhat dirty.
- Total enrollment at Hartnell is about 10,000. About 1,000 students are at the Alisal Campus, which is focused on technical training, including training for positions in the automotive and agricultural fields. Hartnell recently contributed funding to a new turnaround for MST buses there.

James Serrano

- Mr. Serrano, who as City transportation staff will be involved in the process of implementing any recommendations from this study, described the recommendations from the previous SASA-I study as "excellent." Only one that was implemented, involving operation on the residential Las Palos Drive near Salinas Valley Memorial Hospital, encountered community opposition and eventually had to be rescinded. A few of the recommendations, such as removal of service from East Market Street in East Salinas in order to provide more (consolidated) service on parallel East Alisal Street, encountered initial opposition and were not implemented (in the case of East Market, merchants wished to retain service).
- Mr. Serrano described the land use context in Salinas. Because farmland just beyond the city limits to the south and east is highly productive, growth has for some time been directed toward the northeast. East Boronda Road, which runs along the city's northeastern edge, suffers from traffic congestion and is planned to be widened to four lanes. Development of the Master Plan "Future Growth Area" beyond Boronda, including a fully permitted retail development near Northridge Mall, has been delayed by the recession, but McKinnon Elementary School was recently constructed north of Boronda.
- The Creekbridge neighborhood, which was built in the 1990s just south of Boronda, has obtained approval to build additional apartments. Mr. Serrano described Creekbridge as a "walking community," noting that while most homes are new and rather large, there are high-density apartments and there is some Section 8 affordable housing in the area, and due to a relative lack of transit service within the neighborhood, many residents MUST walk to Natividad Medical Center.
- The Santa Rita neighborhood to the far north also has some multifamily housing. The Bolsa Knolls area just beyond the city limits to the north tried to attract direct MST service by providing a stop, but the stop did not meet MST guidelines.
- There is a significant amount of senior housing along North Main Street.
- Some new development is planned in the industrial and commercial corridor to the southeast (generally between John Street, Abbott Street and Highway 101). There are already 25,000 jobs located within this area, and there is little existing transit service. Better serving this area would be challenging: there are many large trucks making slow turn movements, there are few sidewalks, agricultural jobs are seasonal in nature, and

activity and congestion peak around shift changes at 7 a.m., 3 p.m., and 11 p.m. However, many of the major agricultural production facilities are relatively near Abbott Street and Sanborn Road, major arterials. Traffic speeds are high along Abbott, making provision of additional stops (Route 23 makes a few stops on Abbott, a few times a day) potentially problematic, and Sanborn suffers from congestion. Sanborn does, however, provide a direct connection to East Salinas, where many area workers live, and there are many hotels along this corridor, near Salinas Municipal Airport. There are also a number of jobs at the Firestone Business Park several miles further south along Abbott Road, near its interchange with Highway 101. An employer has offered his parking lot as a turnaround location for MST buses; unfortunately, it would not be possible to provide an ADA-compliant stop at this site (the City has secured space for buses to lay over at a planned development site nearby). An adjacent commercial area along Moffett Street near the airport is newly served since the September service changes by Route 48.

- With the exception of Hartnell College and the South Main Street corridor (where there is significant congestion around school bell times), there is little demand for transit in southwestern Salinas.
- Mr. Serrano spoke about MST ridership and service trends. While ridership along routes operating in the East Alisal corridor has fallen since the September service changes, Mr. Serrano pointed out that it had been declining for some time: in 2005 combined monthly ridership on Routes 41 and 42 was close to 100,000 (despite this, stops along the Rider Avenue diversion of Route 41 remain heavily used). Service was actually increased substantially in the years prior to the recent service reductions: not long ago, there was no evening service, but by the "glory days" of the late 2000's combined (daytime) headways in the East Alisal corridor were 15 minutes. While ridership is highest on weekdays, there is significant travel for shopping on weekends.
- Mr. Serrano noted that even if the Amtrak station is converted into an Intermodal Transit Center with commuter rail service, as is planned, MST would continue to use the STC, which is closer to most downtown destinations. A large (four-story) mixed-use development is planned on the surface parking lot between STC and the Main Street retail corridor. There are also plans to locate a taxi stand on West Gabilan Street on the south side of STC. While there is no active dialogue between MST and representatives of downtown businesses, there is no history of animosity, as exists in many communities, and there has been no call by downtown business interests to relocate STC.
- The current City Council has emphasized economic development issues, in contrast to previous councils who were more "slow growth" in their general approach.
- The City of Salinas refers developers to the MST Design Guidelines. For this reason, recent developments have generally included amenities for transit such as "pull-out" stops on arterial streets (although there is some concern about requiring amenities where no service currently exists). The City also seeks to ensure that bus stops are located on the far sides of intersections, and that they can be accessed by crosswalks (some older, pre-Americans with Disabilities Act stops are less accessible).
- Mr. Serrano noted that neighborhood streets in the Future Growth Area north of Boronda may be made narrower than existing, with travel lanes that are just 10 feet wide, if the fire department can be convinced of their safety. Such lanes would be too narrow for MST operations, but this should not impact MST, as its buses operate on arterial and collector rather than neighborhood streets (MST has also expressed interest in "right-sizing" its fleet by operator smaller "cutaway" vehicles on lower-ridership routes). Developers have

also recently proposed some traffic circles in place of intersections with traffic signals, which depending on their design could impact MST operations.

Stephanie Shonley

- The One-Stop Center in Salinas is in a relatively inaccessible location (on La Guardia Street, near the end of Moffett Street by Salinas Municipal Airport). Nonetheless, it is served by MST (Route 48, connecting to East Salinas, STC and Hartnell College). Most clients don't have access to reliable transportation, but there is a lack of awareness that transit serves the site. There are typically between 600 and 3,000 clients at any given time, many of them from Salinas although many are from different parts of both North and South County (there is another full-time office in Monterey, and part-time offices in Seaside and King City).
- An MST-One-Stop partnership consisting of on-board advertising might help to promote awareness of both One Stop services and MST access to them.

Michelle Slade

- Many of the Boys & Girls Club's young clients come from low-income households, and many staff and families rely on MST for mobility. However, while the Boys & Girls Club clubhouse at 85 Maryal Drive, just east of the Salinas Sports Complex, is relatively near MST routes on North Main Street (29 and 49) and East Laurel Drive (42), the nearest stops are close to one-quarter mile away, and there was recently a shooting in the area. Also, it can be unsafe to cross the street.
- In order to provide access to the clubhouse, the Club has had to invest in a bus and two vans to help transport its clients. The service is focused on the Alisal area in East Salinas, where the Club has targeted outreach efforts as part of a larger gang violence prevention program funded in part by the federal government. However, Club clients come from throughout the city.
- If access to the Club could be improved, there is excess capacity available – Ms. Slade believes another 100 to 250 visitors per day could be accommodated.
- The Club may be interested in establishing a pass program with MST. The agencies have in the past collaborated on public service announcements. MST also offered discounted youth passes last summer in partnership with the county's Department of Social and Employment Services.
- Important after-school destinations for youth other than the Club include after-school libraries, recreation centers, and malls. Access to hospitals is also important.

Christina Watson and Andy Cook

- MST's greatest challenge is funding; lately, it's been unable to maintain reasonable levels of service on its most important routes.
- As part of the Sustainable Communities Strategy just getting underway, planners have started to identify "high quality transit" corridors that should feature fast, frequent service to support transit-oriented development.
- Ms. Watson is TAMC's rail planner. The Salinas commuter rail project, in planning for some time, is now planned to involve an extension of Capitol Corridor rather than Caltrain service. It is now undergoing environmental review. They have secured \$35

million in funding, some of which has already been spent on planning. They are hoping for federal New Starts program funding, and to begin service in 2016. The current design for the Intermodal Transportation Center, or ITC at the Amtrak site provides for five or six bus bays.

- Due to the jobs-housing imbalance, the intercity transit market is very important in Monterey County. Salinas-Marina should be a “multimodal corridor” with connections to the Monterey Branch rail line, if that is built.
- TAMC no longer allocates funding from local sources to roadways – all available funding is going to MST.
- Monterey County is not a “self-help” county. The last attempt to pass a transportation sales tax, with 20 percent set aside for transit projects (including rapid bus corridors in Salinas), lost narrowly in 2008. Prior attempts were made in 2006 and in the late 1990s. Polling was conducted on a 2012 measure, but the decision was made not to go forward at this time.
- Ms. Watson is also a legislative analyst. Both the federal and state outlooks for transit funding are not promising. MST itself could attempt to pass a tax measure; as a district, MST also has the authority to issue bonds.

Outreach Conclusions

While many of the comments made by riders, operators and stakeholders proved valuable in developing project recommendations, a few major themes emerged from the outreach process that were central to the development of recommendations.

- *East Alisal corridor.* Prior to September, Routes 41 and 42 had for years combined to provide relatively frequent (until recently, 15-minute) service between the Salinas Transit Center and Natividad Medical Center through East Salinas. Riders had grown so accustomed to the configuration of that service that when Route 42 was truncated to serve the corridor only on weekends, and Route 48 was realigned to partially take its place on weekdays, some riders let Route 48 buses bound for their destination pass by, waiting for a Route 41 or 42 bus instead. Several dozen survey participants specifically requested restoration of the former service pattern (these requests were especially prevalent among Spanish-language comments), and the change has resulted in a curious outcome: the corridor now receives more frequent, useful and easily-understandable service on weekends than on weekdays. This corridor has historically been MST’s busiest, and it is imperative that it receive a high quality of service.
- *Fares.* While this study has not directly addressed MST fare policy, it has sought to take into account an element of that policy that has proven frustrating to riders, and which staff members acknowledge is a problem: widely varying fares. In some cases different fares may be charged for the same trip, depending on which bus a rider boards: this problem is especially acute on North Main Street, where Routes 29 (charging \$3.50) and 49 (\$2.50) combine to provide limited 30-minute service on weekdays. In other cases riders may choose to follow a different route or combination of routes to a destination even if travel would take longer.
- *Connectivity.* Another element of MST’s current fare policy is that passengers are not provided with free or low-cost transfers; instead, those paying cash fares must pay every time they board. This can be problematic in a system, such as that operated by MST in

Salinas, that is designed to provide access to destinations throughout the city and county using connections between routes. It is also problematic when, as is the case in Salinas, most routes do not operate frequently. Barely miss a timed connection (as often happens, riders say), and you may have to wait an hour for the next bus. These problems were exacerbated by the September service reductions, which changed many former “one-seat rides” into journeys requiring a transfer (including, notably, many trips to Northridge Mall).

- *Stability of service.* MST substantially reduced its Salinas-area service in September, and made further reductions in February and April. Obviously, agency staff would prefer to *increase*, not decrease service. Nonetheless, funding and options are limited (it should be noted that one of the primary objectives of this study has been to identify opportunities to improve service without increasing costs). Repeated service cuts reduce ridership in two ways: first, through the simple act of reducing or eliminating service, and second, by causing confusion among riders. Given enough outreach and enough time, user understanding can be restored to previous levels. But at a certain point, “change fatigue” begins to set in, and even before the April cuts, many survey participants used the comments space at the end of their forms to ask, simply, that no further changes be made. It is for this reason that the recommendations made at the conclusion of this study were careful not to reconfigure service where a strong case for change could not be made.
- *Access to stops.* The finding that many riders are willing to walk relatively long distances to stops was key, as it suggested that it might be possible to remove some closely spaced stops and/or make some routes more direct, both measures that would improve speed and reliability. With that said, access for the mobility-challenged has to remain a core concern.
- *South Salinas jobs.* It is notable that “route closer to my job” was the least popular of ten possible service improvements survey participants were asked to rank. Nonetheless, it is likely that many potential MST riders are not aboard buses in the first place because they cannot access their workplaces using transit. The industrial corridor extending from Old Town Salinas south to the city limits, between Abbott Street and Highway 101 (and extending west and south of Abbott along Harkins Road), is poorly served by MST, and indeed would be difficult to effectively serve – yet within this corridor are tens of thousands of jobs, and a sort of alternate transit system has evolved to provide connections between the area and East Salinas, where many employees live. The existence of this system of private jitneys and carpools may be said to suggest that more transit service is needed to this area; or, conversely, that additional public investment is not needed.
- *Frequency and span.* Finally, frequency and hours of service were primary concerns of passenger survey participants. This is typical – who *doesn't* desire greater convenience? – but MST passengers likely view these as even higher priorities given the recent reductions to both. Incidentally, one element of service is notable for the extent to which it was *not* a concern of commenters: speed. In many transit systems, “faster service” is among the most commonly requested improvements to service, yet passenger survey participants expressed little interest in reduced travel times.

3 RECOMMENDED SERVICE PLAN

This chapter describes Nelson\Nygaard's recommendations for changes to Monterey-Salinas Transit service in the Salinas area.

ROUTE RECOMMENDATIONS

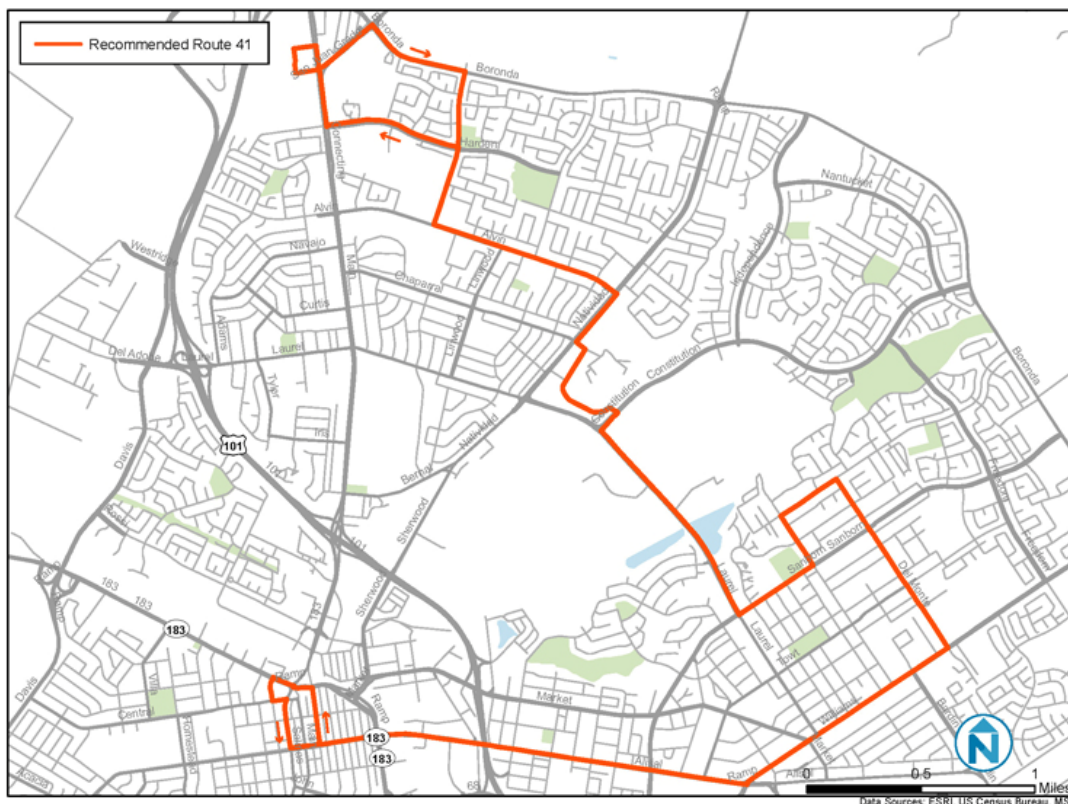
Nelson\Nygaard staff developed fiscally constrained route recommendations to improve mobility while remaining within existing resources. The recommendations described in this section are based on input from bus drivers, stakeholder outreach, and extensive field work throughout the community.

The recommendations fully address the project objectives for cost-effective deployment of resources, financial sustainability, access to key destinations, and simplified service.

The following section describes the proposed fiscally constrained recommendations for fixed-route bus service. The Route Recommendations section is followed by Recommended Operating Route Characteristics, Estimated Operating Costs, and a Fiscally Unconstrained Scenario.

Route 41

Figure 3-1 Recommended Route 41 Alignment



Route 41 is one of MST's most productive routes. The only recommended change builds on Route 41's success in connecting East Salinas to the Northridge Mall by providing a connection to the northern end of Harden Ranch Plaza, including the Walmart store at San Juan Grade and East Boronda Roads. This would serve to restore the direct, one seat-ride between East Salinas and a Walmart store that was severed last September when Route 42, serving Westridge Center, ceased to operate on weekdays.

This connection could be provided by converting the route's northernmost segment into a one-way loop. Rather than traveling southbound from the mall via North Main Street and Harden Parkway, buses would proceed along San Juan Grade, Boronda, and McKinnon Street to the intersection of Harden Parkway and McKinnon Street.

This alignment would add approximately 0.3 miles to the route; however, it would eliminate the need to make a left turn from North Main Street onto Harden Parkway, and thus should have little impact on travel time and reliability. Scheduled cycle time for each bus is 120 minutes, and as currently scheduled, round-trip travel time during the peak period is 105 minutes, leaving 15 minutes of recovery time (14 percent of travel time).

Route 41 would entirely replace Route 42 service on weekdays and weekends.

Weekday headway and span would be unchanged. On weekends, 20-minute service would be provided between 11 a.m. and 5 p.m. to respond to the high levels of weekend demand. Service would be every 30-minutes otherwise.

Route 42

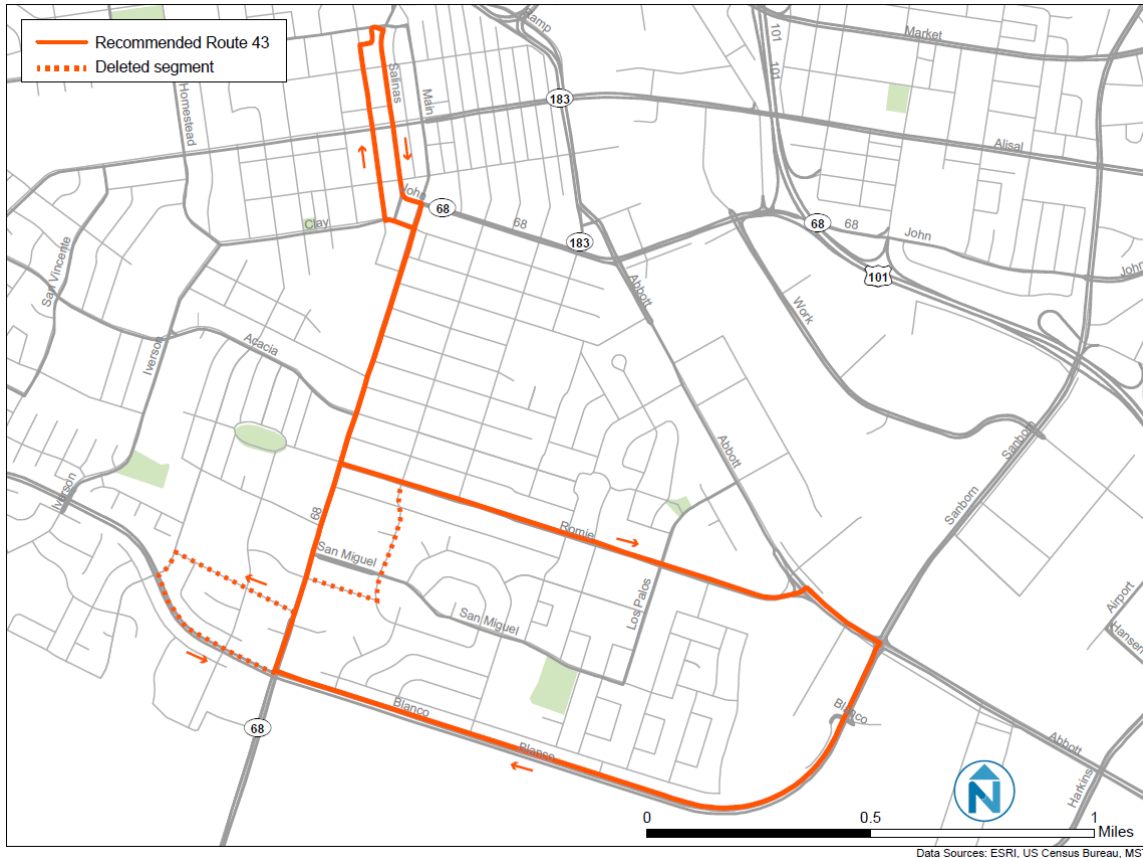
Route 42 should be deleted due to low ridership and productivity.

Historically, Route 42 followed the Route 41 alignment between the STC and Natividad Medical Center, providing combined headways of as little as 15 minutes in the East Alisal corridor. At Natividad, Route 42 would diverge from Route 41, continuing west along Laurel Drive to Westridge Center. Since September 2011, however, Route 42 has followed this alignment only on weekends. On weekdays, it operates only between Natividad and Westridge, and this has dramatically reduced both ridership and productivity (as well as the legibility of services in the East Alisal corridor).

Analysis of Route 42 weekday ridership patterns found little activity between Natividad and Westridge, and analysis of passenger surveys found high levels of transfer activity between Routes 41 and 42, suggesting that since its truncation, Route 42 has served primarily to connect passengers from East Salinas to the retail destinations at Westridge Center. It is assumed that realignment of Route 41 to serve Walmart on San Juan Grade could effectively serve much of this market while reducing trip costs for these users by up to \$2.50 each way. Also, Route 49 provides access to key destinations along Laurel Drive within walking distance of North Main Street, including the California Department of Motor Vehicles office approximately 0.3 miles east of North Main. Westridge Center would still be accessible from East Salinas using Routes 45 and 44 (which would be interlined to provide one-seat rides) or Routes 41 and 44 (via a timed transfer at STC).

Route 43

Figure 3-2 Recommended Route 43 Alignment



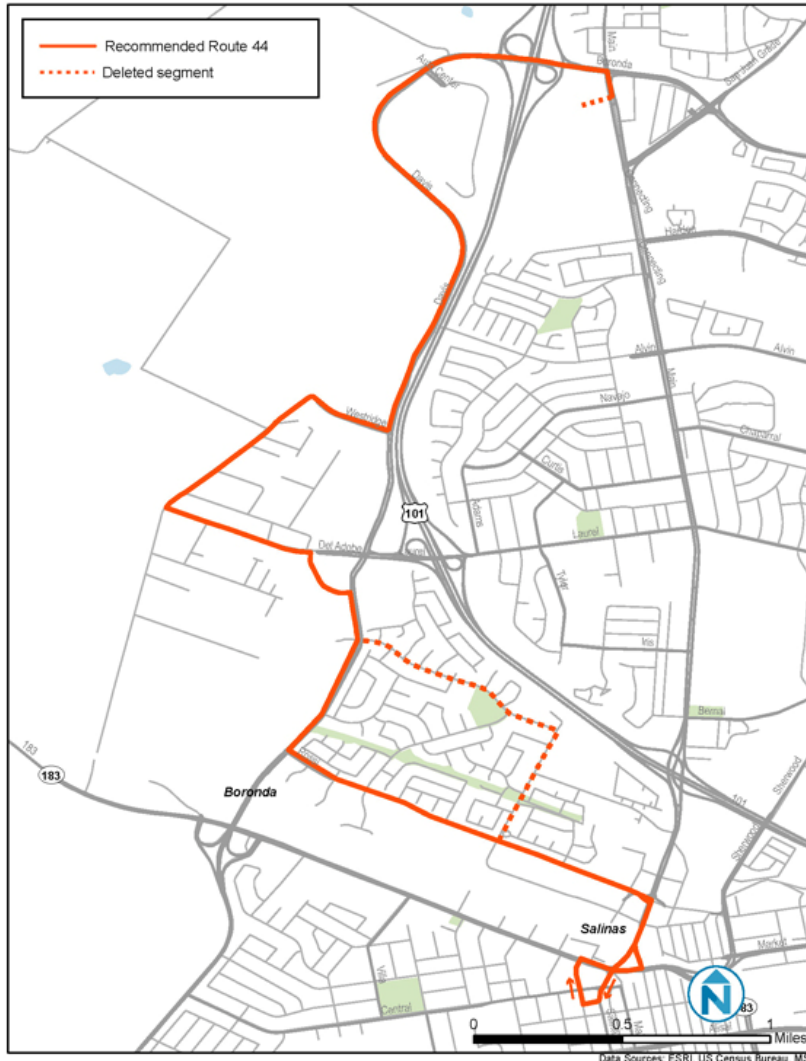
Route 43 is one of MST's more productive routes, but it has also had on-time performance issues due to variable traffic levels on South Main Street. Since service changes made in April, Route 43 has effectively become two routes: every other trip follows the full alignment, while all other trips remain on South Main Street, turning back at Blanco Road. This has reduced frequencies in the East Romie Lane/East Blanco Road segment to hourly. However, and importantly, it has also made it possible for Route 43 to operate reliably as a standalone (i.e., not interlined) route.

An examination of the ridership pattern shows that more than half of the non-STC boardings on Route 43 have had their service reduced by half. In particular, the stop at the Salinas Valley Memorial Hospital, with 41 boardings, has been negatively affected by the changes.

Two recommendations are made for Route 43. First, in order to provide consistent 30-minute service Route 43 riders, the two-route system implemented in April should be changed back to a one-way loop. In order to shorten travel times for the loop, the East San Joaquin Street/Pajaro Street deviation should be eliminated. While this may increase walk times for some patrons, it will allow many more patrons to have access to 30-minute service. In addition, the twice-daily deviation to Brunken Avenue should be removed. Stops along the diversion see little activity, and the diversion serves to take riders more than a mile out of direction near the midpoint of the route, and it negatively impacts on-time performance.

Route 44

Figure 3-3 Recommended Route 44 Alignment

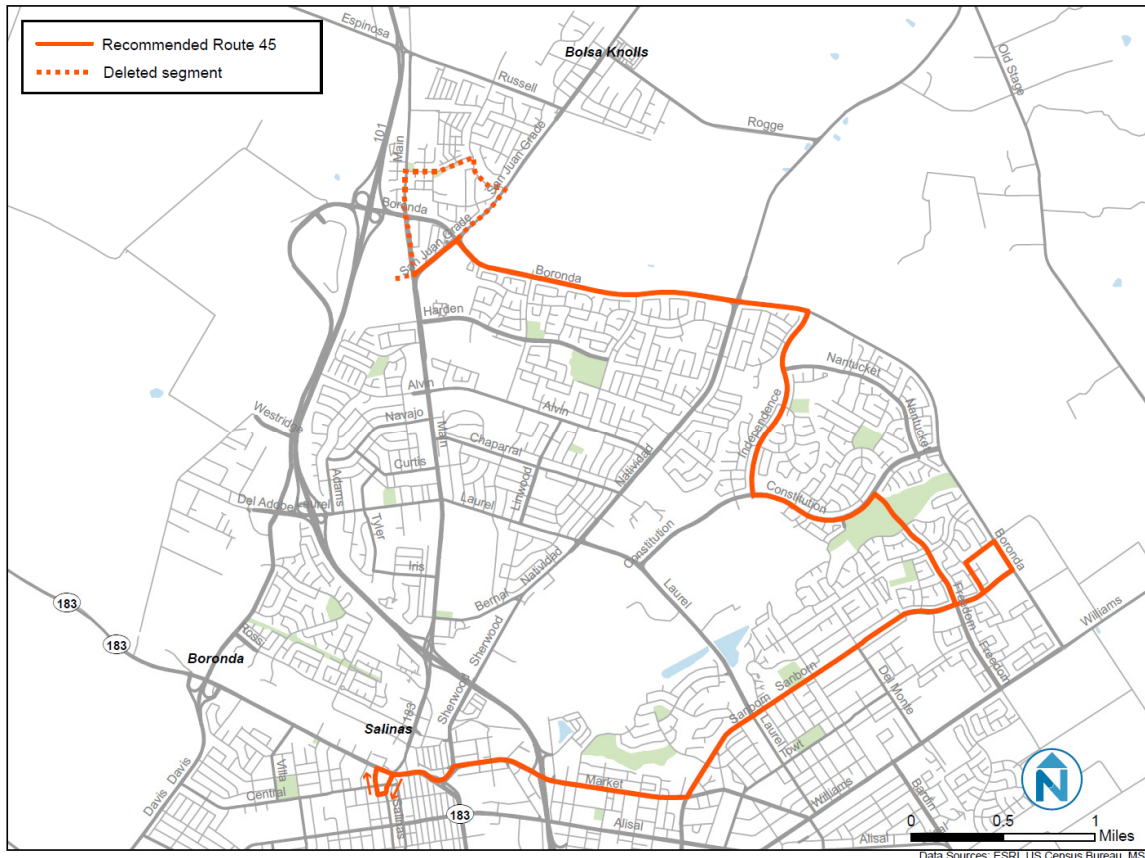


Substantial changes are recommended to this route to improve performance.

- Route 44 should be realigned to operate on West Rossi Street and North Davis Road rather than Rico Street and Larkin Drive. While this would not reduce the distance buses must cover, they would operate on arterial rather than neighborhood streets in this segment, reducing travel time.
- Weekday service to Northridge Mall, which was discontinued in September, would be restored, addressing a major concern expressed by commenters during outreach.
- At Northridge, buses would not turn into the mall parking lot; rather, they would use existing stops on North Main Street adjacent to the mall. In combination with other changes designed to reduce travel time on both routes, this would allow Route 44 to be interlined with Route 45, a measure necessary to allow both routes to operate on a cycle evenly divisible by the desired 60-minute headway.

Route 45

Figure 3-4 Recommended Route 45 Alignment



Route 45 currently has a 90-minute frequency, which is less than optimal in attracting transit patrons. Route 45's alignment should be changed to reduce travel times, and allow the route to operate at 60-minute frequencies. Specific recommendations include:

- Route 45 should be interlined with Route 44, and would terminate on North Main Street adjacent to Northridge Mall rather than within the mall parking lot. Given the travel times of Route 44 and Route 45, it is unlikely that sufficient time in the schedule exists to allow either Route 44 or Route 45 to access the Northridge Mall at all times of the day.
- To further reduce travel time and remove duplication with Route 49, the "Santa Rita" segment along North Main, Bolivar Street, Van Buren Avenue, and San Juan Grade north of Boronda would be eliminated. Buses would travel between North Main Street and Boronda via San Juan Grade (the Santa Rita neighborhood would continue to be served by Route 49).
- During the mid-morning, two additional trips on Route 45 should be added between the STC and East Boronda Road and Mesquite Drive. These trips would serve the Montecito senior housing complex on Mesquite currently served by Route 48. The two trips would be interlined with Route 49. The primary purpose of this service would be to ensure 30-minute headways on North Main; however, this would make it possible to provide additional Route 45 service at no additional cost.

Route 46

Route 47

Recommended Route 47

Salinas

101

183

68

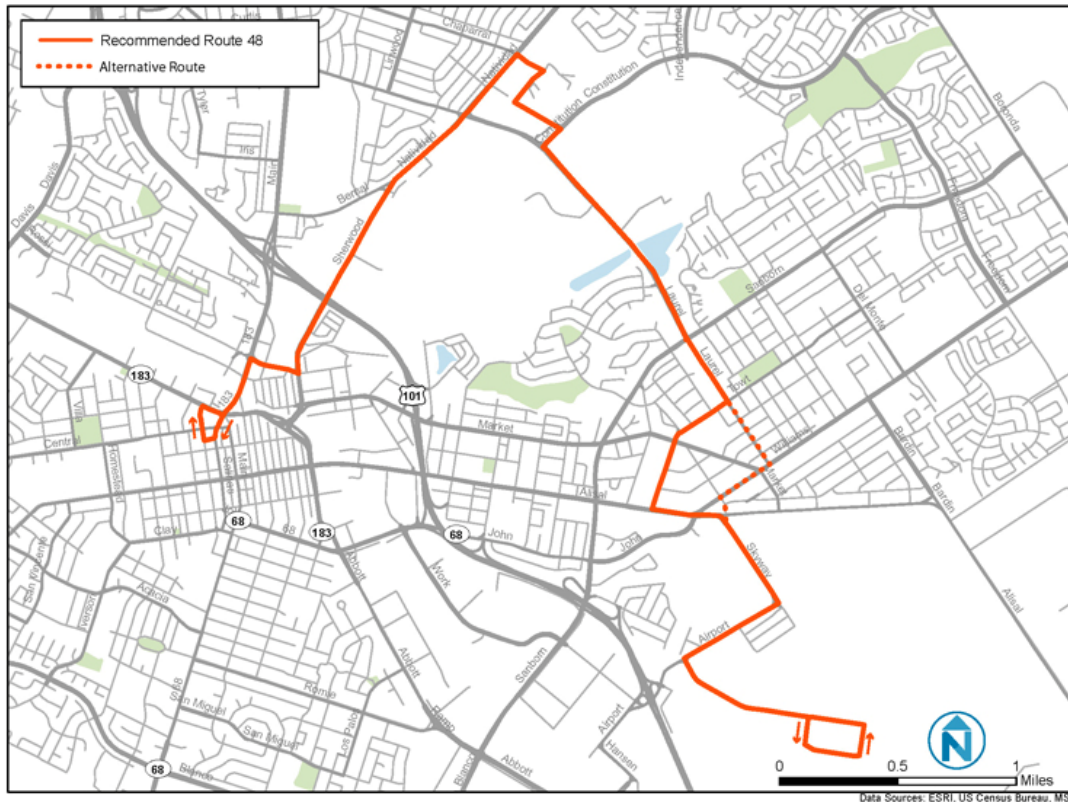
0 0.5 1 Miles

Data Sources: ESRI US Census Bureau

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Route 48

Figure 3-6 Recommended Route 48 Alignment



Route 48 would be substantially reconfigured. Route 48 would begin at the Salinas Transit Center, travel to Natividad Medical Center via the existing Route 46 alignment, and head to the Airport business park to serve the One Stop Career Center along La Guardia Street. Between Laurel and Alisal, the route could use either Williams or Towt. Either alignment would introduce service to areas of East Salinas that are not currently directly served.

Existing Route 48 service to Williams Ranch and Creekbridge would be eliminated due to low ridership.

Limited service to the Montecito senior housing site on Mesquite Drive would be provided weekday mid-days by a revised Route 45. Alternatively, MST may soon introduce grant-funded “senior shuttle” service within Salinas to serve this facility.

Route 49

Figure 3-7 Recommended Route 49 Alignment



No alignment changes are recommended for Route 49. However, three mid-day trips would be added to the schedule in order to ensure consistent 30-minute headways (between Routes 49 and 29) on North Main Street during the late morning and early afternoon.

Route 20

Figure 3-8 Recommended Route 20 Alignment



Route 20 is an excellent performer. Minor changes to select trips are recommended for Route 20 to improve on-time performance.

- Serve Las Palmas and Notre Dame High Schools in the morning at the end of the trip rather than diverting mid-route (this trip is currently a 7:05 a.m. departure from the Monterey Transit Plaza; to arrive prior to bell times, this trip may have to depart a few minutes earlier).
- Eliminate the afternoon departure from Brunken and Malarin and instead have that trip start at Notre Dame before continuing on to Las Palmas and the STC.

Route 21

Route 21 should be eliminated due to low ridership. In addition to low ridership, Route 21 is expensive to operate, because the bus travels out of service (deadheading) in the afternoon between Salinas and Monterey. If Route 21 is not deleted, the amount of deadheading may be reduced by interlining the afternoon trip with Route 68.

Route 23

Figure 3-9 Recommended Route 23 Alignment

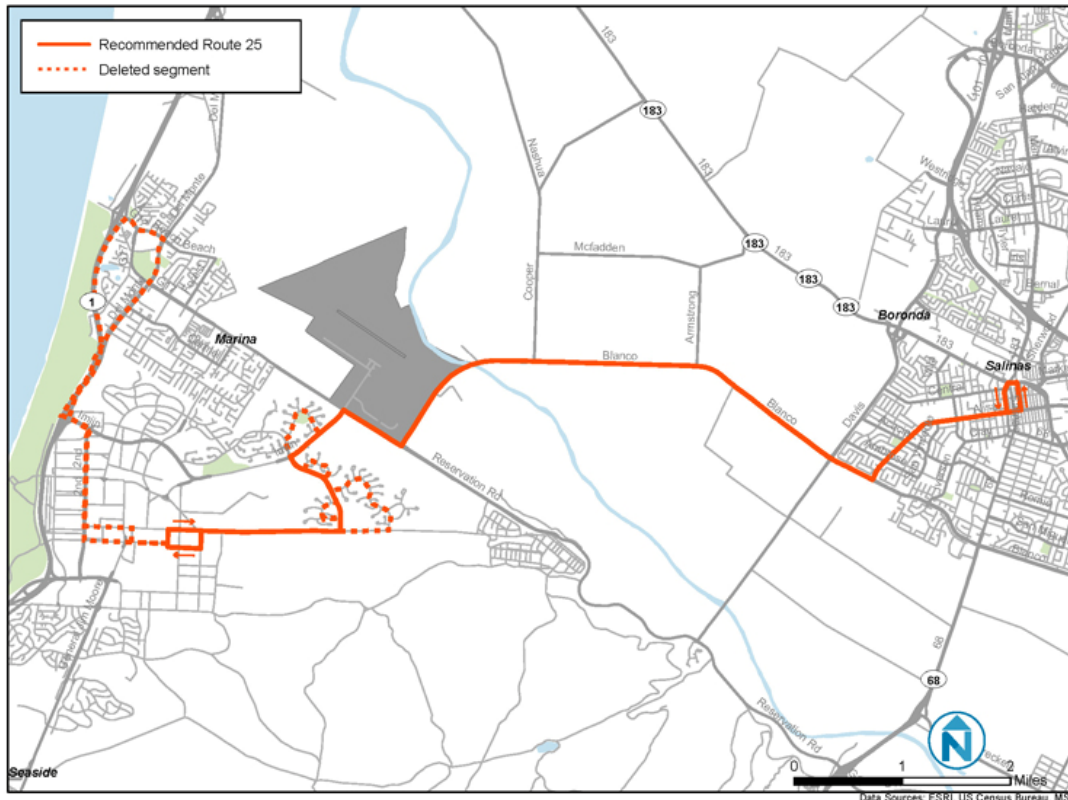


Route 23's primary market is transporting people from South County cities to Salinas, and according to staff, generates heavy loads (starting later this month, the route will also provide service to South Salinas when Route 43 is not in operation on weekends). A previous study on Route 23 was recently completed. Ridership growth has been strong on Route 23 and it appears that additional capacity may be needed.

From a routing perspective, the only recommended change is to delete the twice-daily deviation to the HSBC facility on Schilling Place. There does not appear to be anyone using these stops.

Route 25

Figure 3-10 Recommended Route 25 Alignment



Route 25 is one of the least productive routes operating in Salinas.

Analysis of ridership patterns on Route 25 shows 30 daily boardings at the Salinas Transit Center and 36 at Fifth Avenue and Divarty Street on the main campus of California State University, Monterey Bay. However, there are relatively few boardings at other locations, including stops in the East Campus student housing area and north of the main campus in Marina.

Route 16 also provides service between the East and main campuses and the Walmart in central Marina. Unlike Route 25, Route 16 does not serve The Dunes shopping center between the main campus and central Marina, which features a Target and other large stores.

Route 25 operates hourly, and because round-trip travel time is nearly two hours, it requires two vehicles to operate. In order to better serve the markets for travel between Salinas and the main campus and between the East and main campuses, Route 25 should be split into two separate routes.

- Direct, hourly service between Salinas and CSUMB should be provided by a realigned Route 25. This route would travel more directly between these destinations and remain on Imjin Road and Abrams Drive rather than circulating through East Campus on Preston, Bunker Hill, Manassas Drives, and Schoonover Road.
- A new CSUMB shuttle should be created to provide service between the East and main campuses, via a loop of Seventh Avenue, A Street and Fifth Avenue at its western end,

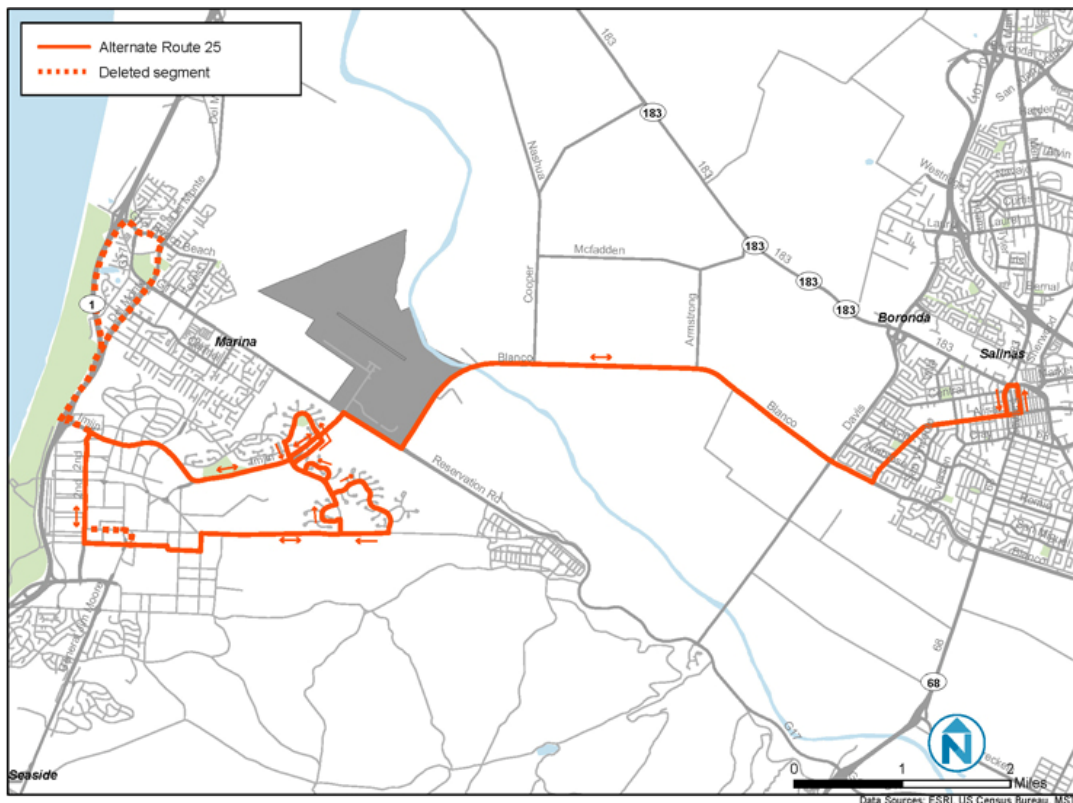
Inter-Garrison Road between campuses, and a loop of Abrams, Manassas, Abrams, Bunker Hill, Abrams, Imjin, Preston, Abrams and Schoonover at its eastern end. The CSUMB shuttle should operate every 30 minutes.

Combined, Routes 16 and 25 and the CSUMB shuttle would provide service on campus every 15 minutes on average (three of the four vehicles per hour would circulate through East Campus, while Route 25 vehicles would remain on Imjin and Abrams). Route 25 would provide faster service between Salinas and the main campus (approximately 27 minutes each way, compared to 33 today). However, The Dunes shopping center would no longer be served, and service between East Campus and central Marina would be reduced from half-hourly to hourly. It is possible that a substantial increase in service between the East and main campuses might generate enough additional ridership to require the use of regular coaches rather than the trolley vehicles that operate on Route 25 today.

MST staff have proposed an alternative (Figure 3-16) that would retain service to The Dunes while providing somewhat faster trips between Salinas and the main campus (approximately 28 minutes) by having Route 25 remain on Imjin west to The Dunes, then turn south on 2nd Avenue toward the main campus and east toward East Campus, where it would circulate using the same alignment as the Nelson\Nygaard-proposed Route 25. Round trips using this alignment should take approximately 84 minutes, meaning that two vehicles could provide service every 45 minutes or hourly. Service between East Campus and the main campus would operate every 24 minutes, on average, and service between East Campus and central Marina would operate hourly.

MST staff have already entered into discussions with CSUMB staff regarding these proposals.

Figure 3-11 Alternate Route 25 Alignment



Route 28

No change is recommended to this route, which provides service between Salinas and Watsonville via Castroville. In May 2012, service on Route 28 and its companion, Route 29, which operates between Salinas and Watsonville via Prunedale and Las Lomas, will be reduced from hourly headways to every two hours (additional short turn service between Salinas and Castroville will be provided during peak periods). This means that service will be provided every hour between the Salinas and Watsonville Transit Centers, by far the busiest stops on each route. The remaining, less busy stops will be served every two hours. Nelson\Nygaard supports this change as a reasonable, relatively low-impact measure to reduce costs. (Also, please see the Route 49 recommendations for every half-hour service throughout the day on North Main Street.)

Route 29

No change is recommended to this route.

RECOMMENDED OPERATING ROUTE CHARACTERISTICS

Major recommendations are briefly summarized in Figure 3-12.

Figure 3-12 Summary of Major Recommendations

Route	Recommendation
41	Extend to Harden Ranch Plaza Walmart via loop using Boronda
42	Eliminate; (Route 47 to provide additional service on East Alisal Street, Route 48 to provide new service between Natividad Medical Center and East Salinas)
43	Eliminate E San Joaquin/Pajaro diversion; restore 30-minute service along entire route; eliminate route deviations
44	Restore weekday service to Northridge Mall; interline with Route 45
45	Restore hourly headways; add mid-day short turn service; interline with Route 44
46	Replace Route 46 with revised Route 48 service
47	Establish new service between Hartnell campuses via Alisal Street
48	Realign to operate between Salinas Transit Center, Natividad Medical Center, and One-Stop Career Center
49	Add mid-day trips
20	Make adjustments to diversions
21	Eliminate; Route 68 to take place in afternoon
23	Eliminate some diversions
25	Realign to operate more directly between Salinas Transit Center and California State University, Monterey Bay; eliminate Marina segment; establish new route between CSUMB East and main campuses
28	No changes
29	No changes

These changes would reduce operating costs, primarily by reducing the number of vehicles required to operate weekday service on “40-series” routes within Salinas from 11 to 10. The required numbers of vehicles are shown in Figure 3-13.

Figure 3-13 Vehicles Required for Weekday Operation

Route	Number of Vehicles	
	As of Late April 2012	Proposed
41	4	4
42	.67 (42/44/46 interlined)	n/a
43	1	1
44	.67 (42/44/46 interlined)	2 (routes are interlined)
45	1	
46	.67 (42/44/46 interlined)	n/a
47	n/a	1
48	2	1
49	1	1
<i>Total</i>	<i>11</i>	<i>10</i>

On weekends, a total of nine vehicles would be operated, which is the same as existing conditions. Routes 43, 47 and 48 would not operate on Saturdays.

While costs would be reduced, a number of improvements would be made, including those identified in Figure 3-1 as well as establishment of a weekend service pattern similar to the weekday pattern. Service in the Route 41 corridor, in particular, would be simplified, as the only difference between weekday and weekend service would be additional weekday service on East Alisal Street. Weekday service (excluding routes that were not a party of this study) is shown in Figure 3-14.

Figure 3-14 Proposed Weekday System Map (Salinas Only)



Figures 3-15 and 3-16 show proposed service spans and typical headways for each route.

Figure 3-15 Proposed Span of Service

Route	Monday-Friday	Saturday	Sunday
	Span	Span	Span
41	5:25 am – 11:14 pm	6:15 am – 10:38 pm	7:10 am – 7:09 pm
43	6:45 am – 6:11 pm	--	--
44	6:15 am – 7:10 pm	9:15 am – 7:10 pm	9:15 am – 7:10 pm
45	6:35 am – 7:10 pm	9:15 am – 7:10 pm	9:15 am – 7:10 pm
47	6:53 am – 6:52 pm	--	--
48	6:45 am – 6:39 pm	--	--
49	6:15 am – 10:02 pm	6:15 am – 10:02 pm	6:15 am – 10:02 pm
20	5:08 am – 12:05 pm	5:45 am – 12:03 pm	6:15 am – 9:07 pm
23	5:23 am – 8:58 pm	7:55 am – 9:02 pm	7:55 am – 9:02 pm
25	6:15 am – 10:09 pm	--	--
CSUMB Shuttle	6:30 am – 10:27 pm	--	--
28	6 am – 10:40 pm	6 am – 10:40 pm	6:45 am – 8 pm
29	5:34 am – 8:39 pm	5:34 am – 8:39 pm	5:34 am – 8:39 pm

Figure 3-16 Proposed Frequency of Service (Minutes)

Route	Monday-Friday		Saturday		Sunday	
	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak
41	30	30	20	30	20	30
43	30	30	--	--	--	--
44	60	60	60	60	60	60
45	60	30-60	60	60	60	60
47	60	60	--	--	--	--
48	60	60	--	--	--	--
49	60	30-60	60	60	60	60
20	30	30-60	60	60	60	60
23	60	60-120	60	60-180	60	60-180
25	60	60	--	--	--	--
CSUMB Shuttle	30	30	--	--	--	--
28	60	120	60	120	60	120
29	60	120	60	120		120

ESTIMATED OPERATING COSTS

Figure 3-17 shows estimated annual operating costs for MST service in the Salinas area under the schedule changes implemented in April. Daily service hours were calculated using schedules, and annual numbers of weekdays, Saturdays, Sundays and weekday holidays were assumed. Actual operating costs may vary slightly. Note that the revenue hours shown here vary somewhat from the figures in the Existing Conditions chapter, as those were calculated for purposes of determining productivity and thus did not include layover and recovery time.

Figure 3-17 Existing Service Hours

Line	Daily Revenue Hours			Annual Revenue Hours
	Weekday	Saturday	Sunday/Holiday	
41	58.3	42.3	39.0	19,245
42	6.5	29.0	29.0	4,940
43	11.5	--	--	2,879
44	9.7	11.3	8.9	3,574
45	12.2	10.4	10.4	4,250
46	9.7	--	--	2,435
48	23.8	--	--	5,966
49	17.8	14.2	12.4	5,983
20	72.3	60.4	29.8	23,144
21	3.2	--	--	803
23	41.7	23.6	23.6	13,159
25*	31.1	--	--	6,288
28/29 interline	36.7	33.5	31.2	12,880
TOTAL All Routes	334.5	224.6	184.4	105,546

* Operates during CSUMB fall, winter and spring semesters only. Numbers of days based on the 2012-2013 schedule.

Figure 3-18 shows estimated costs for proposed service. For new routes or routes on which major changes are recommended, service hours are based on the conceptual schedules in Appendix A. For routes on which only minor schedule adjustments are recommended, existing costs are simply duplicated. Actual costs would vary somewhat.

Figure 3-18 Proposed Service Hours

Line	Daily Revenue Hours			Annual Revenue Hours
	Weekday	Saturday	Sunday/Holiday	
41	58.3	65.6	57.9	21,626
43	11.4	--	--	2,861
44	8.3	6.5	6.5	2,824
45	18.6	13.0	13.0	6,151
47	12.0	--	--	2,420
48	11.9	--	--	2,987
49	20.8	14.2	12.4	6,736
20	72.3	60.4	29.8	23,144
23	41.7	23.6	23.6	13,159
25*	15.9	--	--	3,212
CSUMB shuttle*	16.0	--	--	3,222
28/29 interline	36.7	33.5	31.2	12,880
TOTAL All Routes	323.9	216.8	174.4	103,369

* Assumes operation during CSUMB fall, winter and spring semesters only. Numbers of days based on the 2012-2013 schedule.

The proposed changes should reduce operating costs on these routes by approximately 2 percent; costs to operate 40-series service within Salinas would be reduced by approximately 6 percent.

FISCALLY UNCONSTRAINED SCENARIO

While the focus of SASA-II has been on short-term changes to make service more cost-effective, MST staff has requested that a few additional issues be explored, issues for which solutions might require additional funding. Following are a few preliminary concepts for addressing these issues.

- *Service to Southeast Salinas.* According to James Serrano, a transportation planner for the City of Salinas, more than 25,000 jobs are located in the industrial corridor extending southeast from Old Town Salinas, west of Highway 101. Both existing and proposed service in this area is limited; indeed, the Routes 20, 23 and 43 diversions serving areas to the east of Abbott Street are recommended for elimination due to low ridership (Route 23 service on Abbott Street would not be affected). Industrial areas are difficult for fixed-route transit to effectively serve for a variety of reasons, including poor pedestrian connectivity and work shifts whose beginnings and ends do not coincide with peak commute periods. Additionally, a sort of “shadow” private transit system made up of jitneys and carpools already serves demand for travel between this area and East Salinas.

If the City and MST wish to serve this area, a non-traditional transit solution should be explored, such as a taxi-voucher system. The administrative functions of such a program would be very similar to the existing senior taxi vouchers in Salinas. However, to ensure that vouchers are only used for work trip purposes, the vouchers should only be valid for trips between the industrial area and the STC.

- *Additional capacity for South County service.* As Route 23 was the focus of another study— the South County Area Service Analysis— it has not been a focus of this study. However, MST staff members have indicated that heavy loads sometimes result in passengers having to stand over long distances. MST staff members have expressed an interest in purchasing 60-foot articulated coaches to replace the 40-foot vehicles now used. Alternatively, double-decker vehicles such as those used for long-distance freeway commute service by Community Transit in Snohomish County, Washington, might be suitable. CT’s “Double Tall” vehicles can seat 77 passengers and are 14 feet tall. It would also be possible, of course, to increase capacity by adding service, but at significant ongoing expense. Opportunities to reconfigure Route 23 so that additional service could be provided without additional vehicles are limited; staff have indicated that the idea of eliminating diversions into each of the cities the route serves and allowing local service to provide connections to stops adjacent to Highway 101 was explored but ultimately rejected.
- *Reduced need to transfer/pay additional fares.* Because MST does not provide free or discounted transfers, Salinas’ radial, pulse-based route network, which relies heavily on timed connections between routes, can result in riders having to pay significantly more for some trips than others. For example, trips along Main Street that do not pass through downtown cost \$2.50, while trips that do, requiring a transfer between Routes 23 or 43 and Routes 29 or 49, can cost anywhere from \$5 to \$7 depending on which routes are used. The passenger survey conducted for this study found that more than 40 percent of Salinas-area MST riders must transfer as part of their trips, potentially representing a substantial financial burden in addition to the inconvenience of having to change buses. Currently, many routes are interlined, and MST staff members have indicated that passengers do not necessarily have to pay a second fare if they are not changing buses. However, under the recommendations, interlining would be reduced, as the practice can have significant impacts on reliability (not only do delays on one route affect the route or

routes with which it is interlined, but delays tend to “cascade” on longer routes as delays result in more and more passengers waiting to be picked up). For this reason, we would urge caution in considering opportunities for additional interlining; nonetheless, because all routes operate on headways that are identical or are multiples of one another and because all routes meet at the Salinas Transit Center, it would be possible to link routes together in a variety of configurations.

- *Increased frequencies.* Ridership patterns, land use, and historic data indicate that latent demand for additional service exists in several areas within Salinas. Based on historic service levels and ridership, the strongest candidate for additional service is Route 41. The East Alisal Corridor formerly operated at 15-minute headways, and now operates at 30-minute headways on weekdays. The number of discretionary trips in the corridor has dropped as a result of the service reduction. Improving service levels to 15 minutes on weekdays between 10 a.m. and 6 p.m. would require approximately four additional peak buses and 8,200 annual hours. The second corridor where additional frequency might be warranted is North Main Street. While short, service in the corridor is extremely productive. Operating Route 49 every 30 minutes all day on weekdays would require approximately 2,600 annual hours and one additional peak bus.

APPENDIX A PASSENGER SURVEY

Figure A-1 English Survey

Salinas Area Passenger Survey

Monterey-Salinas Transit is investigating ways to improve transit service in Salinas. Your answers will help us make these improvements.

Para español, por favor
vea el otro lado de este
formulario.

1) On which route did you receive this survey form?
Route _____

2) How did you get to the bus when you started your trip? (Please check one.)

Walked: ☐ less than 1 block ☐ 1 block
☐ 2 blocks ☐ 3 blocks
☐ 4 blocks ☐ 5 or more blocks

By auto: ☐ dropped off ☐ drove

Bike: ☐

Other(specify) _____

3) Did you transfer to this bus?
☐ No ☐ Yes → If yes, from Route _____
And how long did you wait for this bus? _____ minutes

4) How will you get to the end of this trip? (Please check one.)

Walk: ☐ less than 1 block ☐ 1 block
☐ 2 blocks ☐ 3 blocks
☐ 4 blocks ☐ 5 or more blocks

By auto: ☐ pick up ☐ drive

Bike: ☐

Other(specify) _____

5) Will you transfer to another bus to complete this trip?
☐ No ☐ Yes → If yes, to Route _____

6) What is your main trip purpose (either coming from or going to)?

☐ work ☐ shopping ☐ recreation/social
☐ school (K-12) ☐ personal ☐ airport
☐ college/university ☐ medical
☐ Other (specify): _____

7) Is there a bus stop that you think needs improvements such as a better place to stand, a bench, a shelter?
Nearest intersection: _____ and _____

8) Does Monterey-Salinas Transit serve the right areas in Salinas?
☐ Yes
☐ No → If no, where should it serve: _____

9) Does Monterey-Salinas Transit provide the right amount of service in Salinas?
☐ Yes
☐ No → If no, what should it provide: _____

10) Please rank the following potential service improvements, in terms of the relative importance to you. Rank from 1 (most important) to 10 (least important).

_____ more frequent service _____ more direct service
_____ reduced travel times _____ more routes
_____ route closer to my job _____ route closer to home
_____ earlier morning service _____ later evening service
_____ better service information
_____ improved transfer connections
_____ Other(specify) _____

11) How satisfied are you with the service on this route?
☐ very satisfied ☐ satisfied ☐ neutral
☐ dissatisfied ☐ very dissatisfied

12) Since MST service was changed in September, do you think it has gotten better, worse, or remained about the same?
☐ better ☐ worse ☐ same

13) If the September service changes affected your usual travel patterns, how? (Check all that apply.)

☐ I have to wait longer for my bus to arrive.
☐ I can no longer take the bus for some trips I used to take on the bus.
☐ I have to make an extra transfer.
☐ My trip takes longer.

14) Other comments or suggestions?

Please return this completed survey to the surveyor on board this bus. If you must complete this form at a later time, you may return the completed survey to any MST driver. **THANK YOU!**

Figure A-2 Spanish Survey

Encuesta de Pasajeros del Área de Salinas

Monterey-Salinas Transit está investigando formas de mejorar el servicio de tránsito en Salinas. Sus respuestas nos ayudarán a hacer estas mejoras.

**For English, please
see the other side of
this form.**

1) En cuál ruta recibió este formulario de la encuesta?

Ruta _____

2) ¿Cómo llegó al autobús cuando comenzó su viaje?
(Por favor marque solo uno.)

Caminando: ☐ menos de 1 cuadra ☐ 1 cuadra
☐ 2 cuadras ☐ 3 cuadras
☐ 4 cuadras ☐ 5 cuadras o más

Por coche: ☐ lo depositaron ☐ usted manejó

Por Bicicleta: ☐

Otro (indique): _____

3) ¿Hizo una transferencia a este bus?

☐ No ☐ Sí → Si la respuesta es "Sí,"

indique de cual ruta _____

¿Y cuanto tiempo esperó para este autobús? _____ minutos

4) ¿Cómo va a llegar al final de este viaje?
(Por favor marque solo uno.)

Caminando: ☐ menos de 1 cuadra ☐ 1 cuadra
☐ 2 cuadras ☐ 3 cuadras
☐ 4 cuadras ☐ 5 cuadras o más

Por coche: ☐ lo recogerán ☐ manejará

Por Bicicleta: ☐

Otro (indique): _____

5) ¿Transbordará a otro autobús para completar este viaje?

☐ No ☐ Sí → Si la respuesta es "Sí," indique a cuál ruta _____

6) ¿Cuál es el motivo principal de su viaje (ya sea viniendo de o llenando hacia)?

☐ trabajo ☐ comercial ☐ recreación o social
☐ escuela (K-12) ☐ negocios personales
☐ aeropuerto
☐ colegio/universidad ☐ medical
☐ Otro (indique): _____

7) ¿Hay una parada de autobús que usted piensa que necesita mejoramientos, tales como un mejor lugar para estar parado, un banco, un refugio?

Intersección más cercana es: _____ y _____

8) ¿Cree que Monterey-Salinas Transit provee servicio en las áreas adecuadas de Salinas?

☐ Sí ☐ No → Si su respuesta es "No," ¿dónde debería proveer servicio? _____

9) ¿Cree que Monterey-Salinas Transit provee la cantidad correcta de servicio en Salinas?

☐ Sí

☐ No → Si su respuesta es "No," ¿qué debería proveer? _____

10) Por favor ordene las siguientes mejoras de servicio posibles en términos de importancia relativa para usted. Ordene del 1 (más importante) al 10 (menos importante).

_____ servicio más frecuente
_____ servicio más directo
_____ tiempo de viajes reducidos
_____ más rutas
_____ ruta más cerca a mi trabajo
_____ ruta más cerca a mi casa
_____ servicio más temprano en la mañana
_____ servicio más tarde en las noches
_____ mejor información sobre el servicio
_____ mejor conexiones de transferir
_____ Otro (indique): _____

11) ¿Qué tan satisfecho está con el servicio en esta ruta?

☐ muy satisfecho ☐ satisfecho ☐ neutral
☐ insatisfecho ☐ muy insatisfecho

12) Desde que el servicio de MST cambió en septiembre, ¿cree que ha mejorado, empeorado, o se ha mantenido más o menos igual?

☐ mejor ☐ peor ☐ igual

13) Si los cambios de servicios en septiembre afectaron sus patrones de viaje de costumbre, ¿cómo fue? (Marque todas las que apliquen.)

☐ Tengo que esperar más tiempo para que mi autobús llegue.
☐ Ya no puedo tomar el autobús para algunos viajes que solía tomar en autobús.
☐ Tengo que hacer una transferencia adicional.
☐ Mi viaje dura más tiempo.

14) ¿Otros comentarios o sugerencias?

Por favor devuelva esta encuesta al Inspector a bordo de este autobús. Si usted tiene que completar este formulario en otro momento, puede devolver la encuesta completada a cualquier conductor de MST. ¡MUCHAS GRACIAS!

APPENDIX B RIDERSHIP MAPS

On the following pages are maps showing average weekday numbers of boardings at each stop on each route between October 15 and November 15, 2011.

Figure B-1 Route 41 Ridership Map (Southbound)

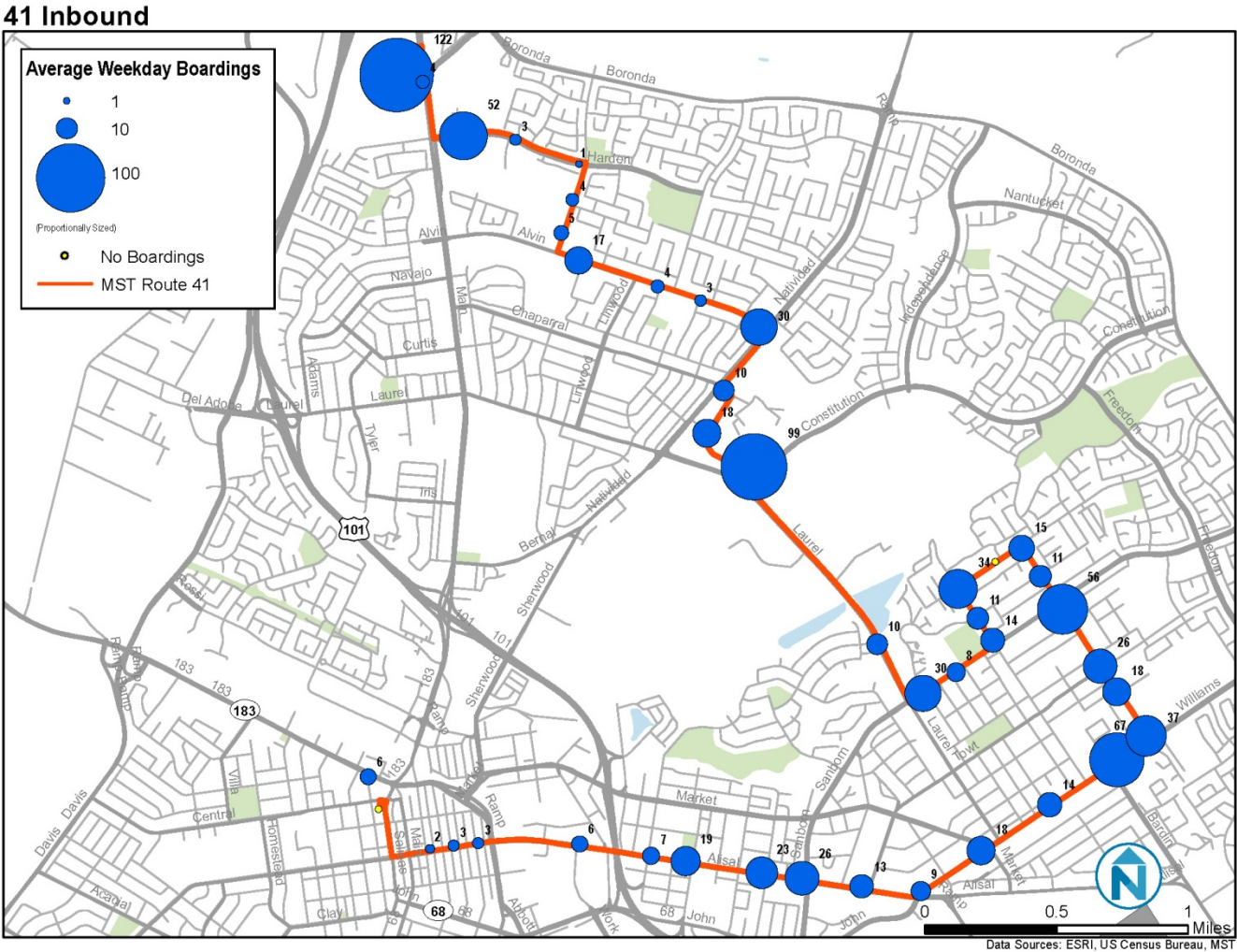


Figure B-2 Route 41 Ridership Map (Northbound)

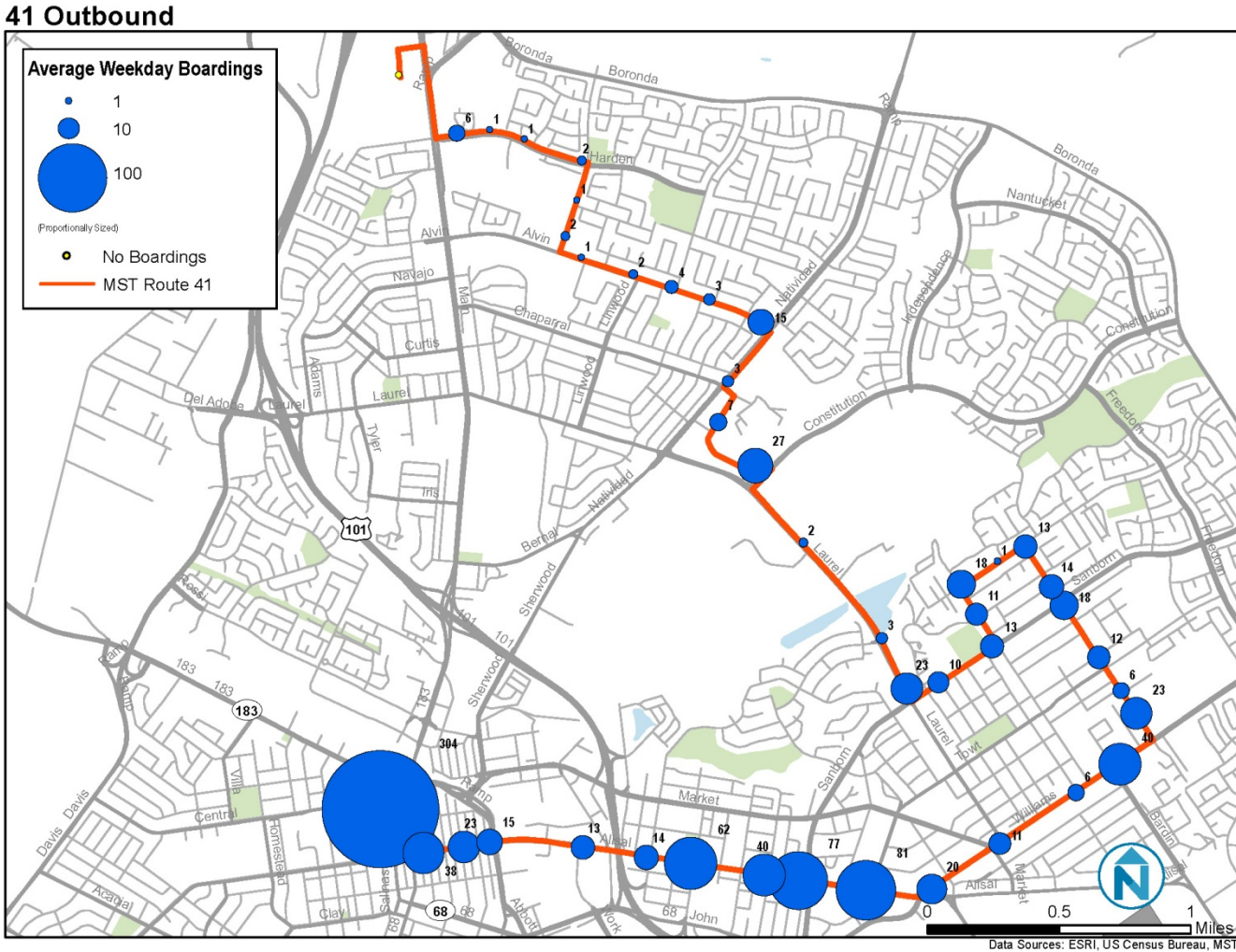


Figure B-3 Route 42 Ridership Map (Eastbound)

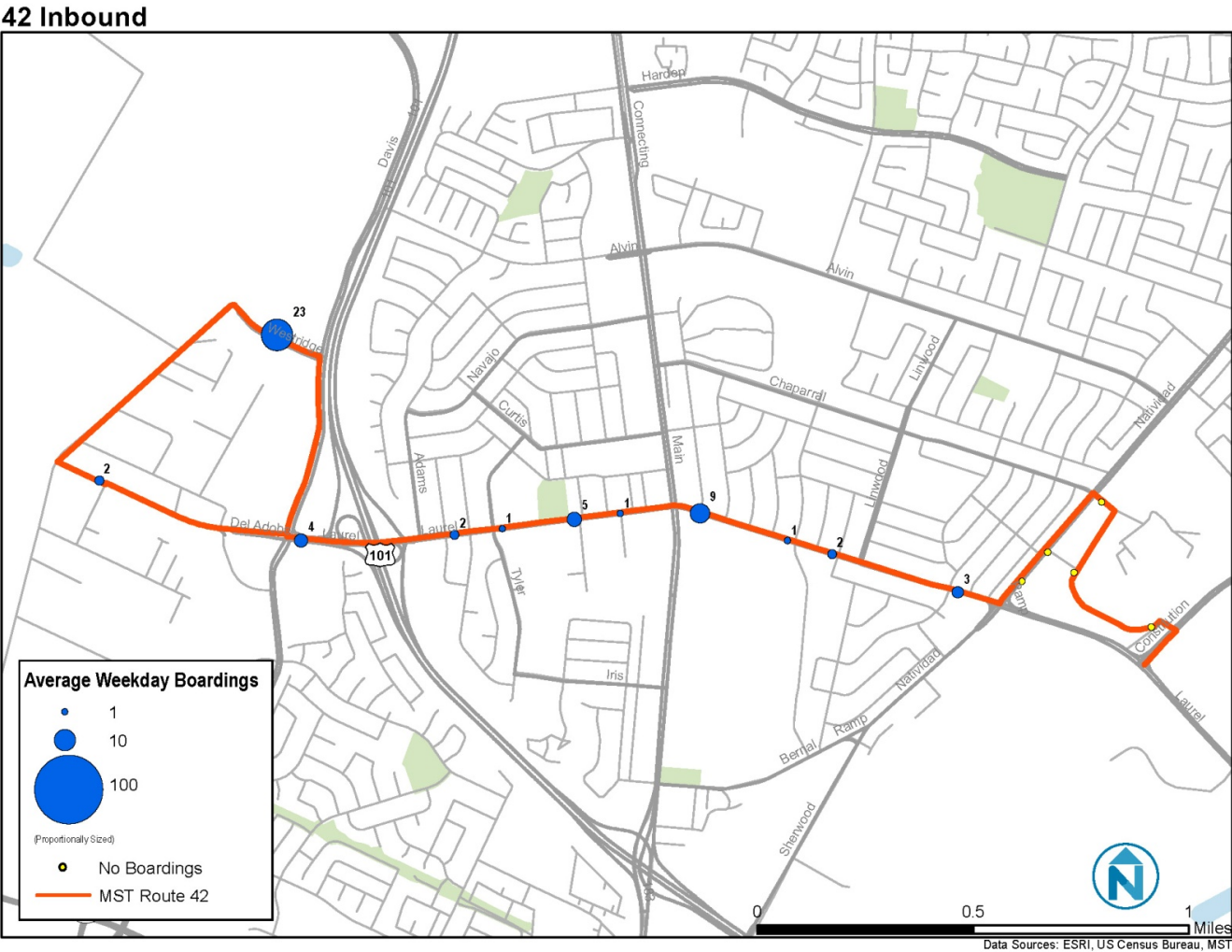


Figure B-4 Route 42 Ridership Map (Westbound)

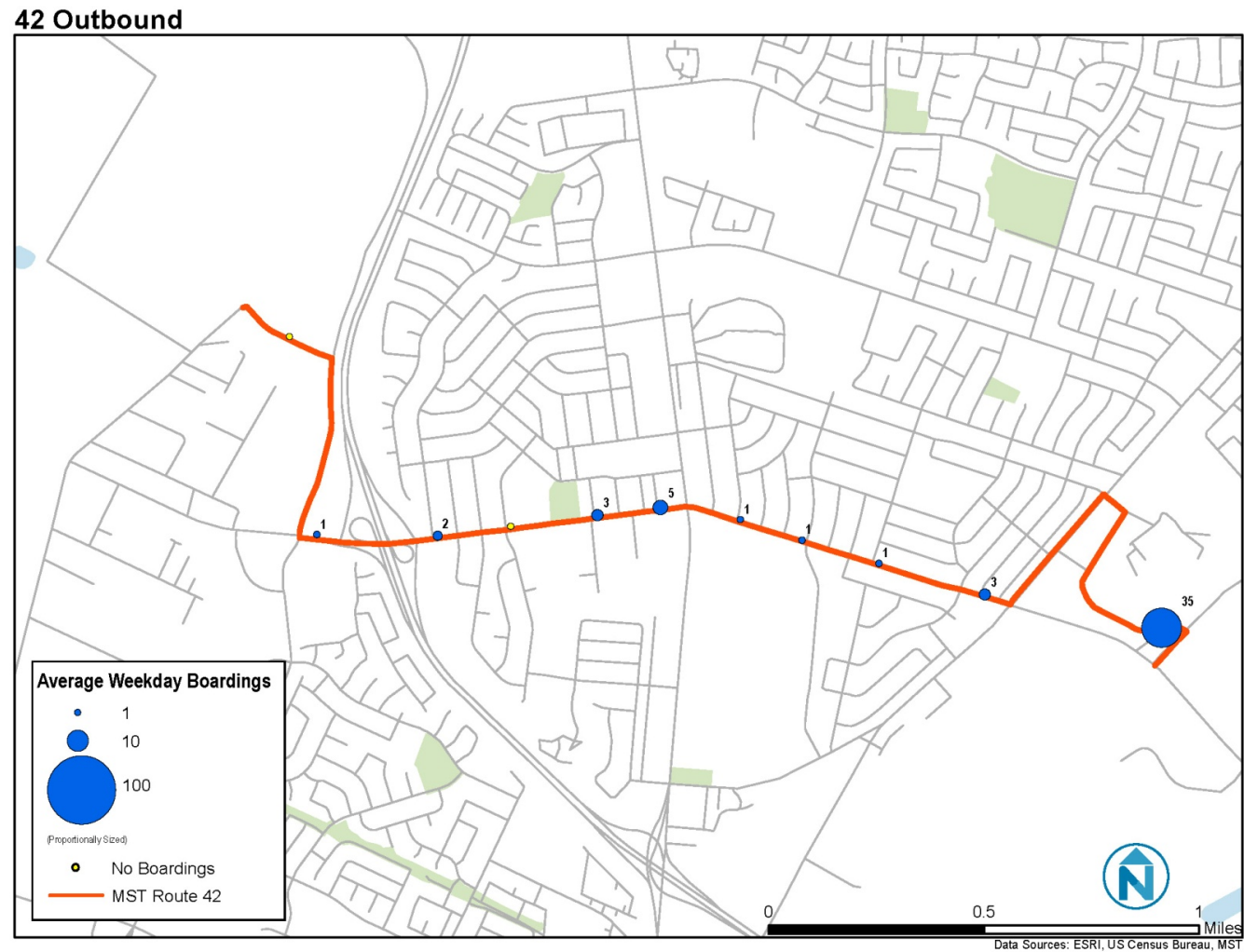


Figure B-5 Route 43 Ridership Map (Northbound)

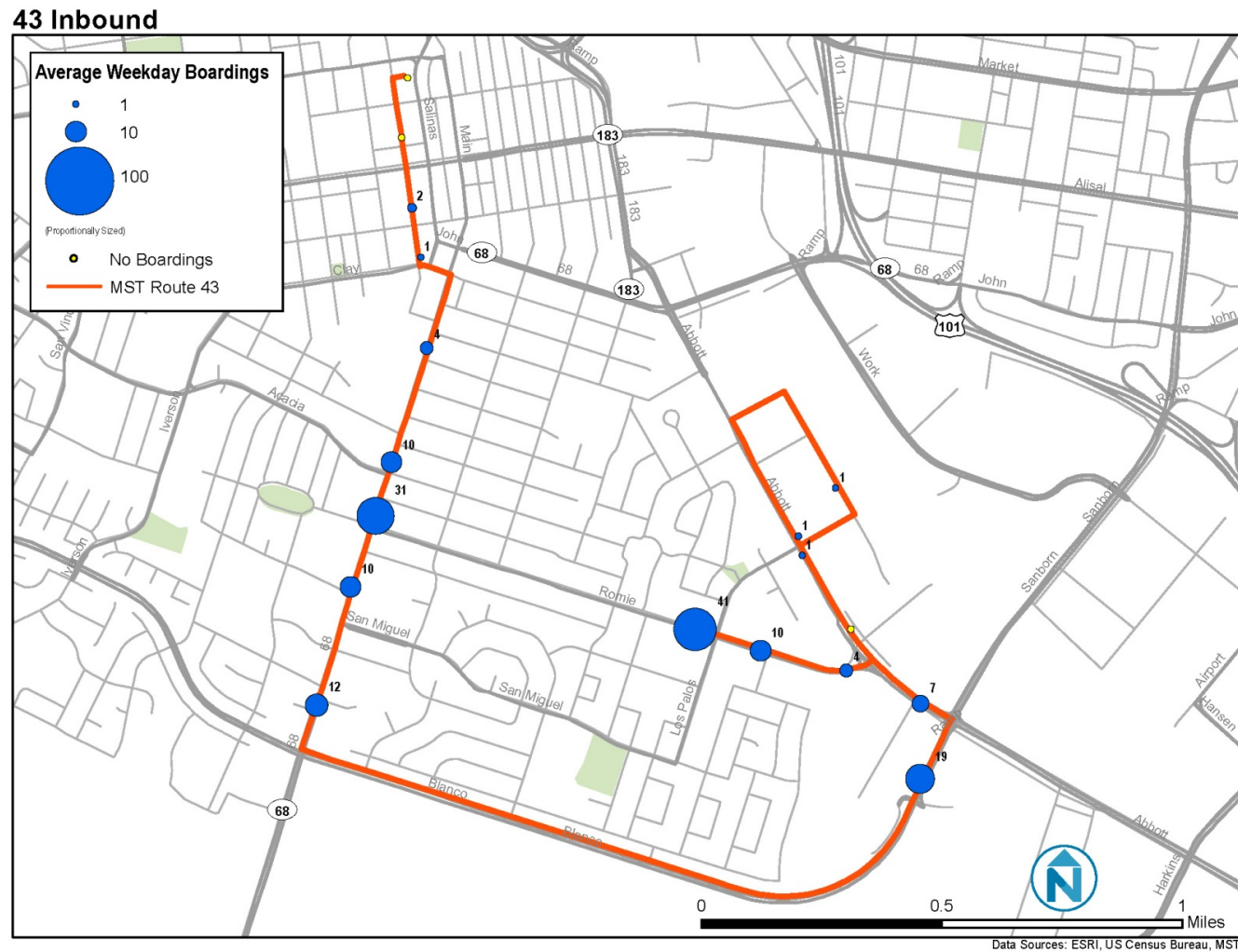


Figure B-6 Route 43 Ridership Map (Southbound)

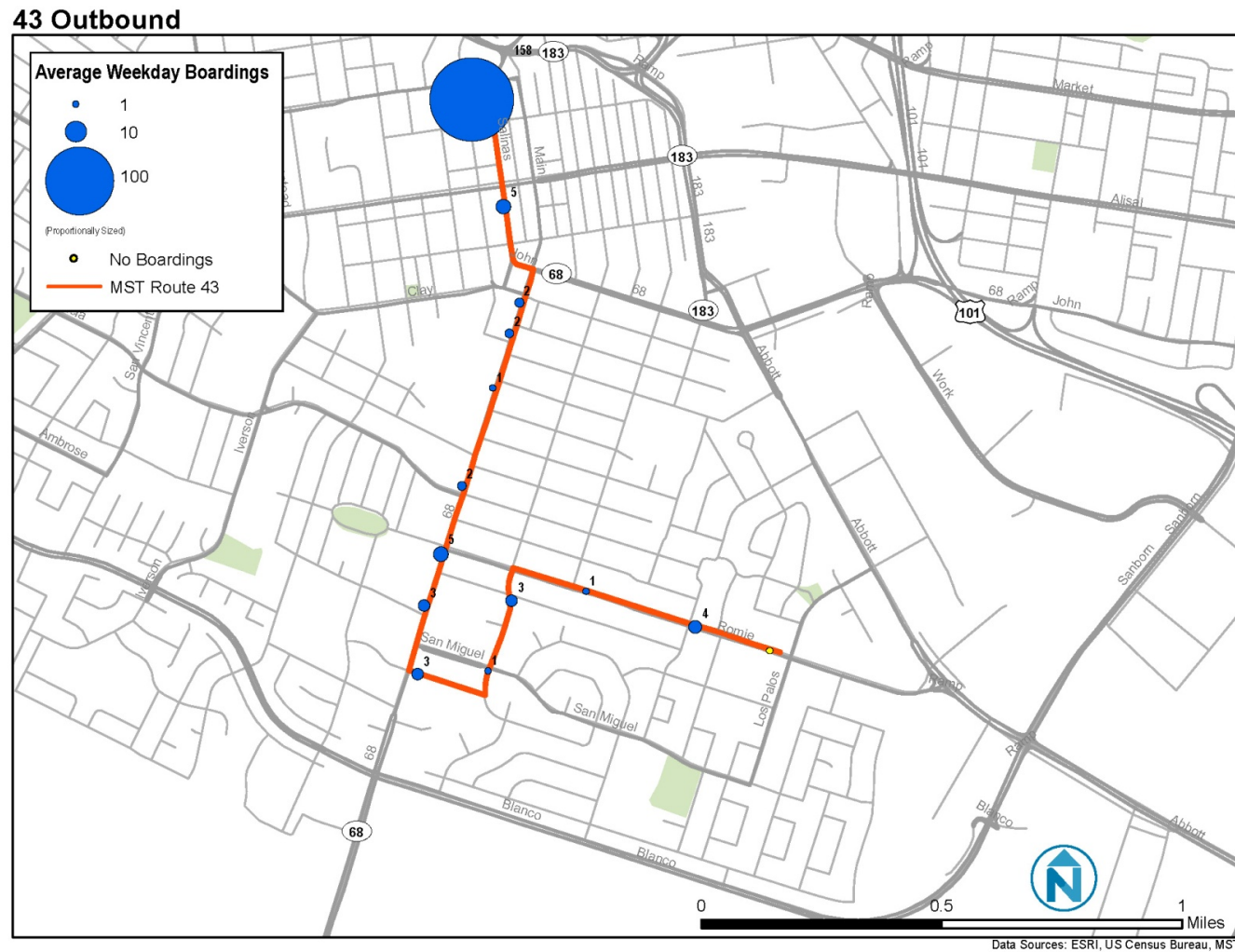


Figure B-7 Route 44 Ridership Map (Southbound)

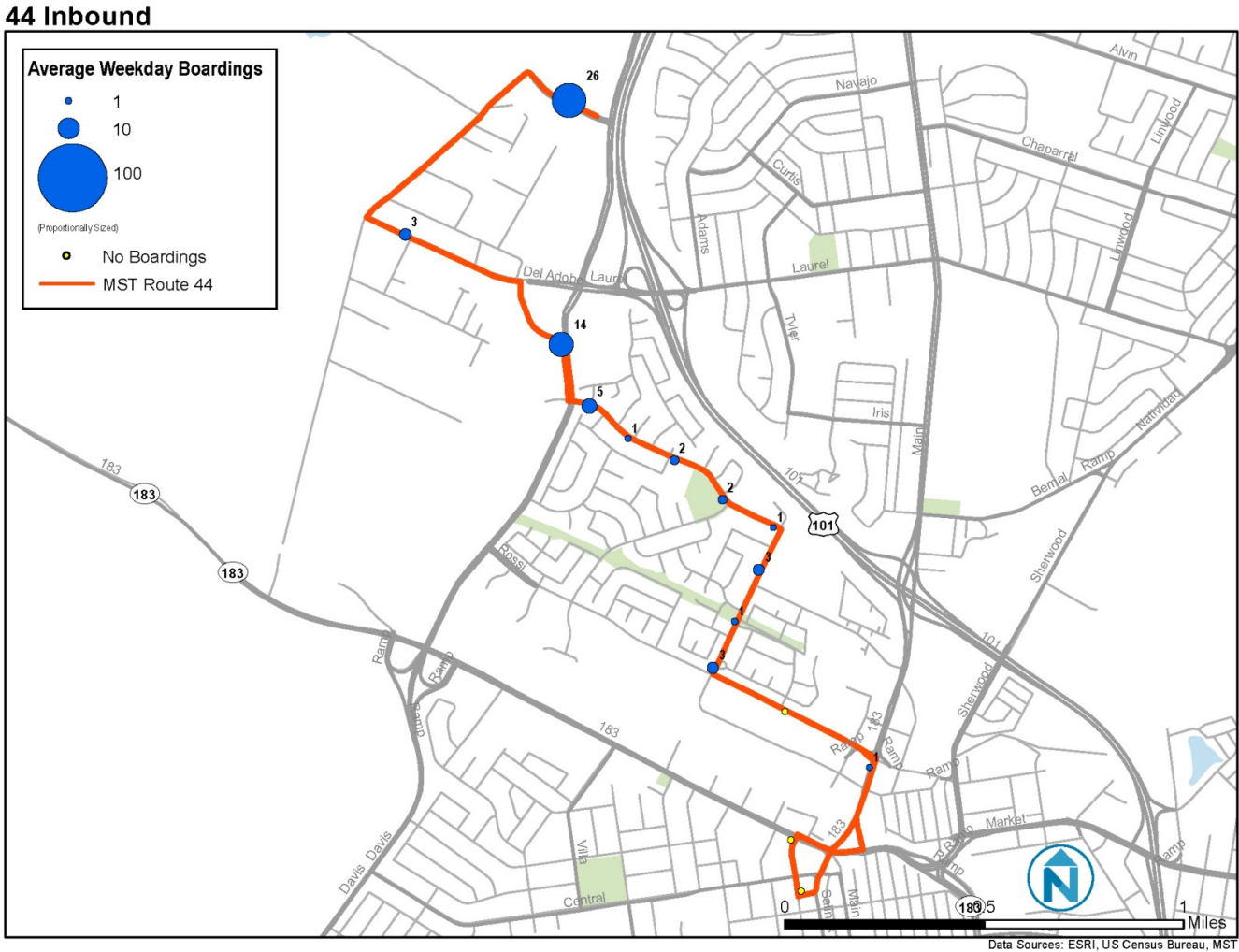


Figure B-8 Route 44 Ridership Map (Northbound)

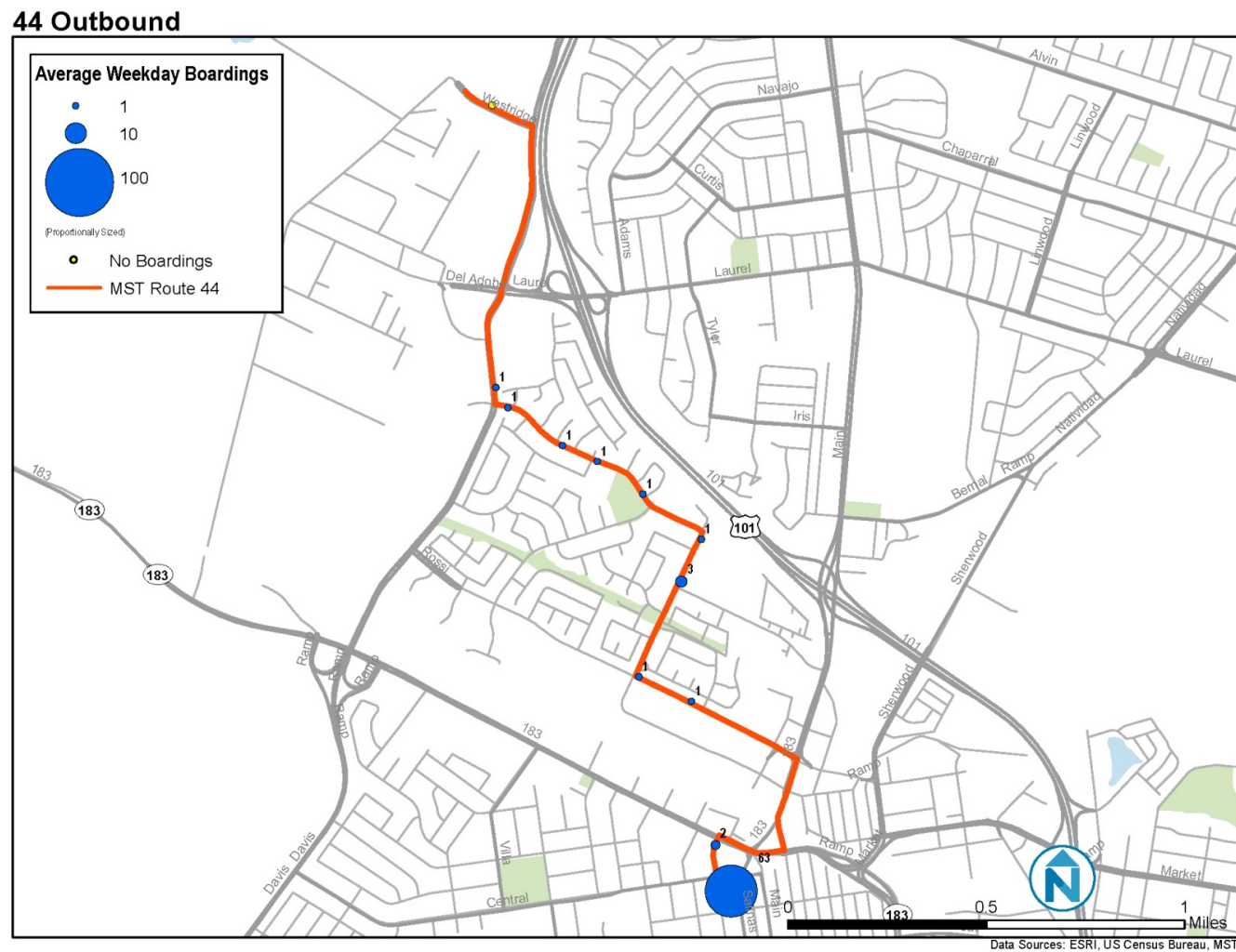


Figure B-9 Route 45 Ridership Map (Southbound)

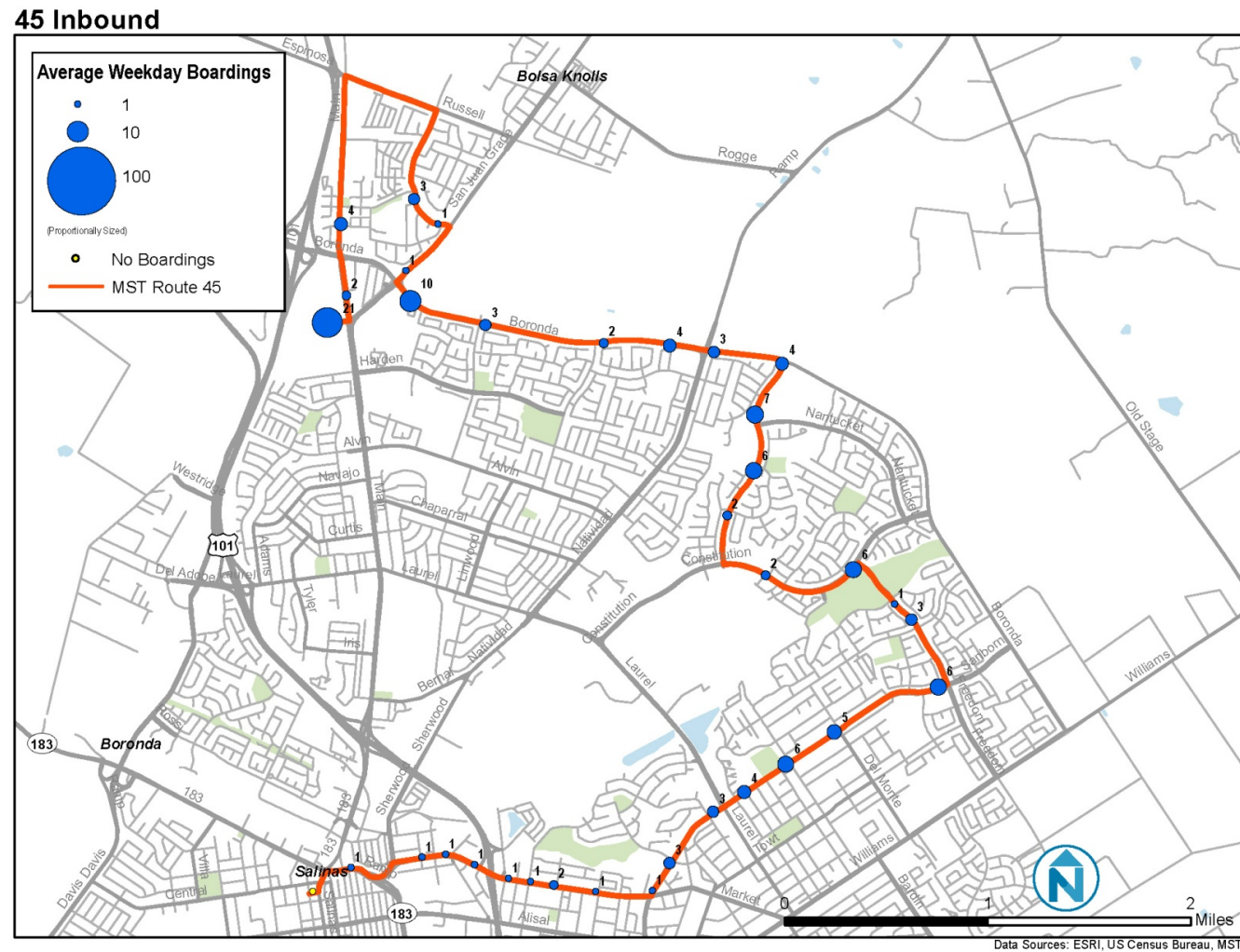


Figure B-10 Route 45 Ridership Map (Northbound)

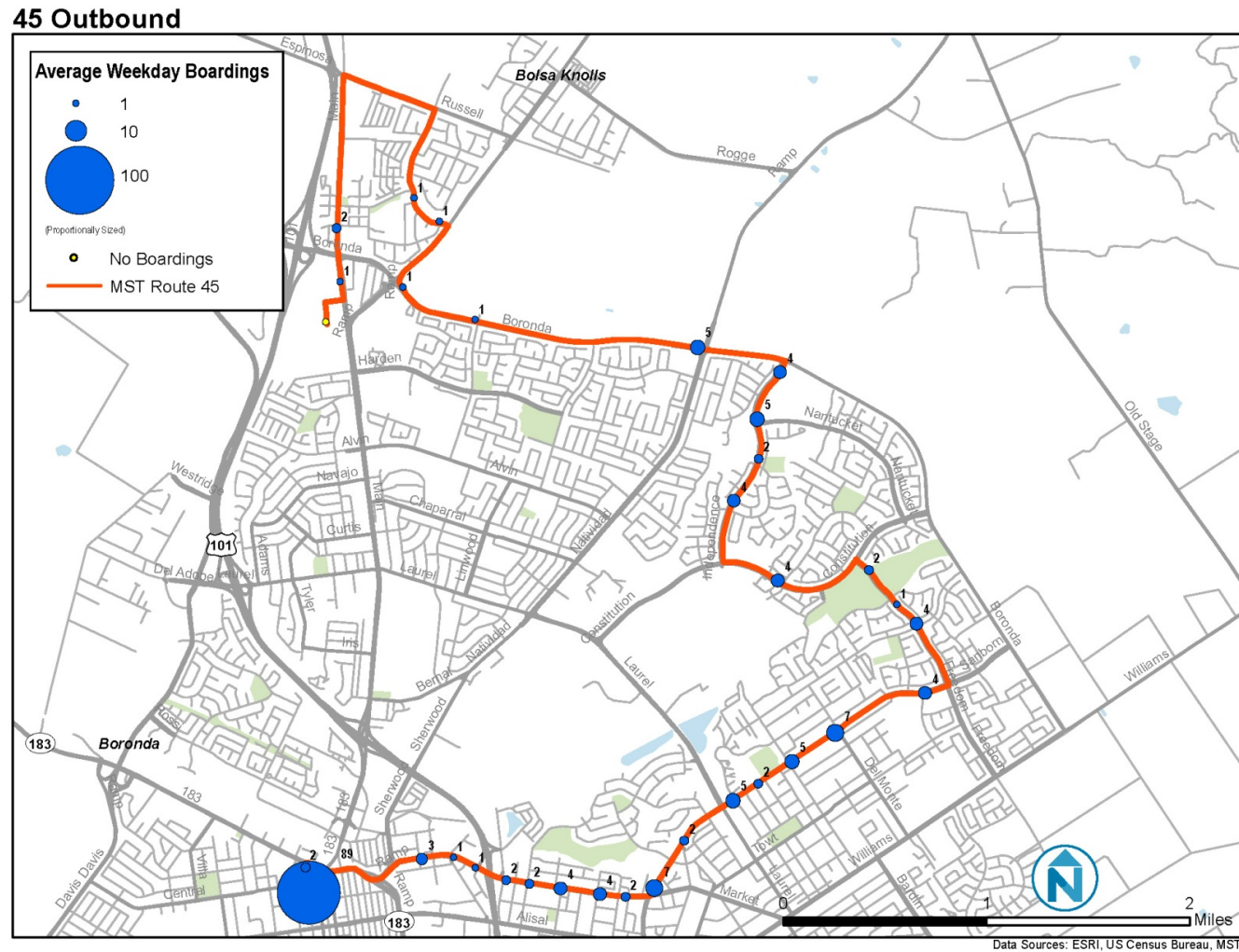


Figure B-11 Route 46 Ridership Map (Southbound)

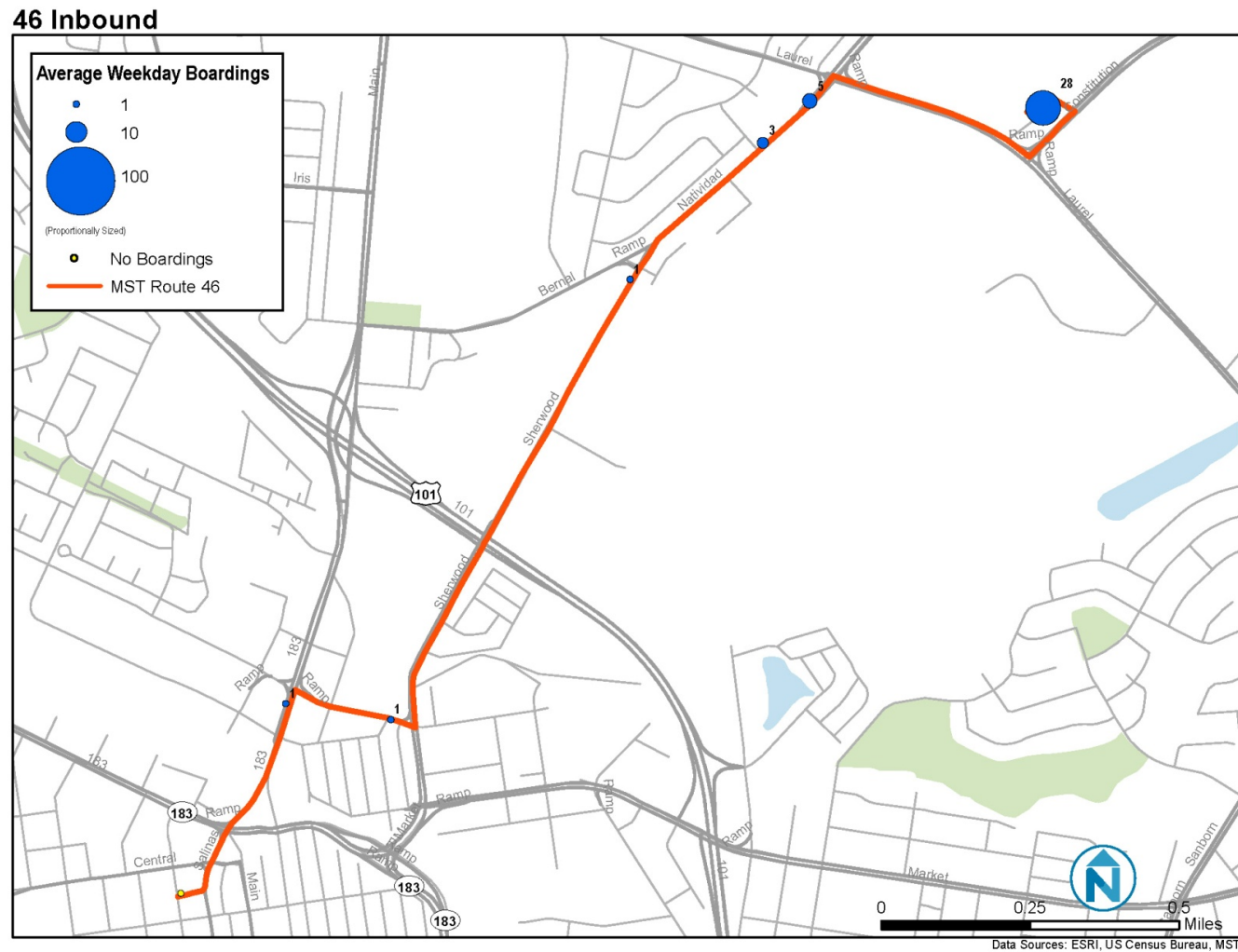


Figure B-12 Route 46 Ridership Map (Northbound)

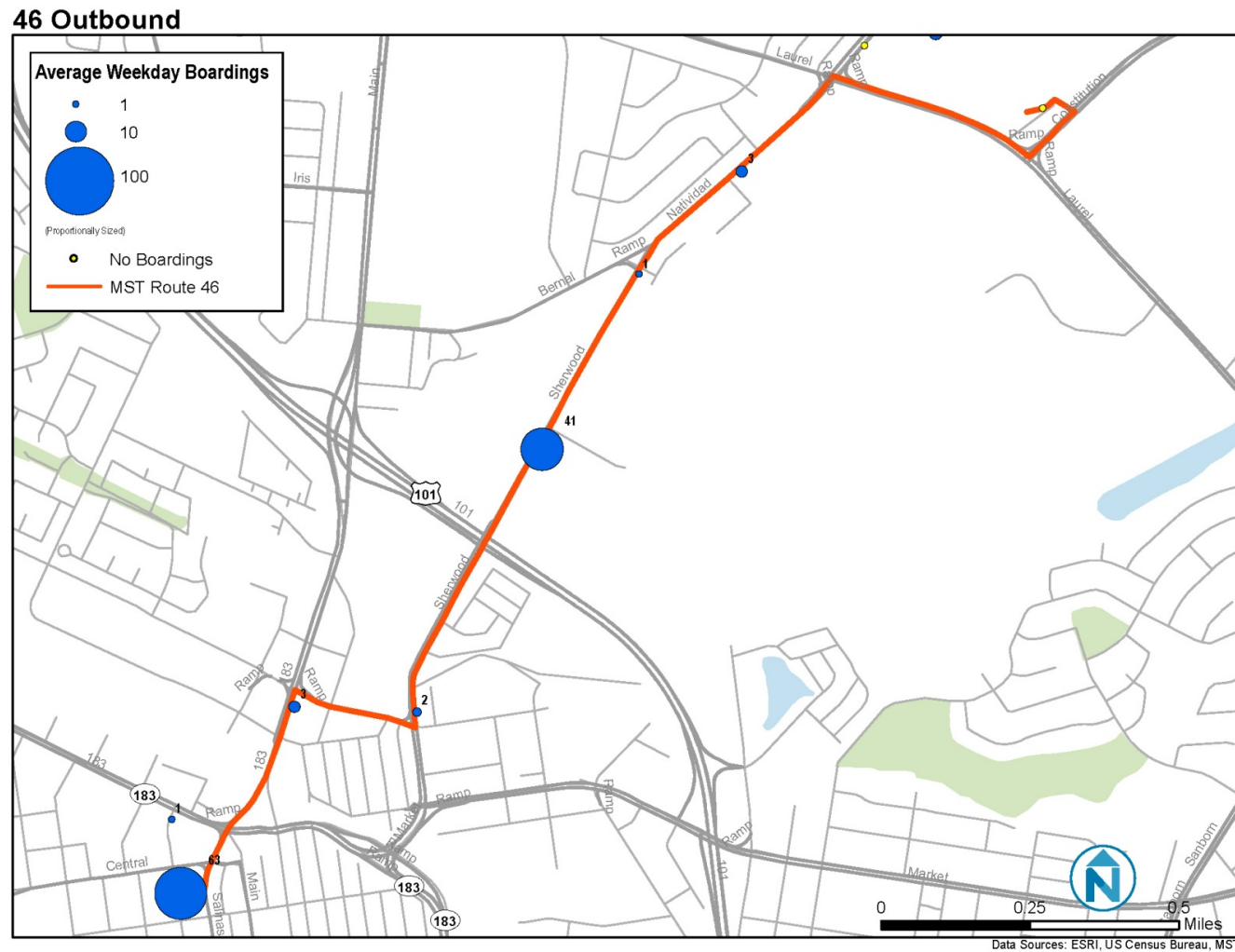


Figure B-13 Route 48 Ridership Map (Eastbound)

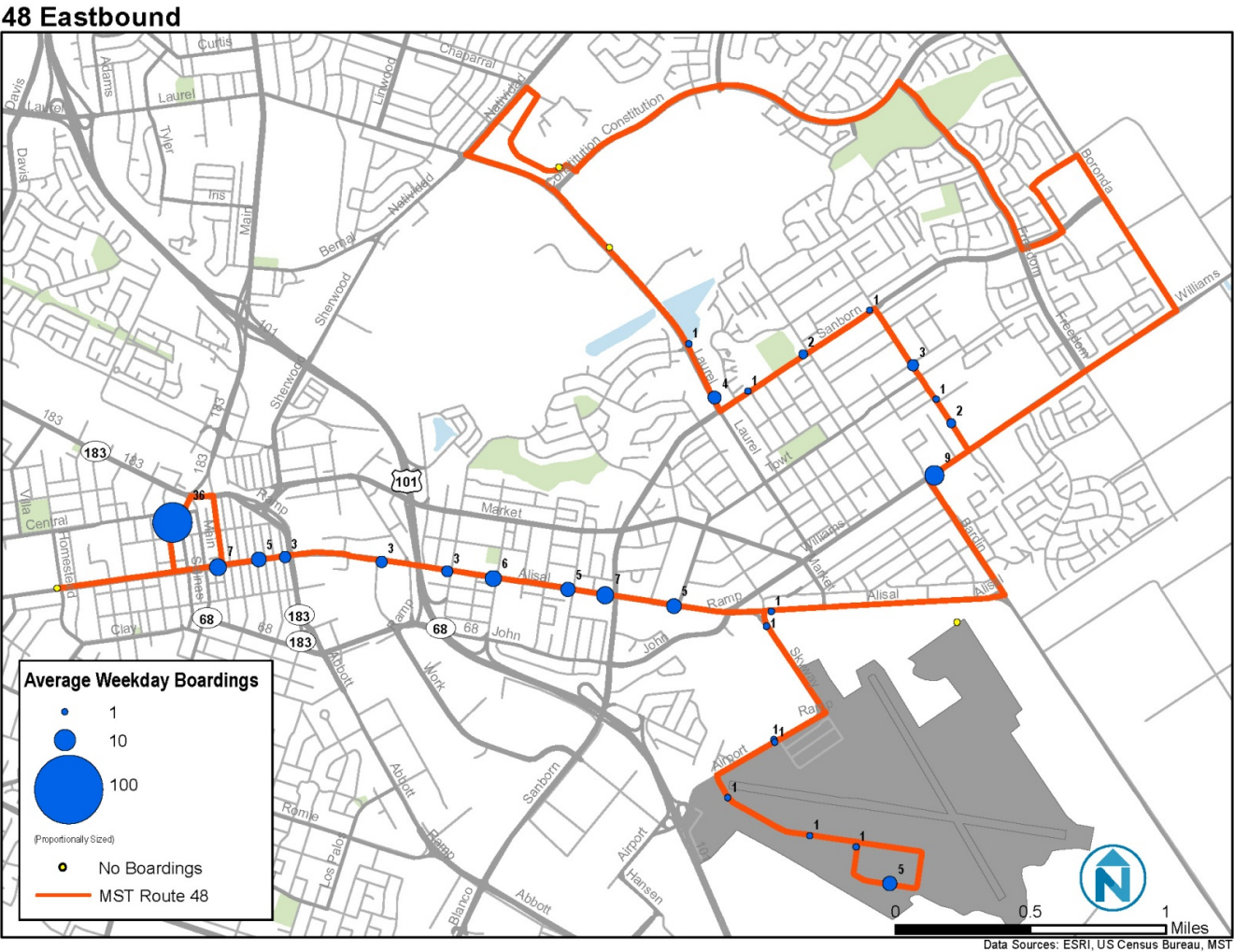


Figure B-14 Route 48 Ridership Map (Westbound)

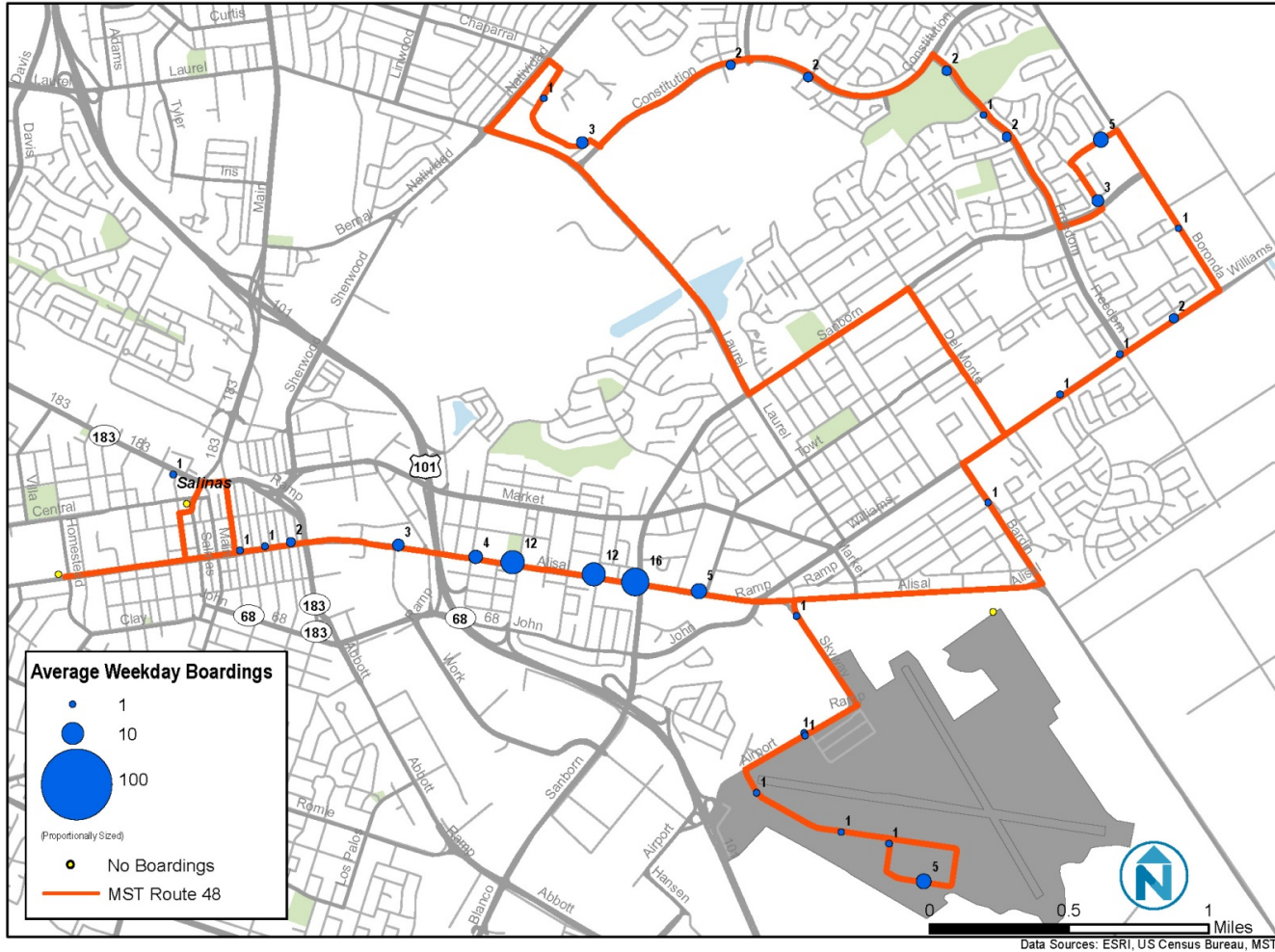


Figure B-15 Route 49 Ridership Map (Southbound)

49 Inbound

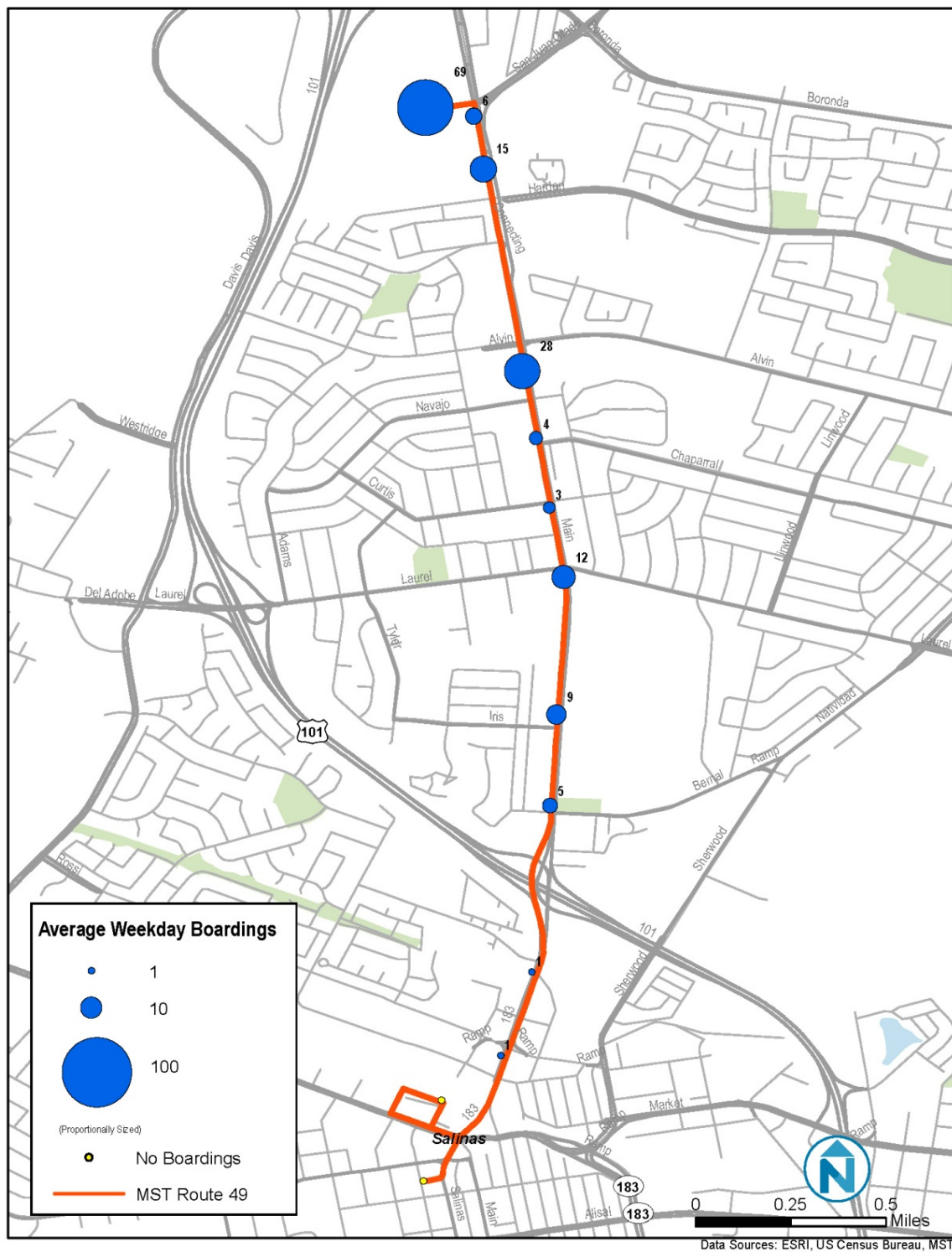


Figure B-16 Route 49 Ridership Map (Northbound)

49 Outbound

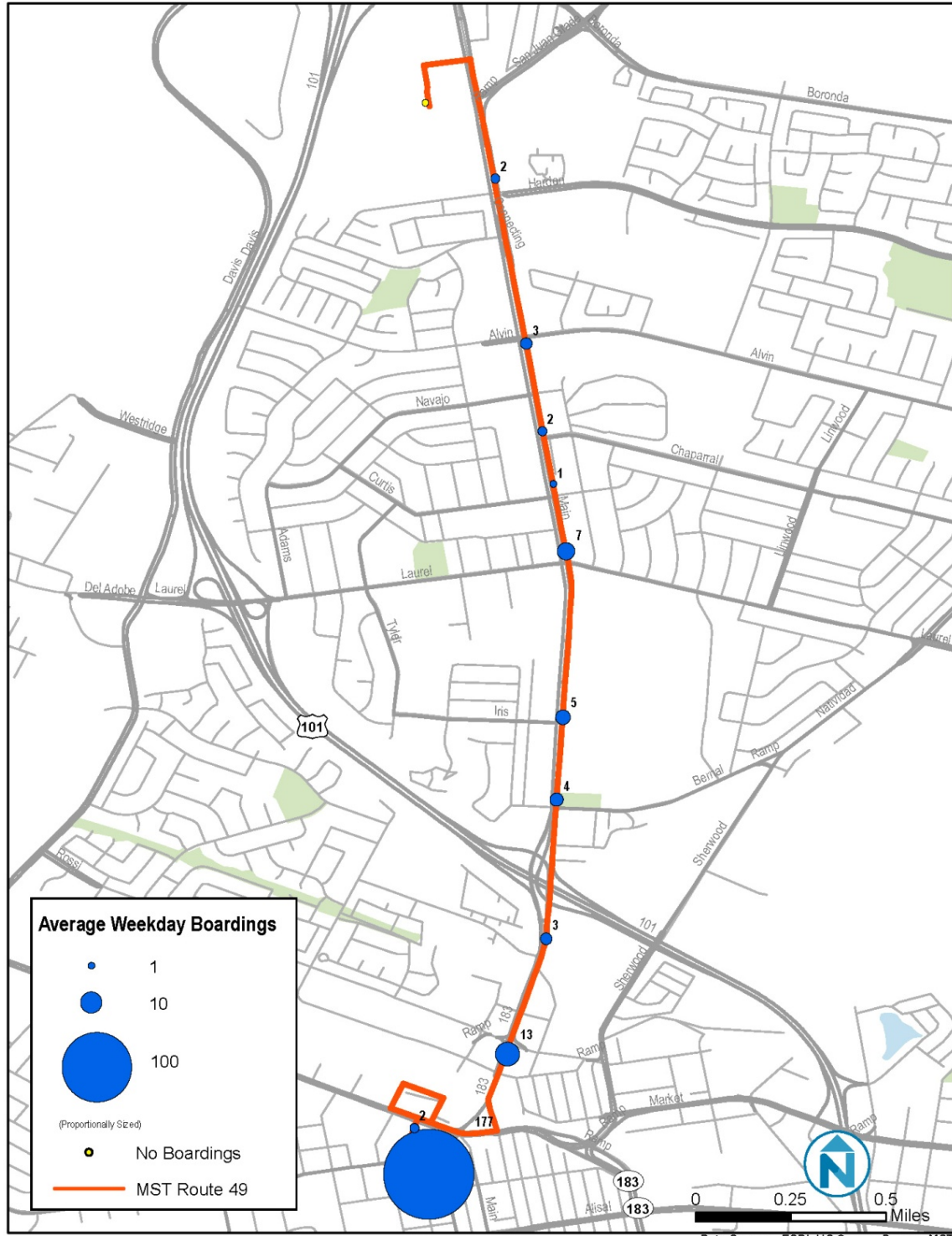


Figure B-17 Route 20 Ridership Map (Eastbound)

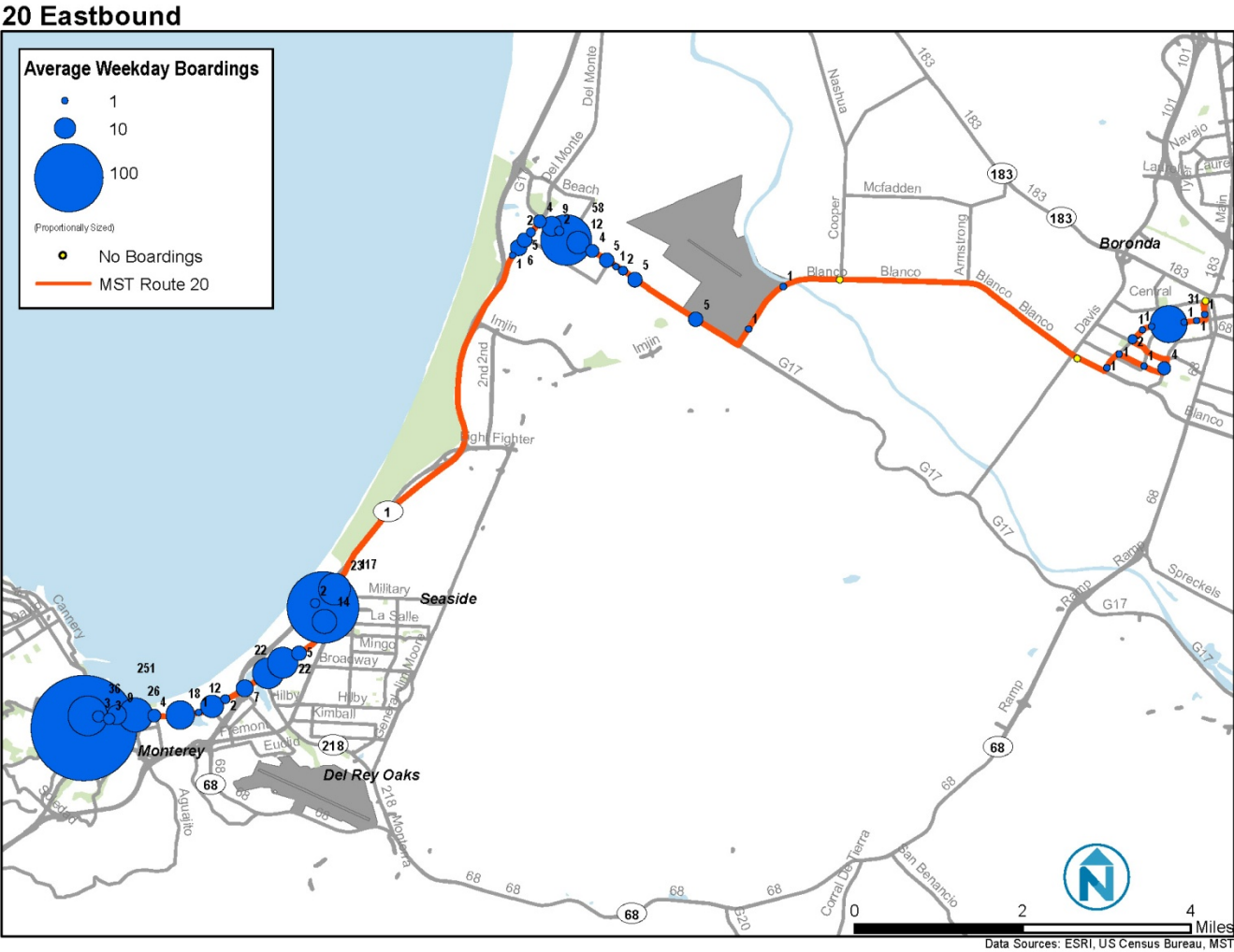


Figure B-18 Route 20 Ridership Map (Westbound)

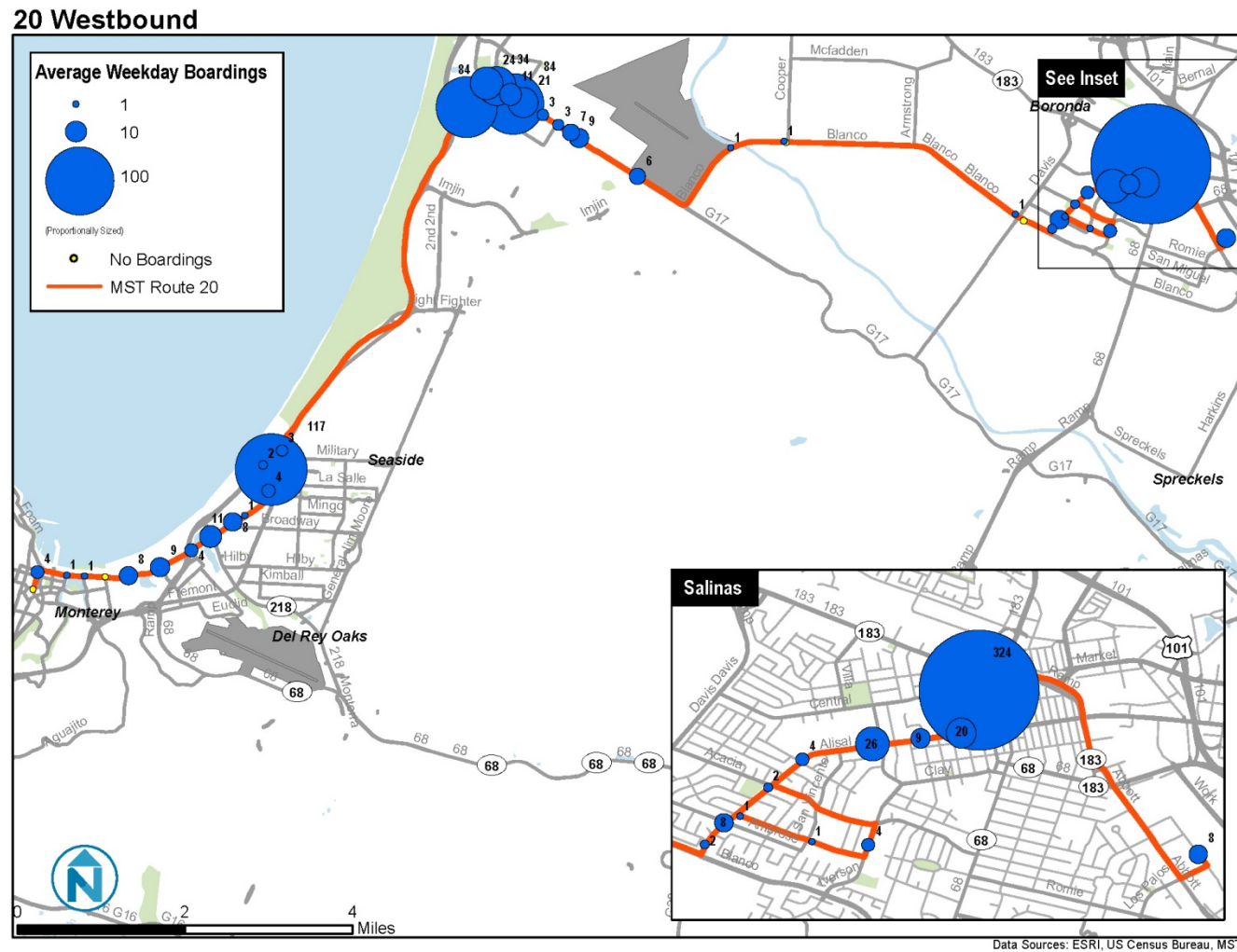


Figure B-19 Route 21 Ridership Map (Eastbound)

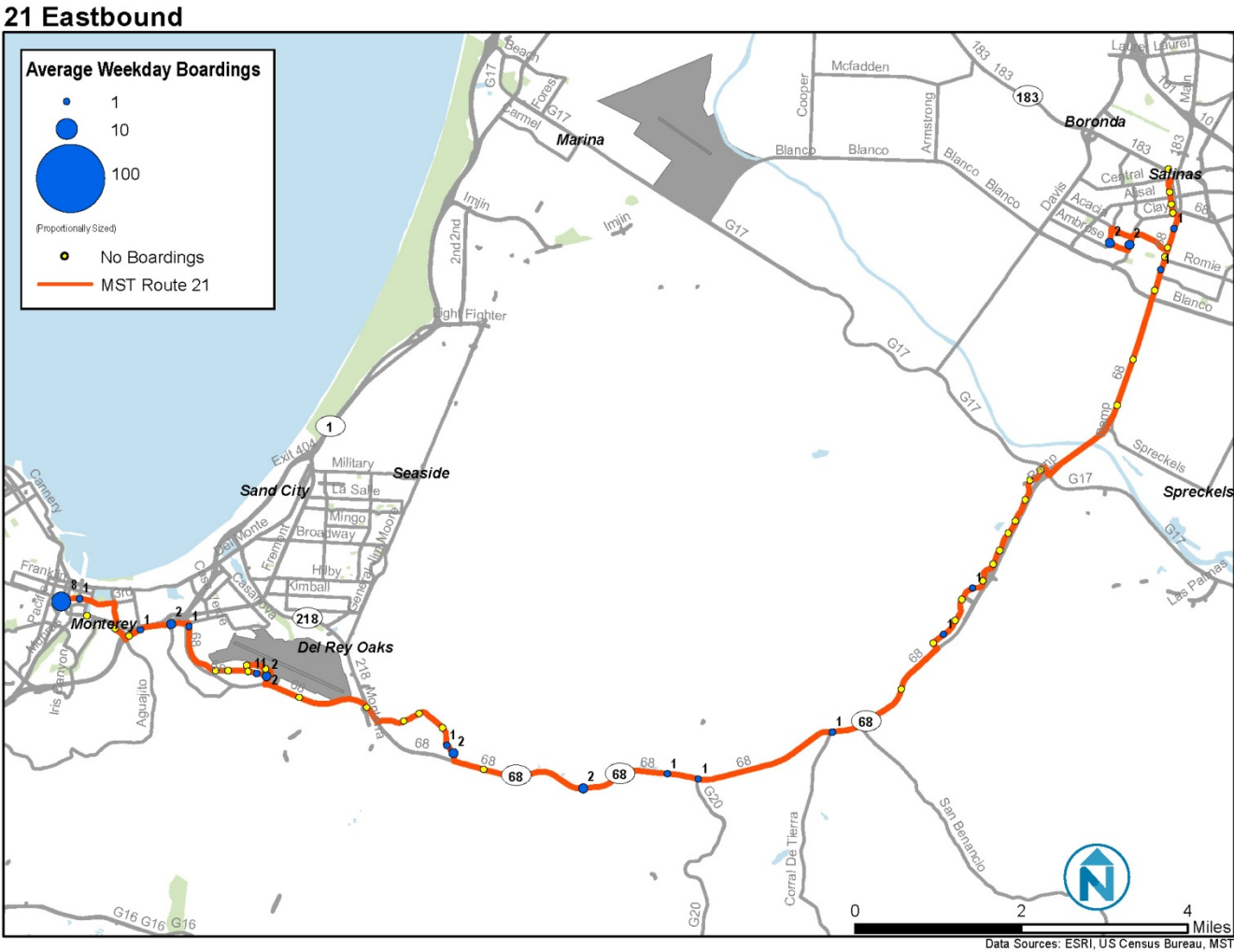


Figure B-20 Route 21 Ridership Map (Westbound)

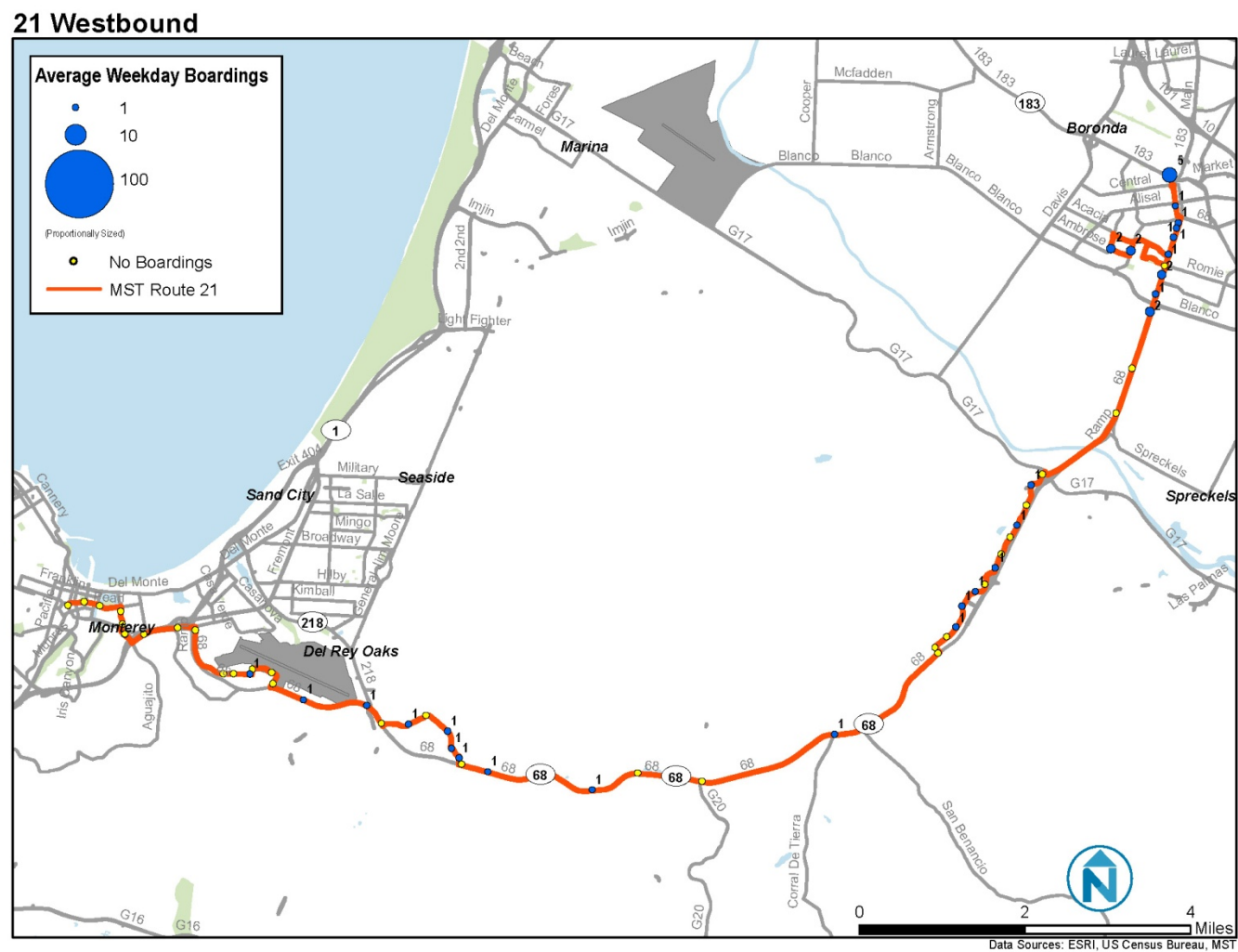


Figure B-21 Route 23 Ridership Map (Northbound)

23 Northbound

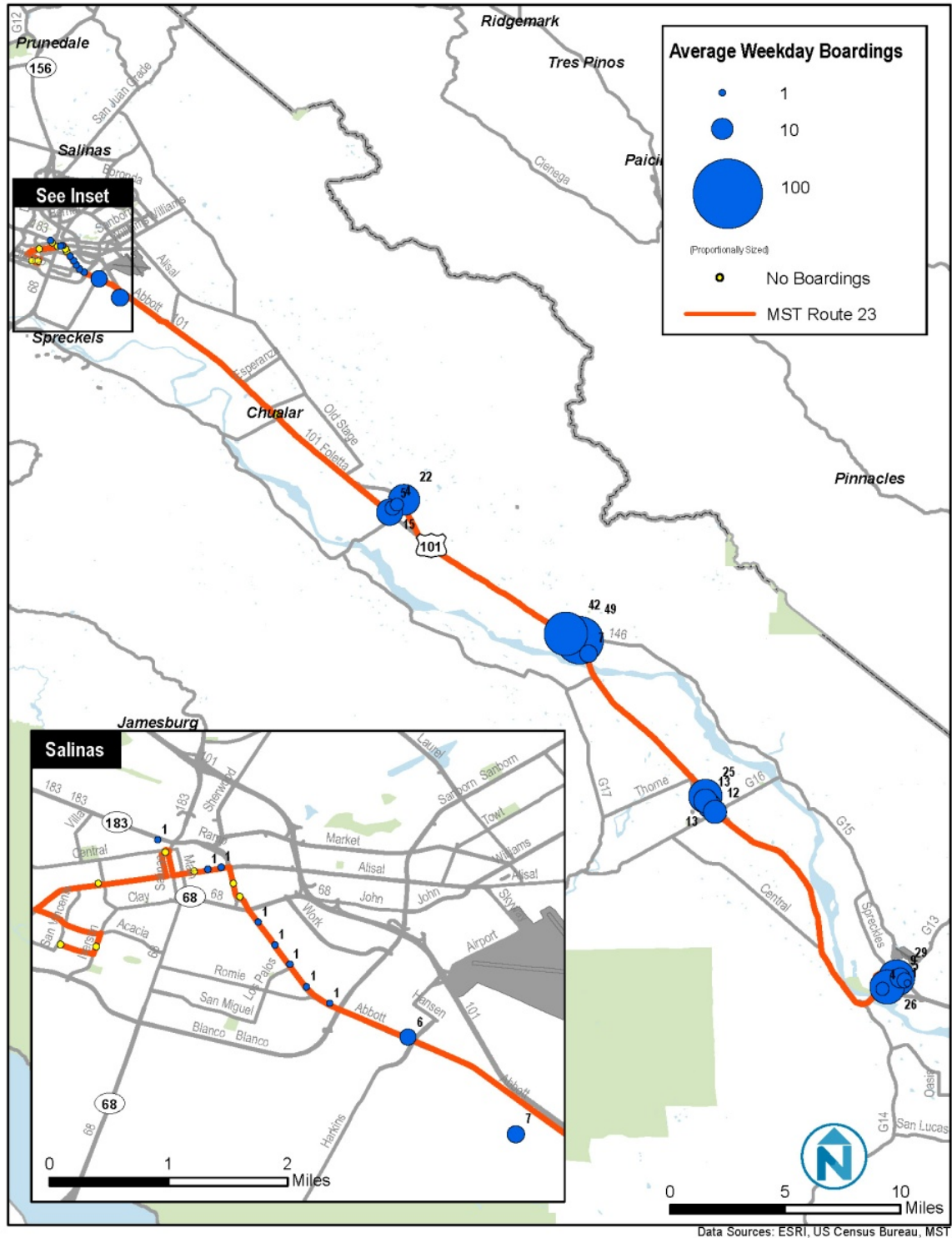


Figure B-22 Route 23 Ridership Map (Southbound)

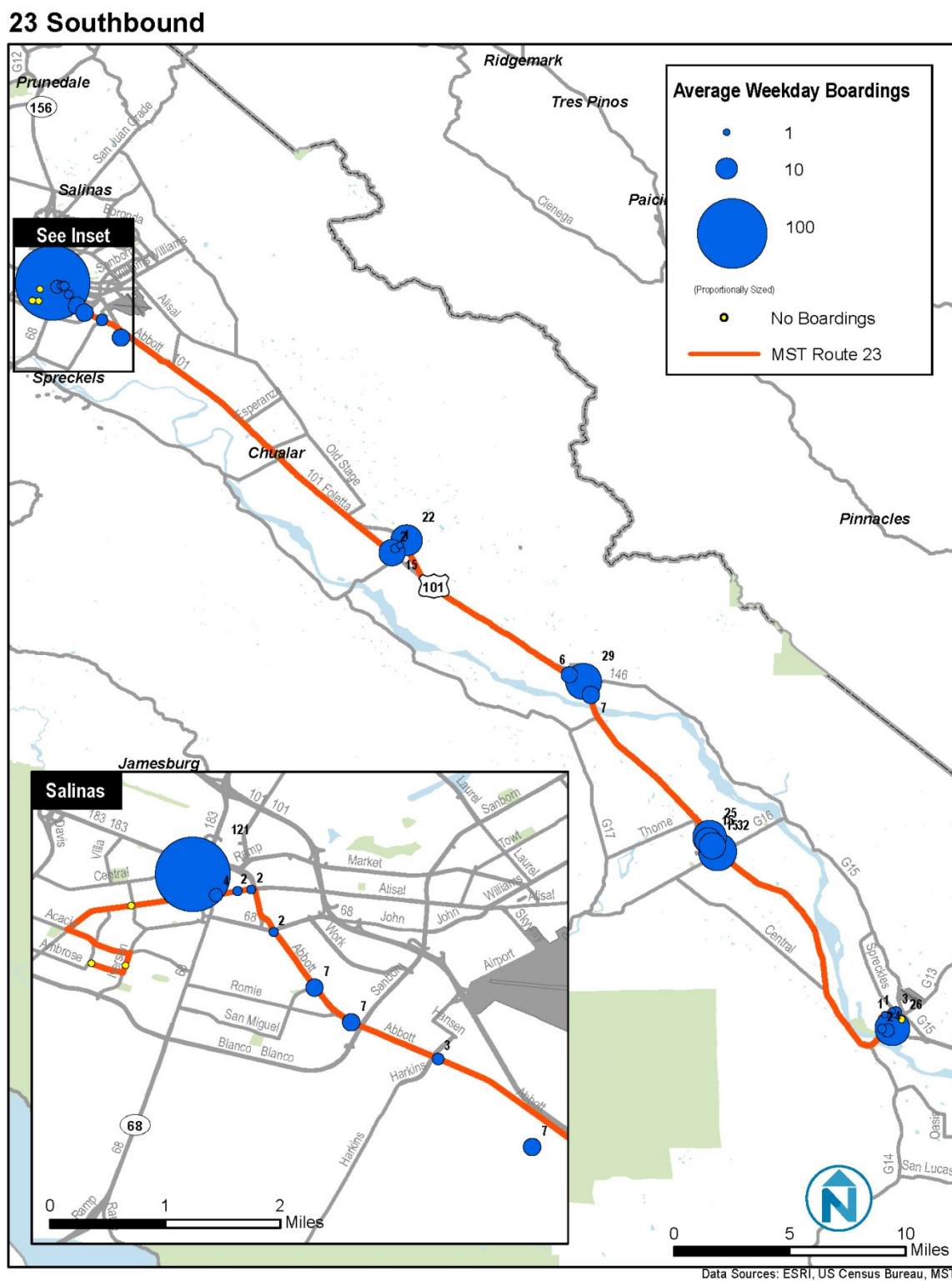


Figure B-23 Route 25 Ridership Map (Eastbound)

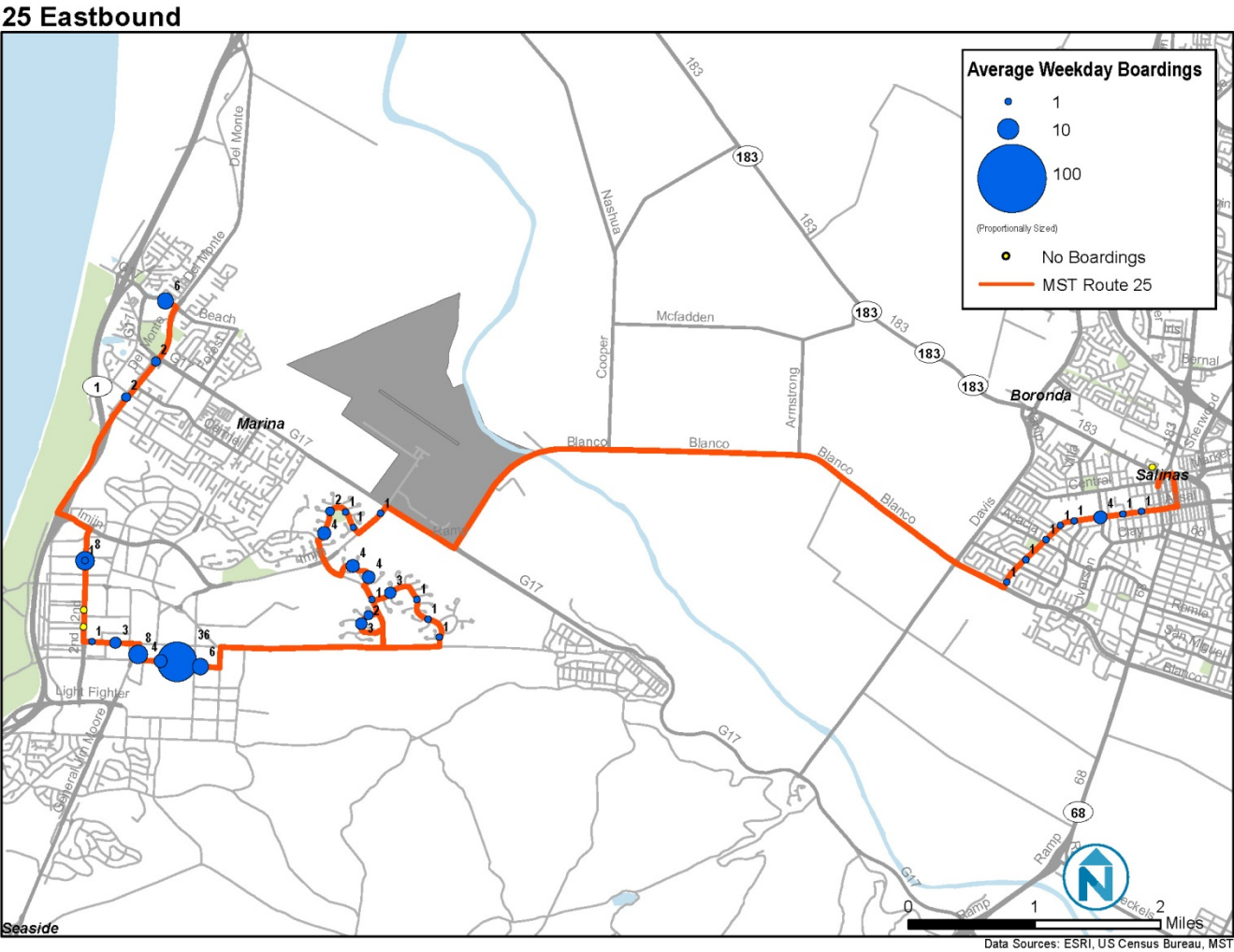


Figure B-24 Route 25 Ridership Map (Westbound)

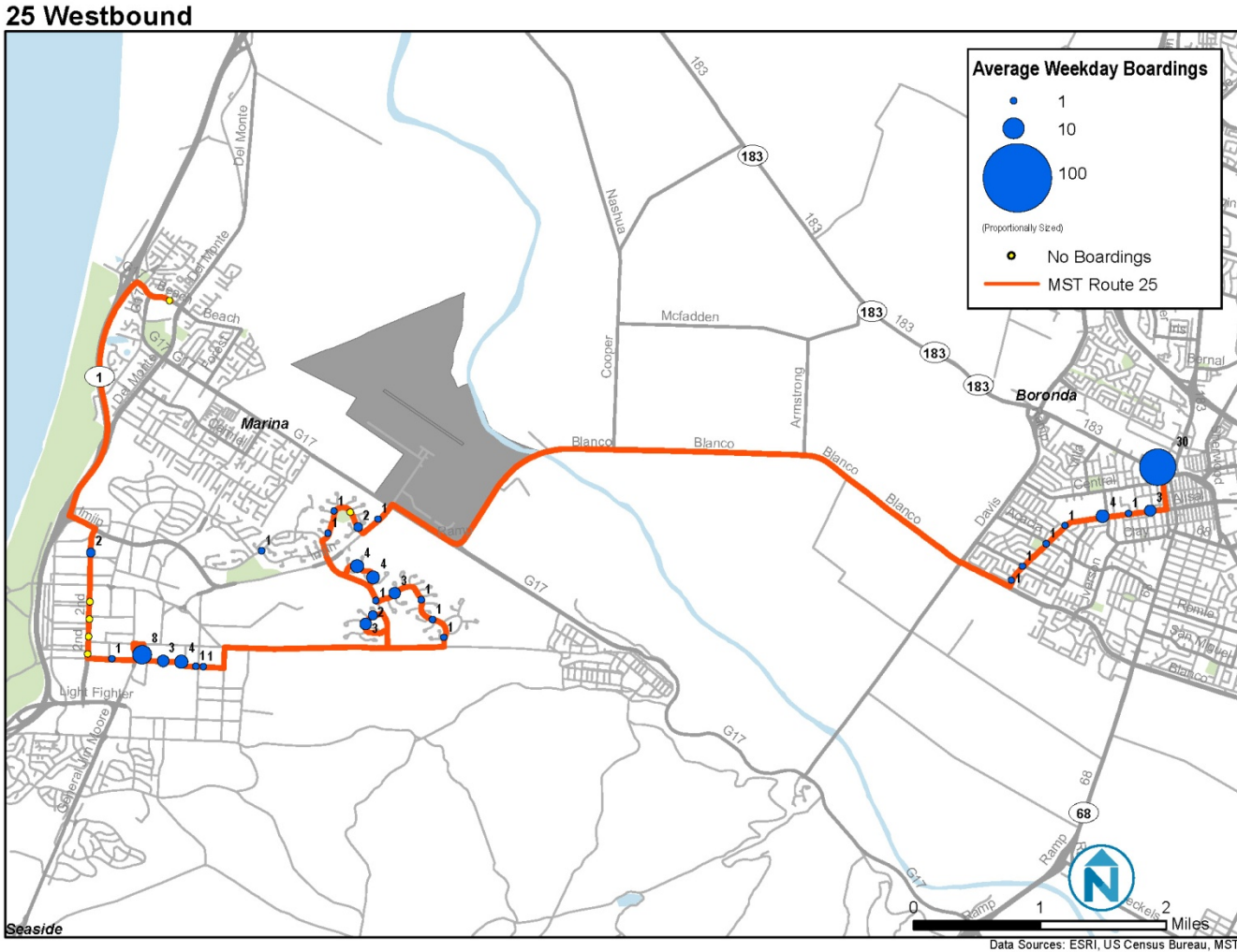


Figure B-25 Route 28 Ridership Map (Southbound)

28 Inbound

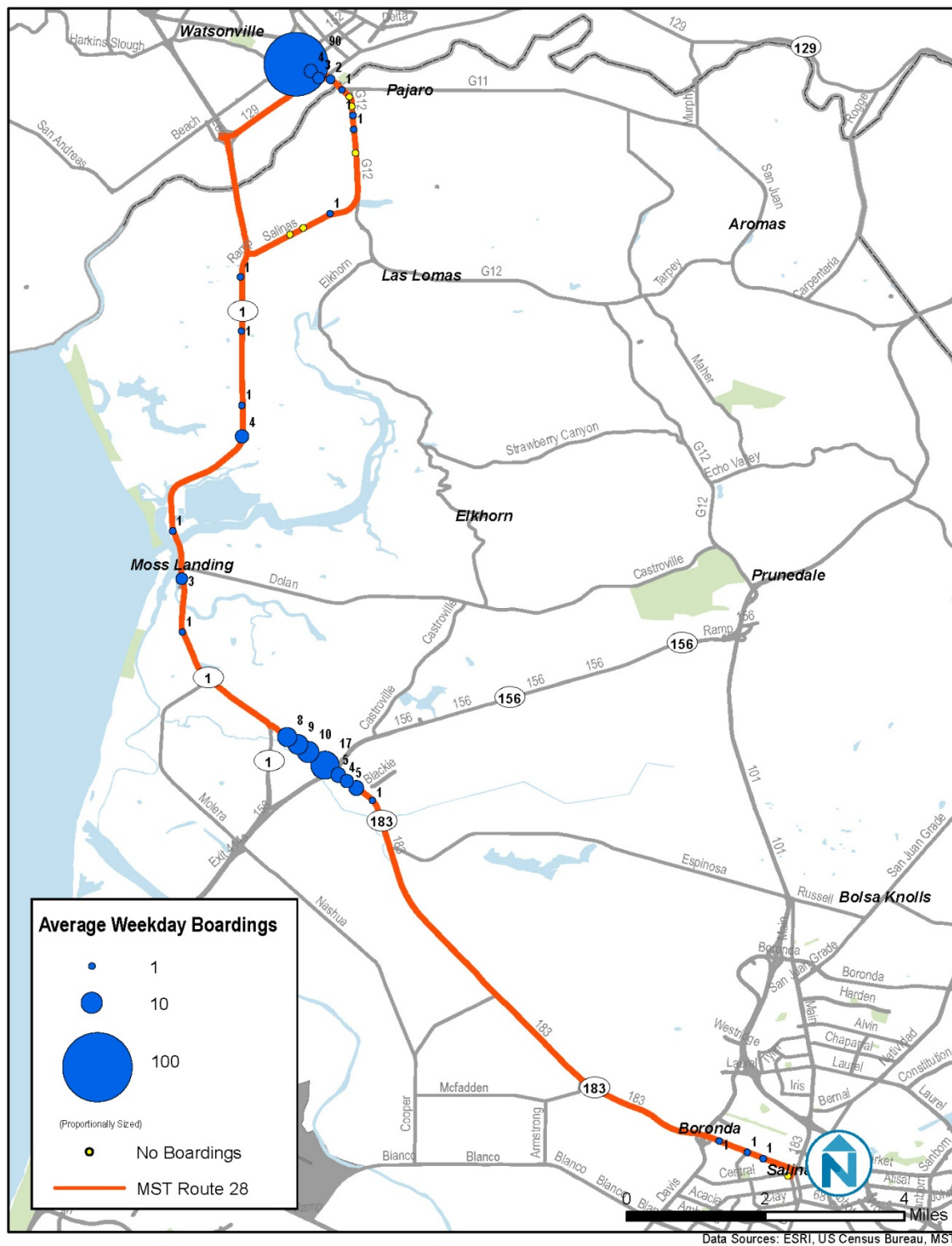


Figure B-26 Route 28 Ridership Map (Northbound)

28 Outbound

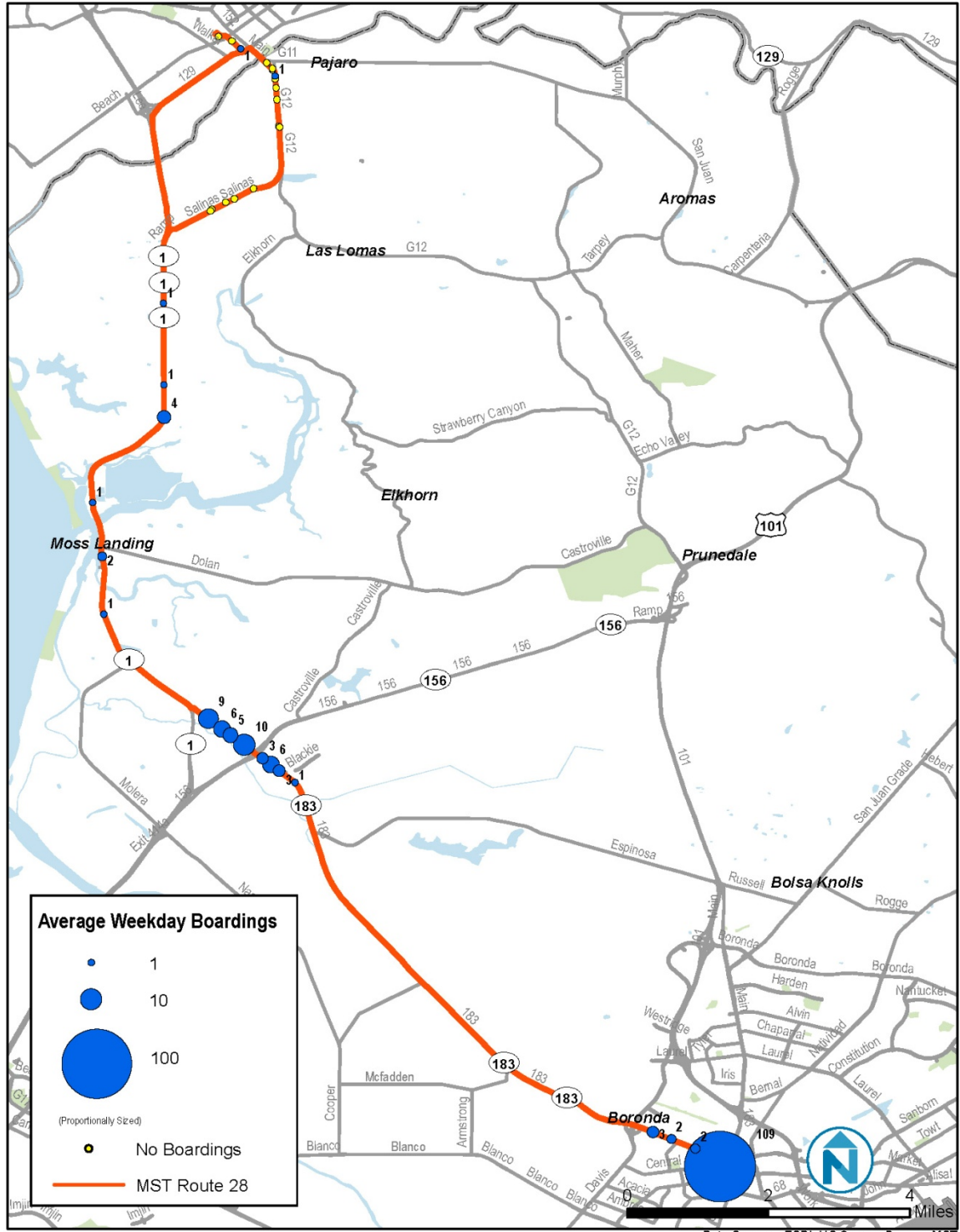
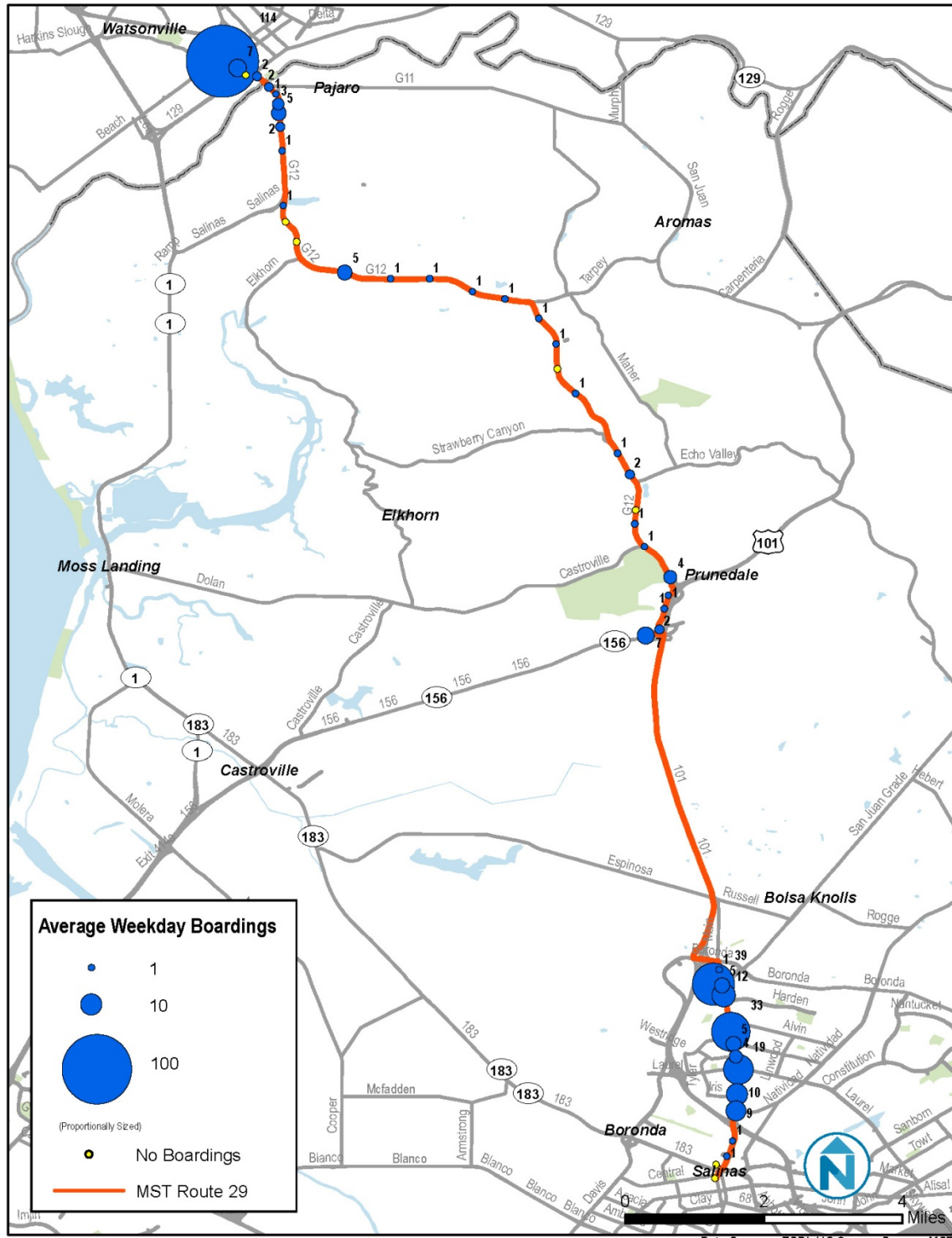


Figure B-27 Route 29 Ridership Map (Southbound)

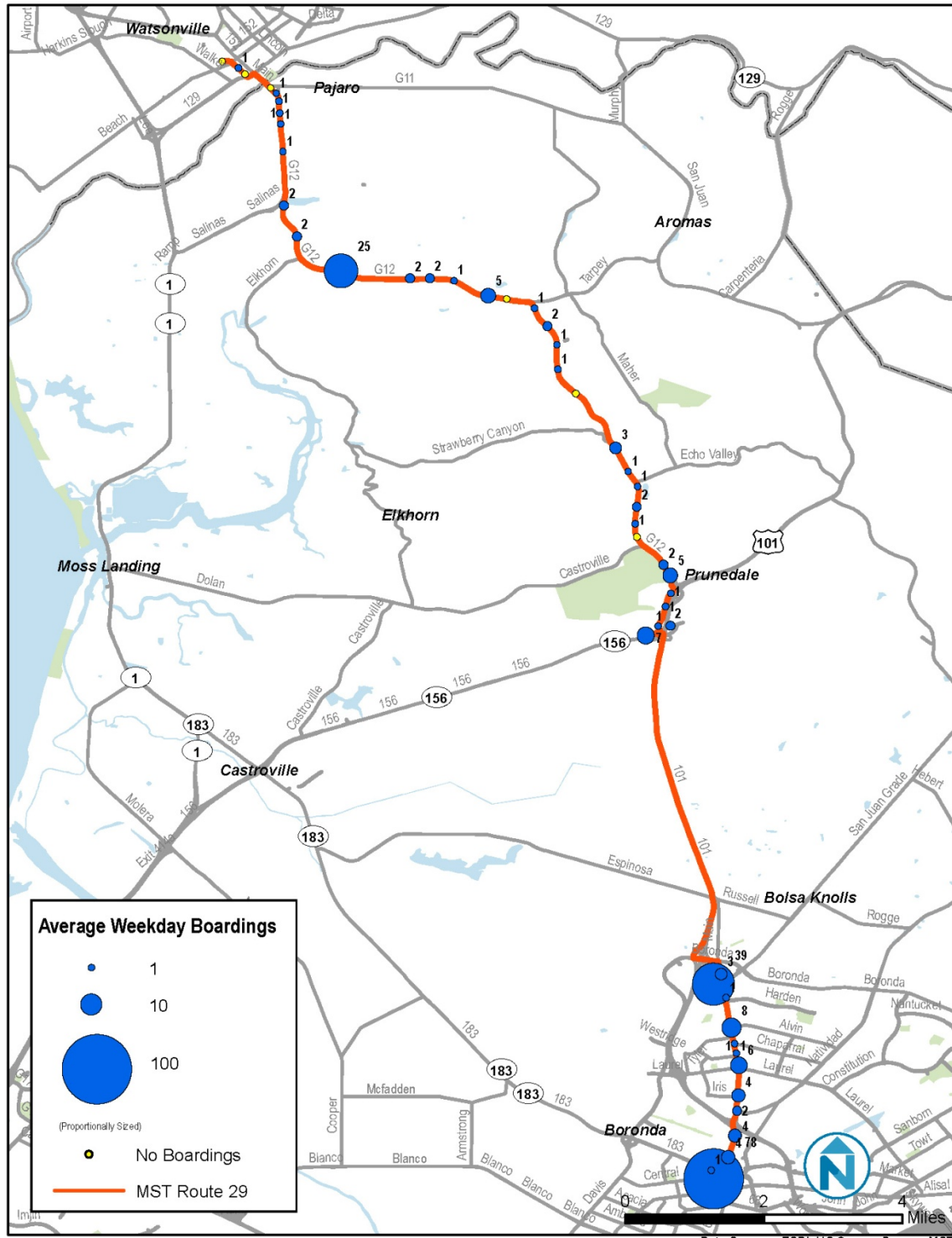
29 Inbound



Data Sources: ESRI, US Census Bureau, MST

Figure B-28 Route 29 Ridership Map (Northbound)

29 Outbound



APPENDIX C CONCEPTUAL SCHEDULES

The following pages contain conceptual schedules for routes on which major realignments or schedule adjustments are proposed. Routes on which only minor adjustments are proposed (such as changes to “school trips” or other diversions) or on which no change is recommended are not shown. Spans are based on existing service or, for new routes, on professional judgment.

Where existing travel times for a segment were not available, travel times have been estimated based on speed limits, numbers of signalized intersections, numbers of stops and time of day, as well as on “test drives” completed during the April site visit. It should be emphasized that these are *conceptual* schedules and that actual schedules produced as a result of additional test drives using actual motor coaches and run-cutting will vary.

Figure C-1 Route 41 Conceptual Schedule (Weekends)

Salinas Transit Center	E. Alisal & Towt	Natividad Medical Center	Northridge Mall	Northridge Mall	Natividad Medical Center	E. Alisal & Towt	Salinas Transit Center
6:15	6:27	6:43	6:54	7:10	7:23	7:39	7:51
6:45	6:57	7:13	7:24	7:40	7:53	8:09	8:21
7:15	7:27	7:43	7:54	8:10	8:23	8:39	8:51
7:45	7:57	8:13	8:24	8:40	8:53	9:09	9:21
8:15	8:27	8:43	8:54	9:10	9:23	9:39	9:51
8:45	8:57	9:17	9:31	9:40	9:55	10:15	10:29
9:15	9:27	9:47	10:01	10:10	10:25	10:45	10:59
9:45	9:57	10:17	10:31	10:40	10:55	11:15	11:29
10:15	10:27	10:47	11:01	11:10	11:25	11:45	11:59
10:45	10:57	11:17	11:31	11:40	11:55	12:15	12:29
11:05	11:17	11:37	11:51	12:00	12:15	12:35	12:49
11:25	11:37	11:57	12:11	12:20	12:35	12:55	1:09
11:45	11:57	12:17	12:31	12:40	12:55	1:15	1:29
12:05	12:17	12:37	12:51	1:00	1:15	1:35	1:49
12:25	12:37	12:57	1:11	1:20	1:35	1:55	2:09
12:45	12:57	1:17	1:31	1:40	1:55	2:15	2:29
1:05	1:17	1:37	1:51	2:00	2:15	2:35	2:49
1:25	1:37	1:57	2:11	2:20	2:35	2:55	3:09
1:45	1:57	2:17	2:31	2:40	2:55	3:15	3:29
2:05	2:17	2:37	2:51	3:00	3:15	3:35	3:49
2:25	2:37	2:57	3:11	3:20	3:35	3:55	4:09

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Salinas Transit Center	E. Alisal & Towt	Natividad Medical Center	Northridge Mall	Northridge Mall	Natividad Medical Center	E. Alisal & Towt	Salinas Transit Center
2:45	2:57	3:17	3:31	3:40	3:55	4:15	4:29
3:05	3:17	3:37	3:51	4:00	4:15	4:35	4:49
3:25	3:37	3:57	4:11	4:20	4:35	4:55	5:09
3:45	3:57	4:17	4:31	4:40	4:55	5:15	5:29
4:05	4:17	4:37	4:51	5:00	5:15	5:35	5:49
4:25	4:37	4:57	5:11	5:20	5:35	5:55	6:09
4:45	4:57	5:17	5:31	5:40	5:55	6:15	6:29
5:15	5:27	5:47	6:01	6:10	6:25	6:45	6:59
5:45	5:57	6:17	6:31	6:40	6:55	7:15	7:29
6:15	6:27	6:47	7:01	7:10	7:25	7:45	7:59
6:45	6:55	7:09	--	--	--	--	--
7:45	7:55	8:09	--	--	8:10	8:26	8:38
8:45	8:55	9:09	--	--	9:10	9:26	9:38
9:45	9:55	10:09	--	--	10:10	10:26	10:38

* Shaded trips do not operate on Sunday.

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figure C-2 Route 43 Conceptual Schedule (Weekdays)

Salinas Transit Center	SVMH	S. Main & Plaza	Salinas Transit Center
6:45	6:54	7:03	7:11
7:15	7:24	7:33	7:41
7:45	7:54	8:03	8:11
8:15	8:24	8:33	8:41
8:45	8:54	9:03	9:11
9:15	9:24	9:33	9:41
9:45	9:54	10:03	10:11
10:15	10:24	10:33	10:41
10:45	10:54	11:03	11:11
11:15	11:24	11:33	11:41
11:45	11:54	12:03	12:11
12:15	12:24	12:33	12:41
12:45	12:54	1:03	1:11
1:15	1:24	1:33	1:41
1:45	1:54	2:03	2:11
2:15	2:24	2:33	2:41
2:45	2:54	3:03	3:11
3:15	3:24	3:33	3:41
3:45	3:54	4:03	4:11
4:15	4:24	4:33	4:41
4:45	4:54	5:03	5:11
5:15	5:24	5:33	5:41
5:45	5:54	6:03	6:11

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figure C-3 Route 44 Conceptual Schedule (Daily)

Salinas Transit Center	Post & Davis	Westridge Center	Northridge Mall	Northridge Mall	Westridge Center	Post & Davis	Salinas Transit Center
6:15	6:24	6:29	6:35	--	--	--	--
7:15	7:24	7:29	7:35	7:50	7:56	8:01	8:10
8:15	8:24	8:29	8:35	8:50	8:56	9:01	9:10
9:15	9:24	9:29	9:35	9:50	9:56	10:01	10:10
10:15	10:24	10:29	10:35	10:50	10:56	11:01	11:10
11:15	11:24	11:29	11:35	11:50	11:56	12:01	12:10
12:15	12:24	12:29	12:35	12:50	12:56	1:01	1:10
1:15	1:24	1:29	1:35	1:50	1:56	2:01	2:10
2:15	2:24	2:29	2:35	2:50	2:56	3:01	3:10
3:15	3:24	3:29	3:35	3:50	3:56	4:01	4:10
4:15	4:24	4:29	4:35	4:50	4:56	5:01	5:10
5:15	5:24	5:29	5:35	5:50	5:56	6:01	6:10
6:15	6:24	6:29	6:35	6:50	6:56	7:01	7:10

* Shaded trips do not operate on weekends.

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figure C-4 Route 45 Conceptual Schedule (Daily)

Salinas Transit Center	Sanborn & Market	Sanborn & Del Monte	Boronda & Mesquite	Independence & Nantucket	Northridge Mall	Northridge Mall	Independence & Nantucket	Boronda & Mesquite	Sanborn & Del Monte	Sanborn & Market	Salinas Transit Center
--	--	--	--	--	--	6:35	6:47	--	6:56	7:01	7:10
7:15	7:24	7:29	--	7:38	7:50	7:35	7:47	--	7:56	8:01	8:10
8:15	8:24	8:29	--	8:38	8:50	8:35	8:47	--	8:56	9:01	9:10
9:15	9:24	9:29	--	9:38	9:50	9:35	9:47	--	9:56	10:01	10:10
9:45	9:54	9:59	10:04	--	--	--	--	10:21	10:26	10:31	10:40
10:15	10:24	10:29	--	10:38	10:50	10:35	10:47	--	10:56	11:01	11:10
11:15	11:24	11:29	--	11:38	11:50	11:35	11:47	--	11:56	12:01	12:10
11:45	11:54	11:59	12:04	--	--	--	--	12:21	12:26	12:31	12:40
12:15	12:24	12:29	--	12:38	12:50	12:35	12:47	--	12:56	1:01	1:10
1:15	1:24	1:29	--	1:38	1:50	1:35	1:47	--	1:56	2:01	2:10
2:15	2:24	2:29	--	2:38	2:50	2:35	2:47	--	2:56	3:01	3:10
3:15	3:24	3:29	--	3:38	3:50	3:35	3:47	--	3:56	4:01	4:10
4:15	4:24	4:29	--	4:38	4:50	4:35	4:47	--	4:56	5:01	5:10
5:15	5:24	5:29	--	5:38	5:50	5:35	5:47	--	5:56	6:01	6:10
6:15	6:24	6:29	--	6:38	6:50	6:35	6:47	--	6:56	7:01	7:10

* Shaded trips do not operate on weekends.

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figure C-5 Route 47 Conceptual Schedule (Weekdays)

Hartnell College	Salinas Transit Center	Alisal & Towt	Hartnell College East Campus	Hartnell College East Campus	Alisal & Towt	Salinas Transit Center	Hartnell College
6:53	7:00	7:12	7:18	7:25	7:31	7:45	7:52
7:53	8:00	8:12	8:18	8:25	8:31	8:45	8:52
8:53	9:00	9:12	9:18	9:25	9:31	9:45	9:52
9:53	10:00	10:12	10:18	10:25	10:31	10:45	10:52
10:53	11:00	11:12	11:18	11:25	11:31	11:45	11:52
11:53	12:00	12:12	12:18	12:25	12:31	12:45	12:52
12:53	1:00	1:12	1:18	1:25	1:31	1:45	1:52
1:53	2:00	2:12	2:18	2:25	2:31	2:45	2:52
2:53	3:00	3:12	3:18	3:25	3:31	3:45	3:52
3:53	4:00	4:12	4:18	4:25	4:31	4:45	4:52
4:53	5:00	5:12	5:18	5:25	5:31	5:45	5:52
5:53	6:00	6:12	6:18	6:25	6:31	6:45	6:52

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figure C-6 Route 48 Conceptual Schedule (Weekdays)

Salinas Transit Center	Salinas Adult School	Natividad Medical Center	Alisal & Towt	Salinas Airport Business Center	Salinas Airport Business Center	Alisal & Towt	Natividad Medical Center	Salinas Transit Center
6:45	6:49	6:58	7:05	7:14	7:14	7:21	7:28	7:39
7:45	7:49	7:58	8:05	8:14	8:14	8:21	8:28	8:39
8:45	8:49	8:58	9:05	9:14	9:14	9:21	9:28	9:39
9:45	9:49	9:58	10:05	10:14	10:14	10:21	10:28	10:39
10:45	10:49	10:58	11:05	11:14	11:14	11:21	11:28	11:39
11:45	11:49	11:58	12:05	12:14	12:14	12:21	12:28	12:39
12:45	12:49	12:58	1:05	1:14	1:14	1:21	1:28	1:39
1:45	1:49	1:58	2:05	2:14	2:14	2:21	2:28	2:39
2:45	2:49	2:58	3:05	3:14	3:14	3:21	3:28	3:39
3:45	3:49	3:58	4:05	4:14	4:14	4:21	4:28	4:39
4:45	4:49	4:58	5:05	5:14	5:14	5:21	5:28	5:39
5:45	5:49	5:58	6:05	6:14	6:14	6:21	6:28	6:39

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figure C-7 North Main Street Service Conceptual Schedule

Route	Salinas Transit Center	Northridge Mall	Boronda & San Juan	Watson-ville	Watson-ville	Boronda & San Juan	Northridge Mall	Salinas Transit Center
29	5:45	6:03	--	6:50	5:34	--	6:19	6:39
49	6:15	6:35	6:44	--	--	6:44	6:49	7:09
49	6:45	7:05	--	--	--		7:05	7:25
49	7:15	7:35	7:44	--	--	7:44	7:49	8:09
29	7:45	8:03	--	8:50	7:34	--	8:19	8:39
49	8:15	8:35	8:44	--	--	8:44	8:49	9:09
49	8:45	9:05	9:14	--	--	9:14	9:19	9:39
49	9:15	9:35	9:44	--	--	9:44	9:49	10:09
29	9:45	10:03	--	10:50	9:34	--	10:19	10:39
49	10:15	10:35	10:44	--	--	10:44	10:49	11:09
49	10:45	11:05	11:14	--	--	11:14	11:19	11:39
49	11:15	11:35	11:44	--	--	11:44	11:49	12:09
29	11:45	12:03	--	12:50	11:34	--	12:19	12:39
49	12:15	12:35	12:44	--	--	12:44	12:49	1:09
49	12:45	1:05	1:14	--	--	1:14	1:19	1:39
49	1:15	1:35	1:44	--	--	1:44	1:49	2:09
29	1:45	2:03	--	2:50	1:34	--	2:19	2:39
49	2:15	2:35	2:44	--	--	2:44	2:49	3:09
49	3:00	3:19	--	--	--	--	3:19	3:39
49	3:15	3:35	3:44	--	--	3:44	3:49	4:09
29	3:45	4:03	--	4:50	3:34	--	4:19	4:39
49	4:15	4:35	4:44	--	--	4:44	4:49	5:09
49	4:40	5:00	--	--	--	5:09	5:14	5:34
49	5:15	5:35	5:44	--	--	5:44	5:49	6:09
29	5:45	6:03	--	6:50	5:34	--	6:19	6:39
49	6:20	6:40	--	--	--	--	6:45	7:05
29	--	--	--	--	--	--	7:41	8:00
49	7:20	7:40	--	--	--	--	8:05	8:25
29	--	--	--	--	7:34	--	8:19	8:39
49	7:45	8:02	--	--	--	--	--	--

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Route	Salinas Transit Center	Northridge Mall	Boronda & San Juan	Watson-ville	Watson-ville	Boronda & San Juan	Northridge Mall	Salinas Transit Center
49	8:45	9:05	--	--	--	--	9:05	9:25
49	9:45	10:05	--	--	--	--	--	--

* Lightly shaded trips do not operate on Sunday. Darkly shaded trips do not operate on weekends.

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figure C-8 Route 25 Conceptual Schedule (Weekdays)

Salinas Transit Center	Imjin & Abrams	CSUMB Library	CSUMB Library	Imjin & Abrams	Salinas Transit Center
6:15	6:32	6:42	6:42	6:52	7:09
7:15	7:32	7:42	7:42	7:52	8:09
8:15	8:32	8:42	8:42	8:52	9:09
9:15	9:32	9:42	9:42	9:52	10:09
10:15	10:32	10:42	10:42	10:52	11:09
11:15	11:32	11:42	11:42	11:52	12:09
12:15	12:32	12:42	12:42	12:52	1:09
1:15	1:32	1:42	1:42	1:52	2:09
2:15	2:32	2:42	2:42	2:52	3:09
3:15	3:32	3:42	3:42	3:52	4:09
4:45	5:02	5:12	5:12	5:22	5:39
5:45	6:02	6:12	6:12	6:22	6:39
6:45	7:02	7:12	7:12	7:22	7:39
7:45	8:02	8:12	8:12	8:22	8:39
8:45	9:02	9:12	9:12	9:22	9:39
9:45	10:02	10:12	10:12	10:22	10:39

SALINAS AREA SERVICE ANALYSIS-II | FINAL REPORT
Monterey-Salinas Transit

Figure C-9 New CSUMB Service Conceptual Schedule (Weekdays)

CSUMB Library	Bunker Hill & Yorktown	Preston & Ready	Preston & Ready	Schoonover & White	CSUMB Library
6:30	6:38	6:42	6:42	6:48	6:57
7:00	7:08	7:12	7:12	7:18	7:27
7:30	7:38	7:42	7:42	7:48	7:57
8:00	8:08	8:12	8:12	8:18	8:27
8:30	8:38	8:42	8:42	8:48	8:57
9:00	9:08	9:12	9:12	9:18	9:27
9:30	9:38	9:42	9:42	9:48	9:57
10:00	10:08	10:12	10:12	10:18	10:27
10:30	10:38	10:42	10:42	10:48	10:57
11:00	11:08	11:12	11:12	11:18	11:27
11:30	11:38	11:42	11:42	11:48	11:57
12:00	12:08	12:12	12:12	12:18	12:27
12:30	12:38	12:42	12:42	12:48	12:57
1:00	1:08	1:12	1:12	1:18	1:27
1:30	1:38	1:42	1:42	1:48	1:57
2:00	2:08	2:12	2:12	2:18	2:27
2:30	2:38	2:42	2:42	2:48	2:57
3:00	3:08	3:12	3:12	3:18	3:27
3:30	3:38	3:42	3:42	3:48	3:57
4:00	4:08	4:12	4:12	4:18	4:27
4:30	4:38	4:42	4:42	4:48	4:57
5:00	5:08	5:12	5:12	5:18	5:27
5:30	5:38	5:42	5:42	5:48	5:57
6:00	6:08	6:12	6:12	6:18	6:27
6:30	6:38	6:42	6:42	6:48	6:57
7:00	7:08	7:12	7:12	7:18	7:27
7:30	7:38	7:42	7:42	7:48	7:57
8:00	8:08	8:12	8:12	8:18	8:27
8:30	8:38	8:42	8:42	8:48	8:57
9:00	9:08	9:12	9:12	9:18	9:27
9:30	9:38	9:42	9:42	9:48	9:57
10:00	10:08	10:12	10:12	10:18	10:27