



July 21, 2010
NCTPA Agenda Item 9.1
Continued From: New
Action Requested: ACTION

NAPA COUNTY TRANSPORTATION AND PLANNING AGENCY Board Agenda Letter

TO: Board of Directors
FROM: Paul W. Price, Executive Director
REPORT BY: Deborah Brunner, Manager of Public Transit
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SUBJECT: Public Hearing on Proposed American Canyon Transit (ACT) Service Changes

RECOMMENDATION

That the NCTPA Board: (1) Hold a Public Hearing on the proposed phase 1 modifications to the American Canyon Transit (Duck) service, and (2) Subject to the Public Hearing and Board input, approve the modification of the American Canyon Transit (ACT) service to implement AM and PM Peak hours effective August 18, 2010 to coincide with the opening of the new high school.

EXECUTIVE SUMMARY

Modifying the ACT service by operating AM and PM Peak service will provide service to the new American Canyon High School (ACHS) at bell times and potential connection for residents to take the VINE Route 29 Commuter Express line. At this time school busing is available for students K-8 in American Canyon; however, it will not be offered to high school students. It is estimated that within the next two years 2900 students will attend the ACHS, several of which do not live within an easy walking distance or have to negotiate at-grade crossing at SR-29.

FISCAL IMPACT

Is there a Fiscal Impact? No. The proposed service modifications are not expected to impact the current operating budget.

CEQA REQUIREMENTS

The proposed action is not a project as defined in Section 15378 of the CEQA Guidelines, which define a project as an action which has the potential for resulting in

either a direct physical change in the environment or a reasonably foreseeable indirect physical change. Accordingly, no additional CEQA review is required at this time.

BACKGROUND AND DISCUSSION

The ACT service operates Monday to Fridays from 7:30 am to 5:55 pm with one bus on 90-minute headway. ACT will deviate for seniors and disabled riders upon request, and provides service to Sutter and Kaiser Hospitals in Vallejo. In March, the American Canyon Community Transit Study (CTS) project was launched to evaluate, analyze and recommend potential service improvements for residents. The opening of the new American Canyon High School (ACHS) in August has offered an opportunity to serve the student population of the community. New ridership demand will undoubtedly be generated, especially since the ACHS is located in the far eastern section of the city.

The city and NCTPA staff, in concert with our planning consultant Wilbur Smith Associates, has conducted significant community outreach including a number of meetings with the NVUSD. As a result of these meetings, there is an interest in phasing in these modifications to the American Canyon Transit network to take advantage of this unique opportunity afforded to us by the opening of the new high school on August 18, 2010. Additionally, final route revisions will be proposed based upon community input and analysis of the current system later on in the fall

Proposed Schedule (Phase I)

AM Peak service will operate from 7:35 to 8:22 am using one large bus (50 person capacity). Routing will begin on Rio del Mar (7-11 store) and travel southerly on Donaldson/Elliott, to Danrose/Kimberly, then east on Mini to Broadway northbound; a right at American Canyon Rd to left at Newell to ACHS. The PM Peak service would begin at 3:40 pm at the ACHS bus stop on Newell then follow the existing ACT alignment. A total of 12 stops are proposed.

Fares

The existing ACT fare structure will not change. The Youth fare is \$.50 per one-way trip, \$1 for Adults and \$.50 for all others. NCTPA did reach out to the ACHS administrators in hopes of introducing a value added transit feature to the student ID Card – insignia on ID Card which turns it into flash pass. NCTPA will work with ACHS to explore this idea further and possibly develop a mechanism for the Fall Semester of 2011.

Next Steps

NCTPA will implement an aggressive outreach and marketing plan to notify existing ACT riders, entering ACHS students via ACHS administration, City of American Canyon staff and public counters, library, Napa Valley Unified School District (NVUSD) and the

general public via media, websites, Rider Alerts, NVUSD and City phone and email blasts and marketing efforts.

Phase II of the overall American Canyon Community Transit Study will encompass further service improvements and considerations. NCTPA will work with City staff to craft a plan, followed with a presentation to City Council in August/September. The final recommendation will go to the NCTPA Board in September/October with implementation thereafter.

SUPPORTING DOCUMENTS

Attachment: (1) Draft American Canyon Transit Study

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I. INTRODUCTION

The following community transit study for the City of American Canyon provides an evaluation of existing and future mobility needs of the residents and visitors as it relates to transit usage. Four sections are included with includes an existing service profile, a needs assessment, service improvements and alternatives and recommendations/implementation plan.

II. EXISTING SERVICE PROFILE

This section describes existing transit service and demographics within the City of American Canyon.

MAJOR ACTIVITY CENTERS

Figure 1 provides a map of the American Canyon study area including the City's major activity centers. The core planning area is defined as the area just north of Vallejo and Solano County, south of Green Island Road, and roughly bordered between Wetlands Edge Road and Flosden Road.

Major activity centers identified for the purposes of transit planning in American Canyon include major employment sites, schools, shopping/retail destinations, community and recreation centers and major medical facilities. Within American Canyon, Wal-Mart / Napa Junction, Safeway and Canyon Corners comprise the majority of the retail destinations. Medical facilities are located south of the city in Vallejo. A detailed description of employment areas and schools is provided below.

MAJOR EMPLOYMENT AREAS

Major employers within the city are located on the northern portion of town and include Wal-Mart, located at Napa Junction, and various businesses located in the Green Island Industrial Park. In addition to these major employment centers, The City of American Canyon and Chardonnay Golf Club, both on the north side of town, have significant employment. Table 1 shows an estimate of these employment sites

AMERICAN CANYON TRANSIT STUDY

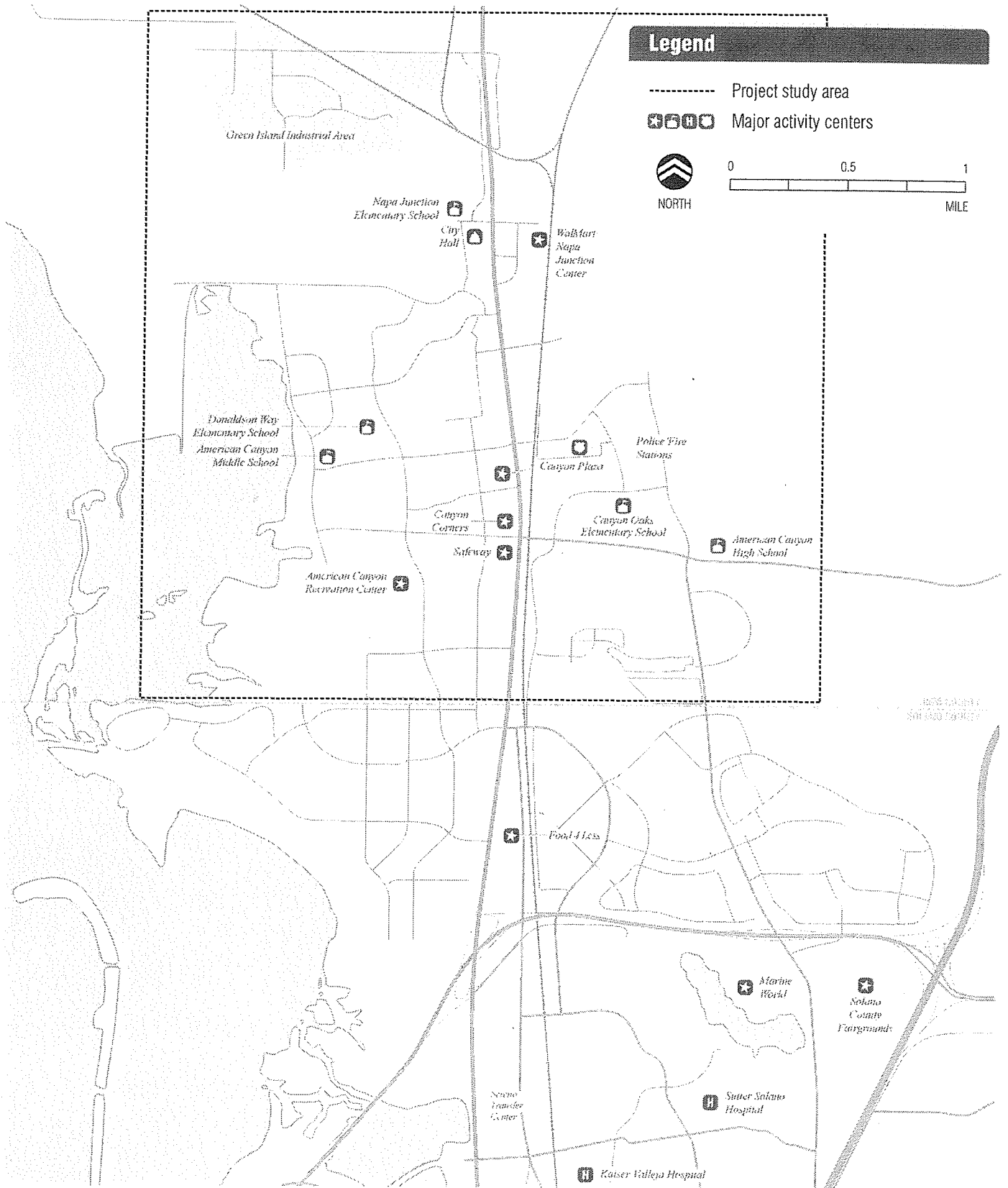


Table 1: American Canyon Major Employers

Employer	Estimated Employees	Location
Wal-Mart	550	Napa Junction
G.L Mezzetta Inc. (Kona Coast Food Products)	175	Green Island Industrial Park
Ghilotti Construction	175	Napa Junction
Pokka Beverages (Amcan Beverages, Inc.)	125	Green Island Industrial Park
City of American Canyon	75	Just west of Napa Junction

SCHOOLS

There are five schools located in American Canyon, which are part of the Napa Valley Unified School District (NVUSD). These include three elementary schools, one middle school, and one high school (opening in the fall of 2010). Once American Canyon High School is open, an estimated 2,930 of students will be in attendance at these five schools. Table 2 shows an estimated breakdown of these students by school.

Table 2: American Canyon School Enrollments

School	Grades	Estimated Enrollment
Canyon Oaks Elementary School	K-5	590
Donaldson Way Elementary School	K-5	530
Napa Junction Elementary School	K-5	350
American Canyon Middle School	6-8	875
American Canyon High School	9-12 ¹	585 ²
Total		2,930

Notes:

- (1) Only 9th and 10th grade would attend upon opening in the fall of 2010
- (2) Estimated based on 9th and 10th grade expected enrollment only in the fall of 2010

Once all grades occupy the new high school in 2012-2013, this enrollment estimate for the high school will near 1,300 students and the total enrollment for all schools will surpass 4,200. Using enrollment projects based on future population and household estimates developed for American Canyon, school enrollment for all grades will continue to climb and reach 5,000 by 2020, and double the current enrollment (5,642) by 2026. The new high school will be built with an enrollment capacity of 2,200 students.

LOCAL DEMOGRAPHIC PROFILE

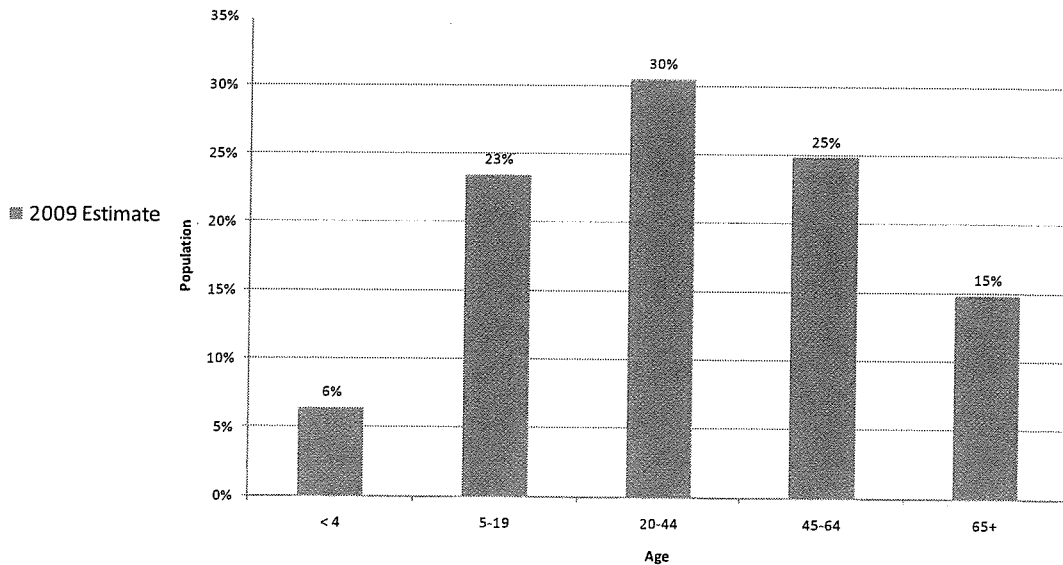
Transit markets in communities similar to American Canyon tend to be the transit-dependent population including seniors (65+), youth (< 19), low income households and those who do not have access to a private automobile. The following is a brief summary of the existing demographic profile of American Canyon including those markets which have higher than average transit usage.

POPULATION

The population of American Canyon has grown significantly within the past several years. In the 2000 census, the city's population was reported as 9,774, while in 2009, the Department of Finance estimated that population had grown to 16,503. This equates to nearly 70% more residents in a ten year period or 5.5% growth in population annually. The city estimates a future build-out population of about 22,000.

Nearly 30% of American Canyon's population is less than 19 years of age and 15% is over 65 years of age. This breakdown by age is shown below in Table 3. The percentages of youth are higher than Napa County totals and the senior percentages are very consistent.

Table 3: American Canyon Population by Age



Source: ABAG 2009

HOUSING

In 2000, there were an estimated 3,274 housing units within the city, while in 2009 this grew to an estimated 5,635 total housing units. This represents a growth of 42% in total units. Approximately 80% of this housing stock is single-family housing units, with 6% multi-family and 14% mobile homes.

EMPLOYMENT

According to the 2000 census, 1,694 people worked in American Canyon. This total does not include the 550 employees added when Wal-Mart was opened in 2007. Compared to the total residential population, American Canyon can be considered a bedroom community since population outweighs employment by over two to one. The estimated daytime population of the City drops by over 25%. In 2000, only 10%, or 421 of workers residing in American Canyon also worked within the city.

INCOME

In 2000, the average household income for those in American Canyon was \$52,105, slightly higher than the countywide median of \$XX,XXX. Approximately 9% of population in American Canyon is below the poverty level, also slightly higher than the countywide average. Compared to the rest of the state, American Canyon has a higher average income level and significantly lower poverty levels.

COMMUTE TO WORK

American Canyon has one the highest percentages of carpool commute to work trips in the Bay Area. Nearly 21% of all journey to work trips are done using by this method. In total, personal automobile (including carpool) account for 97% of all home based work trips and public transportation accounts for 2% of all trips. Overall, mode share behavior in American Canyon is comparable to the rest of Napa County as shown in Table 4.

Table 4: American Canyon Journey to Work Mode Share

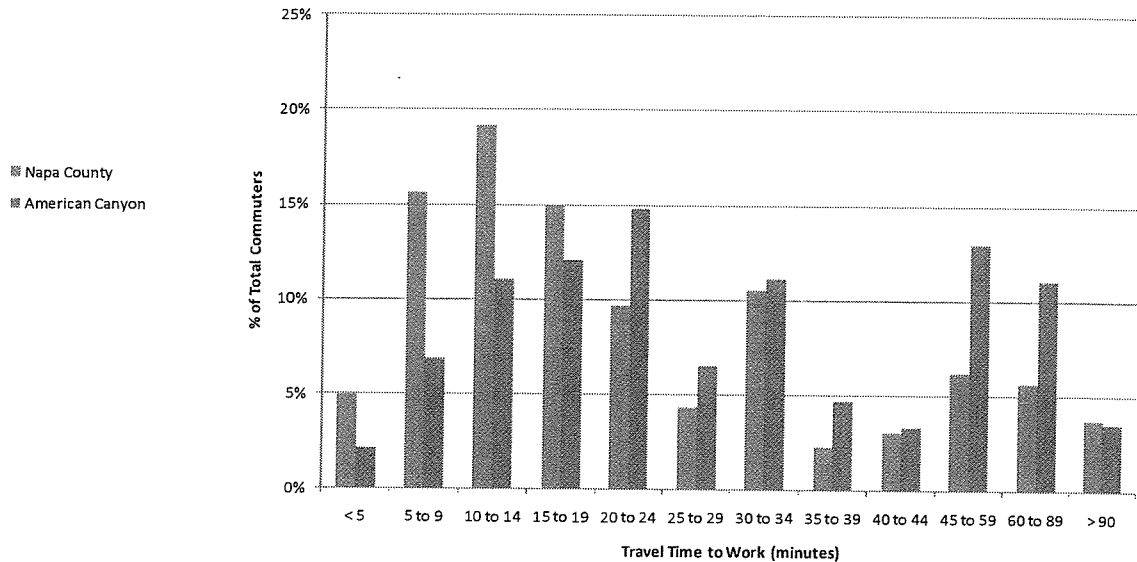
	American Canyon	Napa County
Total ¹	4,027 (100%)	54,478 (100%)
Drive Alone	3,054 (76%)	41,698 (77%)
Carpool	858 (21%)	8,519 (16%)
Public Transportation	62 (2%)	8,519 (1%)
Bicycle	17 (0.4%)	479 (0.9%)
Walk	29 (0.7%)	2,378 (4%)
Other	7 (0.2%)	474 (0.9%)

1. Total excludes work at home trips

Source: 2000 US Census

Travel time to work for those who live in American Canyon is shown in Figure 2 below. Overall, nearly half of all residents commute greater than 30 minutes to work and 27% commute greater than 45 minutes. Compared to Napa County, this travel time is significantly higher.

Figure 2: Travel Time to Work



Source: 2000 US Census

VEHICLE OWNERSHIP

In 2000, 97% of American Canyon households owned a least one vehicle, leaving a very small portion of households without access to a vehicle. The highest concentration of zero vehicle households was observed in the residential areas south of American Canyon Boulevard and east of Broadway.

EXISTING TRANSIT SERVICE

Existing transit service includes the American Canyon Transit (ACT) shuttle, also called "The Duck," VINE Routes 10 and 29, VINE Go, and the American Canyon Taxi Scrip Program. The fixed-route services, along with designated stops and transfer points, are shown in Figure 3.

AMERICAN CANYON TRANSIT (ACT) SHUTTLE

The ACT shuttle is a deviated fixed-route service, operating on a fixed route but allowed to deviate upon request for door-to-door service for seniors and disabled individuals. The service operates on weekdays only from 7:30 AM to 5:55 PM with 90 minute headways. The route serves the major shopping centers and community locations within the City, as well as the Sutter Solano Hospital, Kaiser Vallejo Hospital and the Sereno Transfer Center in Vallejo.

Fares

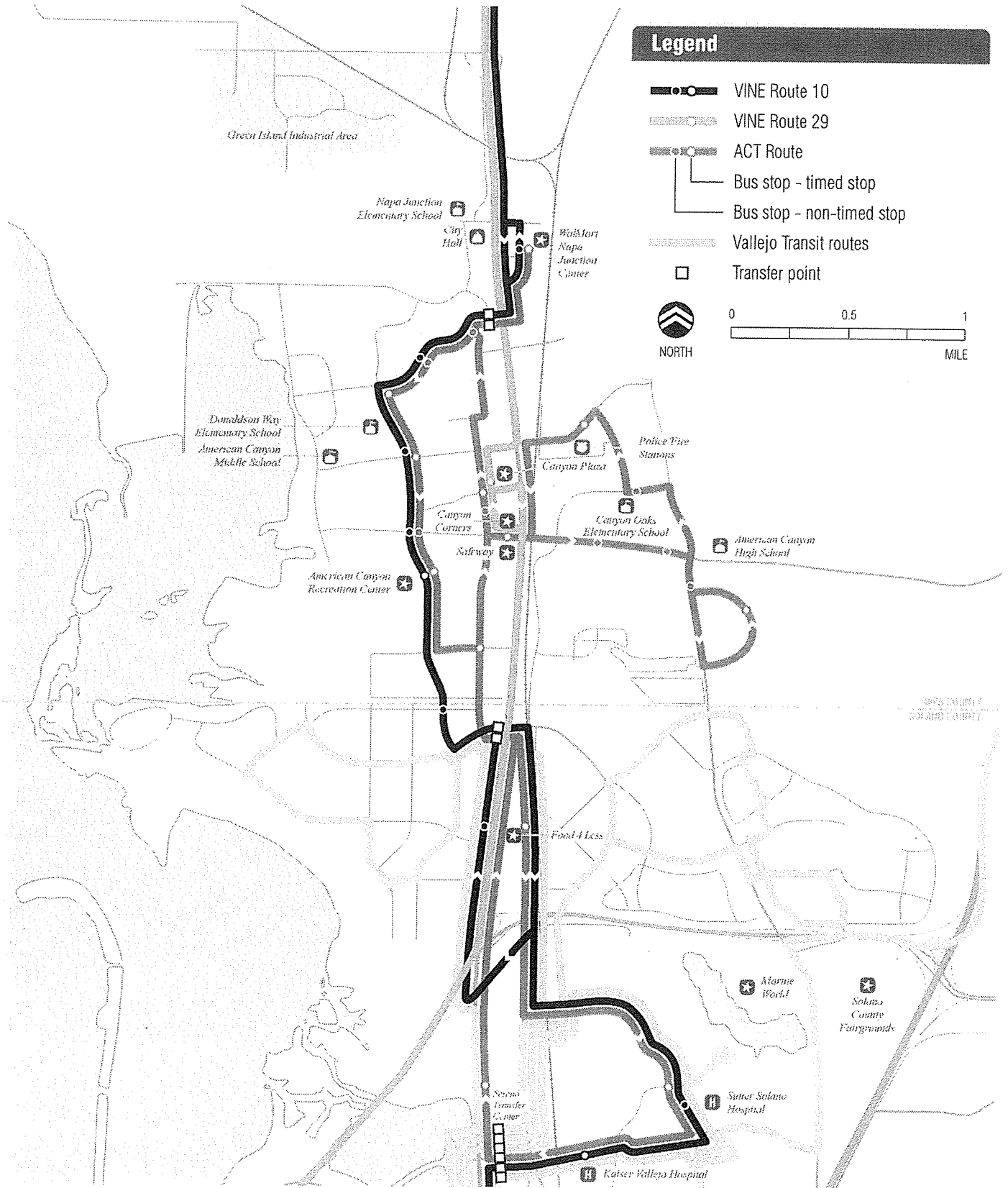
One-way fixed route fares are \$1.00 for adults (ages 19-64) and \$0.50 for youth (ages 6-18), seniors (65+) and disabled, and Medicare cardholders. Up to two children age 5 and younger are allowed to ride free with a paying Adult. The fare for deviated door-to-door services is \$1.00 for both seniors and disabled passengers. Free transfers to or from VINE Route 10 can be issued upon boarding and are valid for a one-zone trip. Day passes are also available that can also be used on the VINE, Napa Shuttle, St. Helena Shuttle, and Yountville Shuttle.

Existing Ridership

Weekday ridership data on the ACT Shuttle, including boardings and alightings at each stop as well as deviations, was obtained for two weeks in February 2010. A summary of average daily boardings, alightings, and onboard loads along the route is shown in Table 5 below. Average weekday ridership is about 30 passengers per day.

It should be noted that onboard loads shown in the table below also include all passengers going to and from deviated stops, as it was unknown where these passengers were getting on and off along the route. Thus, in order to incorporate these passengers into the ridership summaries, boardings at deviated stops were added to the onboard load at the beginning of the route, and alightings at deviated stops were taken out at the end of the route.

AMERICAN CANYON TRANSIT STUDY



EXISTING TRANSIT SERVICES

Figure 3

Table 5: American Canyon Transit Shuttle Existing Average Daily Ridership

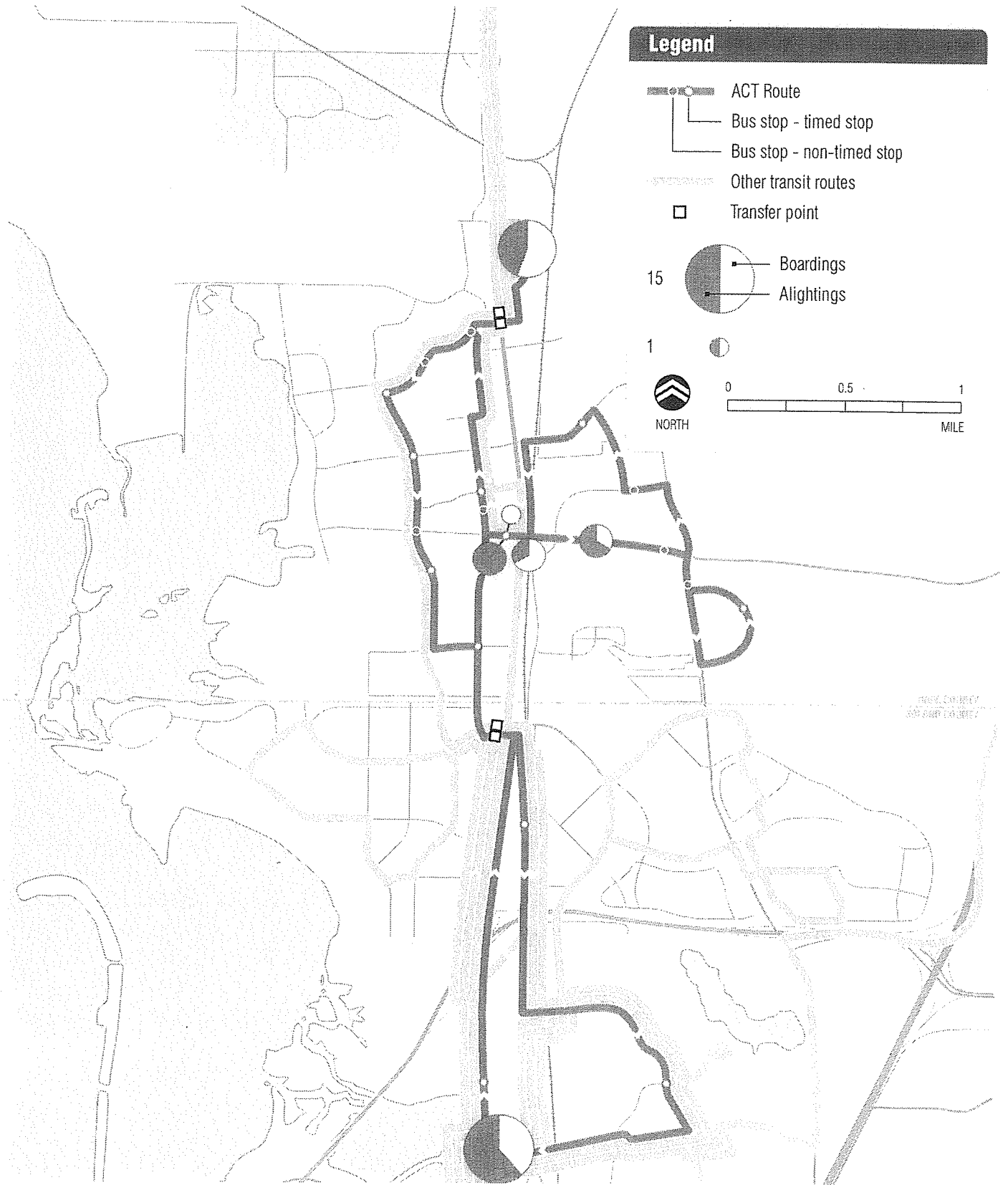
Bus Stop	Boarding	Alighting	Max Load
Safeway (Departs)	2	1	7
3000 Broadway	0	0	7
244 & 260 American Canyon Rd	1	2	7
Daniels/Flosden	0	0	7
Via Bellagio	0	0	7
Police Station/Donaldson	0	0	7
Northbound Safeway	1	0	7
Wal-Mart	5	4	7
Donaldson/Benton	0	0	7
Danrose/Kimberly	0	0	7
Sutter Solano Hospital	0	0	7
Sereno Transfer Center	5	8	6
Raley's	0	0	6
Safeway (Arrives)	0	3	6
Deviations	16	12	6

Source: Veolia Transportation, February 2010

The ACT shuttle route is shown in Figure 4 along with the total number and proportion of boardings and alightings displayed at each bus stop location. The data shows deviation trips compose a significant percentage of the total ridership activity (53% of ons / 40% of offs). The majority of boarding and alighting activity at fixed stop locations occurs at Safeway, Wal-Mart and the Sereno Transfer Center.

While detailed information on the exact location of the deviation trips was not captured in the data collection, observations were obtained to determine how many of these deviation trips were going to the medical destinations in Vallejo (Sutter and Kaiser). These trips, which require a front door drop off or pick up, are commonly served by the County's paratransit service VINE Go.

The observations showed less than 5% of the total activity was represented by trips to these medical destinations in Vallejo. This information, coupled with the ridership data shown in Table 5, indicates the demand to Vallejo is focused more on connections to the regional services at the Sereno Transfer Center and less on the medical trip needs.



AMERICAN CANYON TRANSIT SHUTTLE - BOARDINGS AND ALIGHTINGS

Figure 4

There are also a significant number of passengers who board and/or alight at deviated stops. It was observed that a number of the deviated trips were to or from the Kaiser Vallejo Hospital or Sutter Solano Hospital. Although there is a fixed stop at the Sutter Hospital, deviated trips occur at this location in order to provide passengers more direct access to specific locations or buildings within the medical center.

As noted previously, changes in onboard loads due to passenger activity at deviated stops is not reflected. Overall, onboard loads remain relatively constant. Maximum loads are observed beginning at Wal-Mart and continuing south to Sereno Transfer Center.

Performance Measures

Table 6 below shows a summary of various performance indicators for the ACT Shuttle over the last five years. These measures give an indication of the productivity and cost effectiveness of the service. The indicators include total fare revenue and fare per passenger; operating costs per passenger, per mile, and per hour; passengers per hour and per mile; and farebox recovery ratio.

Table 6: American Canyon Transit Shuttle Performance Measures

	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10 ⁽¹⁾
Fare Revenues ⁽²⁾	\$15,252	\$18,023	\$17,022	\$18,555	\$15,324
Advertising Revenues					
<i>% Change</i>		18.17%	-5.55%	9.01%	-17.41%
Actual	\$0	\$7,287	\$6,389	\$7,714	\$7,927
City Subsidy	\$15,252	\$10,735	\$10,633	\$10,841	\$7,397
Operating Cost	\$152,520	\$167,937	\$170,220	\$185,550	\$153,242
<i>% Change</i>		10.11%	1.36%	9.01%	-17.41%
Revenue Miles	30,979	27,369	27,889	27,253	27,615
<i>% Change</i>		-11.65%	1.90%	-2.28%	1.33%
Revenue Hours	2,284	2,158	2,233	2,241	2,367
<i>% Change</i>		-5.52%	3.49%	0.34%	5.64%
Total Passengers	10,058	9,337	10,316	9,844	10,322
<i>% Change</i>		-7.17%	10.49%	-4.58%	4.85%
Farebox Recovery Ratio	0.10	0.11	0.10	0.10	0.10
<i>% Change</i>		7.32%	-6.82%	0.00%	0.00%
Average Fare/Passenger	\$1.52	\$1.93	\$0.62	\$0.78	\$0.77
<i>% Change</i>		27.29%	-67.92%	26.53%	-2.00%
Passengers/Hour	4.40	4.33	4.62	4.39	4.36
<i>% Change</i>		-1.75%	6.76%	-4.90%	-0.75%
Passengers/Mile	0.32	0.34	0.37	0.36	0.37
<i>% Change</i>		5.08%	8.43%	-2.35%	3.48%
Operating Cost/Passenger	\$15.16	\$17.99	\$16.50	\$18.85	\$14.85
<i>% Change</i>		18.61%	-8.26%	14.23%	-21.23%
Subsidy Cost/Passenger	\$13.65	\$16.06	\$15.88	\$18.07	\$14.08
<i>% Change</i>		17.65%	-1.09%	13.75%	-22.07%
Operating Cost/Hour	\$66.78	\$77.82	\$76.22	\$82.80	\$64.73
<i>% Change</i>		16.54%	-2.06%	8.63%	-21.82%

Notes:

Source: NCTPA, February 2010

- (1) FY09-10 figures projected based on actual performance between July 2009 and February 2010.
- (2) Actual revenues and city subsidy estimated for FY07-08, FY08-09, and FY09-10 based on 10% farebox recovery rate.

VINE

Napa VINE Routes 10 and 29 also run through American Canyon, connecting the city to the rest of Napa County. Route 10 runs from Calistoga and connects to St. Helena, Yountville, Napa, American Canyon, and Vallejo. The service

operates on weekdays from 5:00 AM to 9:45 PM with about 60 minute headways. The route operates on Saturdays from 6:00 AM to 8:45 PM with 1.5 to 2 hour headways and on Sundays from 8:20 AM to 7:15 PM with 2 to 3 hour headways and limited stops.

VINE Express Route 29 is a commuter service that runs between Calistoga and American Canyon with continued service to the Vallejo Ferry Terminal and the El Cerrito Del Norte BART station. In Napa County, the service has stops in Calistoga, St. Helena, Yountville, Napa (4) and American Canyon. The service operates in the morning from 4:40 AM to 8:35 AM with 30 minute headways, and in the evening from 3:40 PM to 8:20 PM with 30 minute headways.

Fares

One-way fares on VINE Route 10 are based on distance traveled (zone-based). Multi-zone cash fares are summarized in Table 7 below. Discounted passes, including monthly and day passes, are available for use on all local and intercity VINE routes, including Route 10. Day passes are also valid on the ACT Shuttle, Napa Shuttle, St. Helena VINE Shuttle, and Yountville Shuttle. Fares for these special passes are shown in Table 8.

Free transfers are available upon boarding to and from the ACT and St. Helena Shuttle, as well as between VINE routes at designated transfer points. Transfers to Route 10 are valid for a one-zone fare, and the additional fare must be paid for travel beyond one zone.

Table 7: VINE Multi-Zone Cash Fares

Fare Category	From/To ⁽²⁾	Zone 1	Zone 2	Zone 3
Adult	Zone 1	\$1.35	\$2.15	\$2.90
Youth		\$1.10	\$1.60	\$2.00
Reduced ⁽¹⁾		\$0.65	\$1.00	\$1.25
Adult	Zone 2	\$2.15	\$1.35	\$2.15
Youth		\$1.60	\$1.10	\$1.60
Reduced ⁽¹⁾		\$1.00	\$0.65	\$1.00
Adult	Zone 3	\$2.90	\$2.15	\$1.35
Youth		\$2.00	\$1.60	\$1.10
Reduced ⁽¹⁾		\$1.25	\$1.00	\$0.65

Notes:

Source: NCTPA, March 2010

- (1) Includes seniors (age 65+), disabled individuals of any age, and persons with a valid Medicare ID card
- (2) Zone 1 (North): Calistoga, St. Helena, Deer Park, Oakville
Zone 2 (Central): Napa, Yountville
Zone 3 (South): American Canyon, Vallejo

Table 8: VINE Discount Passes

Fare Category	Punch Pass	Monthly Pass	Day Pass
Adult	\$25	\$43	\$4
Youth	\$20	\$33	\$3
Reduced ⁽¹⁾	\$12	\$22	\$2
Seniors age 90+ with Lifetime Pass	FREE		

Notes:

Source: NCTPA, March 2010

- (1) Includes seniors (age 65+), disabled individuals of any age, and persons with a valid Medicare ID card

One-way fare for VINE Express Route 29 is \$2.00 if travel is within Napa County or to the Vallejo Ferry Terminal. Travel between Napa County and the El Cerrito Del Norte BART station costs \$5.00 each way. No transfers are available to or from other transit services.

Existing Ridership

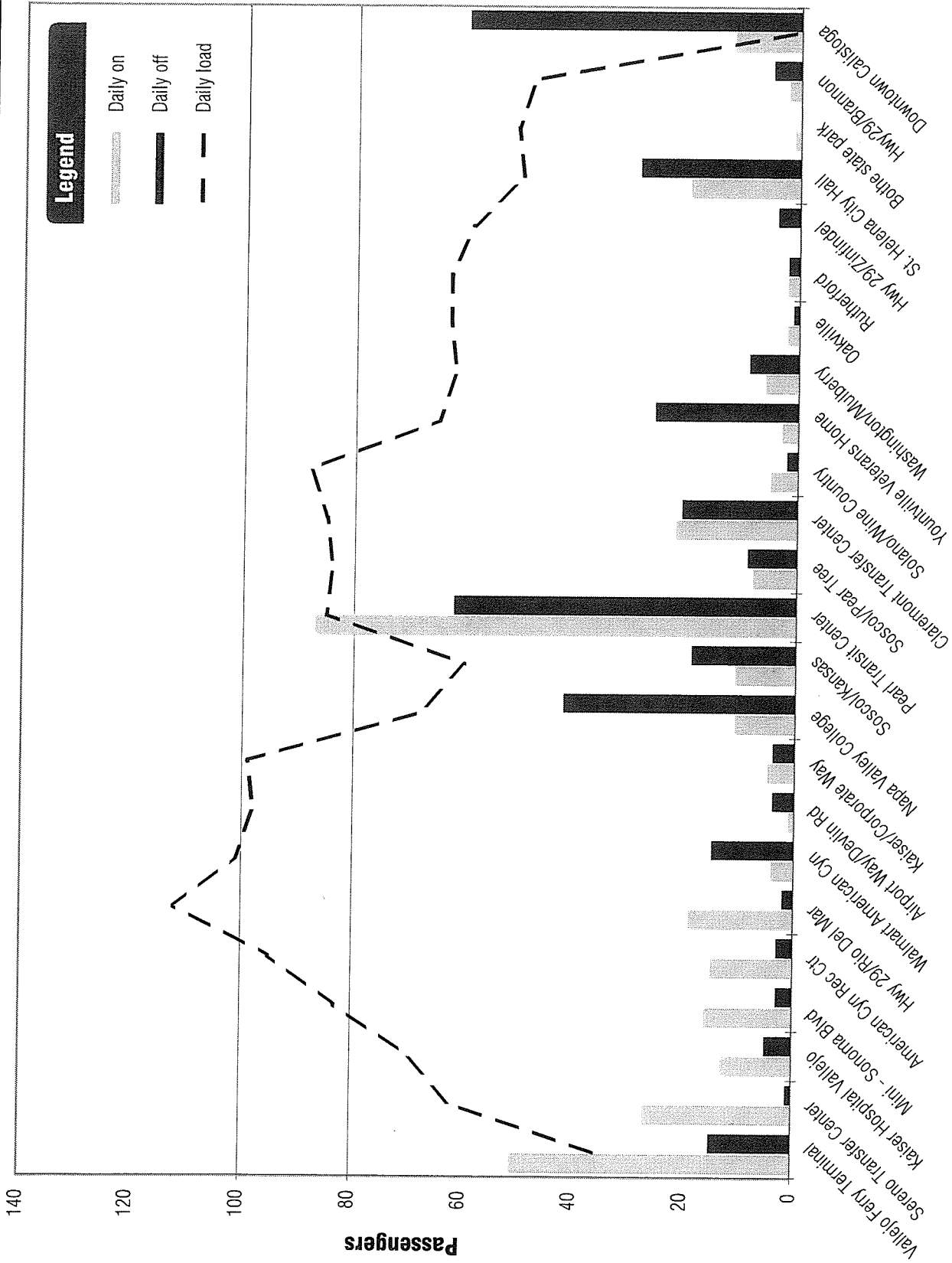
Ridership data, including boardings and alightings, was obtained for two weeks in March 2010. A summary of average weekday boardings, alightings, and onboard loads along the route in the northbound and southbound directions is shown in Table 9, and stops serving American Canyon are shown in bold. This ridership data is also summarized in Figure 5 and Figure 6.

Table 9: VINE Route 10 Existing Weekday Ridership

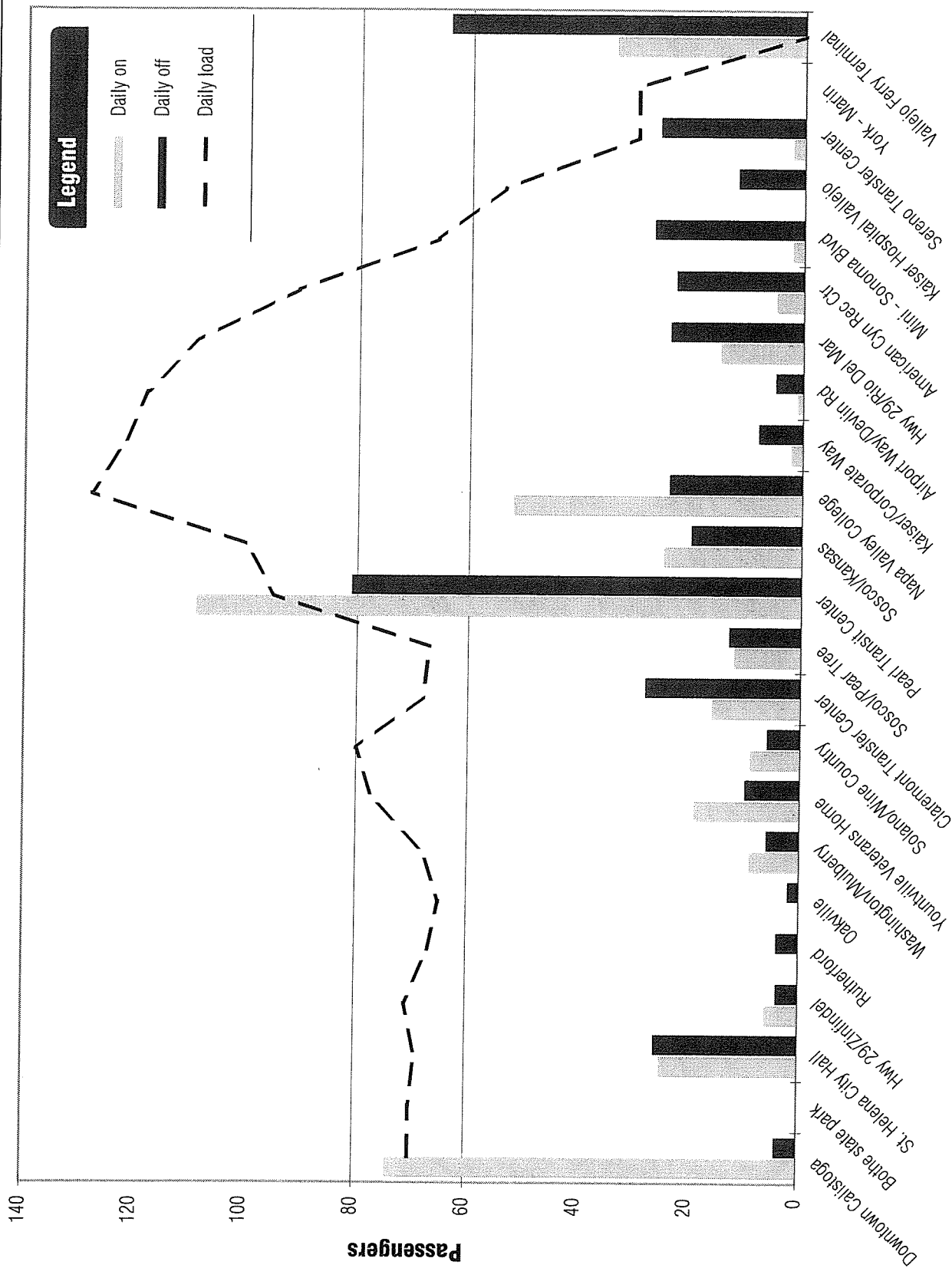
Bus Stop	Northbound			Southbound		
	On	Off	Max Load	On	Off	Max Load
Downtown Calistoga	12	60	0	74	4	9
Hwy29/Brannon	2	5	8	--	--	--
Bothe state park	1	0	9	0	0	9
St. Helena City Hall	20	29	9	25	26	10
Hwy 29/Zinfandel	0	4	10	6	4	12
Rutherford	2	2	10	0	4	12
Oakville	2	1	10	0	2	12
Washington/Mulberry	6	9	10	9	6	13
Yountville Veterans Home	3	26	10	19	10	12
Solano/Wine Country	5	2	14	9	6	12
Claremont Transfer Center	22	21	14	16	28	12
Soscol/Pear Tree	8	9	12	12	13	11
Pearl Transit Center	87	62	12	109	81	14
Soscol/Kansas	11	19	11	25	20	14
Napa Valley College	11	42	13	52	24	18
Kaiser/Corporate Way	5	4	19	2	8	19
Airport Way/Devlin Rd.	1	4	21	1	5	19
Wal-Mart Am. Canyon	4	15	22	--	--	--
Hwy 29/Rio Del Mar	19	2	22	15	24	18
Am. Canyon Senior Ctr	15	3	18	5	23	17
Mini - Sonoma Blvd.	16	3	14	2	27	10
Kaiser Hosp. Vallejo	13	5	10	0	12	9
Sereno Transfer Center	27	1	7	2	26	4
York & Marin ¹	--	--	--	0	0	4
Vallejo Ferry Terminal	51	15	5	34	64	0

Source: Veolia Transportation, March 2010

1. York and Marin was under construction during data collection. Facility is scheduled to reopen in 2011.



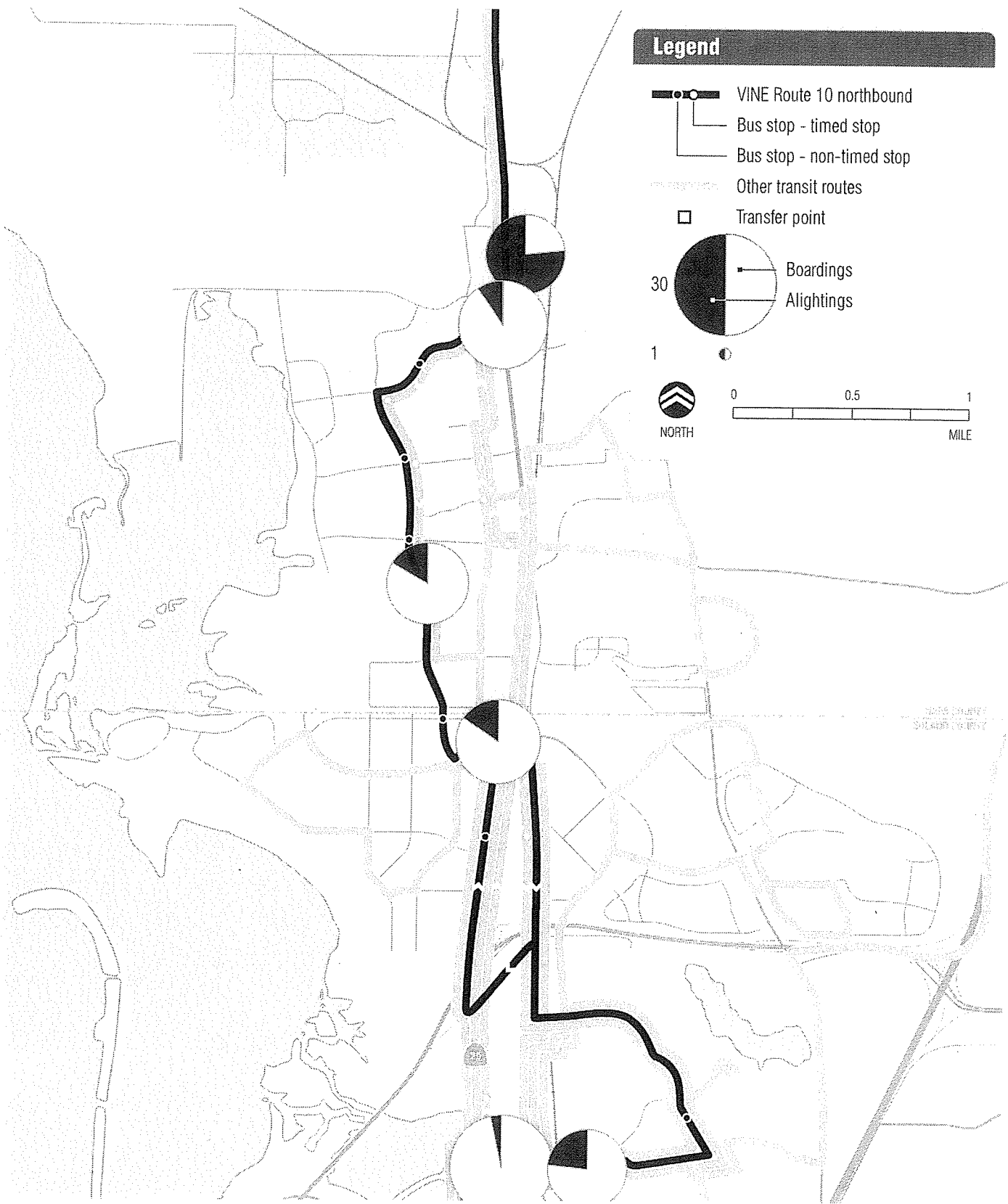
VINE ROUTE 10 NORTHBOUND WEEKDAY RIDERSHIP
Figure 5



VINE ROUTE 10 SOUTHBOUND WEEKDAY RIDERSHIP
Figure 6

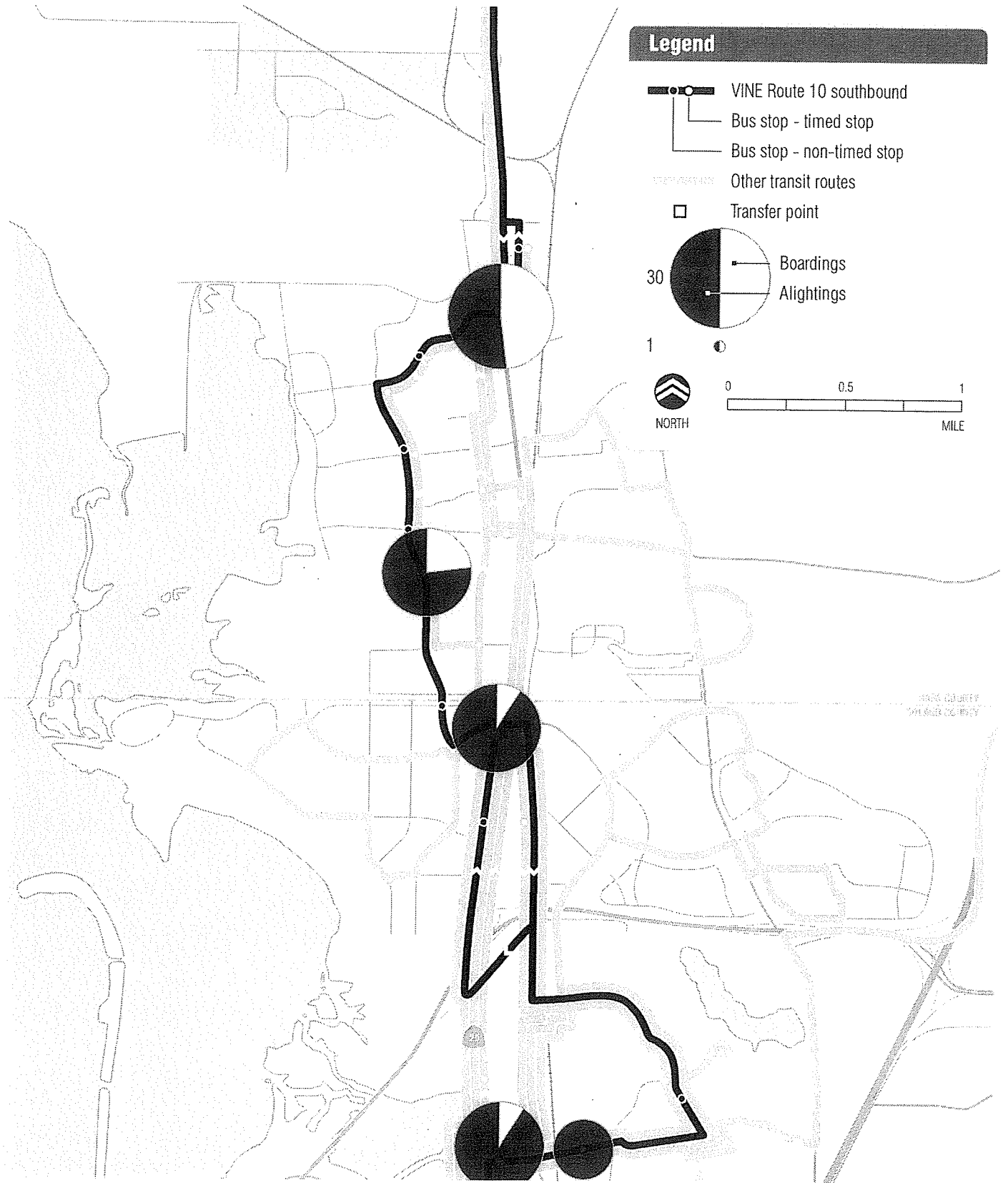
Route 10 Northbound and Southbound alignments are shown in Figure 7 and Figure 8, along with the total number and proportion of boardings and alightings displayed at each bus stop location. In the northbound direction, the largest proportion of alightings occurs at Wal-Mart, while more boardings occur at the other stops. In the southbound direction, there are slightly more boardings occurring at Hwy 29/Rio Del Mar, while the remaining stops have a higher proportion of alightings.

In the Northbound direction, onboard loads build up until the maximum load point within the study area, which occurs between Hwy 29/Rio Del Mar and Wal-Mart. In the Southbound direction, onboard loads remain relatively low through the study area, with loads gradually reducing toward the route terminus.



VINE ROUTE 10 NORTHBOUND - BOARDINGS AND ALIGHTINGS

Figure 7



VINE ROUTE 10 SOUTHBOUND - BOARDINGS AND ALIGHTINGS

Figure 8

Performance Measures

Table 10 shows a summary of performance indicators for VINE Route 10 over the last three years.

Table 10: VINE Route 10 Performance Measures

	FY07-08	FY08-09	FY09-10 ⁽¹⁾
Fare Revenues	\$243,498	\$258,495	\$246,857
<i>% Change</i>		6.16%	-4.50%
Operating Cost	\$1,242,009	\$1,298,669	\$1,497,340
<i>% Change</i>		4.56%	15.30%
Revenue Miles	379,419	402,690	459,024
<i>% Change</i>		6.13%	13.99%
Revenue Hours	25,702	27,281	24,997
<i>% Change</i>		6.14%	-8.37%
Total Passengers	296,428	298,018	274,041
<i>% Change</i>		0.54%	-8.05%
Farebox Recovery Ratio	0.20	0.20	0.16
<i>% Change</i>		1.53%	-17.17%
Average Fare/Passenger	\$0.82	\$ 0.87	\$0.90
<i>% Change</i>		5.59%	3.85%
Passengers/Hour	11.53	10.92	10.96
<i>% Change</i>		-5.28%	0.36%
Passengers/Mile	0.78	0.74	0.60
<i>% Change</i>		-5.27%	-19.33%
Operating Cost/Passenger	\$4.19	\$4.36	\$5.46
<i>% Change</i>		4.00%	25.39%
Subsidy Cost/Passenger	\$ 3.37	\$ 3.49	\$4.56
<i>% Change</i>		3.62%	30.74%
Operating Cost/Hour	48.32	47.60	59.90
<i>% Change</i>		-1.49%	25.83%

VINE GO

The VINE Go is a door-to-door ADA paratransit service that serves Napa County from Calistoga to American Canyon and portions of Vallejo. The VINE Go is a complementary service to the VINE fixed-route services and is available for ADA certified individuals, seniors age 65 and older who live in south Napa County, and general public residents that live in the Up Valley cities of Yountville, St. Helena, and Calistoga, or unincorporated areas within the county.

Passengers may schedule a trip 1 to 7 days in advance, and reservations are required for all trips. The VINE Go provides service seven days a week during the following hours:

- Monday – Friday, 5:20 AM – 9:30 PM
- Saturday, 6:00 AM – 8:30 PM
- Sunday, 8:00 AM – 7:00 PM

Fares

Vine GO fares are based upon the distance traveled, as show in Table 11 below. Fares may be paid with cash or a VINE Go Punch Pass.

Table 11: VINE Go Multi-Zone Cash Fares

To/From	Calistoga	St. Helena	Deer Park	Yountville	Napa	American Canyon	Vallejo
Calistoga	\$2.50	\$2.50	\$2.50	\$4.00	\$4.00	\$5.50	\$5.50
St. Helena	\$2.50	\$2.50	\$2.50	\$4.00	\$4.00	\$5.50	\$5.50
Deer Park	\$2.50	\$2.50	\$2.50	\$4.00	\$4.00	\$5.50	\$5.50
Yountville	\$4.00	\$4.00	\$4.00	\$2.50	\$2.50	\$4.00	\$4.00
Napa	\$4.00	\$4.00	\$4.00	\$2.50	\$2.50	\$4.00	\$4.00
American Canyon	\$5.50	\$5.50	\$5.50	\$4.00	\$4.00	\$2.50	\$2.50
Vallejo	\$5.50	\$5.50	\$5.50	\$4.00	\$4.00	\$2.50	\$2.50

AMERICAN CANYON TAXI SCRIP

Taxi Scrip is a paratransit service for seniors and persons with disabilities. Trips can be taken anywhere within Napa from American Canyon and to Kaiser and Sutter Hospitals in Vallejo. Riders must apply in order to be eligible. Taxi service is available to participants 24 hours a day, and 7 days a week. Taxi scrip costs \$10.00 for a fare value of \$20.00, a 50% discount, and passengers may buy up to \$60.00 work of taxi scrip a month.

III. NEEDS ASSESSMENT

PIPELINE PROJECTS

Future development will be focused primarily on the northern and eastern portions of town. Figure 9 shows a summary of the near term projects likely in American Canyon.

Napa Junction will continue to add commercial uses and with the addition of Autozone on the vacant site east of the Chevron Station on Napa Junction Road and Phase II of the Napa Junction occupying the 17-acre vacant site on the northeast corner of Napa Junction Road and Highway 29. Additional commercial will also soon be added to a 3.7 acre site on southeast of American Canyon Road and Highway 29. Included in this project is a 15,000 square foot Walgreens.

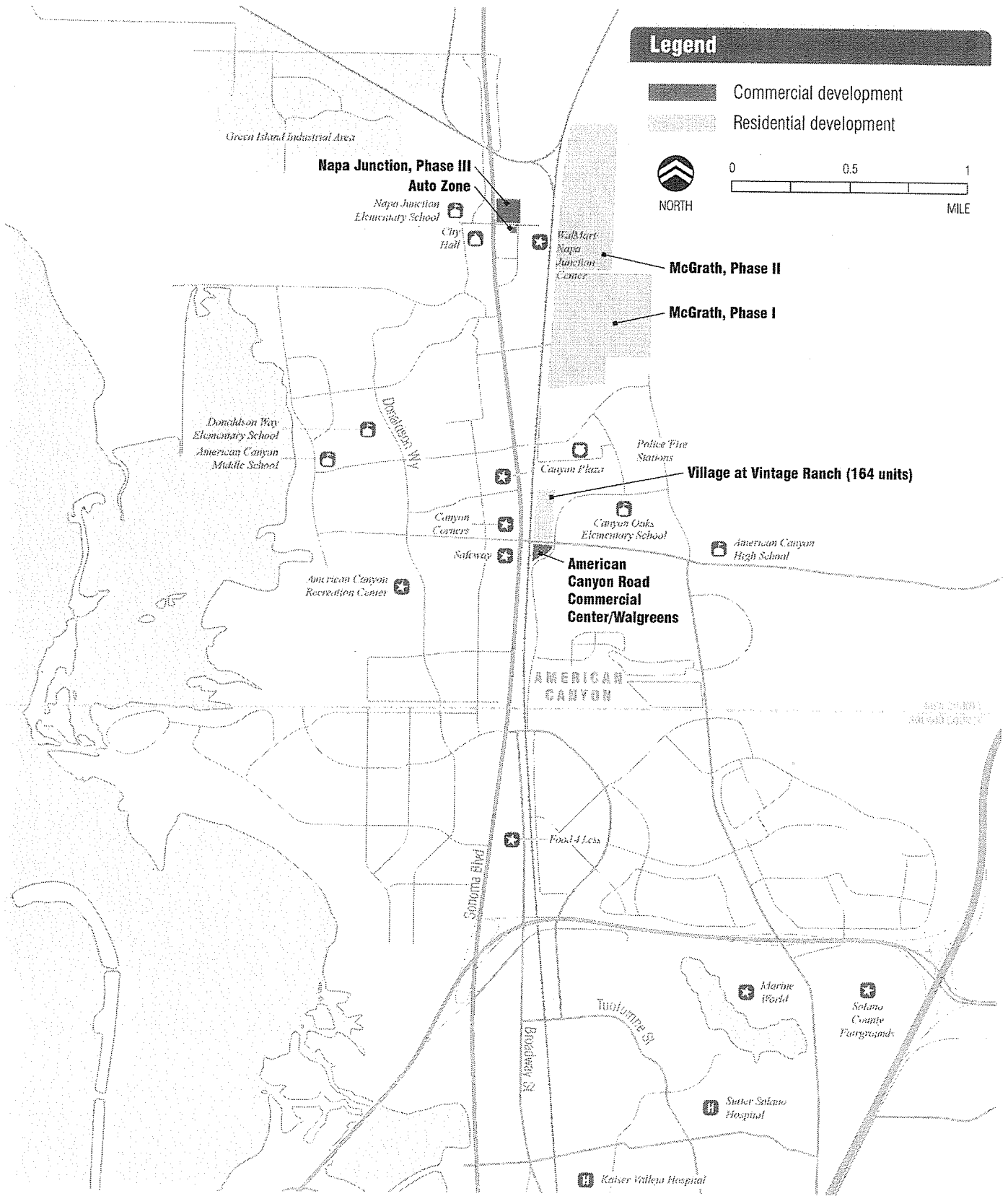
Future residential development is expected to continue primarily toward the northeast of town. The future Town Center project is expected to add 1,100 new low, medium and high density units to the housing stock. Another 164 townhome units will also be added at the northeast corner of Highway 29 and American Canyon Road. This project was recently approved by the City and will likely be completed in 2011.

FUTURE DEMAND

American Canyon has been the focus of new growth in Napa County over the last ten years. Although growth in the County will continue to be focused within this community, the current economic conditions make it difficult to predict when and how much growth will continue in the near term.

SOCIOECONOMIC PROJECTIONS

The current population of 16,503 is expected to grow to approximately 20,000 by 2035, 2,000 shy of the City's anticipated build-out potential. In the next ten years, an estimated 1.5% annual growth will occur or approximately 2,500 new residents. Looking at the 25 year planning horizon, annual growth is lower at less than 1% growth per year. This is significantly less than the 5.5% annual growth experienced between 2000 and 2010.

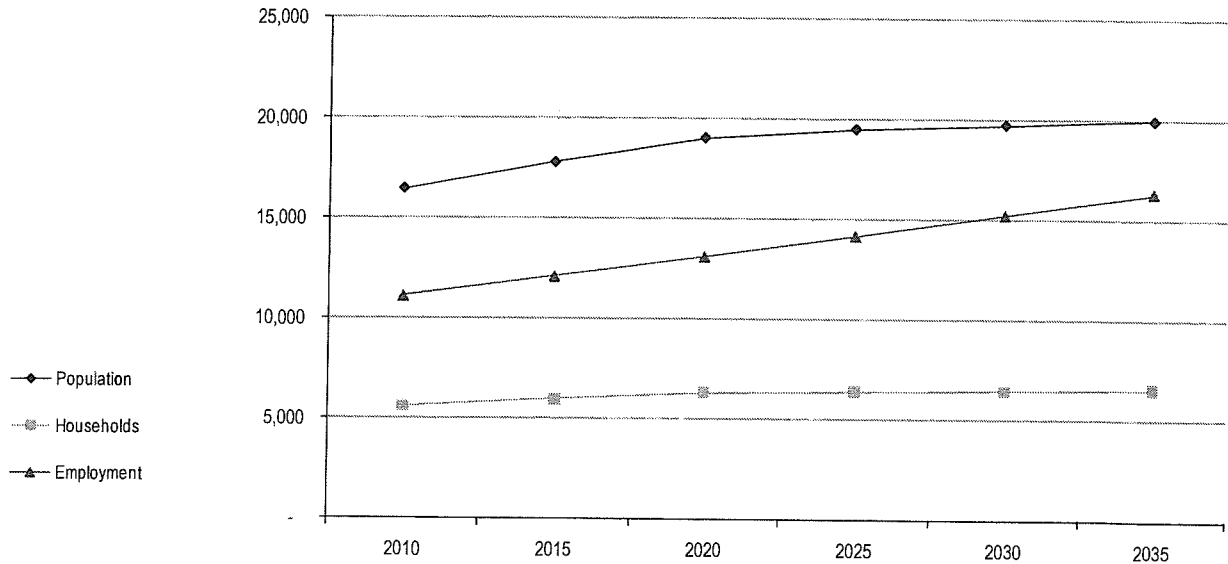


AMERICAN CANYON FUTURE DEVELOPMENT PROJECTS

Figure 9

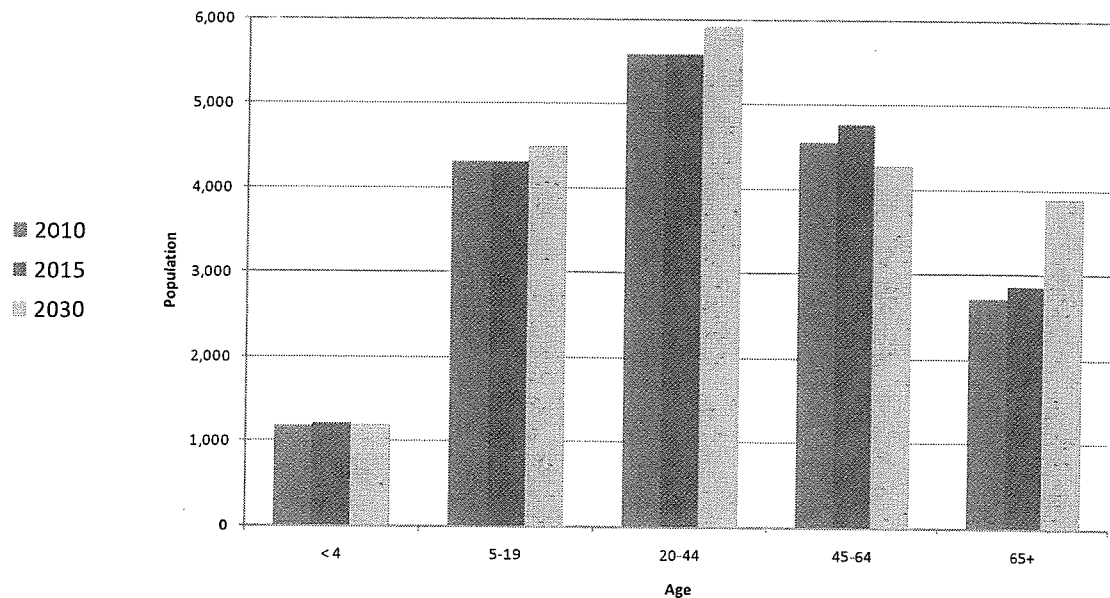
Employment is expected grow at a higher rate than population, increasing from the current estimate of 11,154 employees to 16,351 by 2035, or 1.5% annually. This growth is consistently distributed over these 25 years. Figure 10 shows these growth estimates over the next 25 years.

Figure 10: American Canyon Socioeconomic Projections



In addition to population growth, a significant increase in the senior population is expected to occur by 2030. Currently, it is estimated that residents 65 and older comprise about 15% of the total population. By 2030, this is expected to increase

Figure 11: American Canyon Population Growth (by Age)



to almost 20% of the total population, about a 43% increase compared to the existing senior population.

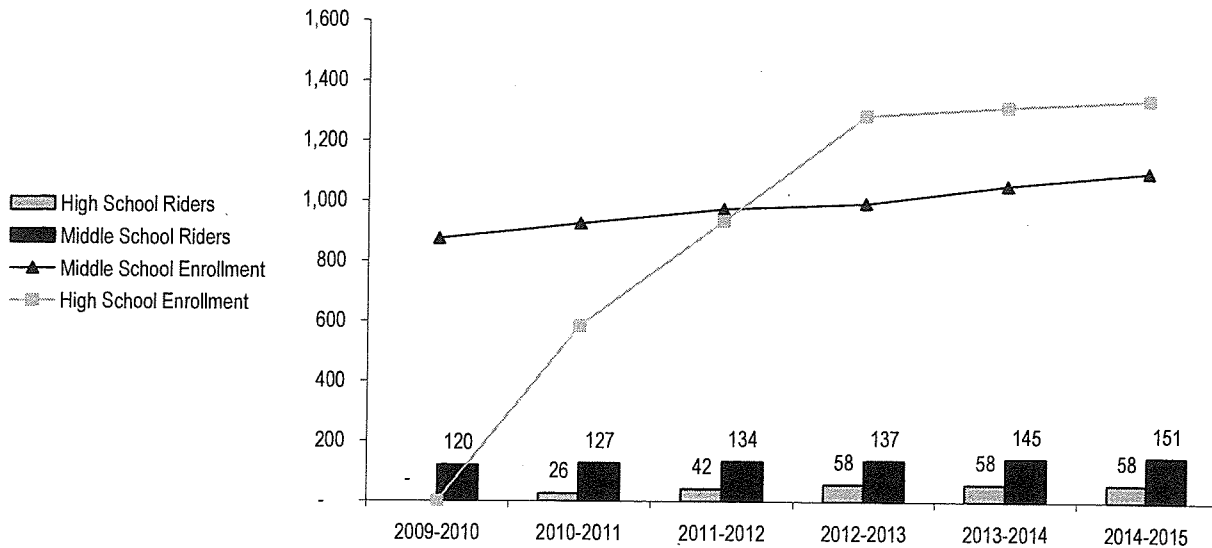
SCHOOL ENROLLMENT PROJECTIONS

Using Napa Valley Unified School District enrollment projections and actual 2009-2010 enrollment data, estimates were developed showing future student enrollment at American Canyon Middle School and High School. These two study body populations are identified as potential future transit users.

Using these enrollment projections and existing student transportation behaviors within the school district, assumptions were developed to estimate the potential transit usage from the middle school and high school populations. One of the primary assumptions in developing these estimates was students living on the same side of Highway 29 as their school would not be a potential rider of transit, i.e. they would walk or bike to school. Of the remaining students (those who live on the opposite side of Highway 29 from their school), 10% of the high school student population would use transit and 25% of the middle school population would use transit. Using the assumption that 45% of all students live west of Highway 29 and 55% live to the east, this equates to 4.5% of all high school students and 13.8% of middle school students using transit to access school.

Future estimates of enrollment and transit riders are shown in Figure 12. Growth in student ridership is based on growth in population and households in the community. Since nearly all residential growth is anticipated east of Highway 29, growth in student ridership to the high school will plateau following the 2012-2013 year when all grades of the high school will be filled.

Figure 12: School Enrollment and Potential Student Transit Users



RIDERSHIP PROJECTIONS

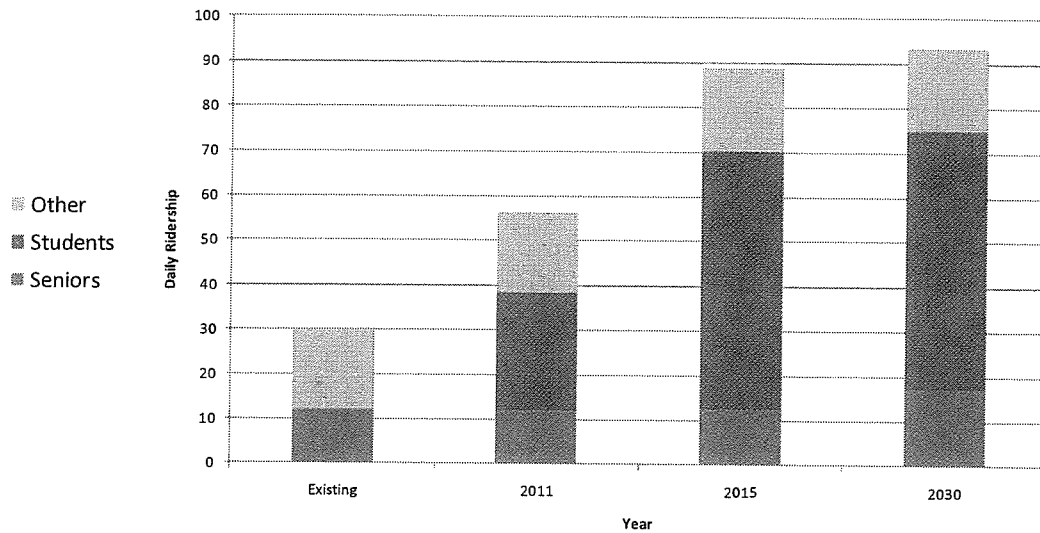
Due to the nature of the existing American Canyon community shuttle system, the majority of the existing users are seniors or those with disabilities who are transit dependent. Route 10 and 29 existing riders use the service to access employment destinations in Napa County and regional transportation hubs such as the Vallejo Ferry Terminal and Downtown Napa Transit Center.

American Canyon Transit

While modifications to the structure (routing, destinations served, etc) and operations (frequency, span, etc.) could open new markets of transit riders, the anticipated ridership gains from these improvements are marginal. The most significant short-term market for attracting transit riders is that of student riders who will need seek transportation to the new American Canyon High school on the eastern edge of town when school opens in the fall of 2010. As shown above, an estimated 26 new daily riders would use the service in 2010 when freshmen and sophomore classes are added. With the addition of the junior and senior classes, an estimated 58 new student riders¹ could be added by 2014. This demand would be concentrated around the school bell times during the AM and PM hours.

¹ Estimate assumes on those student living on the east side of Highway 29 in American Canyon will use the service, 55% of all new students live east of Highway 29 and only 10% of those students will use transit to get to school. School demand estimates do not include Middle School population which could potential add another 120-200 students commuting from the west side of town across Highway 29 to access the middle school.

Figure 13: ACT Demand Estimates



Transit demand from the senior population will continue to increase but at a much slower rate than other markets. Annually, growth in this market is estimated at 2% which increases ridership by approximately five per day by 2030.

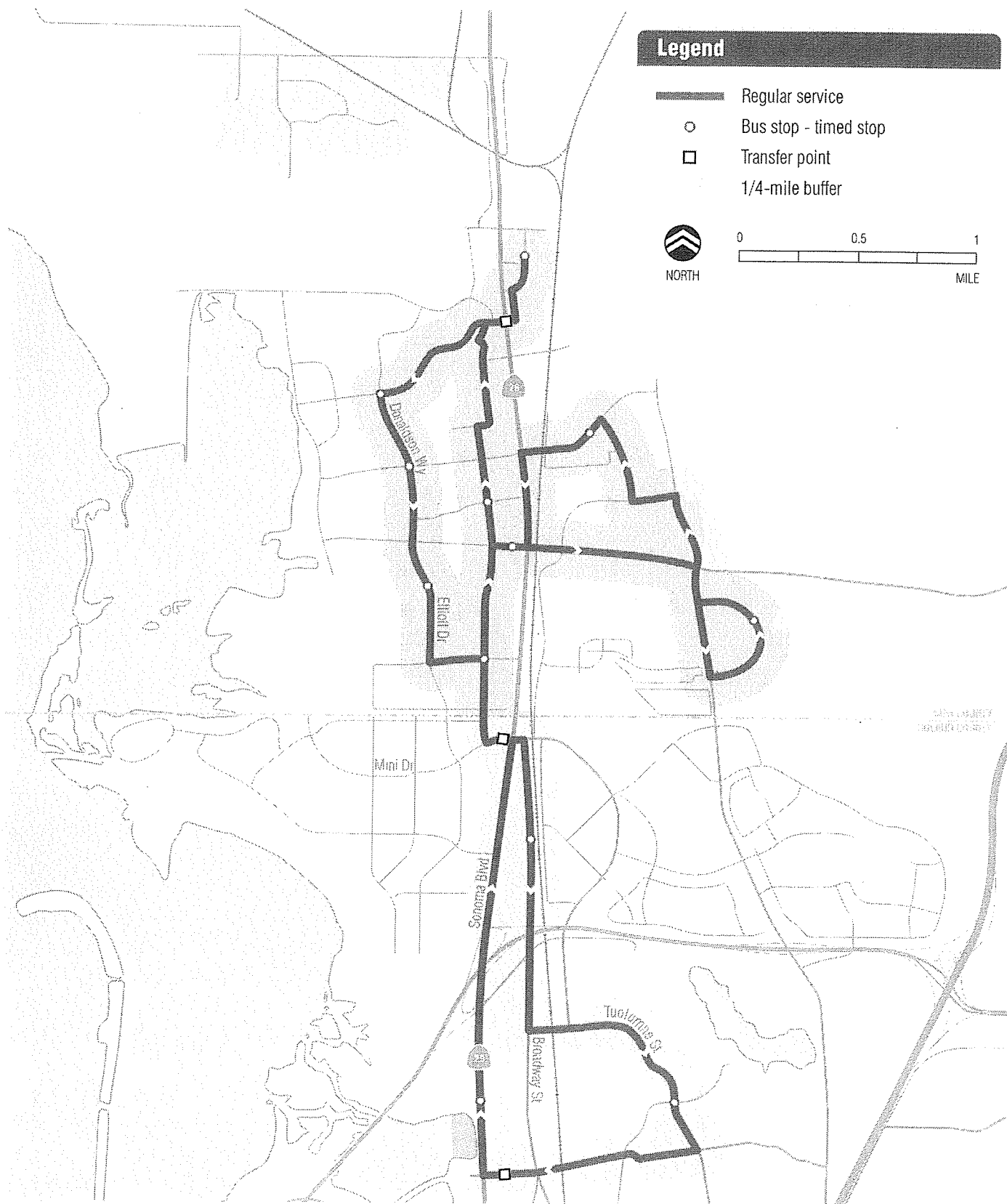
The ACT service could also facilitate as a feeder system for the relatively new regional Highway 29 express service. This commuter based system connects provides limited stop connections to the major activity centers in Napa County and regionally to the Vallejo Ferry Terminal and El Cerrito BART station. With only one stop in American Canyon, the ACT could adjust its operations to provide feeder service timed to these peak hour trips at the one American Canyon stop.

Route 10

Demand estimates for American Canyon boardings were done based on growth in population and employment and shown in Figure 14. Due a modest growth in these areas, transit demand is expected to slightly increase in 2015 by 8% and in 2030 by 26% over existing use. These estimates could increase or decrease based on the future housing stock and employment opportunities and where they are located relative to transit services.

Route 29 – Commuter Express

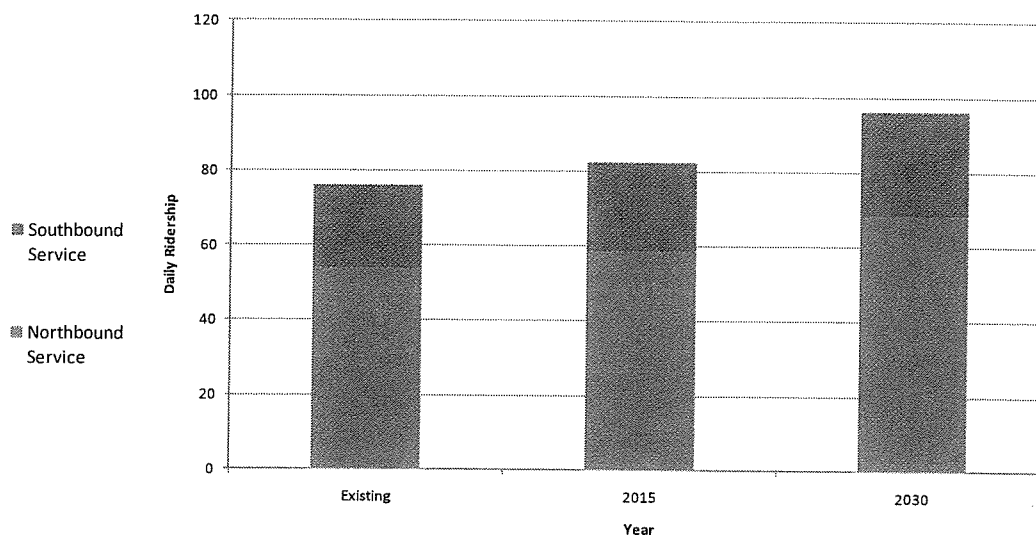
Due to the relatively short existence of the Route 29 service (started in late February of 2010), ridership estimates are difficult to predict. New service typically takes X months for an established market to recognize and utilize it.



EXISTING SERVICE

Figure 16

Figure 14: VINE Route 10 Demand Estimates



TRAVEL PATTERNS

American Canyon is located on southern edge of Napa County, adjacent to the City of Vallejo. Travel demand is focused primarily south to destination Solano, Contra Costa, Alameda Counties. As a function of its placement between the Vallejo and the City of Napa on Highway 29, the community experiences a high volume of commuter and visitor trips traveling between Napa Valley and the greater Bay Area.

American Canyon's ability to provide affordable housing options compared to the rest of the Bay Area has also attracted households to relocate in recent years, often times distancing themselves from their place of employment. According to the 2000 US Census, only 10% of those living in American Canyon worked in the same City and only 37% working the same County. This corresponds to a high degree of commute based travel along the I-80 corridor.

Until recently, local shopping trips from American Canyon were done in Vallejo or Napa due to the lack of retail options within the City. The recent additions of Wal-Mart and Safeway, along with the upcoming Walgreens, now give residents a local place to shop and place less reliance on outside communities for these services.

Although retail and employment options are available within the city, American Canyon still lacks a major medical facility. Sutter Regional Medical and Kaiser

Hospital in Vallejo provide the most convenient options for typically medical needs.

OUTREACH

STAKEHOLDERS

As part of the outreach process, the project team interviewed a series of stakeholders during the months of March and April 2010 to obtain input on how transit service could better service the community and the organizations they represent. Those interviewed included members of City Council, City Staff, and the Napa Valley Unified School District.

OPERATORS

The outreach process included sit-down interviews with bus operators, schedulers and dispatch with have daily exposure with operations in American Canyon and throughout Napa Valley. Information was gathered to identify observed shortcomings in service or areas of improvements within the operations to benefit the existing service.

COMMUNITY

A public open house in American Canyon was held on May 19, 2010 regarding the community transit study. In total, 24 people from the general public showed up to offer input to the project team. The purpose of the open house was to obtain valuable input from the community of American Canyon to help evaluate existing transit services and identify travel patterns to better meet the travel needs of the community. Service alternative concepts were also presented to the participants for feedback and other comments. The information obtained from the open house was used in conjunction with the existing service evaluation in drafting the proposed future service plan. A detailed summary of the meeting and recorded comments is included in Appendix XX.

Public input was also obtained through an online survey. The survey was open to both existing users and non-users and aimed to identify travel patterns and needs, as well as existing deficiencies and factors influencing travel choices. Between March and June 2010, 50 responses were captured from this online tool. A summary of the survey responses from American Canyon residents is included in Appendix XX.

IV. SERVICE ALTERNATIVES

The Service Alternatives presented below were developed to meet the short-term (2015) transit needs of the City of American Canyon. This section suggests improvements and explores various alternatives for service adjustment for the ACT shuttle and the regional VINE services which operate through American Canyon. Since the regional services extend beyond the limits of American Canyon and are influenced by factors beyond the limits of this effort, effort was focused primarily on operational improvements to ACT. Although suggestions are provided on improvements to the regional services as they impact American Canyon, operational improvements to these services will be deferred to the Countywide Short Range Transit Planning effort.

AMERICAN CANYON TRANSIT (ACT)

Based on the above assessment of the transit mobility needs of the City of American Canyon, the following improvements to the ACT are suggested to enhance the existing service and meet the short-term needs of the community.

IMPROVEMENT 1: PEAK HOUR SERVICE

Added demand from the opening of the American Canyon High School and the regional commute services warrant a change in local operations and the addition of a new stop at the High School to meet these new demands. The primary demand from this population will be concentrated during the AM peak hours (7:30-9:00 AM) when students need to get to school and commuters need to get to work. PM peak hour demands will be less concentrated due to a more dispersed travel need caused by various after school activities and commuter work schedules.

Added new service during the AM peak to serve these travel needs should replace the first morning ACT run due to the low productivity and ridership activity experienced during this run. Reallocating these service hours to the proposed peak hour service would likely increase ridership and operational productivity. Due to the anticipated lower demands on transit service during the PM hours, the existing service offered by the ACT (with the addition of a timed stop at the High School) should be able to handle the anticipated demand.

IMPROVEMENT 2: SERVICE RESTRUCTURING

The following alternatives provide a comparison of options for restructuring the current ACT service to better serve the existing and future ridership markets, make transit a more feasible option for travel in American Canyon, and improve overall operational productivity. These alternatives were developed based on

In all alternatives, the AM peak hour service improvement is assumed. A description is included which is followed by a comparison matrix shown below.

Alt 1: Baseline

The baseline alternative assumes the existing service and service levels, combining a one way fixed route loop with route deviations along the fixed route, except during the AM peak hour when the one-way fixed route loop would not do deviations. The alternative provides local service within American Canyon and direct service to the Sutter Solano Hospital, Kaiser Permanente and Sereno Transit Center in Vallejo. The baseline service is shown above in Figure 15 with operating details summarized in the matrix below.

Alt 2: Fixed Route - One way Loop

Alternative 2 operates as a fixed one way loop route within American Canyon with separate route configurations in the AM peak and during the remainder of the service day. This route is shown below in Figure 16.

Following the AM peak hour one-way loop service, service would go into regular midday and PM peak service at American Canyon High School operating on a one way loop north on Newell, west on Donaldson Way, north on Highway 29, east and north on Eucalyptus Drive, north on Main Street, west on Napa Junction, south on Hwy 29, southwest on Rio Del Mar, south on Donaldson Way, south on Elliott, east on Mini, north on Danrose, east on American Canyon Road, and north on Newell.

This service could potentially extend to feed last 2 Route 29 southbound trips in AM and second and third Route 29 northbound trips in PM.

Alt 3: Fixed Route - Bi-Directional Service

Alternative 3 operates as a bi-directional fixed route within American Canyon with separate route configurations in the AM peak and during the remainder of the service day. This route is shown below in Figure 17.

Following the AM peak hour one-way loop service, service would go into regular midday and PM peak service at American Canyon High School operating on a counterclockwise one way loop north on Newell, west on Donaldson Way, north on Hwy 29, east and north on Eucalyptus Dr, north on Main, west on Napa Junction, south on Hwy 29, southwest on Rio Del Mar, south on Donaldson Way, south on Elliott, east on Mini, north on Danrose, east on American Canyon Rd., and north on Newell. Clockwise service would be scheduled to start 30 minutes after the first counterclockwise trip departs Wal-Mart tracing the fixed route in the opposite direction.

This service could potentially extend to feed last 2 Route 29 southbound trips in AM and second and third Route 29 northbound trips in PM.

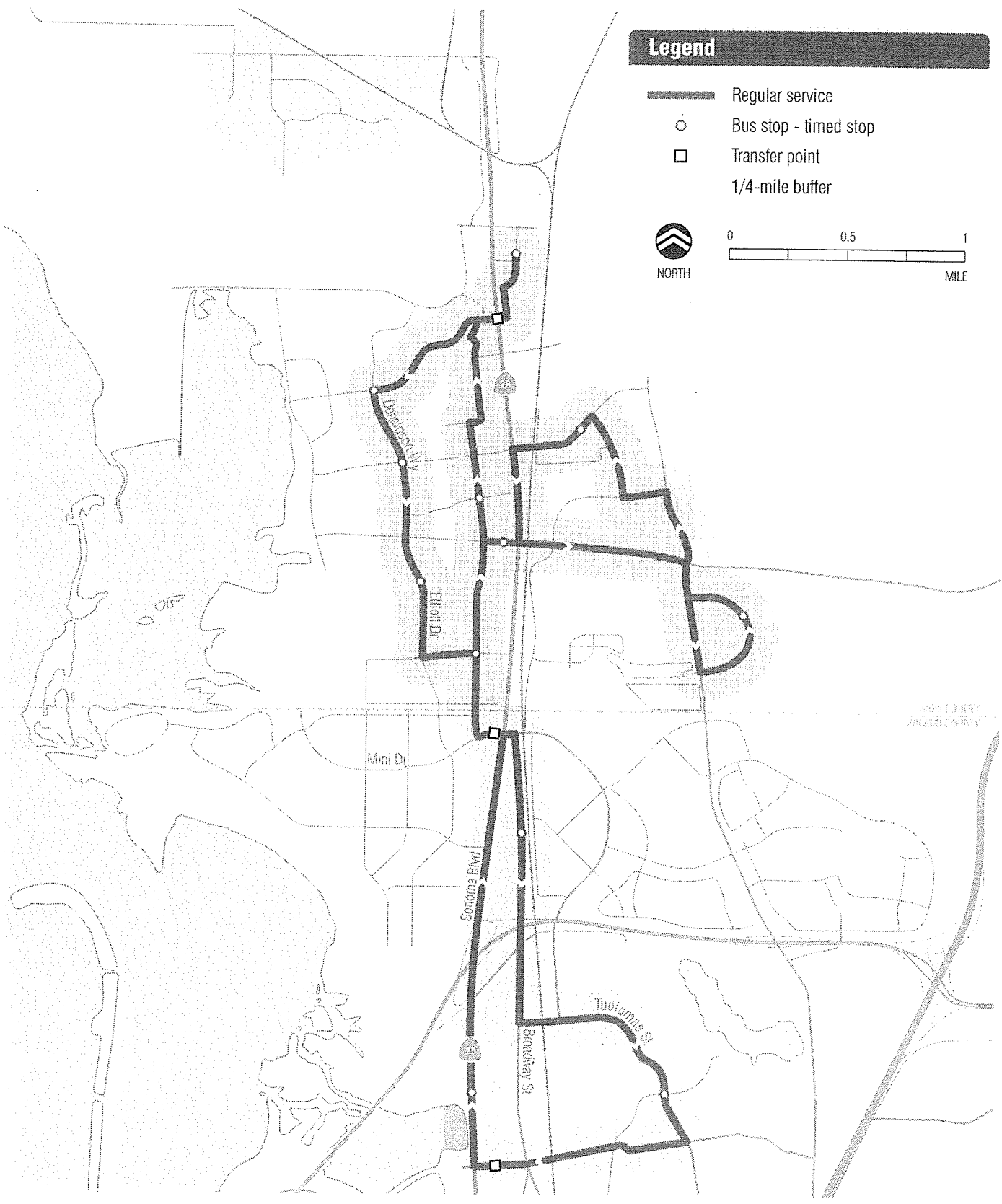
Alt 4: Demand Response

Alternative 4 operates as a structured demand response service with a north timepoint (Wal-Mart) and a south timepoint at Mini and Sonoma. With a single bus, service would depart northbound (from Mini/Sonoma) and southbound (from Wal-Mart) every 60 minutes. With 2 buses, service would depart northbound and southbound every 30 minutes. This concept is shown below in Figure 18.

Passengers could board the bus as walk-ons at the south and north timepoints and at Safeway serving as a midpoint between the south and north service zones. Walk-on passengers would request a north bound or south bound destination drop off as they board the bus. Passenger wishing to be picked up between the south and north timepoints and midpoint would book a trip request through VINE dispatch and be assigned to a north or south bound trip based on running time and space availability.

The regular demand response service would start at either the north or south timepoint at approximately 8:30 AM, following the new peak hour service.

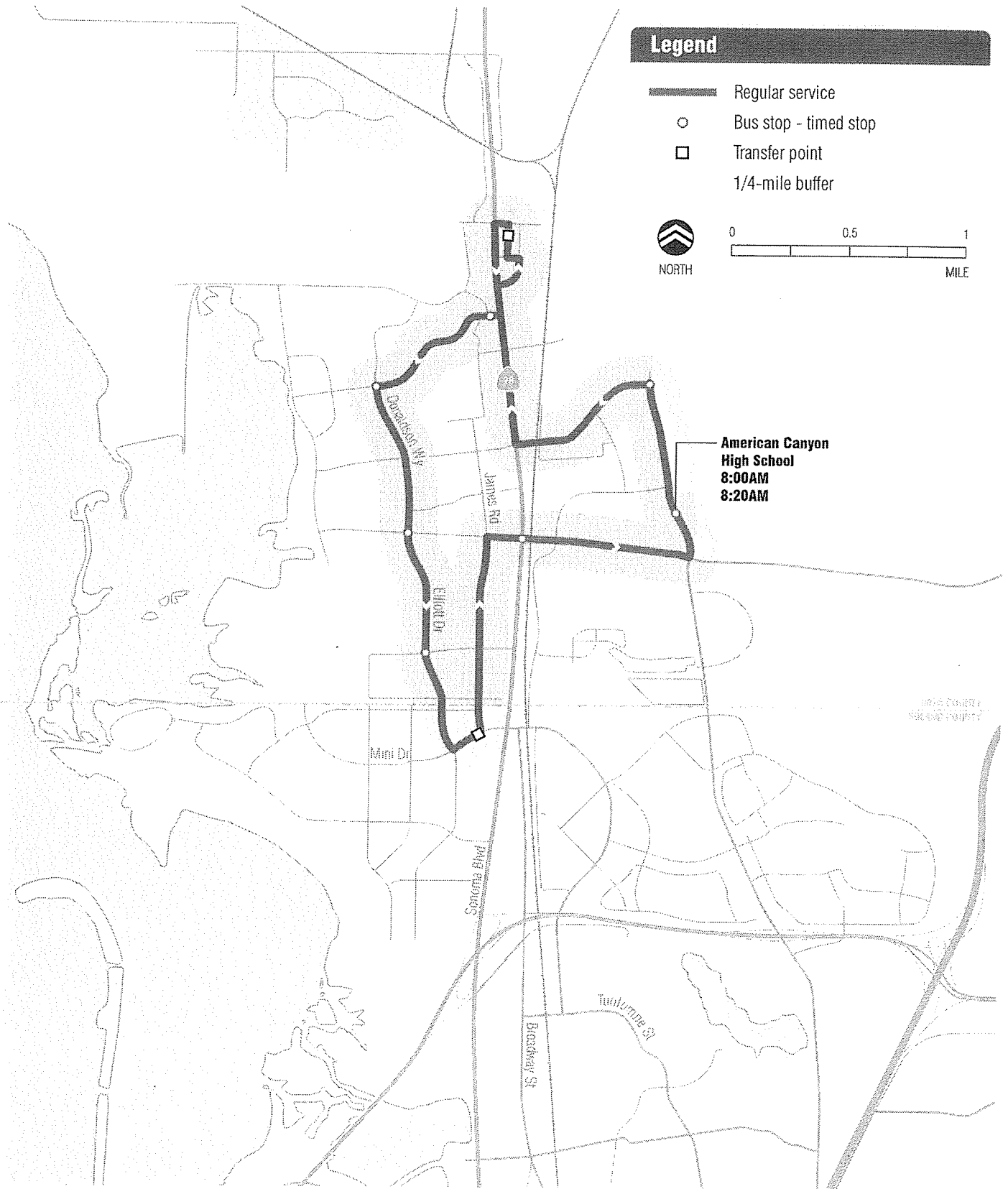
This service could potentially extend to feed last 2 Route 29 southbound trips in AM and second and third Route 29 northbound trips in PM. This service could be offered on a subscription basis or requested as required on a day-to-day basis.



EXISTING SERVICE

Figure 16

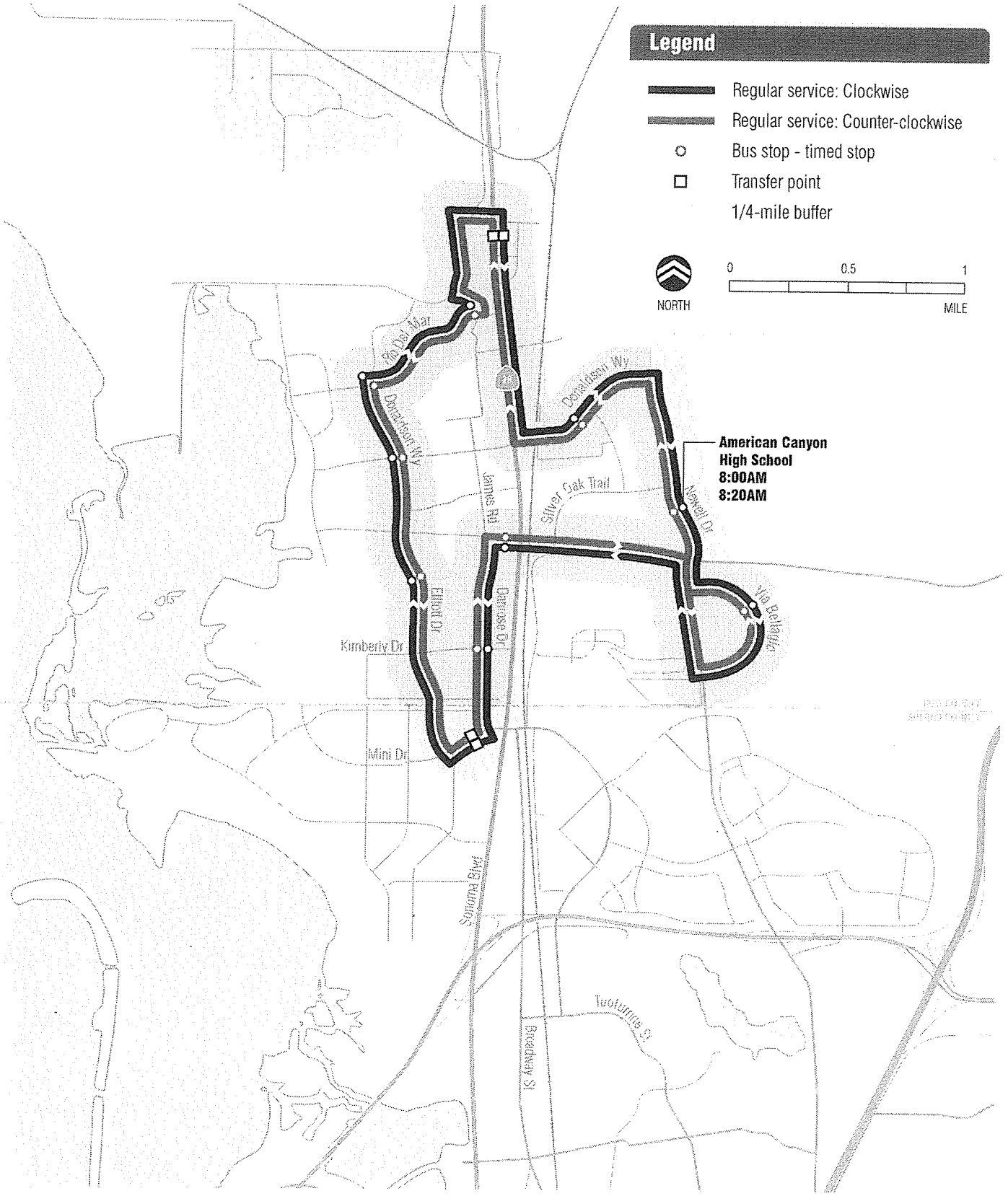
AMERICAN CANYON TRANSIT STUDY



FIXED ROUTE - ONE-WAY LOOP

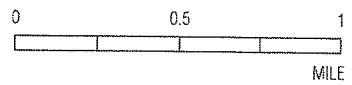
Figure 17

AMERICAN CANYON TRANSIT STUDY

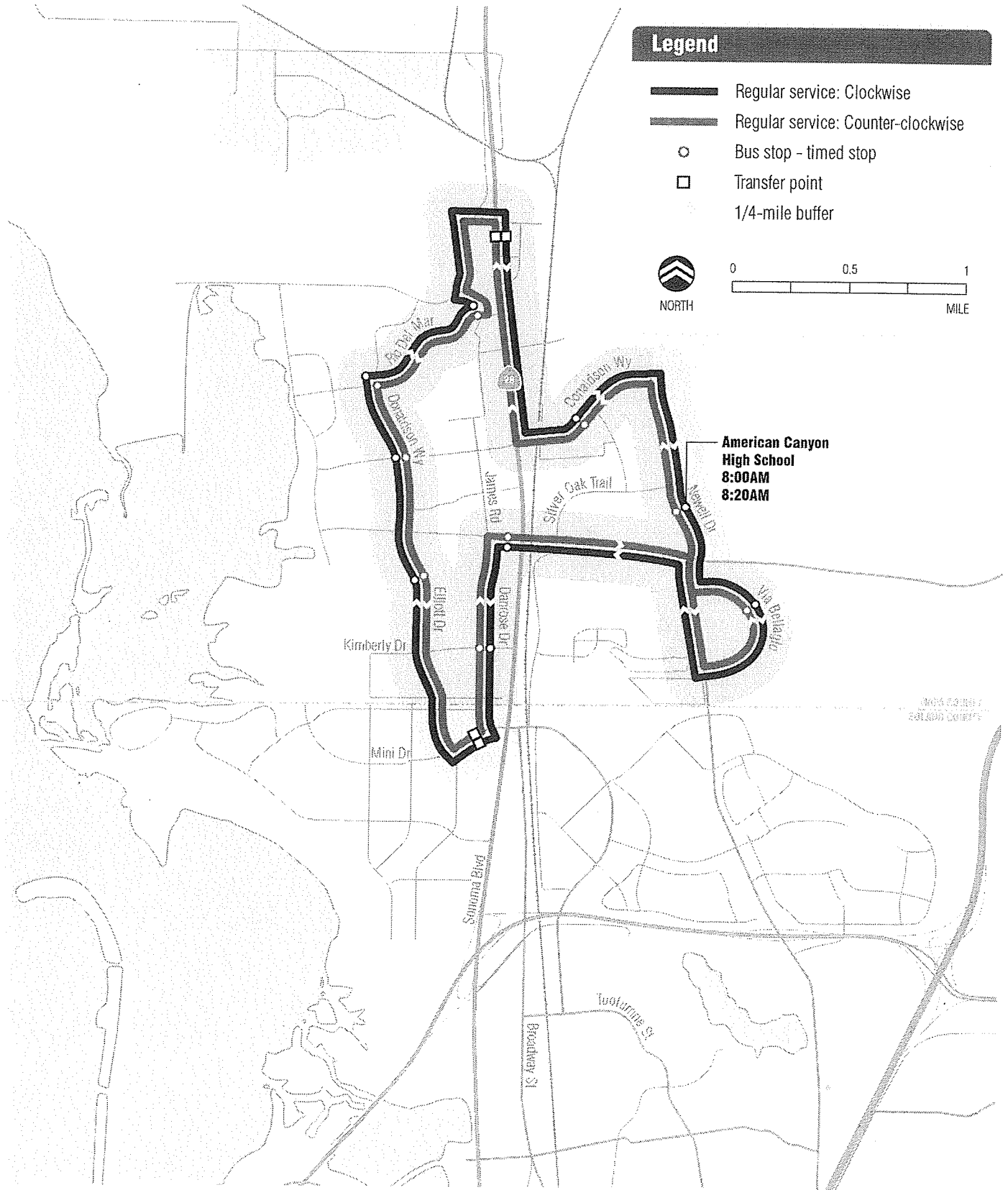


Legend

- Regular service: Clockwise
- Regular service: Counter-clockwise
- Bus stop - timed stop
- Transfer point
- 1/4-mile buffer



American Canyon High School
8:00AM
8:20AM



FIXED ROUTE - BI-DIRECTIONAL SERVICE

Figure 18

	ALT 1: BASELINE	ALT 2: FIXED ROUTE One Way Loop	ALT 3: FIXED ROUTE Bi-Directional Service	ALT 4: DEMAND RESPONSE
Service Hours Span	Monday - Friday 7:30 AM to 5:55 PM	<u>Base</u> Monday - Friday 7:30 AM to 5:55 PM <u>Expanded Hours (Rte 29 feeder)</u> Monday - Friday 5:55 AM to 7:20 PM	<u>Base</u> Monday - Friday 7:30 AM to 5:55 PM <u>Expanded Hours (Rte 29 feeder)</u> Monday - Friday 5:55 AM to 7:20 PM	<u>Base</u> Monday - Friday 7:30 AM to 5:55 PM <u>Expanded Hours (Rte 29 feeder)</u> Monday - Friday 5:55 AM to 7:20 PM
Service Frequency	90 minutes	<u>1 Bus</u> 60 minutes Service <u>2 Buses</u> 30 minutes Service	<u>2 Buses</u> 60 minute service in each direction. By staggering clockwise and counterclockwise buses, a bus will be departing SB and NB every 30 minutes.	<u>1 Bus</u> 60 minutes Service <u>2 Buses</u> 30 minutes Service
Service Hours Per Day	10.4 Hours	<u>60 Minutes Service</u> Base - 10.4 Hours Extended - 13.4 Hours <u>30 Minutes Service</u> Base - 20.0 Hours Extended - 25.0 Hours	<u>Base</u> 20.8 Hours <u>Extended Service</u> 25.0 Hours	<u>60 Minutes Service</u> Base - 10.4 Hours Extended - 13.4 Hours <u>30 Minutes Service</u> Base - 20.0 Hours Extended - 25.0 Hours
Service Hours Per Year ²	2,652 Hours	<u>60 Minutes Service</u> Base - 2,652 Hours Extended - 3,417 Hours <u>30 Minutes Service</u> Base - 5,100 Hours Extended - 6,375 Hours	<u>Base</u> 5,304 Hours <u>Extended Service</u> 6,375 Hours	<u>60 Minutes Service</u> Base - 2,652 Hours Extended - 3,417 Hours <u>30 Minutes Service</u> Base - 5,100 Hours Extended - 6,375 Hours
Bus Pull Out	1 Bus	<u>60 minutes Service</u> 1 Bus <u>30 Minutes Service</u> 2 Buses	2 Buses	<u>60 minutes Service</u> 1 Bus <u>30 Minutes Service</u> 2 Buses

² Service Hours include proposed peak hour service improvement

	ALT 1: BASELINE	ALT 2: FIXED ROUTE One Way Loop	ALT 3: FIXED ROUTE Bi-Directional Service	ALT 4: DEMAND RESPONSE
Service to Vallejo (Medical Trips)	<p>Direct service the Sutter Solano Hospital, Kaiser Permanente and Sereno Transit Center in Vallejo every 90 minutes</p>	<p>Passengers would have to transfer to Rte 10 service for trips to Sutter Solano Hospital, Kaiser Permanente and Sereno Transit Center in Vallejo. Rte 10 operates on a 60 minute frequency.</p> <p>Current ACT passengers needing a route deviation to/from Sutter Solano Hospital, and Kaiser Permanente could book service on VINE Go Paratransit. VINE Go service between American Canyon and Sutter Solano Hospital, and Kaiser Permanente could be scheduled every 2 hours if there were service requests. ADA regulations allow a 2 hour trip scheduling window (a person can be dropped off 60 minutes before and up to 60 minutes after a requested drop off time). This facilitates the organization of trip requests onto ADA paratransit bus trips every 2 hours for longer distance trips.</p>	<p>Passengers would have to transfer to Rte 10 service for trips to Sutter Solano Hospital, Kaiser Permanente and Sereno Transit Center in Vallejo. Rte 10 operates on a 60 minute frequency.</p> <p>Current ACT passengers needing a route deviation to/from Sutter Solano Hospital, and Kaiser Permanente could book service on VINE Go Paratransit. VINE Go service between American Canyon and Sutter Solano Hospital, and Kaiser Permanente could be scheduled every 2 hours if there were service requests. ADA regulations allow a 2 hour trip scheduling window (a person can be dropped off 60 minutes before and up to 60 minutes after a requested drop off time). This facilitates the organization of trip requests onto ADA paratransit bus trips every 2 hours for longer distance trips.</p>	<p>Passengers would have to transfer to Rte 10 service for trips to Sutter Solano Hospital, Kaiser Permanente and Sereno Transit Center in Vallejo. Rte 10 operates on a 60 minute frequency.</p> <p>Current ACT passengers needing a route deviation to/from Sutter Solano Hospital, and Kaiser Permanente could book service on VINE Go Paratransit. VINE Go service between American Canyon and Sutter Solano Hospital, and Kaiser Permanente could be scheduled every 2 hours if there were service requests. ADA regulations allow a 2 hour trip scheduling window (a person can be dropped off 60 minutes before and up to 60 minutes after a requested drop off time). This facilitates the organization of trip requests onto ADA paratransit bus trips every 2 hours for longer distance trips.</p>
Positive Service Characteristics	<p>Route deviation reduces walking distance for those who have difficulty walking to and from a bus stop and facilitates broader coverage within American Canyon.</p> <p>Serves key destinations including Safeway, various mobile home parks, Wal-Mart, the Community Center, Sutter Solano Hospital, Kaiser Permanente and the Sereno Transit Center.</p> <p>Serves VINE Route 10 and Route 29 bus stops.</p>	<p>No requirement to make trip reservations.</p> <p>Base Higher frequency service (60 minute frequency) with no increase in service hours.</p> <p>Extended Service Hours ACT could act as a local feeder for Rte 29.</p> <p>Student Market Service is reconfigured to effectively serve American Canyon High School students living west of Hwy 12.</p> <p>Service to the student market will increase overall productivity and farebox recovery.</p>	<p>No requirement to make trip reservations.</p> <p>Bi-directional service reduces onboard travel time for passengers.</p> <p>Staggering of clockwise and counterclockwise service, a bus will be departing southbound and northbound every 30 minutes.</p> <p>Extended Service Hours ACT could act as a local feeder for Rte 29.</p> <p>Student Market Service is reconfigured to effectively serve American Canyon High School students living west of Hwy 12.</p> <p>Service to the student market will increase overall productivity and farebox recovery.</p>	<p>60 minute frequency can be provided with no increase in service hours.</p> <p>On board travel time reduced for passengers.</p> <p>Walking distance reduced for passengers who have difficulty getting to and from a bus stop.</p> <p>Extended Service Hours ACT could act as a local feeder for Rte 29.</p> <p>Student Market Service is reconfigured to effectively serve American Canyon High School students living west of Hwy 12.</p> <p>Service to the student market will increase overall productivity and farebox recovery.</p>
Shortcomings	<p>Low frequency.</p> <p>Service does not operate early enough or late enough to effectively "feed" VINE commute bus service.</p> <p>Long on board travel times for some passengers because of one way route configuration. For example, passenger traveling to Wal-Mart from northwest area of City traveling to Wal-Mart or a passenger living on the east side of the City traveling home from Wal-Mart. In both cases passenger must ride through Vallejo to reach their local American Canyon destination.</p> <p>Requirement to book route deviation requests.</p>	<p>While discontinuing service to Vallejo will shorten potential travel times, the one way loop configuration will result in relatively long on board travel times for some passengers because of one way route configuration. For example, passenger traveling to Wal-Mart from northwest area of City traveling to Wal-Mart or a passenger living on the east side of the City traveling home from Wal-Mart. In both cases passenger must ride through Vallejo to reach their local American Canyon destination.</p> <p>Access to service will be a problem for current ACT passengers who have difficulty getting to and from a bus stop.</p> <p>Increase in annual operating hours and costs with 30 minute frequency service and extended service. With a limited demand density in American Canyon, both service enhancements could reduce productivity and farebox recovery.</p> <p>No direct service to Vallejo.</p>	<p>Access to service will be a problem for current ACT passengers who have difficulty getting to and from a bus stop.</p> <p>Increase in annual operating hours and costs with bi directional service.</p> <p>With a limited demand density in American Canyon, service enhancement could reduce productivity and farebox recovery.</p> <p>No direct service to Vallejo.</p>	<p>Increase in annual operating hours and costs with 30 minute frequency and extended hours.</p> <p>With a limited demand density in American Canyon, service enhancement could reduce productivity and farebox recovery.</p> <p>No direct service to Vallejo.</p> <p>Requirement to book non-walk on trips.</p>

REGIONAL SERVICES

Service improvement to the regional services in American Canyon (Rout 10 and 29) will be addressed during the countywide SRTP effort later this year. However, improvements within American Canyon have been identified to improve the travel times and transfer activity. These improvements are suggested below.

IMPROVEMENT 1: TRANSFER LOCATION IMPROVEMENTS

The local service alternatives presented above are structured around providing a high quality transfer between the ACT service and regional services. Improvements to the service aspects of this transfer can be done through timed transfers between the local ACT service and the Route 10 where the local service is scheduled to meet the regional service. Capital improvements and programming can also be done to improve and strengthen the connection between transit services.

The northern (The Junction) and southern (Mini Dr. /Sonoma) ends of the local American Canyon service represent a significant percentage of total transit ridership activity within American Canyon. The northern option offers a major activity center while the southern option offers transfer opportunities to the Vallejo transit services. In between these anchor points, Safeway (Highway 29/American Canyon Rd.) provides the other major local destination and is situated at the current center of activity for the community.

These three locations have been targeted for improvements to improve the transit rider experience and environment. Suggested capital improvements include:

- Bus Stop enhancements and passenger amenities – add shelters, trash/recycling, signage and lighting at these locations to enhance the visibility of transit within the community and increase the safety of passengers. Real-time arrival information should be considered as funding allows.
- Park N' Ride - Develop shared-use parking agreements with local retailers to allow all day parking within select, underutilized areas of retail parking lots. In the north, this would likely be Wal-Mart (or tenants of Junction Phase II) and in the south this would be Rancho Square. At the intersection of American Canyon and Highway 29, opportunities

exist at the current Safeway lot or at the new American Canyon Road Commercial Center (Walgreens).

IMPROVEMENT 2: AMERICAN CANYON HWY 29 EXPRESS STOP

There is currently one Highway 29 stop located in American Canyon at the Post Office at the corner of Crawford Way and James Road. This stop location requires a deviation from Highway 29 along residential streets to serve. The nature of the regional service, which now connects to BART, would benefit from fewer deviations and opportunities for Park N'Ride. Moving the stop to the intersection of American Canyon and Highway 29 would allow this service to stay on its route without deviations and serve a location with potential Park N'Ride opportunities (see suggested Improvement #1).

Since these on-street stops would be at opposite sides of the intersection and the parking would likely be concentrated in one location, pedestrian improvements are necessary to make this a safe and convenient place to cross. Paved sidewalks would need to be added on the east side of Highway 29, north of American Canyon Road and crosswalks along all crossings (currently two are missing) should be added.

IMPROVEMENT 3: HIGHWAY 29 CORRIDOR IMPROVEMENTS

Although current regional VINE Route 10 service deviates from Highway 29 to serve the residential areas of American Canyon, the regional service should focus on improvements to reduce travel times within Napa County and connections to Vallejo. Due to significant congestion along Highway 29 in American Canyon, the current deviation may have little impact on overall travel time. However, if improvements are made along this corridor to improve transit performance, regional services would benefit with travel time reductions. In addition, service along Highway 29 would increase transit's coverage in American Canyon and eliminate the duplication of service currently provided along Donaldson Way/Elliot Way.

The addition of transit signal priority and transit queue jump lanes where possible would be a good starting point for improvements. Queue jumps would allow the transit vehicle to make a through movement in a right turn only pocket to serve a farside stop. These signalization and striping improvements along with farside stop locations would improve performance with little investment and disruption of the existing traffic conditions.

NCTPA should continue to work with the City and Caltrans to identify additional improvements to make transit more efficient on this facility and help manage transportation demand on this key transportation facility.

V. RECOMMENDATIONS

AMERICAN CANYON TRANSIT

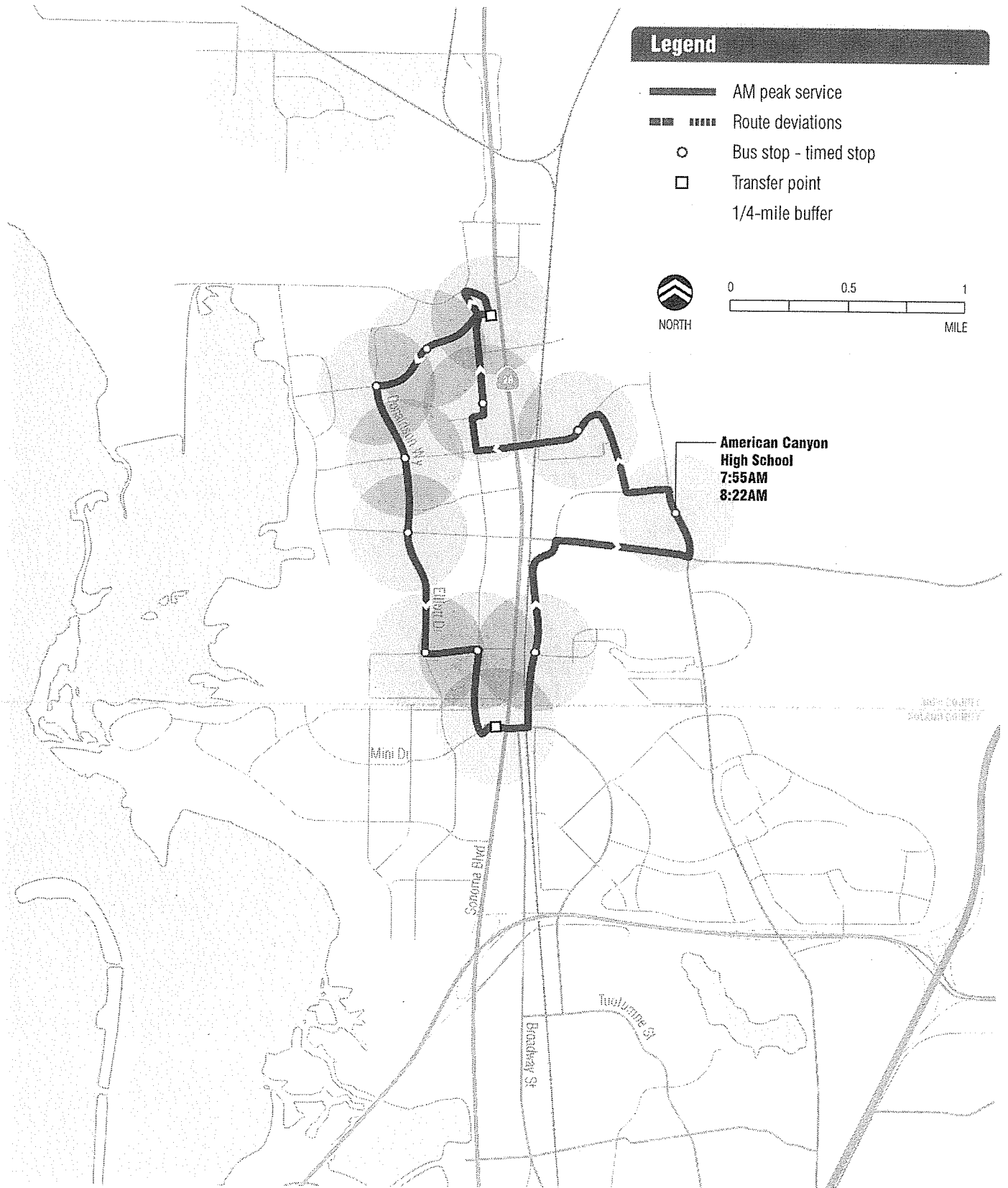
AM PEAK HOUR SERVICE IMPROVEMENT PLAN

The recommended improvement would add a one-way fixed route loop during the AM peak hour service to meet the high school student needs and the commuter population. During the AM peak, two trips operating on approximately 20 minute headways would be added between 7:30 AM and 8:30 AM. These trips would primarily provide service to the high school students on the Westside of town (and areas of the Eastside which are challenging to access) and taking them to the High School and to local commuters (this can be done with one full size bus). *Although NVUSD currently provides yellow bus service within American Canyon to the middle school (located on the east side of town off Benton Way), the proposed improvement would meet the travel needs of this population if the school district reduces or eliminates this service.*

The recommended alignment is shown in Figure 19. This alignment focuses on service to the residential areas and avoids the peak hour inbound congestion often experienced along Highway 29. The loop would operate in a counterclockwise direction through town and go southwest on Rio Del Mar, south on Donaldson Way (turning into Elliot Drive), east on Kimberly Dr., south on Danrose Dr., east on Mini Dr., north on Broadway St., east on American Canyon Rd., north on Newell Dr., west on Silver Oak Trail, north on Shenandoah Dr., west on Donaldson Way, north on James / Melvin / Cassayre, north on Theresa, and south on Eucalyptus back to Rio Del Mar. In total, the loop is 6.3 miles in length and takes approximately 25 minutes to complete.

A total of 12 stops would be served with six acting as set timepoints. All stops except the High School would be in existing stop locations where either the NVUSD serves or the ACT service. These locations include:

- SR 29 / Rio Del Mar
- Carolyn / Rio Del Mar (Harvest Baptist Church)
- Donaldson / Rio Del Mar
- Donaldson / Benton
- Donaldson / American Canyon
- Elliot / Kimberly



PEAK HOUR IMPROVEMENT MAP

Figure 1

- Danrose / Kimberly
- Mini / Sonoma
- Broadway / Vine Terrace
- Newell, south of Silver Oaks Trail (American Canyon High School)
- Donaldson / Vinegate (American Canyon Police Station)
- Wilson / Melvin (Lake Chabot Congregation)

Following the two AM trips, existing ACT local service would resume, starting with the 9:00 AM ACT trip at Safeway. The existing 7:30 AM ACT trip would be cancelled. During the 7:30-9:00 AM period, no deviations would be accepted and only walk-ons at set stop locations would be able to use the service.

The proposed AM peak hour service improvement as described above should be a priority for NCTPA and the City of American Canyon to implement. The safety and mobility needs of the students attending the new American Canyon High School should be a strong objective for the agency and the new transit service should be in place upon opening day of the facility on August 18, 2010. For this to occur, NCTPA and their service provider must include these service changes in the next bus driver bid cycle.

Due to the priority of this improvement, these service changes should go into effect with the existing ACT service plan. Future ACT service improvements targeting the midday travel needs of the community could be phased in at a later time. Monitoring should occur on this new service once school starts to determine if the propose routing and stop locations target these peak hour demands.

NCTPA, the City of American Canyon and NVUSD should take active roles in promoting and marketing the new service. This would include educating parents and students of this transportation option to the new High School prior to the first day of classes and during the student registration periods. The high school newsletter ("The Wolf") and website are also good resources to advertise this new service.

Proposed Schedule

Table 12 shows the proposed ACT service with the AM peak hour service improvement in place. As mentioned earlier, this schedule would primarily serve the new high school demand with trips dropping students at the school at 7:55 AM and 8:22 AM, both prior to the first period which will start at 8:30 AM.

Table 12: Proposed Schedule w/AM Peak Hour Service

	Napa Junction Center/Walmart	SR 29/Rio Del Mar	Donaldson / Benton	Danrose/Kimberly	Mimi/Sonoma	Sutter Solano Hospital/Tuolumne	Sereno Transfer Center	Broadway /Vine Terrace	Safeway (arrives)	Safeway (departs)	American Canyon HS	Safeway	American Canyon Post Office	
		7:35 AM	7:39 AM	7:45 AM	7:47 AM			7:49 AM			7:55 AM			No Deviations Accepted
		8:02 AM	8:06 AM	8:12 AM	8:14 AM			8:16 AM			8:22 AM			No Deviations Accepted
	9:41 AM	9:43 AM	9:47 AM	9:56 AM	9:58 AM	10:08 AM	10:15 AM		10:25 AM	10:30 AM	10:48 AM	10:58 AM	11:03 AM	No Deviations Accepted
	11:11 AM	11:12 AM	11:16 AM	11:26 AM	11:28 AM	11:38 AM	11:45 AM		11:55 AM	12:00 PM	12:18 PM	12:28 PM	12:33 PM	No Deviations Accepted
Off-Peak	12:41 PM	12:42 PM	12:46 PM	12:56 PM	12:58 PM	1:08 PM	1:15 PM		1:25 PM	1:30 PM	1:48 PM	1:58 PM	2:03 PM	No Deviations Accepted
	2:11 PM	2:12 PM	2:16 PM	2:26 PM	2:28 PM	2:38 PM	2:45 PM		2:55 PM	3:22 PM	3:40 PM	3:50 PM	3:55 PM	No Deviations Accepted
	4:03 PM	4:04 PM	4:08 PM	4:18 PM	4:20 PM	4:30 PM	4:37 PM		4:47 PM	4:52 PM	5:10 PM	5:20 PM	5:25 PM	No Deviations Accepted
	5:33 PM	5:34 PM	5:38 PM	5:48 PM	5:50 PM	6:00 PM	6:07 PM		6:17 PM					No Deviations Accepted

Notes: Bold times indicate connections to regional peak hour service or trips which off drop-off/pick-up based on bell times at the High School

Although targeting the needs of the students, all peak hour trips would be open to the general public, as well as students.

The PM peak hour service would be provided through the existing ACT trips³ in the afternoon and early evening. Since the existing service operates in a counterclockwise direction, students boarding at the High School would be circulated through the western portion of the city before the service turns south to Vallejo. Due to varied after school activities, the demand on the PM service is anticipated to be significantly less than the AM.

Fare Policy

The current ACT fares would not change and would be applicable to the proposed AM peak services. These fares are \$1.00 for adults and \$0.50 for all other passengers. A discounted pass (fixed number of trips or fixed time period - annually or monthly) for students should be considered which would offer a discount over the full daily fees and speed up the boarding process. Monthly passes could sell for around \$10 and full year passes could sell for around \$60 per student. This pass could be issued directly by NCTPA or an add-on stamp/sticker/hologram to the student ID card.

Long term fare policies for students should consider a "class pass" program for students which would allow all students to use the transit service for a very small fee to each student. This fee could be added to the student registration charges and administered by the Napa Valley School District. The pass would allow students to use all NCTPA services during the times school is in session and provide increased mobility for this transit-dependent population. Based on the anticipated demand from students during the first year and the total enrollment projections, a charge of \$6.00 per student, per year would be a target rate for this type of class pass program.

Fleet Requirements

Due to the increased, yet uncertain demand on the system during these peak hour trips, it is recommended to use a vehicle with a higher capacity than the

³ Although the capacity of the current ACT cut-away is estimated to accommodate the after school demand, a second vehicle should be provided during the first few weeks of classes to handle any spillover demands. Fleet requirement on this trip may need to be adjusted once true demand is observed.

existing ACT service for the AM Peak Service. This may require sending a 35 or 40 foot vehicle down to American Canyon during the AM peak hours until ridership levels are established. Once capacity requirements are determined, existing ACT Shuttle equipment may be able to accommodate the AM peak hour school demand.

The off-peak service hours should continue to operate the existing cut-away vehicle. If demands from the after school students (3:40 PM pickup) exceed the capacity of the current vehicle, a larger vehicle may have to be deployed to meet the demands of this trip. Monitoring should occur during the first week of service to assess these needs.

Funding Implications

The proposed AM peak hour service improvement, if operated year round on the current Monday-Friday schedule, is estimated to add an additional 71 annual service hours, a 2.7% increase over current hours. The cost to fund this additional service is estimated to be approximately \$5,000 annually.

If the demands on this service are observed to come only from the student population, with little demand from the commuter population, the service could be scaled back to only operate the AM peak service during school days and operate off-peak during the remaining days. This would reduce revenue hours and cost below current day levels and result in little to no additional resources. Table 13 shows a breakdown of these two scenarios compared to the existing service.

Table 13: Revenue Hour and Cost Comparison

Scenario	Hours / Day	Days / Year	Annual Revenue Hours ¹	Total Annual Cost ²
Existing	10.4	252	2,625	\$170,625
w/ AM Peak Hour	10.9	252	2,696	\$175,266
w/ AM Peak Hour – School Only	10.9	174	2,586	\$168,084
	9.3	78		

1. Annual revenue hours are estimated based on revenue hours/day and revenue days/year. Total hours may differ slightly from actual year end audited results.
2. An average cost of \$65 per revenue hour was used – based on FY09-10 data