

To: Operations and Scheduling Committee

Date: December 31, 2014

From: Anne Muzzini, Director of Planning and Marketing

Reviewed by:

Subject: Lamorinda Service Plan Update

Nelson Nygaard has completed the first deliverable of the Service Plan - the existing conditions report. They have presented the findings to the LPMC TAC and incorporated their edits. Here are some of the highlights:

- Lamorinda residents have a higher median income than the other parts of the County and a higher percentage of seniors. Almost every household has access to a vehicle.
- The majority of commuters using public transit work outside the County
- BART's load factor for westbound AM trips is 1.47 at Lafayette – there are no seats available.
- Many of the LINK paratransit trips provided to Lamorinda residents are to destinations outside Lamorinda.
- The BART access study indicates that many Lamorinda residents are still driving alone to the BART station.
- Lamorinda residents use the Nextdoor social media website alot. There are 12,864 members in Lamorinda. A total of 713 survey responses were obtained by using this platform
- Survey results:
 - 82% are aware of County Connection service to BART
 - Only 16% have used the bus in the past 6 months
 - The top deterrents were: no stop near the home, and infrequent service
 - Top priorities for transit service were: short travel time, and ease of access
 - Top transportation alternatives were: shuttles, and satellite parking lots for shuttles to BART

The consultant has begun work on the service alternatives and has met with the LPMC TAC to discuss opportunities and focus. The most promising areas appear to be improvements for commuters such as park and ride lot development paired with shuttles and service options for senior mobility. TAC members wanted to keep student transportation expansion on the list as they expect this will be attractive for voters if a new sales tax goes on the ballot.



LAMORINDA SERVICE PLAN

Existing Conditions Report Final

December 2014



Lamorinda Service Plan – Final Existing Conditions Report
County Connection

This page intentionally left blank.

Table of Contents

		Page
1	Introduction.....	1-1
	Study Purpose.....	1-1
	Community Profile.....	1-1
	Existing Planning Efforts	1-3
2	Existing Transportation Services	2-1
	Public Transportation	2-1
	Transportation Network.....	2-13
3	Market Analysis.....	3-1
	Demographic Information.....	3-1
	Commute Patterns.....	3-7
	Future Development Areas.....	3-13
4	Community Input.....	4-1
	Stakeholder Interviews	4-1
	Resident Online Survey.....	4-3
	Existing Transit Riders	4-7
5	Needs Assessment and Opportunities	5-1
	Needs Assessment.....	5-1
	Potential Opportunities.....	5-2

Table of Figures

		Page
Figure 1-1	Study Area.....	1-2
Figure 1-2	Lamorinda Demographic Summary.....	1-3
Figure 2-1	Orinda BART Station Layout.....	2-2
Figure 2-2	Lafayette BART Station Layout	2-3
Figure 2-3	Current Lamorinda County Connection Services.....	2-4
Figure 2-4	Route 6 Service Characteristics.....	2-5
Figure 2-5	Route 25 Service Characteristics	2-5
Figure 2-6	Route 6 and Route 25 Boardings in Lamorinda	2-6
Figure 2-7	LINK Trips with Home Addresses in Lamorinda.....	2-10
Figure 2-8	Lamorinda Spirit Van Passenger Pick-up Locations.....	2-11
Figure 2-9	Average Daily Traffic at Select Lamorinda Intersections.....	2-13
Figure 2-10	Lamorinda Road Network, Casual Carpool and Park and Ride Locations.....	2-14
Figure 2-11	Existing Lamorinda Bicycle Network	2-16
Figure 3-1	Proportion of Residents Over Age 65.....	3-1
Figure 3-2	Lamorinda Median Household Income.....	3-3
Figure 3-3	Lamorinda Average Vehicle Ownership	3-4
Figure 3-4	Lamorinda Combined Population and Employment Density	3-5

Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Figure 3-5	Lamorinda Population Aged 65+	3-6
Figure 3-6	Regional Employment Destinations (Moraga Residents)	3-8
Figure 3-7	Regional Employment Destinations (Lafayette Residents)	3-9
Figure 3-8	Regional Employment Destinations (Orinda Residents)	3-10
Figure 3-9	Home Origins and Mode Choice to BART (Lafayette Station)	3-11
Figure 3-10	Home Origins and Mode Choice to BART (Orinda Station)	3-12
Figure 3-11	Downtown Lafayette PDA	3-13
Figure 3-12	Downtown Orinda PDA	3-13
Figure 3-13	Moraga Center PDA	3-14
Figure 4-1	Orinda Survey Announcement on Nextdoor	4-3
Figure 4-2	Awareness vs. Use of County Connection Service to BART among Lafayette Residents	4-4
Figure 4-3	When asked “What Deters You From Using County Connection?”	4-5
Figure 4-4	Preferences in Transportation Priorities	4-5
Figure 4-5	Interest in Future Alternative Transportation Options	4-6
Figure 4-6	Times of Leaving and Returning to Home for Route 6 Riders	4-8
Figure 4-7	Route 6 Future Rider Preferences	4-8

1 INTRODUCTION

STUDY PURPOSE

The primary purpose of this study is to identify and investigate different transportation alternatives in the Lamorinda area. While the focus of the plan is public transportation options, other alternatives will also be considered based on their ability to meet community needs in providing transportation. This study is funded by County Connection in partnership with the City of Lafayette, Orinda and the Town of Moraga. The study is guided by County Connection staff and members of the Lamorinda Program Management Committee Technical Advisory Committee (LPMC-TAC).

This existing conditions report is the first component of the plan and provides a baseline of existing public and private transportation options in the area; a quantitative and qualitative review of transportation demand; and a summary of feedback and input received from area residents, transportation providers, and other organizations.

The study area is comprised of the communities of Lafayette, Moraga, and Orinda. This area is shown in Figure 1-1.

COMMUNITY PROFILE

The Lamorinda area is composed of three Contra Costa County communities: Lafayette, Moraga, and Orinda. Approximately 58,000 people live in this area. According to the Contra Costa Transportation Authority's (CCTA) 2014 Comprehensive Transportation Plan, the Lamorinda area is projected to see the slowest employment growth of any location in the county, with 25% growth by 2040 (about 1% per year); the majority of this growth will come from the service sector. Residential growth is also projected to be the slowest in the county.

Lamorinda's median income is high as compared to the rest of the county. Orinda's median is more than twice the median of the county as a whole; both Lafayette and Moraga's median incomes are more than 50% greater than Contra Costa County. A summary of demographic information is provided in Figure 1-2 below.

Despite the fact that almost all households in the area have access to at least one vehicle, there is a relatively high percentage of public transit use for commute trips (trips to and from work). Further, in each of these three communities, nearly all people who commute by public transit work outside of Contra Costa County. Similarly, among those who carpool, 48% of Lafayette residents work outside the county; 60% of Orinda residents and 77% of Moraga residents do so. In Lafayette and Moraga, those who drive primarily work within the county.

Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Figure 1-1 Study Area

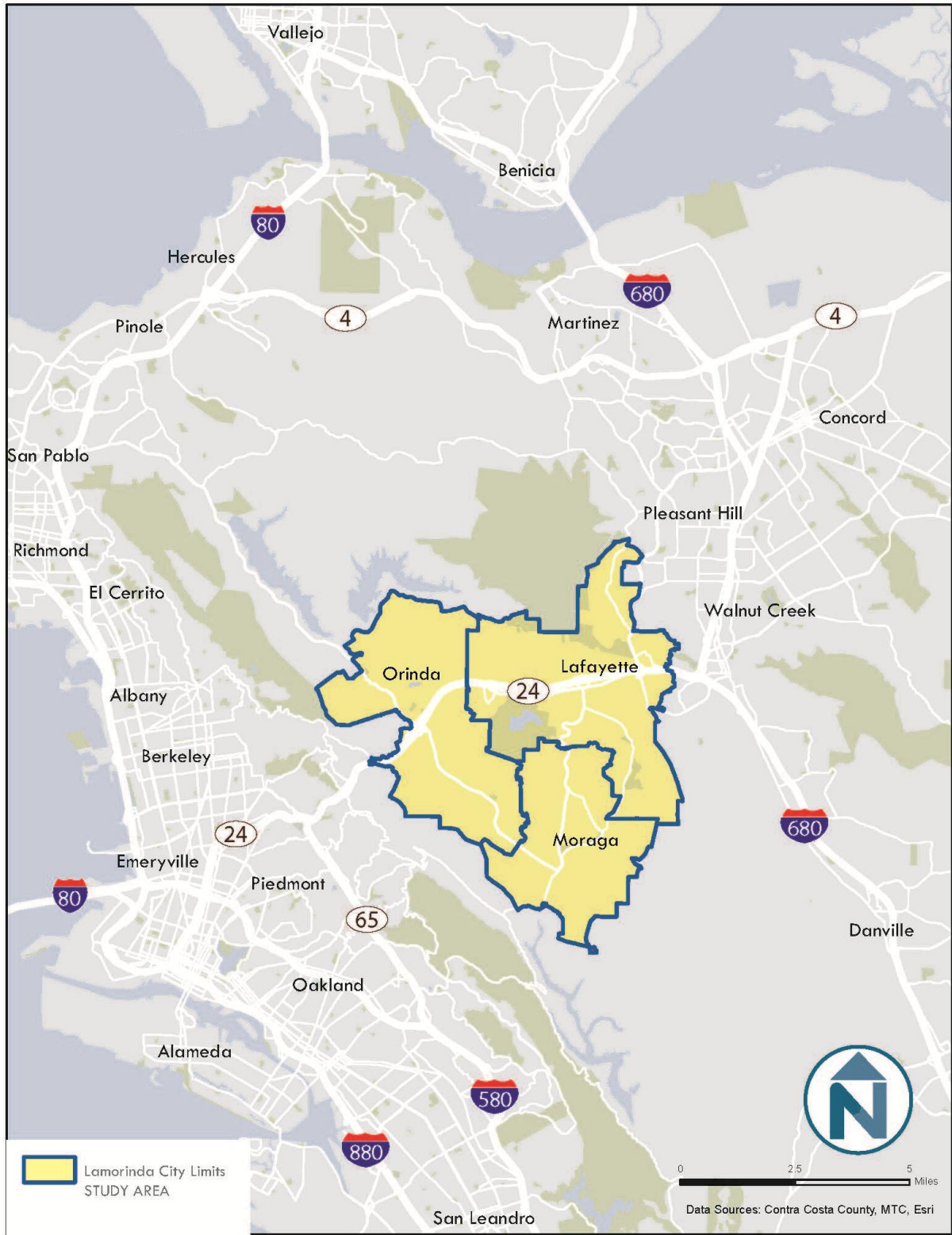


Figure 1-2 Lamorinda Demographic Summary

	Population	Median Household Income	Journey to Work
Lafayette	24,073	\$136,438	Drove alone: 66.7% Carpool/vanpool: 7.0% Public transit: 14.3%
Moraga	16,167	\$119,416	Drove alone: 65.2% Carpool/vanpool: 6.9% Public transit: 15.1%
Orinda	17,868	\$162,267	Drove alone: 65.5% Carpool/vanpool: 5.4% Public transit: 14.5%
Contra Costa County	1,052,047	\$78,187	Drove alone: 69.9% Carpool/vanpool: 12.0% Public transit: 9.2%
Source: 2012 American Community Survey 5-year estimates			

EXISTING PLANNING EFFORTS

Numerous planning efforts have been conducted within the study area over the past several years. Relevant findings from each of those plans are provided in this section.

CCTA Comprehensive Transportation Plan (CTP) and Lamorinda Action Plan (2014)¹

The 2014 Lamorinda Action Plan was developed as a result of the current Comprehensive Transportation Plan for Contra Costa County. It includes a wealth of information germane to the future of Lamorinda transportation services:

- Since 1990, there has been an increase in congestion intensity and duration along CA-24
- 41% of trips through the I-680/CA-24 interchange originated in Lamorinda (2013)
- Traffic along CA-24 is expected to increase by 2040, with most of the increase being from trips that originate in Oakland and Central Contra Costa County
- Telecommuting is growing in popularity in the Lamorinda Area
- BART’s current load factor² for westbound AM trips at Lafayette is 1.47, eastbound PM trips at Orinda station is 1.26 and (both less than the target of 1.5 set in the 2014 Lamorinda Action Plan)
- While Lamorinda is projected to be a slow-growth area of the county, by far the fastest growing demographic group in the area will be seniors, whose population is projected to increase by 54% by 2040; the adult and youth population is projected to remain constant

¹ http://lafayette.granicus.com/MetaViewer.php?view_id=2&clip_id=1526&meta_id=19671

² Load factor of 1.0 means 100% of seats are full. A Load factor greater than 1.0 means that some riders are standing.

- Paratransit ridership in Lamorinda (on County Connection LINK and the Spirit Van) increased about 10% between 2010 and 2012

This Lamorinda Transit Plan satisfies one high-priority action identified in the 2014 Lamorinda Action Plan. Lamorinda jurisdictions came to consensus on several additional efforts relevant to this study, which include the following potential transportation enhancements:

- Expansion of BART seat capacity through the corridor, parking capacity east of Lamorinda, and headway reduction
- Bus headway reductions on routes providing service to BART
- Altered (staggered) school start times along Pleasant Hill Road to reduce peak commute load
- Improved pedestrian and bicycle facilities to/from Lamorinda BART stations and adjacent communities
- Pedestrian and bicycle improvements around schools and trailheads
- Potential road expansion including bypass options and added person-trip capacity on regional freeways to divert traffic from Pleasant Hill Road

The following enhancements identified in the Lamorinda Action Plan are most relevant to this study.

- Subscription bus service (flex van) to BART stations and high volume ridership locations such as St. Mary's College
- Promotion of ridesharing and transit to Lamorinda high schools
- Direct service to important employment centers (e.g. Pleasanton and Bishop Ranch)

Central Contra Costa Transit Authority's FY2013-14 through FY2022-23 Mini Short Range Transit Plan³

CCCTA is a joint powers agency of 11 jurisdictions in Contra Costa County and operates County Connection, a fixed-route bus service. This plan was adopted by the CCCTA Board of Directors in September 2014. As of this time, County Connection is not planning any major service expansions. The plan's only potential effects on the Lamorinda study area are through two countywide planned projects: Access Improvements and Mobility Management. Access Improvements cover projects that improve access and safety at bus stops; this project will rank all County Connection projects by need for improvement. The Mobility Management project will create an inventory of existing transportation services for seniors and people with disabilities in Contra Costa County; it recommends a plan for improving coordination among these services.

City of Lafayette General Plan (2012)⁴

The General Plan's goals are consistent with those of this study. The Circulation Element states, "Alternatives to the single-occupant vehicle, such as increased use of public transit and carpools, and reducing the travel demand through better land use planning are important locally and countywide." The plan includes an explicit goal of reducing automobile travel demand through advocating public transit, promoting carpooling and vanpooling, encouraging telecommuting and

³ Central Contra Costa Transit Authority's Mini Short Range Transit Plan, available at <http://countyconnection.com/wp-content/uploads/2010/06/FY14-SRTP-Final-Approved.pdf>

⁴ City of Lafayette General Plan, Circulation Element, available at <http://www.ci.lafayette.ca.us/Modules/ShowDocument.aspx?documentid=1932>

compressed work weeks, providing shuttle buses to transit facilities, providing incentives and rewards for bicycling, walking, and telecommuting, and offering preferred parking for carpools. This study fulfills Program C-8.1.3 of the Circulation Element, which is to conduct a study of ways to enhance local access to the City’s BART station.

City of Lafayette Downtown Specific Plan (2012)

The Specific Plan, a component of the General Plan’s Circulation Element, states that seven major downtown intersections are projected to operate at unacceptable level-of-service measures by 2030, which increases the need for increased use of non-drive alone modes.

City of Lafayette Bikeways Master Plan (2006)⁵

This plan was last updated in 2006. It includes goals specifically encouraging adults and youth to bicycle as transportation.

City of Lafayette Walkways Master Plan (2014)

This plan was adopted in 2014. It includes a list of planned new walkways and sidewalks as well as enhancements to existing walkways. Important destinations, such as the BART station, are highlighted as are several streets that connect to Mount Diablo Boulevard (where transit currently operates).

City of Orinda Circulation Element (1987)⁶

This plan does not place an emphasis on alternatives to the automobile; however, one guiding policy includes expanding bicycle and pedestrian paths to encourage the use of those modes.

City of Orinda Bicycle, Trails, and Walkways Master Plan (2011)⁷

This plan “envisions a future Orinda where residents and visitors can easily, safely and efficiently travel by bicycle or by foot between and within residential areas, and to public transportation, schools, community amenities, parks, City and regional trail systems and the downtown areas.”

Livable Moraga Road Project (2014)⁸

“The Livable Moraga Road project is a community-based planning effort for Moraga Road, looking at ways to improve the function, character and livability of the corridor between Campolindo High School and St. Mary’s Road.” In October 2014, the Planning Commission, Design Review Board, and Park and Recreation Commission gave preliminary approval to a multi-use path, sidewalks, and bike lanes for Moraga Road between Corliss and Donald Drives. The final plan will be brought to Town Council in January 2015.

Town of Moraga Circulation Element (2002)⁹

⁵ City of Lafayette Bikeways Master Plan, available at <http://www.ci.lafayette.ca.us/modules/showdocument.aspx?documentid=860>

⁶ City of Orinda Circulation Element, available at <https://cityoforinda.app.box.com/generalplan/1/645878301/15693247942/1>

⁷ City of Orinda Bicycle, Trails, and Walkways Master Plan, available at http://www.altaprojects.net/files/2813/1464/1886/Orinda_BTW_Master_Plan_04-21-2011.pdf

⁸ Livable Moraga Road, available at <http://www.moraga.ca.us/livablemoragaroad>

⁹ Town of Moraga General Plan, available at http://www.moraga.ca.us/dept/planning/docs/GenPlan/GeneralPlan_Complete.pdf

Includes a goal to encourage “Moragans” to walk, bike, take transit, or rideshare as a means of reducing traffic trips, improving environmental quality, and maintaining a healthy lifestyle.

Moraga Bicycle and Pedestrian Master Plan Update (2014)¹⁰

In late 2014, the Town of Moraga began the process of updating its 2004 Bicycle and Pedestrian Master Plan (MBPP). The MBPP will guide the design and implementation of bicycle and pedestrian facilities within the town and provide improved access to key destinations such as shopping and employment centers, schools, and recreational opportunities. The planning process is expected to kick off in early 2015.

Moraga Center Specific Plan (2010)¹¹

The Specific Plan sets the stage for infill development in Moraga Center. It considers several topics relevant to the Lamorinda Service Plan. Increased development considered for downtown Moraga will increase the need for added transit service between downtown, St. Mary’s College, and the Rheem Shopping Center. The plan also increases opportunities for bicycle and pedestrian trail connections to, from, and within central Moraga.

This page intentionally left blank.

¹⁰ Town of Moraga Request for Proposals, available at <http://www.moraga.ca.us/dept/planning/docs/BikePedMasterPlanRFP.pdf>

¹¹ Town of Moraga Moraga Center Specific Plan, available at <http://www.moraga.ca.us/dept/planning/docs/MCSP012710.pdf>

2 EXISTING TRANSPORTATION SERVICES

The Lamorinda area is served by local bus and regional rail service in addition to a few specialized services focused on seniors and students. County Connection operates Routes 6 and 25 (traditional fixed-routes), several school tripper routes, and American Disabilities Act (ADA) demand-response services (known as LINK) in the area. Lafayette and Moraga fund the Lamorinda Spirit Van, which is oriented to meeting senior trip needs. The Lamorinda School Bus Program is a subscriber-based service for school age children in the area. Saint Mary's College in Moraga also contracts with County Connection for evening and late-night shuttle service to and from its campus to the Orinda and Lafayette BART stations. A number of local businesses, including retirement communities and hotels, also offer shuttle services to their residents and patrons. Finally, numerous taxi providers serve the area including Taxi Bleu, Orinda Taxi, and the Lamorinda Topsy Taxi (a student-run taxi service to prevent adolescent drinking and driving).

PUBLIC TRANSPORTATION

Bay Area Rapid Transit (BART)

The backbone of the public transit network in the Lamorinda area is BART. Along its “C” line¹², stations in Orinda and Lafayette connect people to major job centers in Walnut Creek, Oakland and San Francisco. In addition, passengers have direct access to San Francisco International Airport. BART service on the C line runs between 4 a.m. and 1:30 a.m. on weekdays with service every 5 to 10 minutes in the peak period and every 15 to 20 minutes off-peak. On Saturdays, BART operates between 6 a.m. and 1:30 a.m. and on Sundays between 8 a.m. and 1:30 a.m.

Orinda Station

The Orinda Station is a lower-ridership station in the BART system with just over 3,000 daily boardings (3,033 in September 2014). Among those traveling to the Orinda Station, 49% arrive from Orinda, followed by 25% from Moraga, 9% from El Sobrante, and 4% from Lafayette. The station itself is bounded within the median of CA-24 which limits any parking expansion and also presents challenges for pedestrian and bicycle access due to wide roads, fast moving traffic, and highway on and off-ramps.¹³

To the north and south, it is surrounded by low-density housing, with offices and retail developments in walking distance of the station. The station is home-origin oriented—80% of weekday riders originate from home. The majority of these riders access the station by

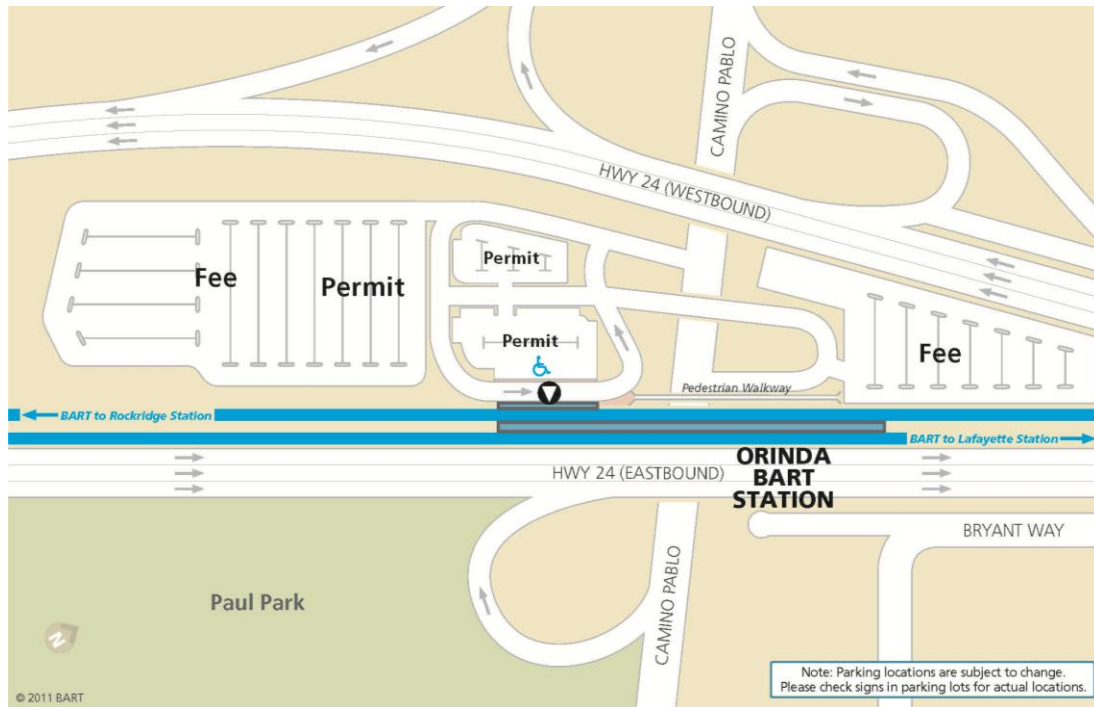
¹² The “C” Line refers to the line of BART stations between Rockridge and Pittsburg/Bay Point

¹³ Pedestrian lighting improvements have been planned and funded, access to the station is challenging

automobile. Transit trips (County Connection) account for 7% of arriving passengers, while 14% walk or bike to the station.

Parking at the Orinda Station is highly used during weekdays. On a typical weekday, BART indicates the parking lot's 1,361 parking spaces are full by 8:40 a.m.¹⁴, however information gathered for the community for this planning process indicates lots fill up closer to 7 or 7:30 a.m. (see Community Input). This poses access issues for those arriving later in the morning who wish to take BART. Parking options at the station include reserved and first-come, first-served spaces. The daily fee is \$2.50. Additional parking pricing options are also available for monthly, extended weekend, and long-term parking.

Figure 2-1 Orinda BART Station Layout



Source: BART

Lafayette Station

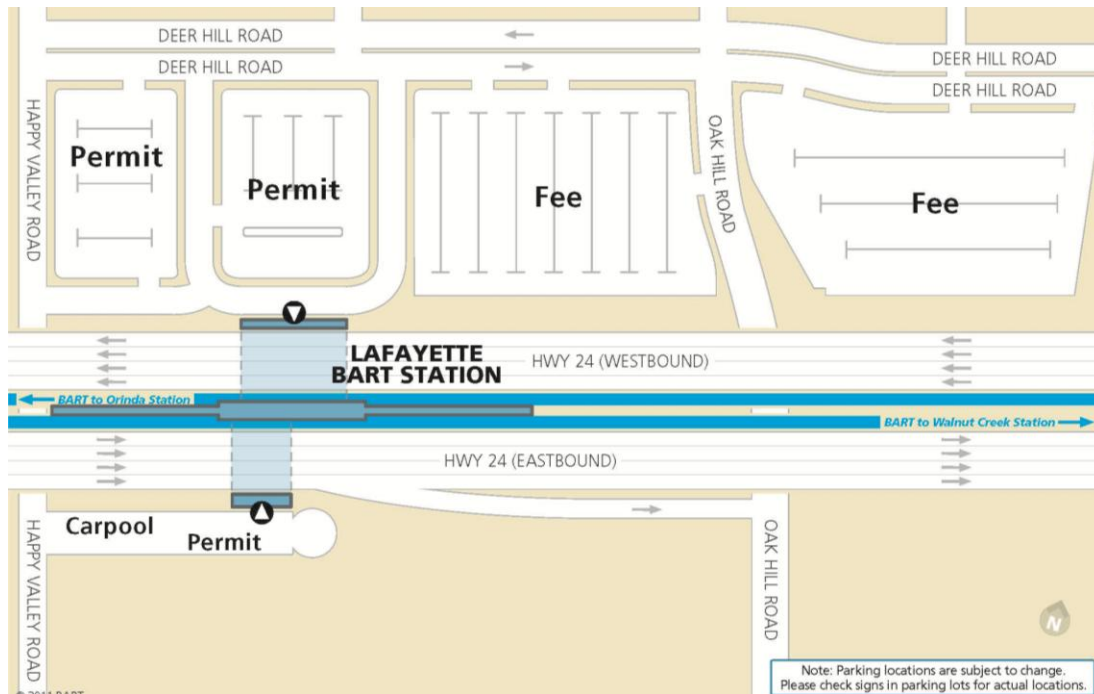
Lafayette is also a low-ridership station relative to others in the system. Of the 3,800 daily boardings (September 2014), 81% are home-origin passengers and over 60% arrive in a car. Bicycling and walking to the station is common—almost a quarter of station entrants walk or bike. Most of the walking trips originate from the downtown commercial district via the underpass to cross into the CA-24 median. To encourage more bicycle access, BART has secured funding for a project to install additional bicycle racks at the station in 2014. Among those traveling to the Lafayette Station, 53% arrive from Lafayette, followed by 13% from Walnut Creek.

Lafayette's commercial district is located near the station, surrounded by low-density single family residential neighborhoods.

¹⁴ Parking fill-time data provided by BART, October 2014.

The Lafayette BART station is priced similarly to Orinda at a \$2.50 daily fee parking. Monthly reserved, extended weekend, carpool, and long-term parking are also available. The lot's 1,528 parking spaces typically fill by 8:20 a.m., according to BART.¹⁵

Figure 2-2 Lafayette BART Station Layout



Source: BART

County Connection

County Connection provides fixed-route transit and ADA paratransit services in Central Contra Costa County. This includes the communities of Concord, Pleasant Hill, Martinez, Walnut Creek, Clayton, Lafayette, Orinda, Moraga, Danville, San Ramon, as well as unincorporated communities in Central Contra Costa County. County Connection also runs other express services that connect to destinations outside of this area.

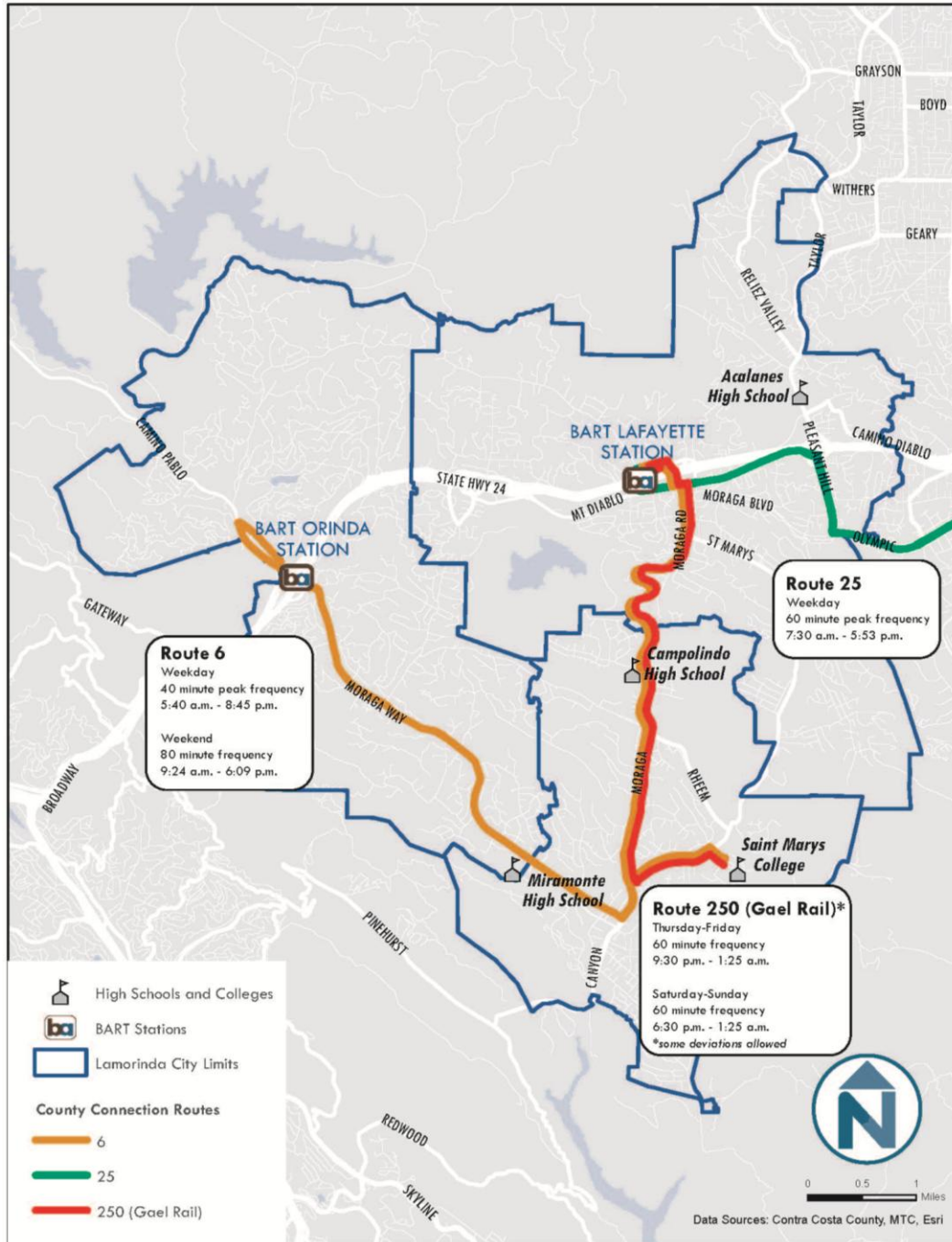
Fixed Route Service

Route 6 and Route 25 are the only two regular County Connection routes operating within the study area. County Connection Route 250 (also called the Gael Rail) is a special service operating Thursday-Sunday evenings between the St. Mary's campus and Lafayette BART station. The Gael Rail could be considered a deviated fixed route service as it allows for pre-scheduled deviations from the posted route to make pick-ups and drop offs.

¹⁵ Capacity and fill times provided by BART, October 2014.

Lamorinda Service Plan – Final Existing Conditions Report
 County Connection

Figure 2-3 Current Lamorinda County Connection Services



Route 6 (Lafayette-Orinda BART via St. Mary’s College and Moraga)

Route 6 provides service to each of the Lamorinda cities with a v-shaped route that connects the Lafayette and Orinda BART stations via Moraga and St. Mary’s College. The route operates 40-minute headways in the peak, two hour mid-day headways. As of the fall of 2014, there were approximately 583 average daily riders¹⁶—the majority of Route 6 passengers are using the service to reach BART (70%) at either Orinda or Lafayette.

Figure 2-4 Route 6 Service Characteristics

Service Characteristic	
Peak Weekday Frequency	40 minutes (15 westbound/ 16 eastbound trips)
Service Span	5:40 a.m. – 8:45 p.m. (weekdays) 9:24 a.m. – 6:09 p.m. (weekends)
Revenue Hours (weekday)	33:05
Average Weekday Passengers	583
Passengers per Revenue Hour (weekday)	17.6 ¹⁷ (up 36% from FY 2010/2011)

Route 25 (Walnut Creek-Orinda BART via Olympic Blvd and Mt. Diablo Blvd)

County Connection Route 25 also serves the Lafayette BART station and connects it with the Walnut Creek BART station. Running along Mt. Diablo Boulevard, Pleasant Hill Road, Olympic Boulevard, and N California Boulevard, it runs only once per hour and serves an average of just 88 passengers daily as of the fall of 2014.

Figure 2-5 Route 25 Service Characteristics

Service Characteristic	
Peak Weekday Frequency	60 minutes (9 westbound/10 eastbound trips)
Service Span	7:30 a.m. – 6:53 p.m. (weekdays)
Revenue Hours (weekday)	9:26
Average Weekday Passengers	88
Passengers per Revenue Hour (weekday)	9.0 ¹⁸ (up 120% from FY 2010/2011)

Figure 2-6 provides an overview of boarding activity within the study area for Routes 6 and 25. The majority of boardings are at the two BART stations and on the alignment between Campolindo High School and just north of the Moraga-Orinda border on Moraga Way. St. Mary’s College also has a high proportion of the study area’s transit boardings.

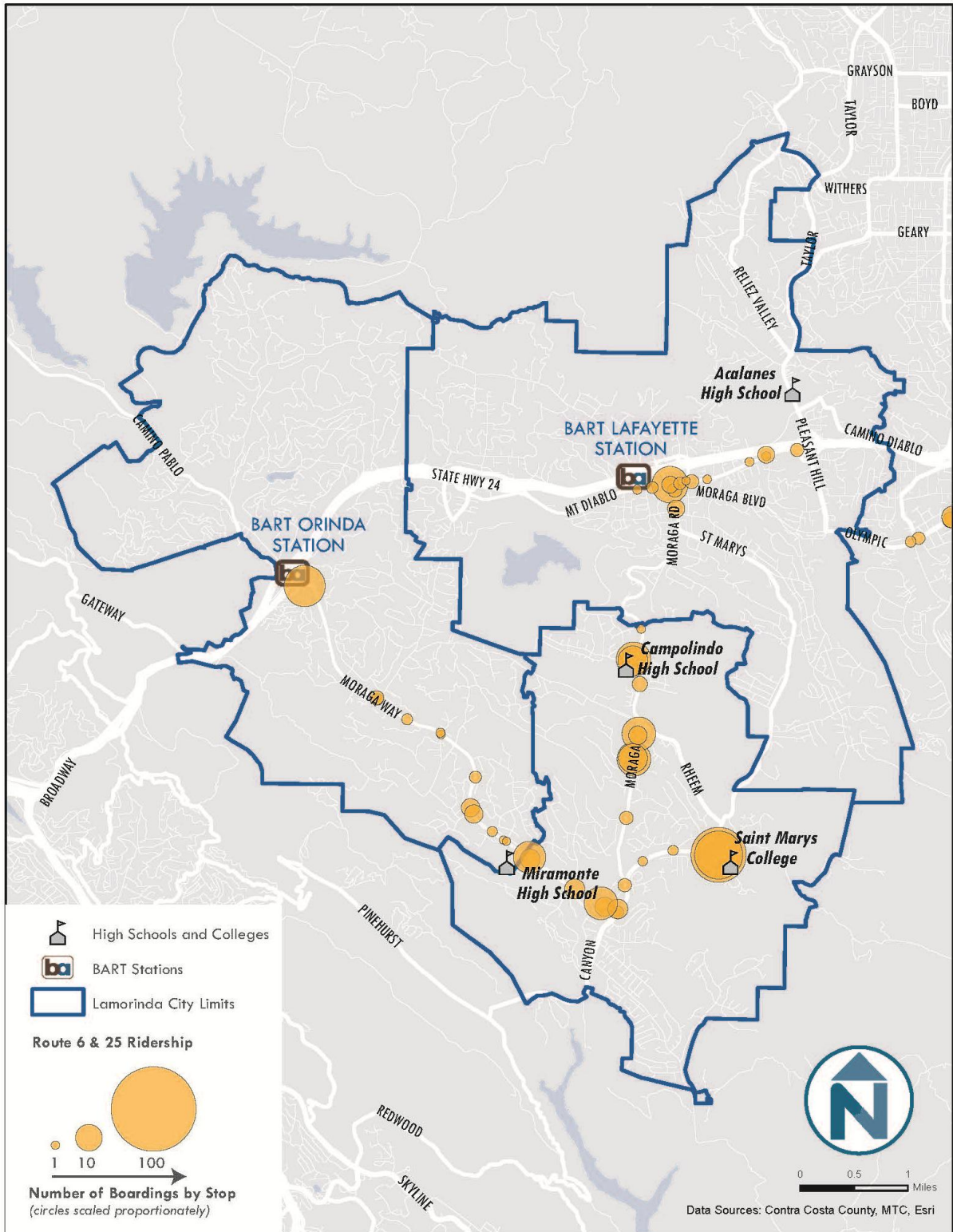
¹⁶ September 2014

¹⁷ Up from 12.9 passengers per hour, 2012 County Connection Short Range Transit Plan

¹⁸ Up from 4.1 passengers per hour, 2012 County Connection Short Range Transit Plan

Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Figure 2-6 Route 6 and Route 25 Boardings in Lamorinda



Route 250 (Gael Rail serving St. Mary’s College, Moraga Road, Lafayette BART)

The Gael Rail (Route 250) is a service operated by County Connection and has a primary purpose to serve late-night trips between St. Mary’s College and the Lafayette BART Station Thursday through Sunday. Unique to this service is its “Flex” capability where deviations are allowed off the main route to pick-up and drop off passengers. This deviation service is only allowed on certain segments of the route. The route also makes existing stops along Moraga Road (Route 6). On Thursdays and Fridays, four southbound trips (to St. Mary’s) and three northbound (to BART) trips are provided. Service operates between 9:30 p.m. and 1:25 a.m. The service is funded by St. Mary’s College at an hourly rate paid to County Connection.

On Saturdays and Sundays, eight southbound trips and seven northbound trips are provided. Service begins at 6:30 p.m. and operates until 1:25 a.m. The service is free for St. Mary’s students (with student pass, see below) and \$2.50 for others.

Service Characteristic	
Peak Frequency	60 minutes 4 southbound/ 3 northbound trips, Thursday and Friday 7 southbound / 6 northbound trips, Saturday, Sunday
Service Span	9:30 p.m. – 1:25 a.m. (Thursday, Friday) 6:30 p.m. – 1:25 a.m. (weekends)
Revenue Hours (per day)	3:55 (Thursday, Friday), 6:55 (weekends)
Average Weekday Passengers ¹⁹	31
Average Weekend Passengers ¹⁷	42

School Tripper Services (Routes 603, 606, 625, 626)

In September 2014, the School Tripper routes served 8,299 passengers (an average of 535 passengers per day). The following routes and destinations are served:

- Lafayette School District
- Acalanes and Orinda School District
- Route 603: St. Mary’s College, Campolindo High
- Route 606: Miramonte High, Orinda Intermediate
- Route 625: Acalanes High
- Route 626: St. Mary’s College, Stanley Middle

Special Transit Pass Programs

Student Transit Ticket Program

511 Contra Costa administers a Student Transit Ticket Program that offers free County Connection transit tickets to students. Each 1st through 12th grade public school student in Lafayette, Moraga, or Orinda is eligible to received two 12-ride passes. This program is offered as an incentive to reduce personal vehicle trips to schools by using transit.

¹⁹ As of September 2014

St. Mary's Student Pass Program

St. Mary's College students also all receive a free County Connection bus pass through the use of their student ID. The campus itself is served directly by Route 6 which connects the campus to shopping in Moraga and the Lafayette and Orinda BART Stations. Thursday-Sunday evenings Gael Rail operates between St. Mary's and BART to provide connections to and from BART after Route 6 service ends service.

LINK Service (ADA Paratransit)

LINK provides ADA paratransit service within the County Connection service area and operates during the same service periods and service areas as Route 6 and Route 25. Since Route 250 already operates as a deviated service, it does not have a concurrent paratransit service during its service period. To be eligible for LINK service, one must be screened to determine if they are unable to independently use the fixed route system due to a disability or health related concern. Currently, seniors (without qualified disabilities or health conditions) are not eligible for LINK service.

Figure 2-7 provides an overview of a one-month period of LINK pick-ups and drop-offs in the Lamorinda area (July 2013) based on home addresses in Lafayette, Moraga or Orinda. The majority of trips are within Lamorinda. Other frequent destinations include Concord, Walnut Creek and Pleasant Hill.

Lamorinda School Bus Program

The Lamorinda School Bus System, is a fee-based service geared especially toward elementary school children. It provides home-to-school (and vice versa) bus transportation to 1,500 students on 21 buses attending 12 schools in the Lafayette, Moraga, Orinda Union, and Acalanes Union High School Districts. The program is a partnership between the three municipalities and the school districts in Lamorinda and is specifically designed to avoid competition with existing fixed-route services provided by County Connection (who offer students a complimentary transit tickets to students, see above and its own school tripper program).

Formally, the program operates as a joint powers authority (JPA) which is primarily funded through Contra Costa County's Measure J ½ cent sales tax program and no funds come directly from the cities. In addition, a portion of revenue comes from users. Parents purchase annual bus passes for specific routes and stops—round trip tickets are \$468 per year and AM/PM-only tickets are \$304 each. One-trip passes are available for \$3 each. Operators suggest that with additional resources, they could run more service and attract more riders, potentially reducing the per student fare.

Some schools are not served by the system, including Happy Valley Elementary (a neighborhood school that generates high biking and walking trips) and Lafayette Elementary (which has traffic congestion issues but generated low bus ridership due to its proximity to the Lamorinda biking and walking trail). St. Mary's Road currently has no service. The highest ridership routes serve Burton Valley Elementary and Stanley Middle School.

The program benefits the community both through direct school transportation and by reducing vehicle trips associated with dropping students off for school.

Origin-Destination Services

The services in this section include scheduled and on-demand services that provide a variety of door-to-door types of services.

Lamorinda Spirit Van

The Lamorinda Spirit Van Program provides transportation services for older members of the community (60+) in Lamorinda and neighboring communities. Riders must schedule trips in advance and can use the service to travel from their home to destinations in the greater Central Contra Costa area (Lafayette, Moraga, Orinda, Concord, Martinez, Pleasant Hill and Walnut Creek). The Spirit Van relies on three vehicles to carry its over 100 registered riders. As compared to other services, the Spirit Van is considered a “door-through-door” service which provides riders a high level of assistance. The Lamorinda Spirit Van is funded in part by the City of Lafayette, Town of Moraga, rider fares and support from the community. The City of Orinda does not contribute directly, but the non-profit Orinda Community Foundation does provide financial support. Rider fares are \$5.00 one-way and \$10.00 round trip for trips within Lamorinda. For trips outside of Lamorinda, trips are \$10.00 one-way and \$20.00 round-trip. Figure 2-8 shows current locations of Lamorinda Sprit Van pick-up locations throughout the study area and other parts of Contra Costa County.

Figure 2-7 LINK Trips with Home Addresses in Lamorinda

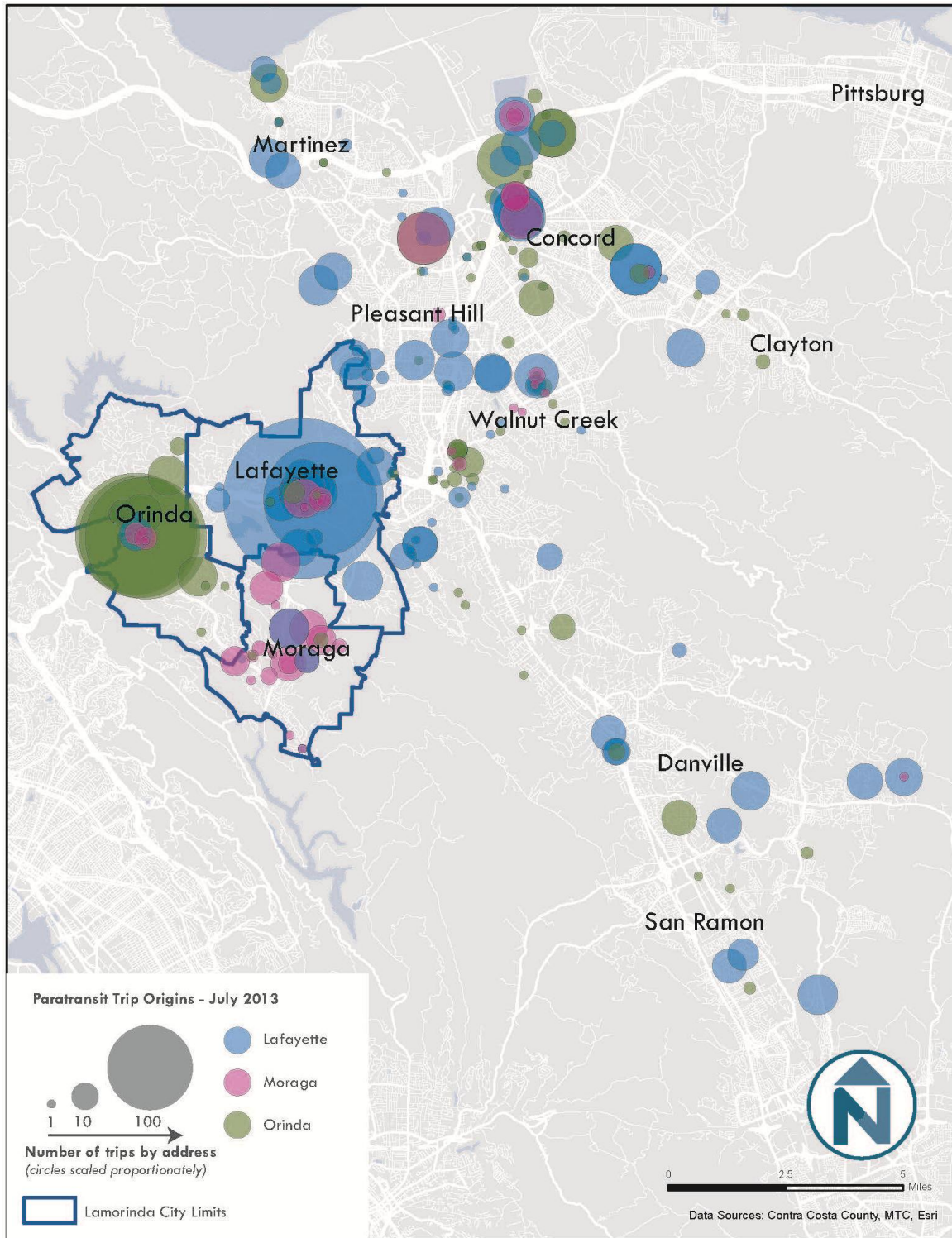
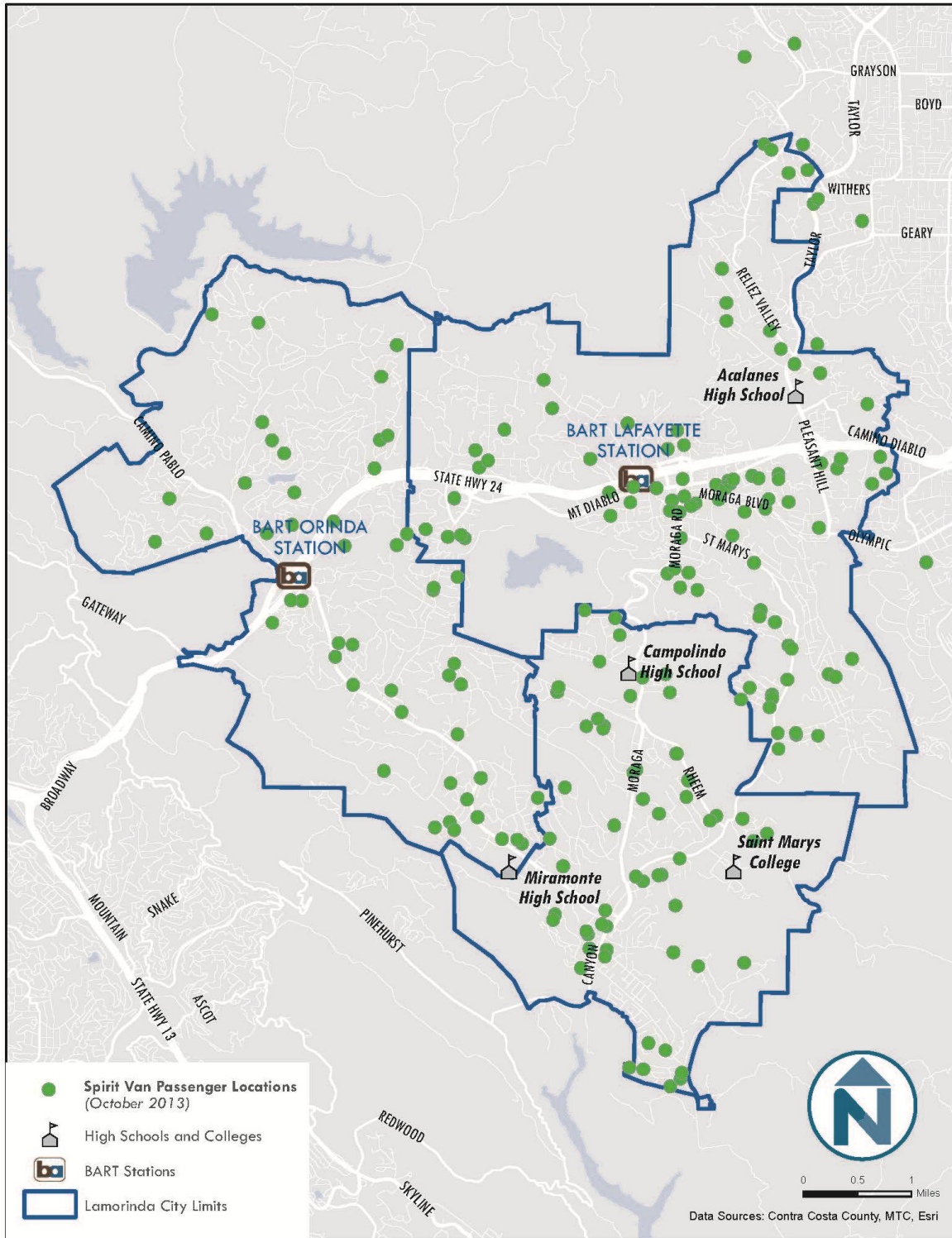


Figure 2-8 Lamorinda Spirit Van Passenger Pick-up Locations



Senior Helpline Services – Rides for Seniors Program

Senior Helpline Services administers a Rides for Seniors program which is a volunteer driver program providing free “door-through-door” rides to senior residents (over 60 years of age) who are unable to use other forms of transportation (including paratransit) within Contra Costa County. The program relies on a pool of trained volunteers who are then matched with seniors who require trips to appointments, medical care and other basic needs. The program is open to the public, but requires participant’s specific situation to be evaluated by Senior Helpline Services staff in advance. Trips must also be scheduled at least one week in advance.

Taxi Providers

Several taxi companies, including Desoto, Taxi Bleu, Orinda Taxi, Orinda Yellow Cab, and the St. Mary’s College student-run Topsy Taxi, serve the Lamorinda area and beyond. According to the experience of one such company, whose services run 24 hours a day, 7 days a week, demand is “non-stop” Thursday through Sunday, though they are able to fulfill all requests. Their most common destination—with 80 trips per week—is to Oakland and San Francisco airports. Other common destinations include hospitals and entertainment venues. Taxi Bleu charges a \$3.10 base rate plus \$3 per mile with a \$30-per-hour fee for waiting time (common for trips to and from medical appointments). For Lamorinda seniors, some of the taxi providers offer a 20% discount.

Ridesourcing Providers (Transportation Network Companies)

In recent years, there has been a surge in companies providing smartphone-based, on-demand ride services. While the majority of these companies (Uber, Lyft, Sidecar, Wingz) have been based in major cities, some have also begun to permeate more suburban environments. Different than other services listed above, these types of services are not bound to traditional service windows as supply of drivers is highly variable and depends on a critical mass of riders. As of November 2014, there are anecdotal accounts that Uber service is available in Lamorinda. It is unclear if there are other service providers in the area.

The marketplace and business environments for these types of companies are quickly evolving. The rules that govern them are currently administered and managed by the State’s Public Utilities Commissions. However, some cities are going beyond state regulations to place additional incentives and restrictions upon these companies.

Private Shuttles

There have been accounts that some corporate private shuttle buses (larger, over-the-road coach services) operate from the Orinda BART Station. However, this is only anecdotal and no data currently exists that verifies whether or not private shuttles are using either the Orinda or Lafayette BART Stations to provide commuter transportation services. These services are not public and are (as of now) only open to employees of those respective companies. Shuttles of this type typically serve major company campuses (typically technology companies in the South Bay). Some companies that offer these types of services include Apple, Facebook, Genentech, Google, and LinkedIn.

TRANSPORTATION NETWORK

Road Network

CA-24 is the only major freeway within the study area and connects Lafayette and Orinda directly to Interstate 680 to the east and Interstates 80, 580, and 880 to the west. In addition, several major roads connect destinations within and between the three communities, including Mt. Diablo Boulevard, Moraga Way, Moraga Boulevard, Pleasant Hill Road, Happy Valley Road, and St. Mary’s Road. Generally, the area is characterized by a few higher-volume two or four lane roads through valleys connecting to smaller, circuitous and hilly neighborhood streets into the hills that often dead end.

Figure 2-9 below shows traffic counts that were taken in Lafayette on some of these major roads within the study area in the last 5-6 years. To put these numbers in context, 23,500 cars per day is the same as about 16 cars per minute passing by a specific point. Traffic patterns peak during morning and evening peak times, so it is likely that in the morning and evening there would be more than 16 cars per minute passing by; outside of those times, it is likely that there would be fewer. The busiest non-highway roads in the Lamorinda area see this amount of average traffic.

Figure 2-9 Average Daily Traffic at Select Lamorinda Intersections²⁰

Intersection	Average Daily Traffic (2-way)	Date
Mt. Diablo Blvd. west of 1 st Street	23,500	09/02/2009
Mt. Diablo Blvd. east of 1 st Street	12,900	09/02/2009
Moraga Rd. north of St. Mary’s Rd.	20,600	09/02/2009
Moraga Rd. south of St. Mary’s Rd.	14,100	09/02/2009
St. Mary’s Rd. east of Moraga Rd.	7,400	09/02/2009
St. Mary’s Rd. south of Florence Dr.	10,600	05/13/2008
Moraga Rd. west of Old Jonas Hill Rd.	15,500	09/02/2009
Pleasant Hill Rd. south of Stanley Rd.	25,100	2012
Pleasant Hill Rd. north of Springhill Rd.	29,300	2012

According to the 2014 Lamorinda Action Plan, CA-24, Pleasant Hill Road, and Camino Pablo all maintained delay indexes less than 2.0 in the AM and PM peaks.²¹

Finally, there is one Caltrans-provided park-and-ride lot and several casual carpool lots in the Lamorinda area. Currently, Wilder Road (west of the main Orinda CA-24 exit) has a park-and-ride parking lot with 34 spaces. However, no transit currently serves this location. Three casual carpool locations (with final destinations in San Francisco) are located in the following locations:

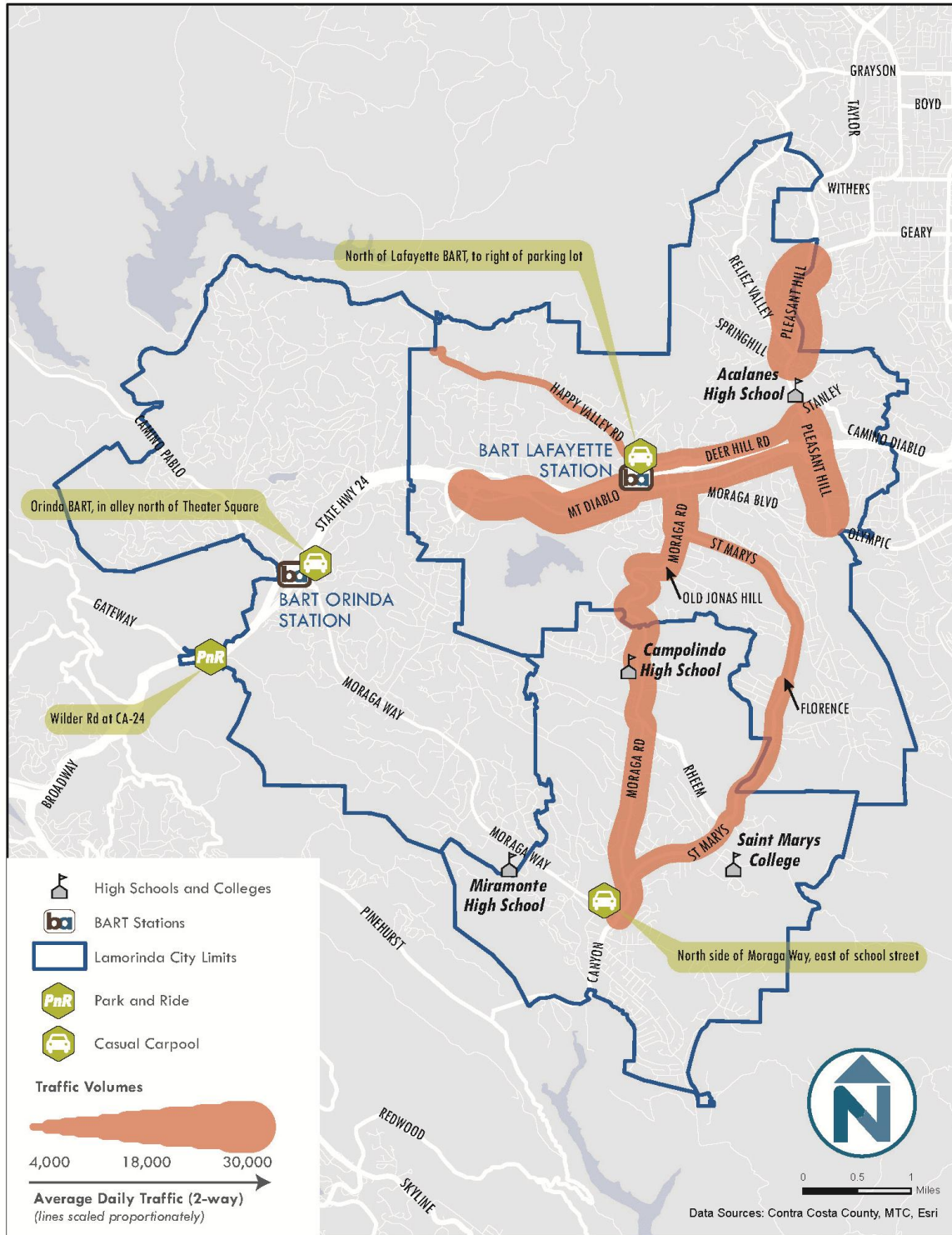
- North side of Moraga Way, east of School street, by the bus stop shelter
- North of Lafayette BART, just outside and to the right of the parking lot
- Orinda BART, in the alley on the north side of Theater Square

²⁰ City of Lafayette Traffic Counts, available at <http://www.ci.lafayette.ca.us/index.aspx?page=316>

²¹ Delay Index refers to the ratio of peak-period travel time as compared to off-peak travel time. Thus, in the peak period, the travel time is not yet double the travel time when there is no traffic.

Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Figure 2-10 Lamorinda Road Network, Casual Carpool and Park and Ride Locations

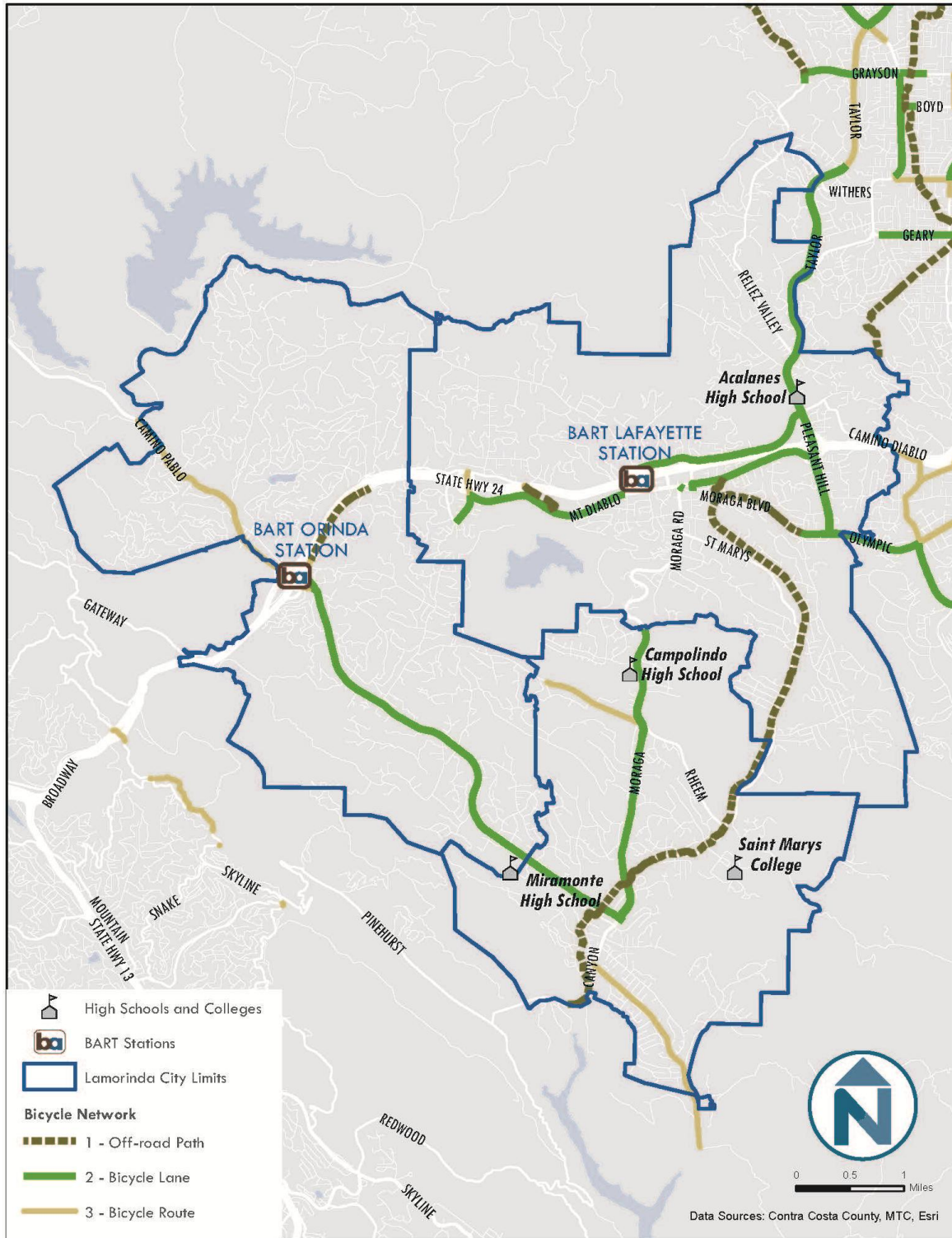


Bicycle Network

Bicycles play an important role in transportation as they can be effective for short trips and can support first and last mile connections to transit. Figure 2-11 shows the existing bicycle network within Lamorinda based on traditional Caltrans classifications (Class 1, 2, 3). This network does not reflect the hilly topography of the study area which may also present a deterrent for cycling. Currently, the dedicated bicycle facility network includes bicycle lanes connecting Moraga to Orinda and the Orinda BART Station (parallel to County Connection Route 6). Bicycle lanes also exist between Moraga Center and Campolindo High School. However, this bicycle facility currently does not extend to Lafayette. Very few on-street bicycle facilities exist outside of the main roads in Lamorinda.

The Lafayette-Moraga Regional Trail is a north-south, 7.7-mile long, linear park intended for pedestrian, equestrian, and bicycle use. Paralleling St. Mary's Road through Lafayette and Moraga, the trail begins at Canyon Road about 0.7 miles south of Camino Pablo and terminates at Olympic Boulevard to the north in Lafayette.

Figure 2-11 Existing Lamorinda Bicycle Network



3 MARKET ANALYSIS

The Lamorinda area is a unique challenge for transit service due to its combination of lower-density neighborhoods combined with hilly topography. However, residents share similar mobility needs as others in the Bay Area in terms of travel within the Lamorinda area and to other destinations around the region. To paint a picture of transit and transportation alternatives that might be suitable for the Lamorinda area, this chapter outlines existing travel markets using data on demographics, commutes, and future development.

DEMOGRAPHIC INFORMATION

Figure 3-2 through Figure 3-4 provide a demographic overview of the study area. These maps include information associated to median income, vehicle ownership, seniors (defined by those aged 65 or greater) and population and employment density. Transit success factors are typically associated with lower median incomes, lower vehicle ownership rates, and higher population and job densities. In this analysis, seniors 65+ are also highlighted as they reflect another potential market for senior transportation trips (for individuals who may no longer be able to drive). The Lamorinda area has a relatively high proportion of senior residents, as demonstrated in Figure 3-1.

Figure 3-1 Proportion of Residents Over Age 65

Location	% of population over age 65
Lafayette	16.7%
Moraga	19.1%
Orinda	20.0%
National Average	13.1%

Figure 3-2 shows the median income in Lamorinda which is dominated by households with a combined income above \$100,000. Only a small portion of the study area along Pleasant Hill Road reflected a median income below this level. The median household income for Contra Costa County is approximately \$80,000. Similarly, it is no surprise that high household incomes correlate with high vehicle ownership. Figure 3-3 shows that nearly the entire study area consists of households with access to more than 1.6 vehicles and much of the study area likely has access to two or more vehicles. The study area has relatively low densities in combination with significant amount of open space. As a result, there are very few areas with high levels of population or employment densities aside from Mount Diablo Boulevard in Lafayette, which includes banks, grocery, and other retail sites. This is reflected in Figure 3-4.

Finally, mobility for seniors is of particular interest in this study given the increasing number of retirees in Contra Costa County. Figure 3-5 highlights the population aged 65 or older throughout

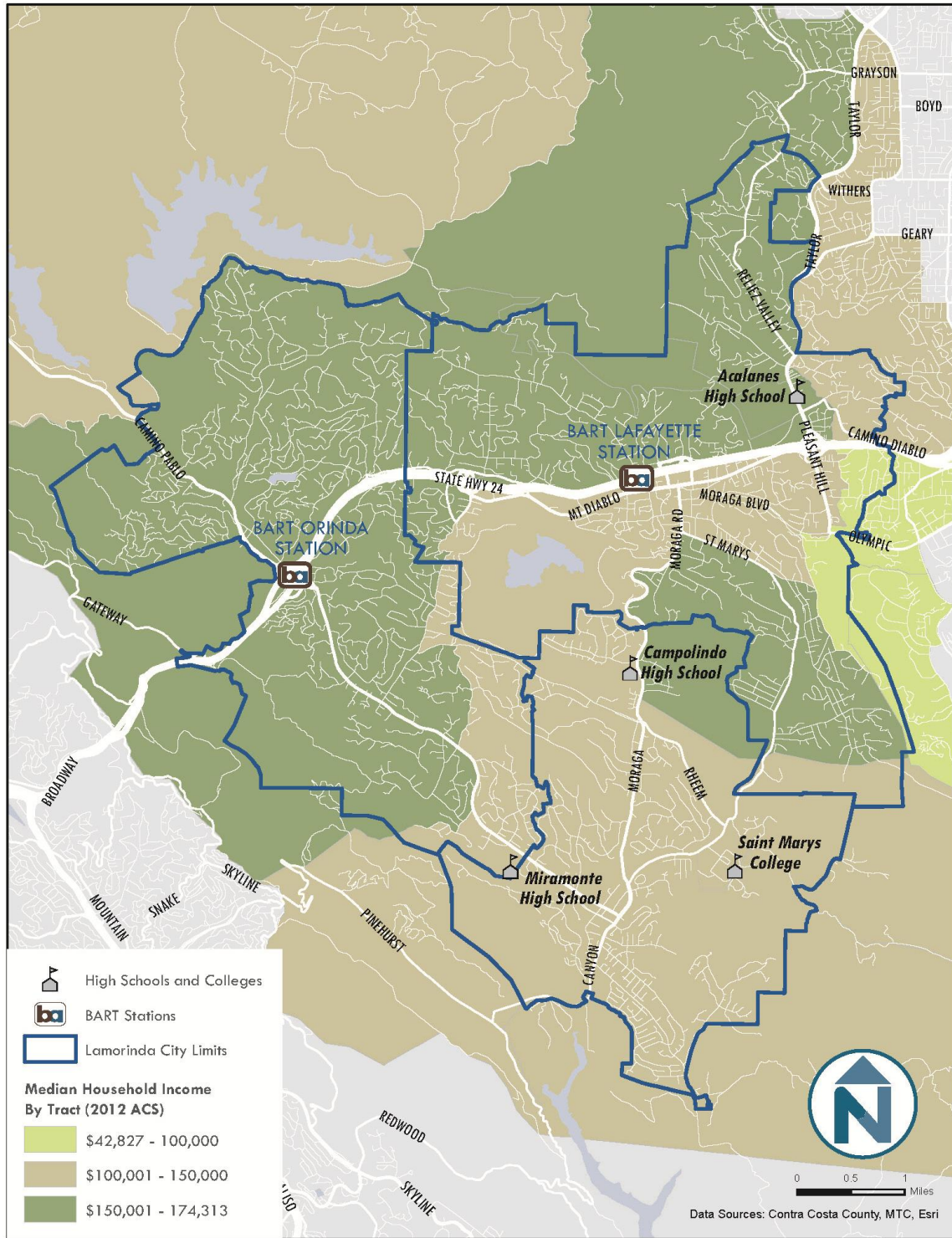
Lamorinda Service Plan – Final Existing Conditions Report
County Connection

the study area. Note that the highest concentration of this population group is north of CA-24 in Orinda. No scheduled transit services currently exist in this area. As mentioned in previous sections, the senior population in Lamorinda will grow at a significant rate in the upcoming decades.

Generally speaking, the information captured from these maps confirm that providing traditional fixed-route transit in the Lamorinda area is challenging based on the demographics in combination with the constrained street network. This suggests that beyond what is currently available, future transportation options must be further tailored to meet the specific characteristics of Lamorinda.

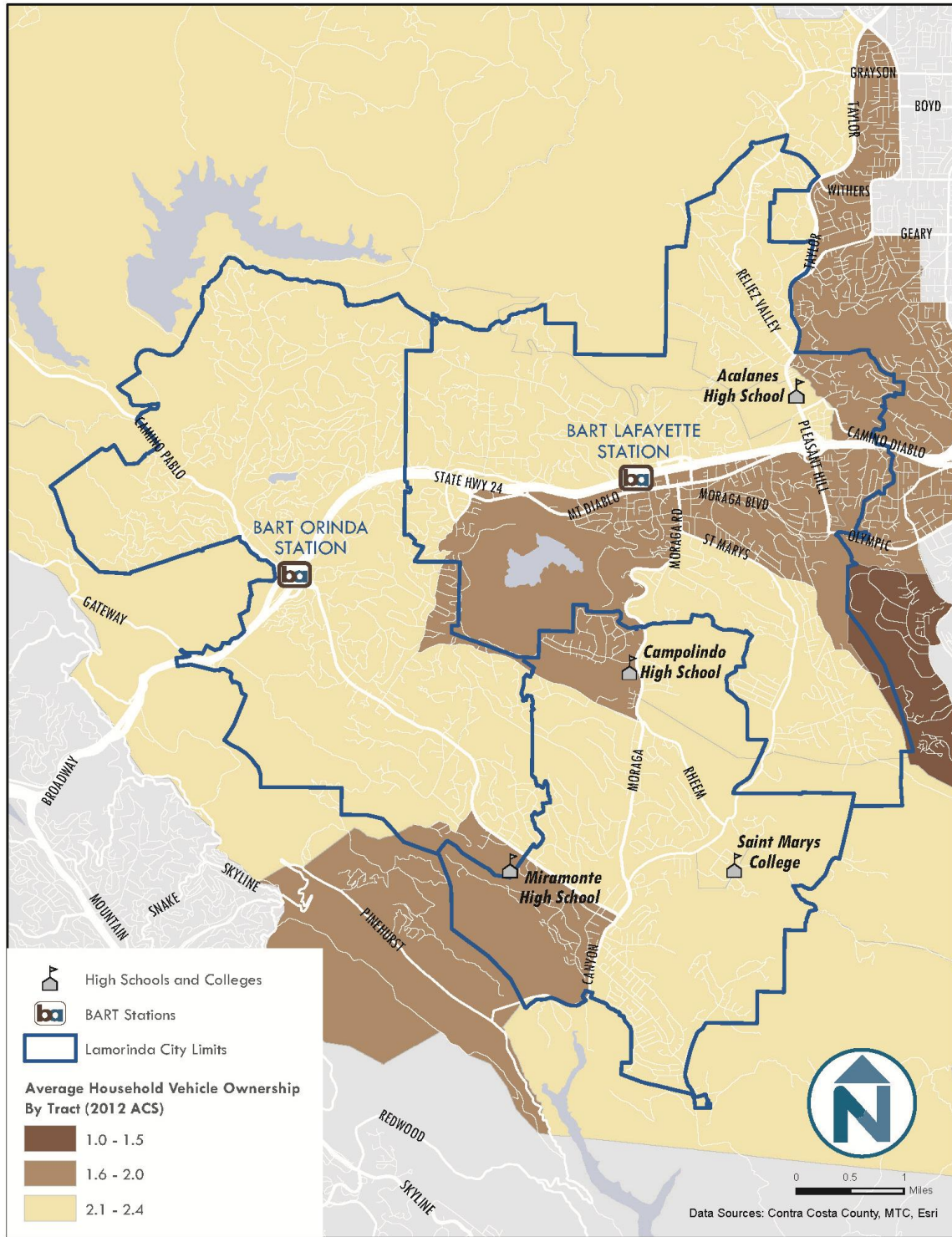
Lamorinda Service Plan – Final Existing Conditions Report
 County Connection

Figure 3-2 Lamorinda Median Household Income



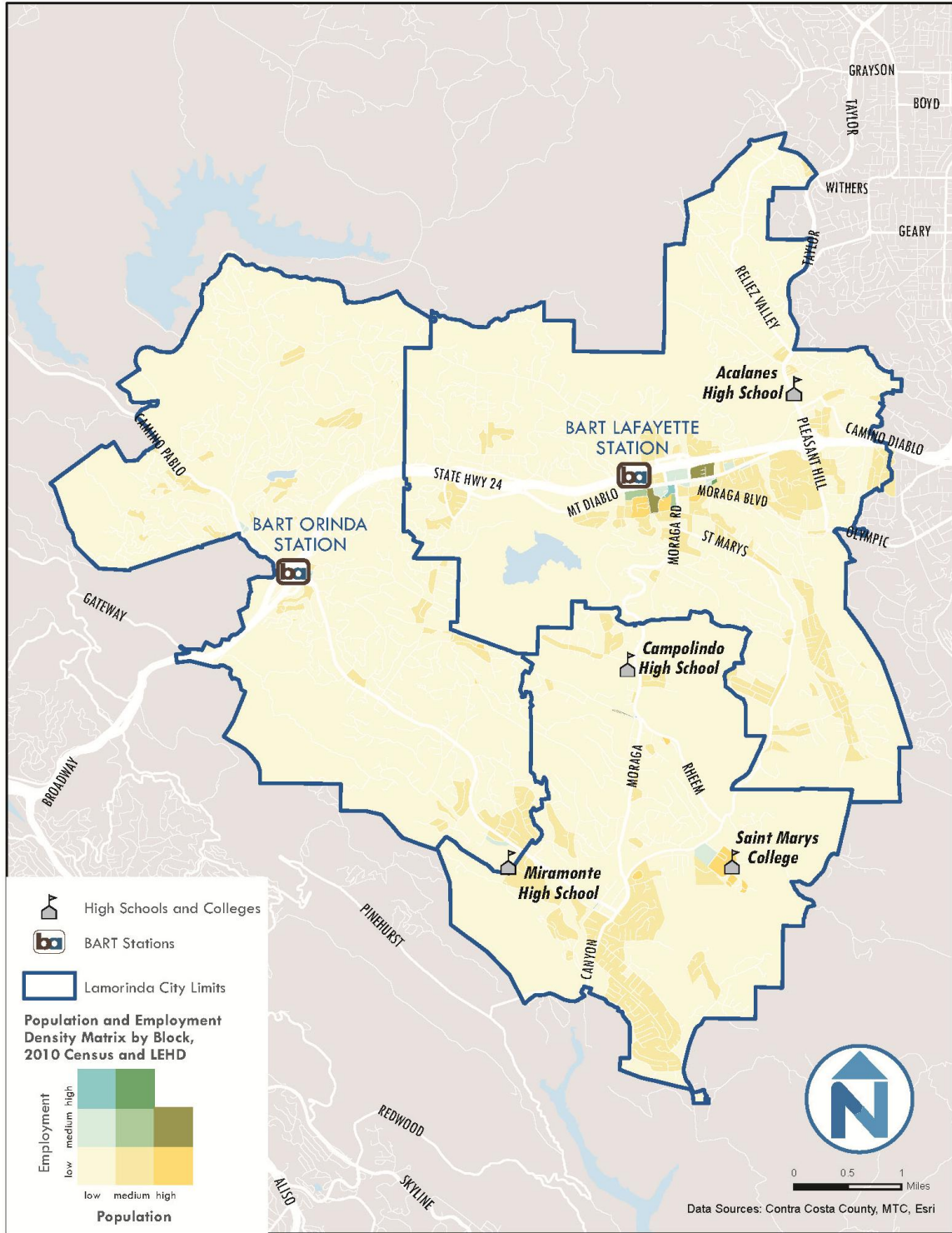
Lamorinda Service Plan – Final Existing Conditions Report
 County Connection

Figure 3-3 Lamorinda Average Vehicle Ownership



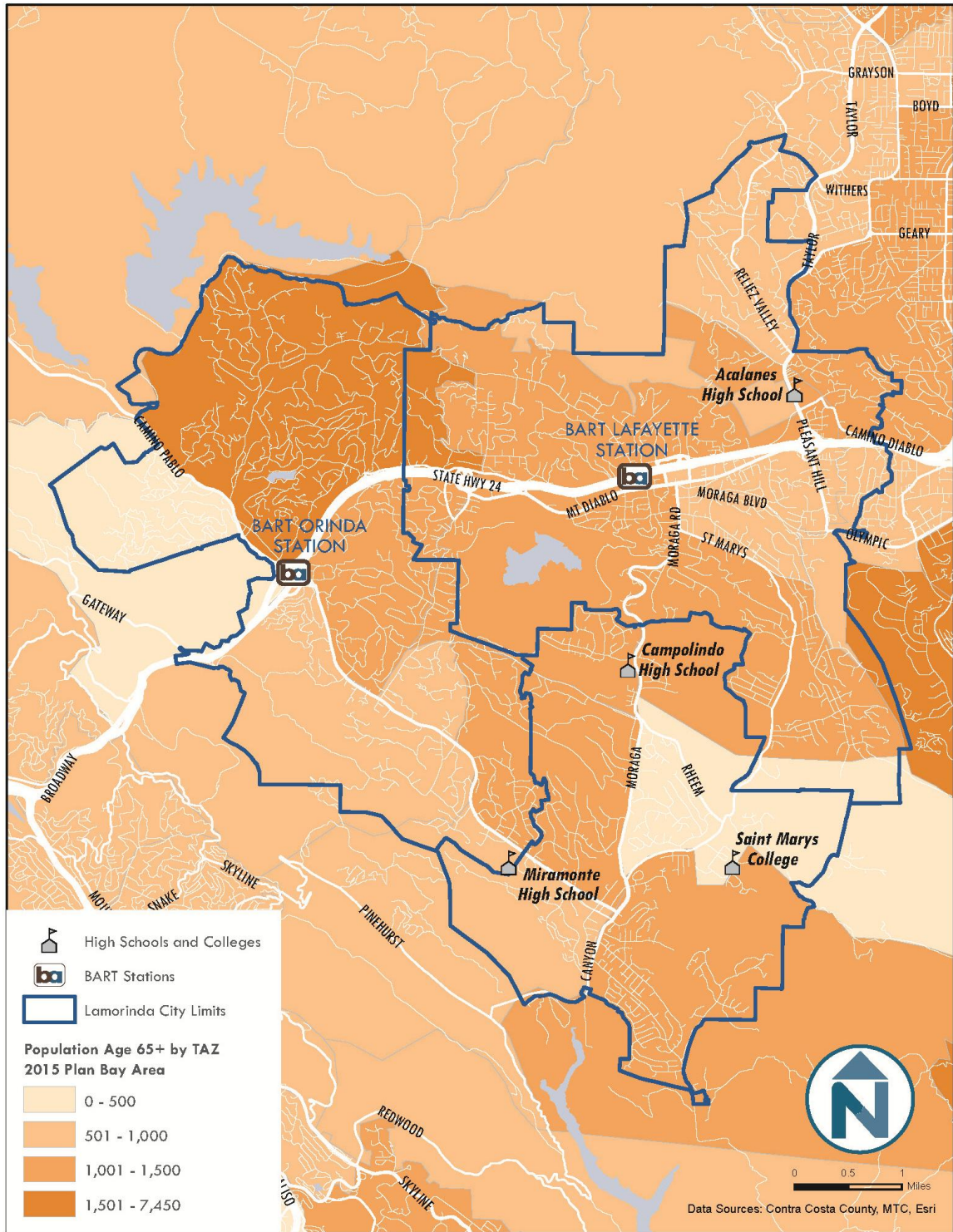
Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Figure 3-4 Lamorinda Combined Population and Employment Density



Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Figure 3-5 Lamorinda Population Aged 65+



COMMUTE PATTERNS

Commuters traveling to and from work compose a significant component of trips within the Lamorinda service area. Thus, an understanding of commute patterns is a critical component to understand potential transportation markets. The information presented in this section includes a combination of U.S. Census Data (Longitudinal Employer-Household Dynamics) and data obtained from BART commuters from the 2008 BART Station Profile Survey. Figure 3-6, Figure 3-7, and Figure 3-8 provide information about employment locations for residents in Moraga, Lafayette, and Orinda, respectively.

Generally speaking, residents in all three cities predominately travel to San Francisco or the inner East Bay (Oakland, Berkeley) for their commute. Walnut Creek, the South Bay (San Jose), the I-680 corridor, and Sacramento were also destinations that showed high employment from the three Lamorinda communities.

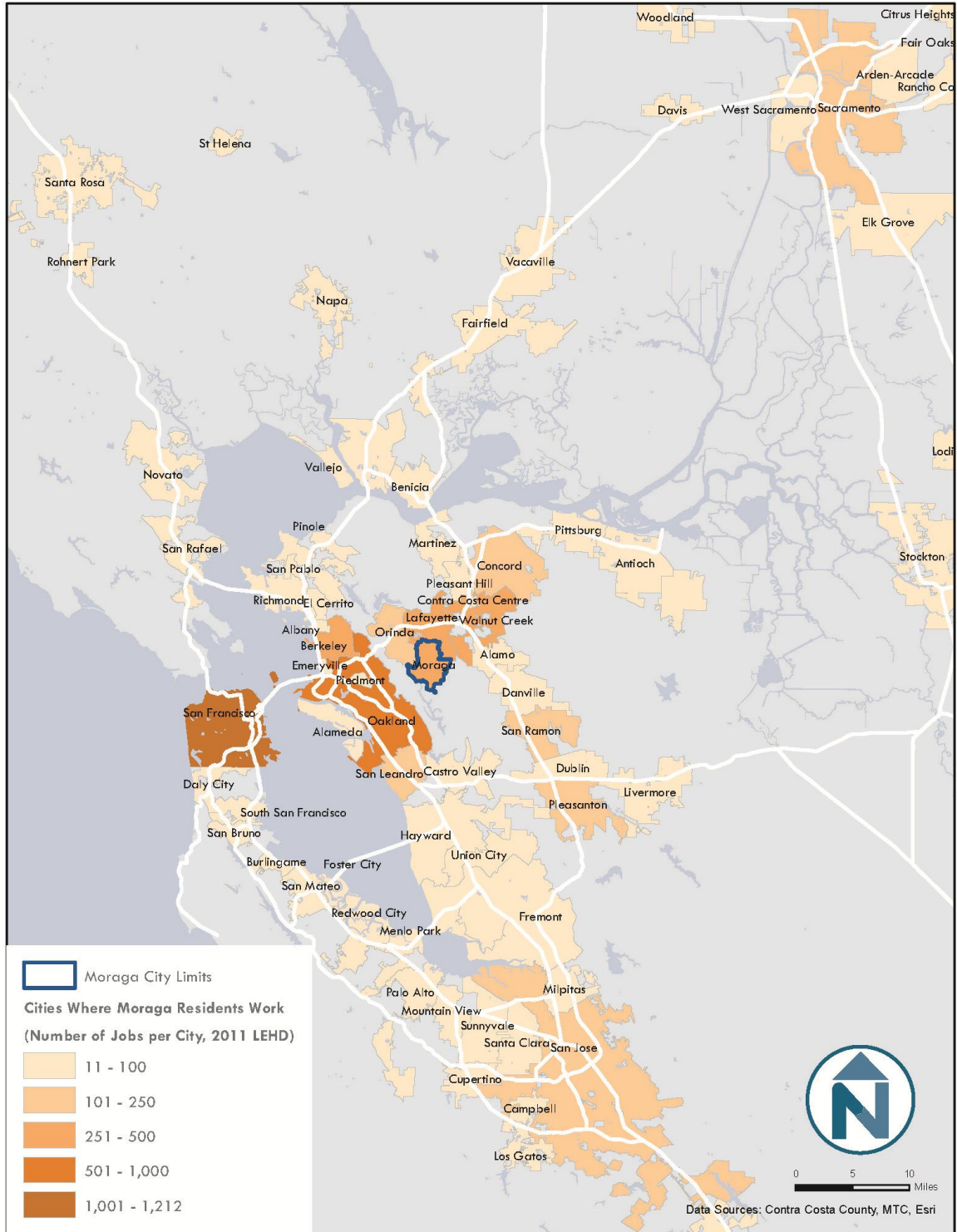
For purposes of this study, it is unlikely that a future service alternative would consider spanning these long distance commutes. However, these long commutes underscore the importance of the role local transportation plays in making connections to other transit services that bridge these gaps. In the Lamorinda service area, BART predominately plays this role. However, County Connection also connects to other regional transit providers such as Amtrak (Capitol Corridor) and the Altamont Commuter Express (ACE).

The most recent American Community Survey indicates that means of transportation to work in the Lamorinda area remains predominately single occupancy vehicle travel. However, given that the study area's two BART stations (Lafayette, Orinda), a fair proportion of residents do rely on BART to get to/from work and for other regional trips.

Figure 3-9 and Figure 3-10 provide information about how individuals access the BART system at the Lafayette and Orinda BART Stations. As of 2008, over 60% accessed the Orinda BART Station by driving alone (and presumably parking at the station). Forty-nine percent of riders arrived from Orinda and 25% arrived from Moraga. The distribution of riders who drove or were dropped off were equally scattered across the catchment area. Those who took transit started their trip adjacent or very close to the existing County Connection Route 6 alignment. Characteristics at the Lafayette BART Station were similar with 68% driving alone. Fifty-three percent of the riders came from Lafayette while only 6% came from Moraga. Transit riders to the BART Station were similarly found to originate from locations adjacent to Route 6 service.

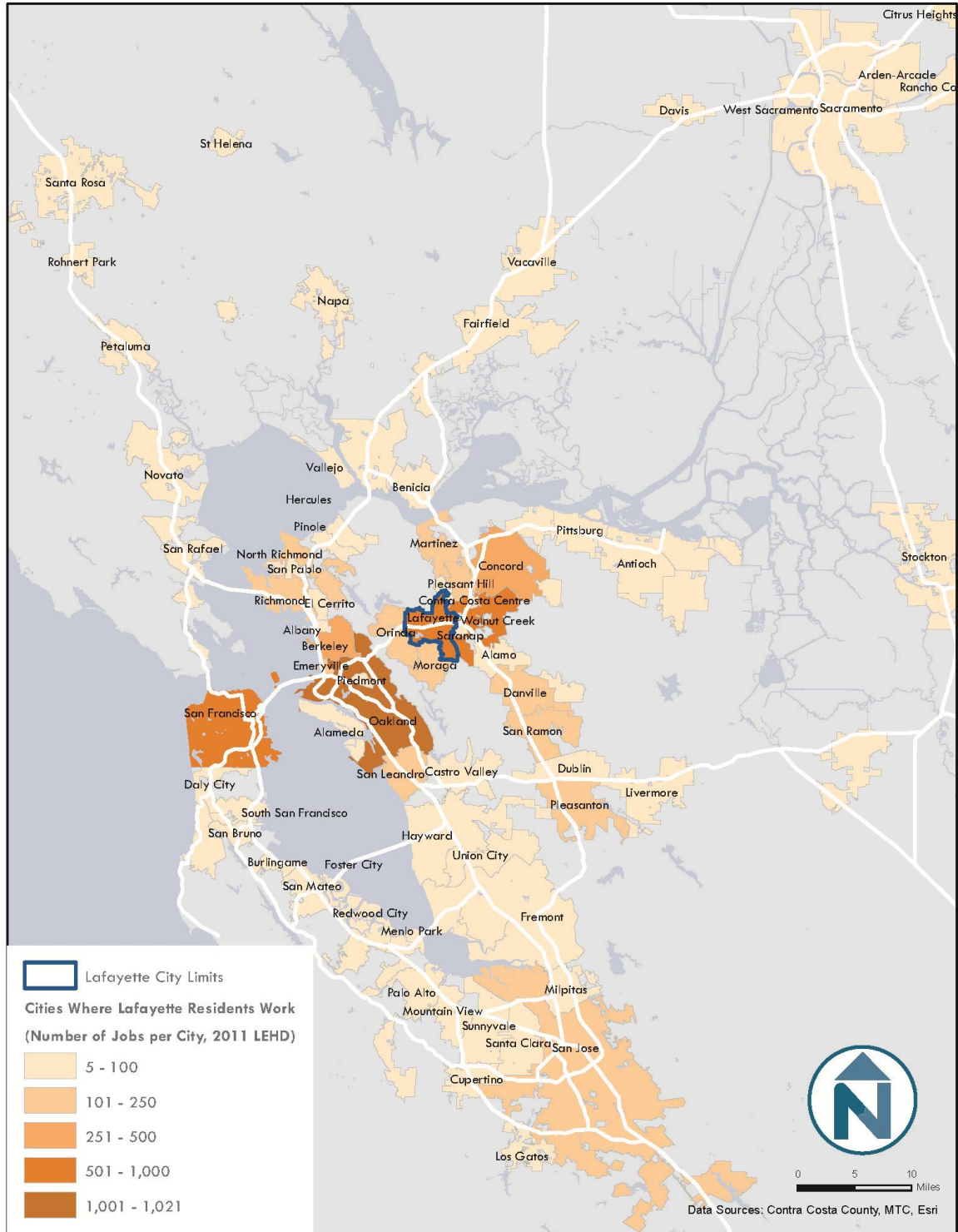
Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Figure 3-6 Regional Employment Destinations (Moraga Residents)



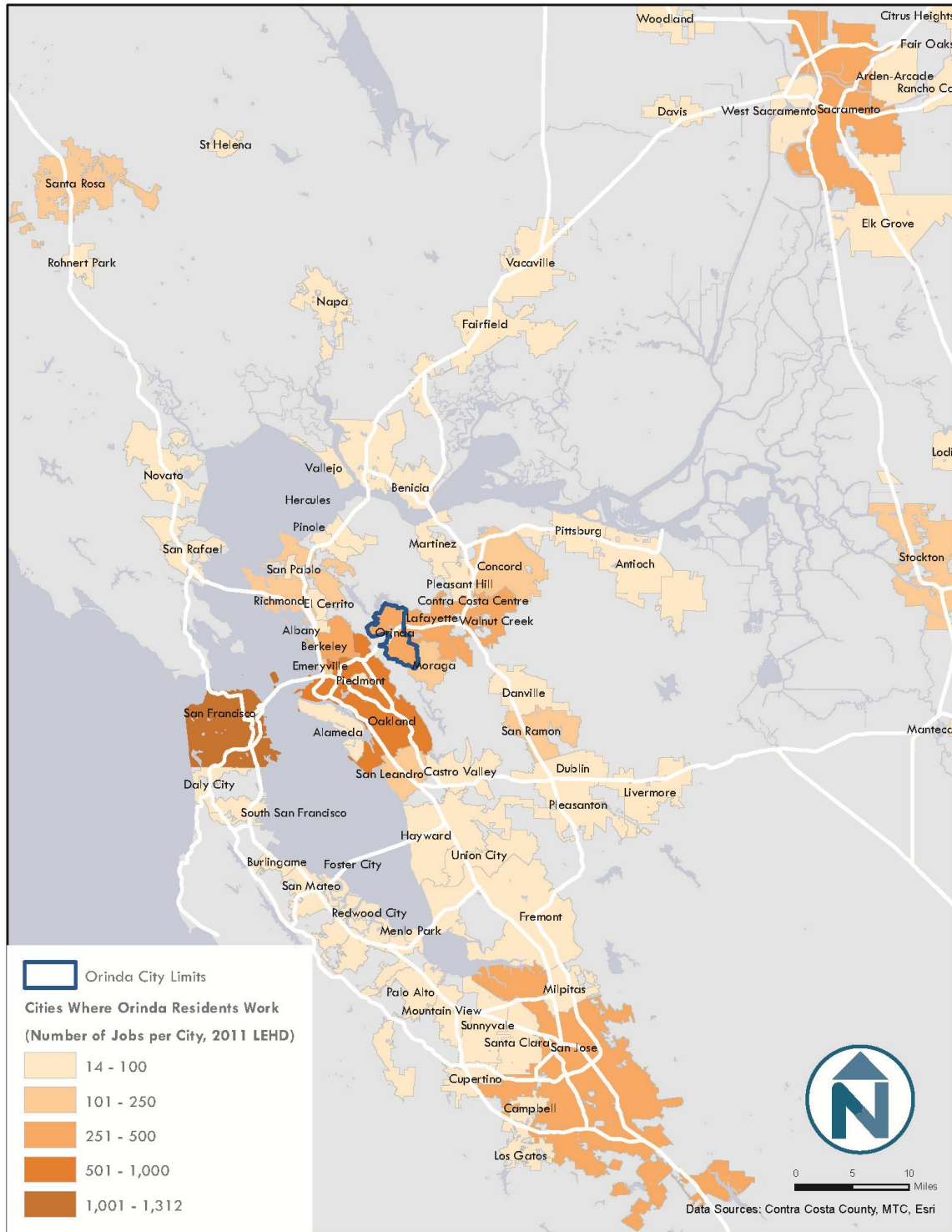
Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Figure 3-7 Regional Employment Destinations (Lafayette Residents)

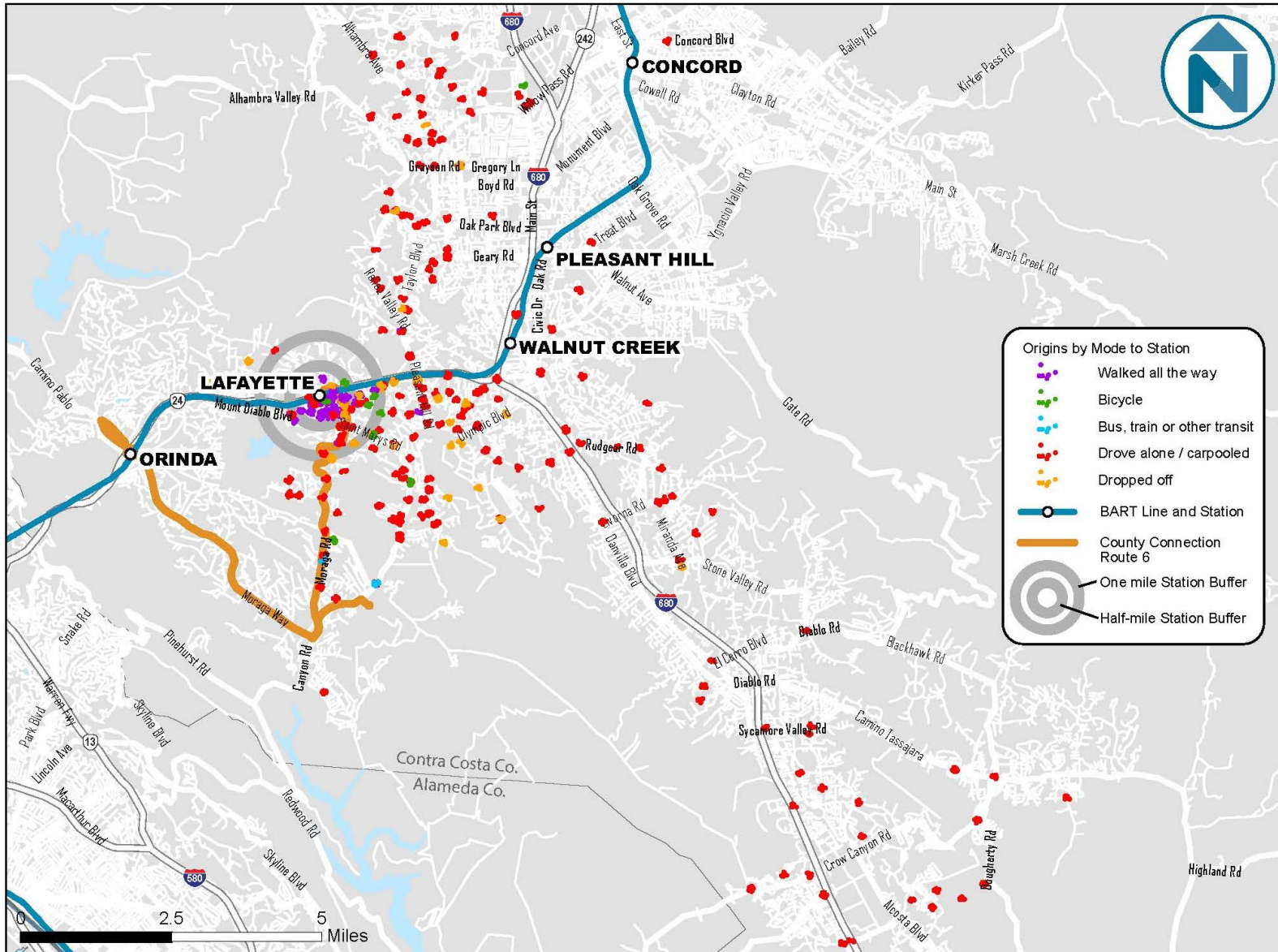


Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Figure 3-8 Regional Employment Destinations (Orinda Residents)



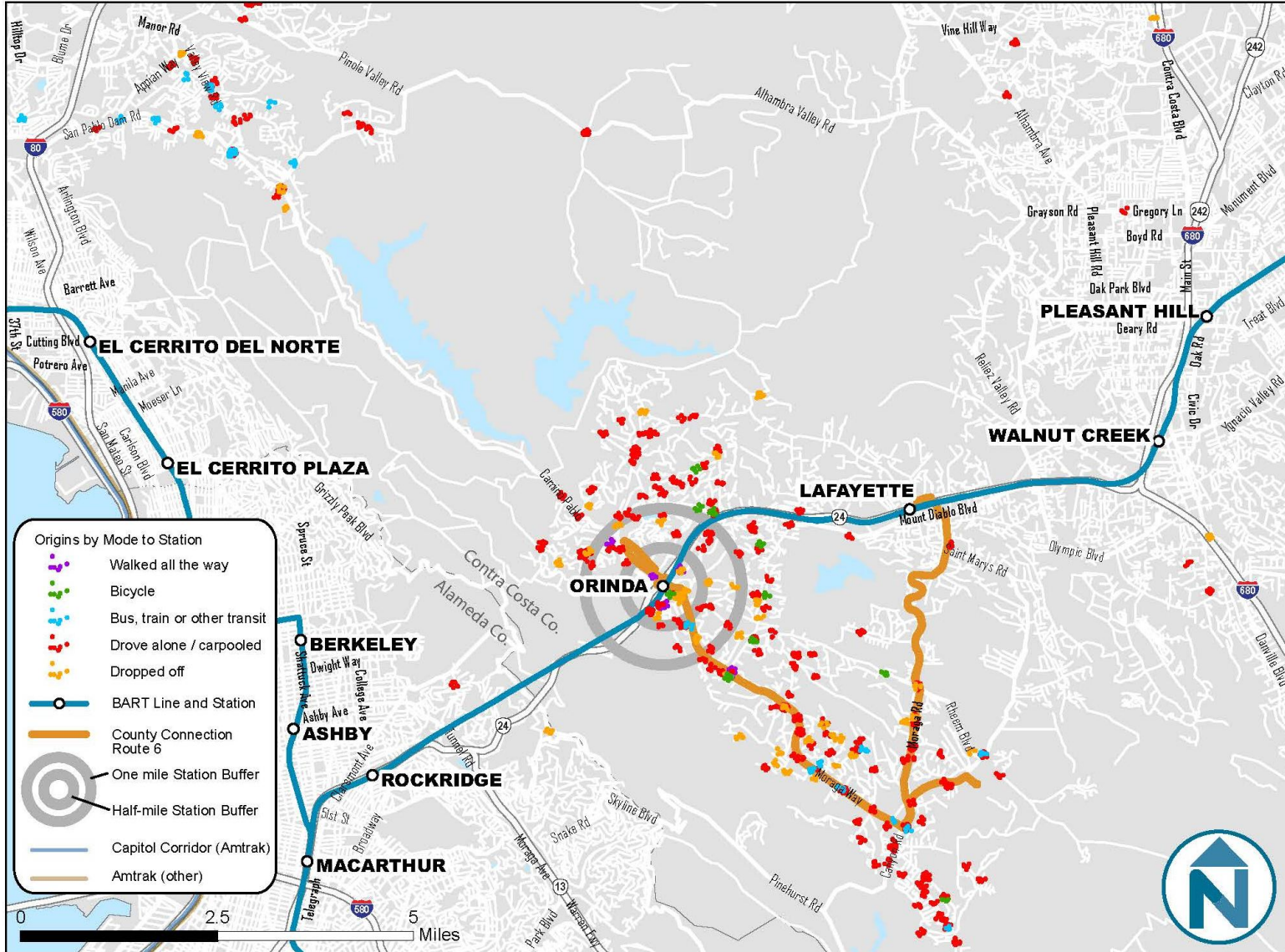
Lamorinda Service Plan – Final Existing Conditions Report
County Connection



Data Sources: ESRI, 2008 BART Station Profile Study (weekday only; data are weighted from survey sample to represent average weekday ridership)

Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Figure 3-10 Home Origins and Mode Choice to BART (Orinda Station)



Data Sources: ESRI, 2008 BART Station Profile Study (weekday only; data are weighted from survey sample to represent average weekday ridership)

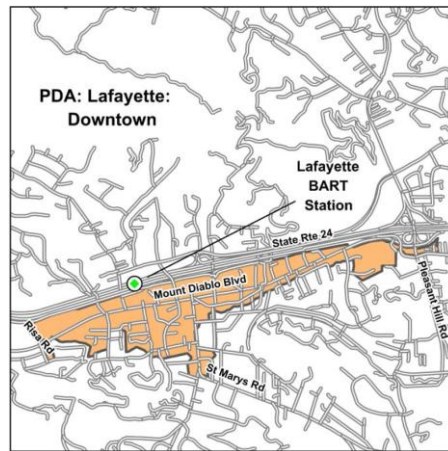
FUTURE DEVELOPMENT AREAS

The preceding information in this chapter largely documents existing information to help identify specific markets that might be served by future transit and transportation services. This section outlines new developments in the study area which should be considered as part of future service options. As part of the Plan Bay Area effort led by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC), several Priority Development Areas (PDAs) have been identified within the study area. PDAs are effectively locations within the region that are locally-identified, infill development opportunity areas and are the most likely for future development within Lamorinda. Contra Costa County has 37 PDAs in total, three of which are located in the study area. Each Lamorinda community has one PDA²² including Downtown Lafayette, Downtown Orinda, and Moraga Center.

Downtown Lafayette

The Downtown Lafayette PDA is bounded to the north by CA-24 and spans the developed length of Mount Diablo Blvd. This corridor is the most developed within the entire study area and is currently served by County Connection Route 25. The Lafayette BART Station is also within walking distance of much of the PDA. Based on PDA planning documents, 900 new housing units (+44%) and 1,480 new jobs (+28%) are slated for this area between 2010 and 2040.

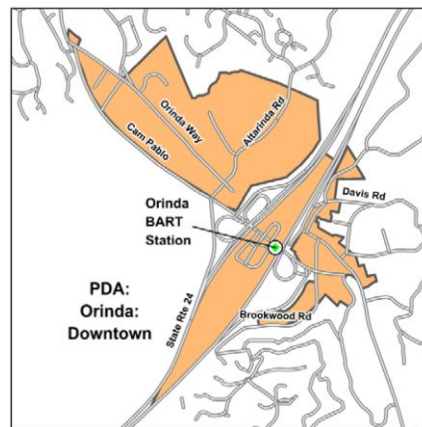
Figure 3-11 Downtown Lafayette PDA



Downtown Orinda

The Downtown Orinda PDA is on both sides of CA-24 and covers both existing commercial districts within Orinda. This PDA encompasses the existing Orinda BART Station and is served by the terminus of Route 6. Between 2010 and 2040, 210 new housing units (+62%) and 760 new jobs (+24%) are slated for this PDA.

Figure 3-12 Downtown Orinda PDA



Moraga Center

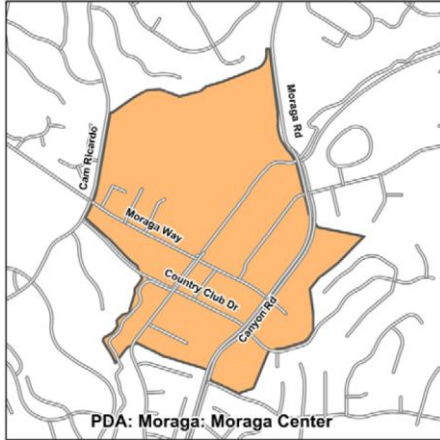
Finally, the Moraga Center PDA includes the existing shopping center located at the junction of Moraga Way and Moraga Road (but not the shopping district at Moraga Road and Rheem Boulevard). This area is currently served by Route 6 and is on the “deviation” portion of the Gael Rail (Route 250).

²² For more information about PDAs and Plan Bay Area, please see OneBayArea.org. Additional information about PDAs in Contra Costa County can be found in the most recent Contra Costa PDA Investment and Growth Strategy Update.

Lamorinda Service Plan – Final Existing Conditions Report
County Connection

Between 2010 and 2040, 340 new housing units (+77%) and 370 new jobs (+32%) are anticipated for this PDA.

Figure 3-13 Moraga Center PDA



4 COMMUNITY INPUT

Due to the auto-orientation of the Lamorinda area, any transit or transit-supportive improvements must be based on a keen awareness of the community's needs and values. As such, numerous members of the community were contacted regarding the transportation services they currently use or observe, and perceptions of transportation challenges. In addition, an online survey was distributed to residents of Lafayette, Moraga, and Orinda to understand their current travel patterns and attitudes towards potential new options.

STAKEHOLDER INTERVIEWS

In October 2014, representatives from the following stakeholder organizations and businesses were contacted:

- Bay Area Rapid Transit District (BART)
- Lafayette Chamber of Commerce
- Lafayette Park Hotel
- Lamorinda School Bus Program
- Lamorinda Spirit Van
- Lamorinda Village
- Members of the County Connection Board of Directors
- Members of the Lamorinda Program Management Committee
- Orinda Seniors Around Town
- Rheem Valley Shopping Center
- St. Mary's College
- Taxi Bleu
- Wendy Smith, Orinda Woods Shuttle Service

Through these interviews, several transportation challenges and opportunities became clear. These are summarized in the list below:

Existing Transportation Alternatives

- Transit is highly constrained by the street network and topography within Lamorinda. Furthermore, expanding service in the area may be cost-prohibitive and challenging since many places do not have adequate sidewalks to walk to a bus stop.
- Current transit is overlooked by many due to long headways and schedules that do not align with BART trains.

- Several privately-operated services (property based and senior-focused) are helping to fill service gaps between their properties, BART, and other customer service needs.

BART Trips

- BART facilitates a significant portion of commute trips from all three cities; however, parking at the Lafayette and Orinda BART stations fill by 7 or 7:30 every morning (this is earlier than the BART predicted time). The cities fear that more BART parking would only exacerbate traffic congestion on their few main roads and adding parking is an expensive investment.
- “First-mile” trips (from home to BART) on County Connection (routes 6 and 25) are uncommon, likely due to the infrequency of the bus service and the distance of many residences from the bus routes.
- Access to BART by biking and walking shows some promise, especially at Lafayette where existing facilities create a comfortable walking and biking environment.
- Different types of parking strategies should be considered such as parking for scooters or motorcycles.

Senior Mobility

- There are several existing services—the Spirit Van, Senior Helpline Services, Orinda Seniors Around Town—to provide trips focused on seniors. However, these services face growing ridership, an aging population of riders and a limited pool of volunteer drivers.
- Demand is growing for longer distance senior trips to bigger cities such as Oakland, Berkeley, and Concord
- Senior transportation needs will continue to grow with senior living facilities such as Eden Housing, Chateau Lafayette, and Merrill Gardens and new (future) senior housing in Lafayette and Orinda (Monteverde Senior Apartments).

Mid-day Trips

- Lunch trips and other errands may not seem to be a substantial factor in the area’s transportation challenges. However, stakeholder indicated that employees’ needs to access destinations during the workday (errands, appointments, shopping) might encourage them to drive to work, even in downtown locations.

Parking

- Employee parking in downtown Lafayette is a challenge—there are no designated lots and some of the existing lots have begun to implement metered parking, which funnels some employees onto on-street parking. According to a recent study, most employees who work in downtown Lafayette come from the east portions of the County (Antioch, Brentwood) where BART is not an option.
- In the future, a downtown shuttle has been discussed that could help ease parking issues and connect people who are just outside of the downtown core.

School Trips

- Parent dropoff and student drivers (high school) still cause significant traffic congestion in the morning peak, particularly at the study area’s high schools. There may be an opportunity to change or stagger school start times to mitigate some of this effect.
- Many children are walking and biking to school, especially Lafayette Elementary where there is a nearby trail. However, some schools are not served by the bus system (e.g. Happy Valley Elementary) as there is not a significant traffic congestion problem to justify routes.

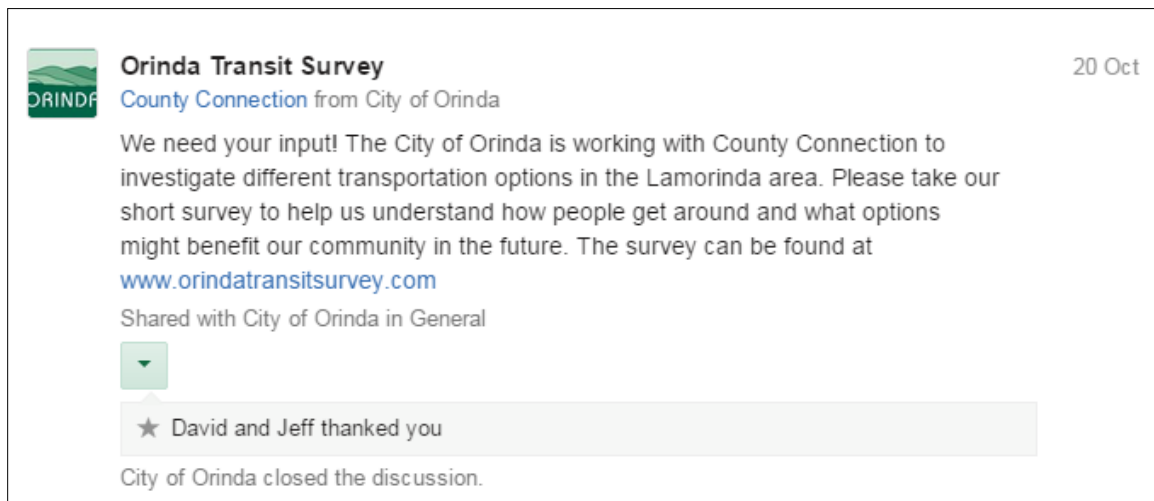
While there are challenges, the stakeholder interviews confirmed that mobility improvements are not only possible but also that the foundation of a mobility network is already in place and key community organizations and officials are committed to making it work for the evolving needs of the Lamorinda community.

RESIDENT ONLINE SURVEY

Between October 21st and the end of November 2014, an online survey was open to residents of Lafayette, Moraga, and Orinda. A new distribution method—Nextdoor—was used to increase resident response and ensure that residents were the primary respondents.

Nextdoor is an online neighborhood-based social network. Residents of specific neighborhoods can log in, post information, and respond to others’ comments readable only by other people who live in the same neighborhood. In each neighborhood of each of the three cities, a post was made by an official city representative announcing the survey and soliciting resident feedback. To encourage constructive feedback, no comments were allowed on the Nextdoor post itself; all feedback came through the online survey directly. An example Nextdoor post is included below

Figure 4-1 Orinda Survey Announcement on Nextdoor



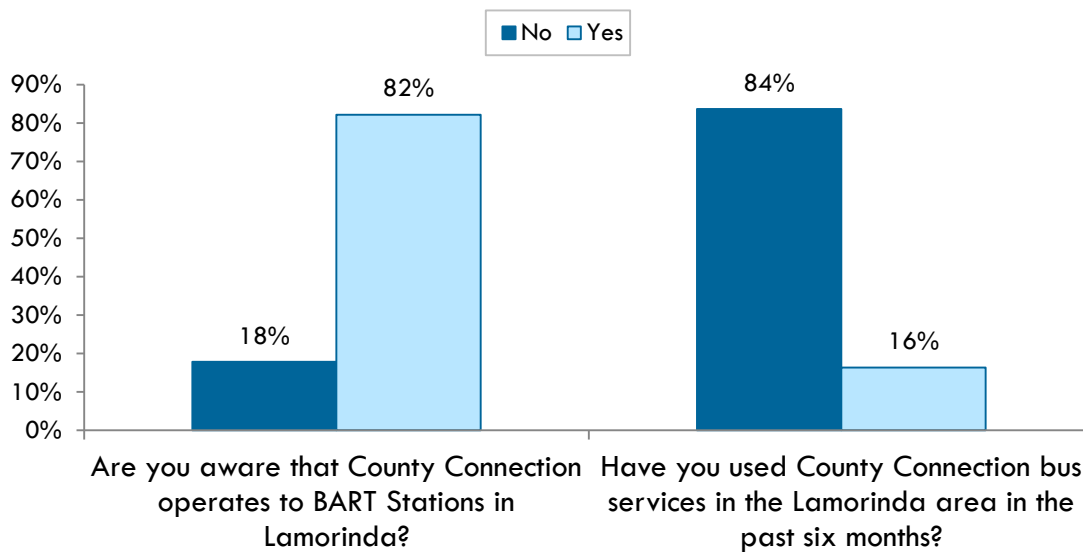
Relative to other outreach efforts in a similar context, the response was extremely high. A total of 713 responses were received, broken out by city as follows:

- Lafayette: 338 responses (4,137 total Nextdoor members)
- Orinda: 173 responses (4,933 total Nextdoor members)
- Moraga: 202 responses (3,794 total Nextdoor members)

The survey included 18 questions covering current travel behavior (frequency of trips and mode of transportation), common destinations, awareness and use of County Connection services, motivations for using public transit and barriers against it, preferences for new services, demographic information, and an open feedback question. High-level feedback gathered from the survey is summarized in the following section. A full analysis of the survey responses can be found in Appendix B.

Amongst respondents in Lamorinda, it was found that the majority are aware of County Connection bus services and its service to BART station in Orinda and Lafayette (82%). However, of those respondents, nearly 85% stated that they have not used County Connection within the last six months (Figure 4-2).

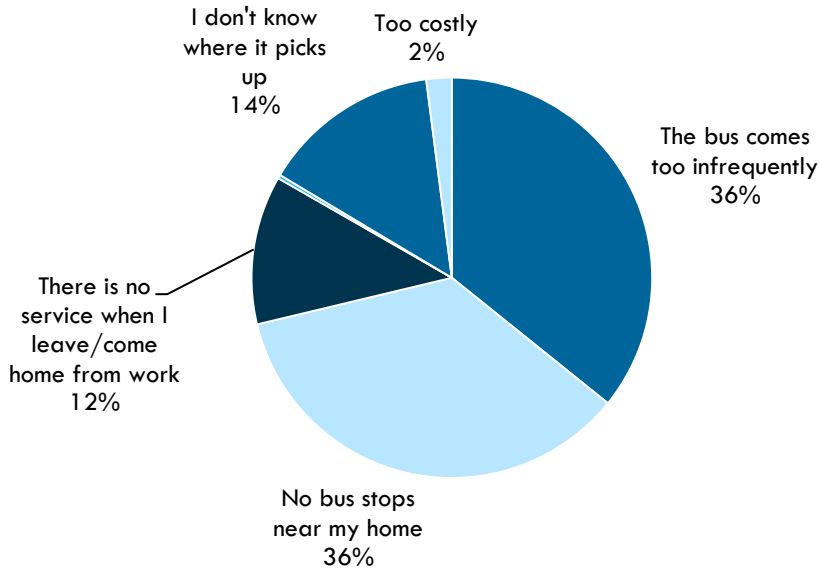
Figure 4-2 Awareness vs. Use of County Connection Service to BART among Lafayette Residents



N=645

As a follow-up question, the survey asked for reasons why some choose not to use County Connection. When asked “What deters you from using County Connection,” the majority stated that (1) either the bus did not come near their home (which is consistent with the land patterns in Lamorinda) or (2) bus schedules were not frequent enough (this was further validated by written responses at the end of the survey). Only 2% felt that the cost deterred them from using the service and 0% stated that County Connection felt unsafe.

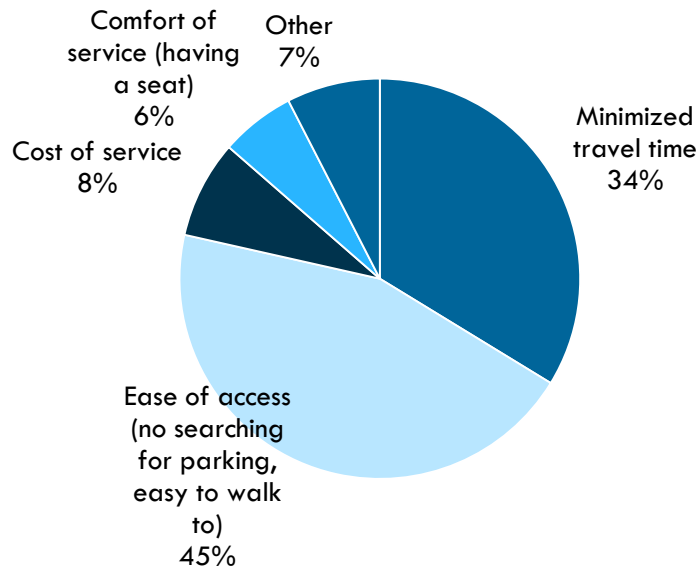
Figure 4-3 When asked “What Deters You From Using County Connection?”



N=683

In terms of general transportation preferences, survey respondents prioritized convenience/ease of access (45%) and minimized travel time (34%) (Figure 4-4).

Figure 4-4 Preferences in Transportation Priorities

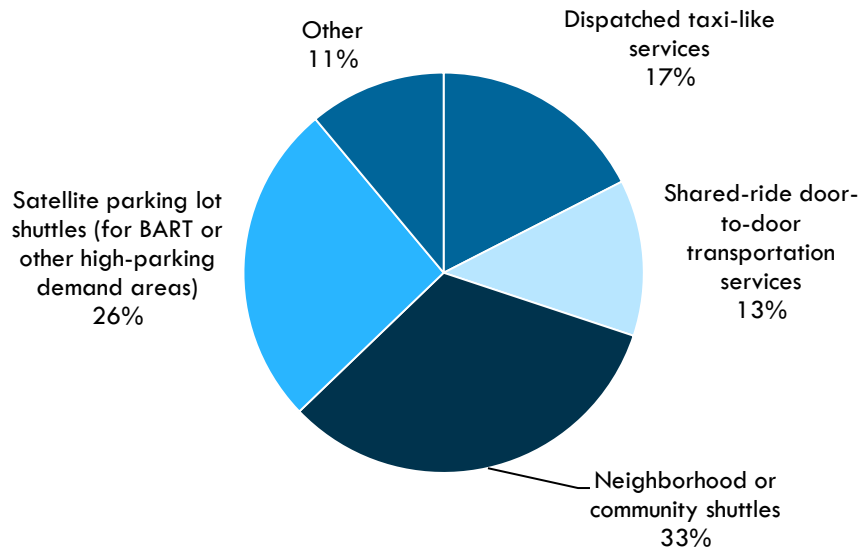


N=596

Finally, survey respondents were asked about their interests in other alternatives for transportation in the Lamorinda area. The provided options were specifically selected as being different than what is offered today. Based on survey responses, nearly 60% were interested in some type of public transportation shuttle option such as satellite parking for BART or neighborhood/community circulator shuttles. 30% were interested in some type of door-to-door

service such as dispatched taxi services (traditional taxis or ridesourcing types of services) or shared ride vehicles. The remaining 11% provided a range of responses including dedicated facilities to encourage carpooling, scooters and improving sidewalks within the study area.

Figure 4-5 Interest in Future Alternative Transportation Options



Similarities between Communities

There were several common themes among Lamorinda residents' travel patterns, preferences, and family characteristics. Respondents represent an overwhelmingly high-income group, with the majority of households earning more than \$150,000 annually. They are also skewed towards older age groups, with more than a quarter of respondents being over age 65 in Lafayette and Moraga and more than three-quarters over age 41 in all three cities.

Each city reported an average of about six one-way work-related trips per week, suggesting a propensity for telecommuting among the Lamorinda community and/or the presence of retirees or people who do not work. In addition, individuals reported six one-way shopping trips per week.

Additionally, given the demographics of the respondents, there were a high number of school-related trips reported, suggesting that parents are also involved in their children's school trips. This is confirmed by the reported drive-alone and carpool use for school-related trips. Two of the most common other trip types mentioned are gym or recreation trips and trips for socializing or entertainment.

Differences between Communities

Despite the similarities among Lamorinda residents' survey responses, there are a few points on which they differ. Moraga's survey received the fewest responses from people who typically do not make work-related trips (about 15%). About 30% of residents in both Moraga and Orinda indicated they use BART as their primary commute mode, whereas in Lafayette only 19% do. Lafayette was also the most likely to have residents who do not typically make work trips (about 28%).

The most common destination reported by Lafayette residents is clearly Downtown Lafayette/Mount Diablo Boulevard commercial area (either daily or multiple times per week). For respondents from Orinda, the most common daily or multiple times per week destination is Downtown Orinda/Orinda Theater Square. In Moraga, it is the Rheem Valley or Moraga Shopping Center. The BART stations are the most likely destinations to be visited *daily* in both Orinda and Moraga (the Orinda Station), but in Lafayette it is a much less common daily destination.

General Comments

By and large, respondents had constructive and insightful feedback in the open comments section. Many expressed a desire to improve mobility options for seniors (both from people with current as well as future needs). Another common comment emphasized the lack of parking availability at the BART stations and for employees in downtown Lafayette and a frustration with a lack of viable driving alternatives. There was some interest in solutions to better facilitate carpools and ridesharing, especially for commute trips to San Francisco. Lastly, school-based trips were emphasized for their contribution to area congestion, but also because of the perceived need to increase options for children going to and from schools in the morning and mid-day. The need for improved pedestrian and bicyclist safety was emphasized.

Finally, a few unique suggestions were made by residents, including increasing motorcycle and scooter parking at BART stations as a way to increase parking availability; flex route transit service, especially along Pleasant Hill Boulevard and Moraga Way; reducing the size of County Connection buses and increasing their frequency; and, utilizing Nextdoor as a tool to facilitate rideshare matching. A full list of comments can be found in Appendix B.

EXISTING TRANSIT RIDERS

In 2012, an on-board survey was conducted for the entire County Connection service. Relevant responses from the 53 Route 6 riders are highlighted below..

- Approximately 70% of riders were traveling to/from home work, 10% were college or university students
- 87% of riders walked to catch the bus, their average walk time was eight minutes. 9% were dropped off and 1% bicycled.
- Ridership generally follows typical general commuter demand (morning peak approximately at 7 a.m. and evening peaks around 6 p.m.). This demand curve is shown in Figure 4-6.
- Only 2% are using a monthly pass product and 4% are using a “punch pass” to purchase their fares
- If County Connection service was not available, 15% would not have made the trip, 57% would have driven alone or would have gotten a ride and 13% would have taken a taxi.
- Among service improvements, 57% desire more frequent service and 30% desire later evening service. This is highlighted below in Figure 4-7.
- 43% of riders do not own a drivers license and 17% do not have access to a vehicle
- Approximately 30% of riders were 23 or younger, 30% were between 24 and 43, 30% were between 43 and 63
- 67% made greater than \$35,000 per year per household

Lamorinda Service Plan – Final Existing Conditions Report
County Connection

- 85% of respondents had access to the internet via a smartphone, tablet or computer.

Figure 4-6 Times of Leaving and Returning to Home for Route 6 Riders

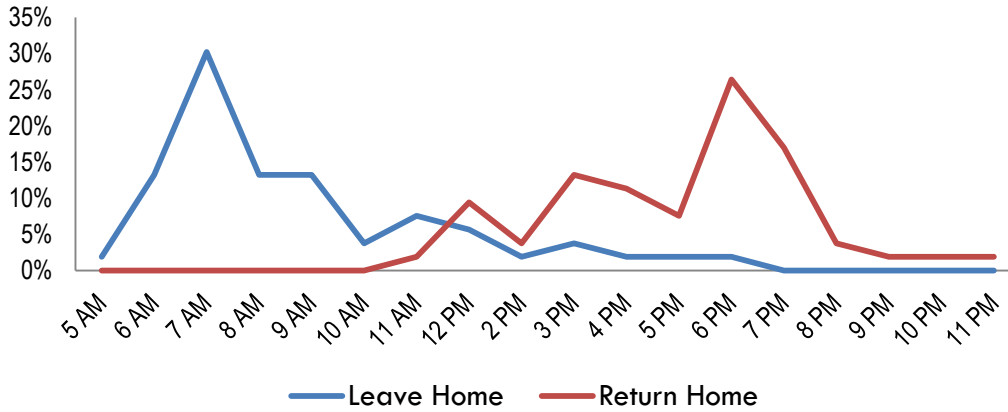
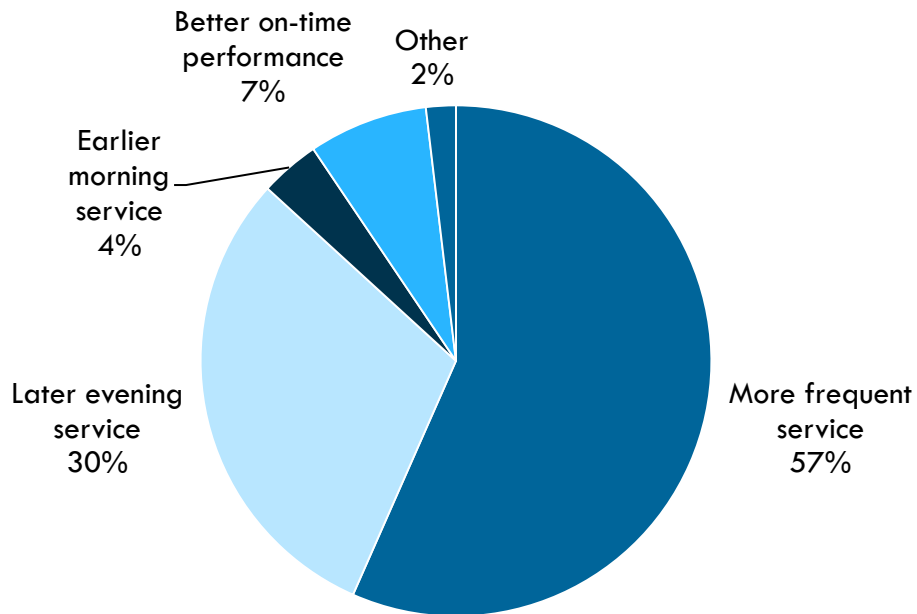


Figure 4-7 Route 6 Future Rider Preferences



5 NEEDS ASSESSMENT AND OPPORTUNITIES

Based on the information captured in the preceding chapters and recent planning efforts, Chapter 5 draws high-level conclusions on potential service needs and opportunities in the Lamorinda service area. From the perspective of transportation options, the study area's combination of physical constraints, development patterns and demographic trends present unique challenges in terms of traditional transportation options. As the preceding chapters have described, numerous existing transportation programs are already in place to try to meet numerous transportation needs from students to seniors, commuters to customer shopping trips. While population growth in Lamorinda itself is expected to be modest relative to other portions of the Bay Area, its growing senior population will place continued pressure on a relatively limited number of senior mobility options. Additionally, limited access options to BART are already seen as a barrier to many within the study area.

NEEDS ASSESSMENT

The following transportation needs are considered to be the highest priority to be addressed in the next phase of this study:

- **Commuter Alternatives:** One of the highlighted issues is the lack of access alternatives to BART due to constrained parking. Since BART is unlikely to expand its parking capacity in Orinda or Lafayette, other transportation policies or options must be explored. In addition, commute patterns and options themselves have changed over the past several decades. Thus, commuter options beyond BART should be explored as not all commuter trip patterns are met by existing regional transit. Potential concepts that could help meet these needs are introduced in the following section.
- **Senior Mobility Choices:** Several senior mobility programs have been highlighted as part of this report; however it is unclear if the piecemeal nature of different services can meet the pace of growth in senior transportation demand within the Lamorinda area. Furthermore, it is not clear whether current senior transportation service options can provide the level of flexibility and on-demand independence that many aging adults will prefer.
- **School Trips:** The combination of the Lamorinda School Bus Program and Student Pass program does an excellent job of reducing the number of unnecessary vehicle trips on the road today. However, traffic congestion around schools during bell times (morning and afternoon) still have been described as a community issue that can be improved.
- **Community Trips:** Much of the focus thus far has been on inter-city and regional trips. However, existing businesses, commerce, and services within each the Lamorinda area creates a need for intra-Lamorinda trips. While Lafayette, Moraga, and Orinda are

relatively small, there are numerous trips that require a vehicle because they are outside of a simple or safe walk. As validated by the community survey, the next phase of the study will focus on trips within each of the communities and potential service options.

POTENTIAL OPPORTUNITIES

At this phase of the project, a broad range of options should remain on the table for further investigation. However, the project team has already begun to brainstorm numerous concepts and service delivery models that might be a suitable fit for the Lamorinda area. For the time being, these concepts are preliminary and will be discussed before further consideration.

Commuter Alternatives

- Increase frequency of existing County Connection services in the Lamorinda area. Ridership has increased in the last four years and may further benefit from frequency improvements.
- Develop BART feeder shuttles or van services.
 - These could be useful in conjunction with satellite parking, if provided, as well as for home-based trips to BART. For home-based trips, assess the demand for a vanpool subscription-type service, whereby residents commuting to BART can sign up for a monthly vanpool to BART.
 - Examine the feasibility of sharing vehicles with Spirit Van to support this service.
- Develop a demand-response zone-based service to cover the Lamorinda area. This service could be modeled after the Denver Regional Transportation District Call-n-Ride service.
- Consider a marketing and informational campaign to promote the use of carpooling to/from the Lamorinda area for longer-distance trips (such as to San Francisco, Alameda County, and Santa Clara County).
- Investigate the feasibility of employing mobile phone-based on-demand options including ridesharing models (e.g. Carma/CarmaHop, Commutr, HellaRides, MetroBee).

Senior Mobility Choices

- Consider the creation of community bus or “service route” type options to address senior needs. This service model is intended to increase residents’ proximity to service availability. Because this approach increases travel time, it is most appropriate for individuals who value proximity over speed.
- Support ongoing efforts for mobility management in the Lamorinda area, which includes vehicle sharing (e.g. Spirit Van, Link, and Senior Helpline Services).
- Investigate the feasibility of employing peer-to-peer transportation models for seniors in the Lamorinda area (e.g. Lift Hero).
- Examine the applicability of a deviated fixed route service for ADA-certified passengers and/or seniors. The San Joaquin Regional Transit District has a similar service branded as “The Hopper,” which is an ADA-focused service.
- Examine how the changing market for senior housing is affecting senior transportation needs in the Lamorinda area. There is a new emphasis on solutions that enable aging in place and increasing options for “healthcare in the home.”

School Trips

- Consider staggering school start times to reduce congestion near schools in the morning and assess the ability of existing school transportation services (the Lamorinda School Bus program and County Connection School Tripper routes) to serve schools with staggered times.
- Assess the feasibility of increasing funding for the Lamorinda School Bus program to increase service availability and/or reduce costs to families.
- Investigate the feasibility of employing mobile phone-based on-demand options for school-based trips (e.g. Shuddle).

Community Trips

- Assess the need for a lunchtime circulator in downtown Lafayette and assess the feasibility of a business partnership to fund such a service.
- Investigate the feasibility of employing mobile phone-based on-demand options including Transport Network Companies (e.g. Uber, Lyft, Sidecar) and taxi-based services (e.g. Flywheel, Curb) for community-based trips.