

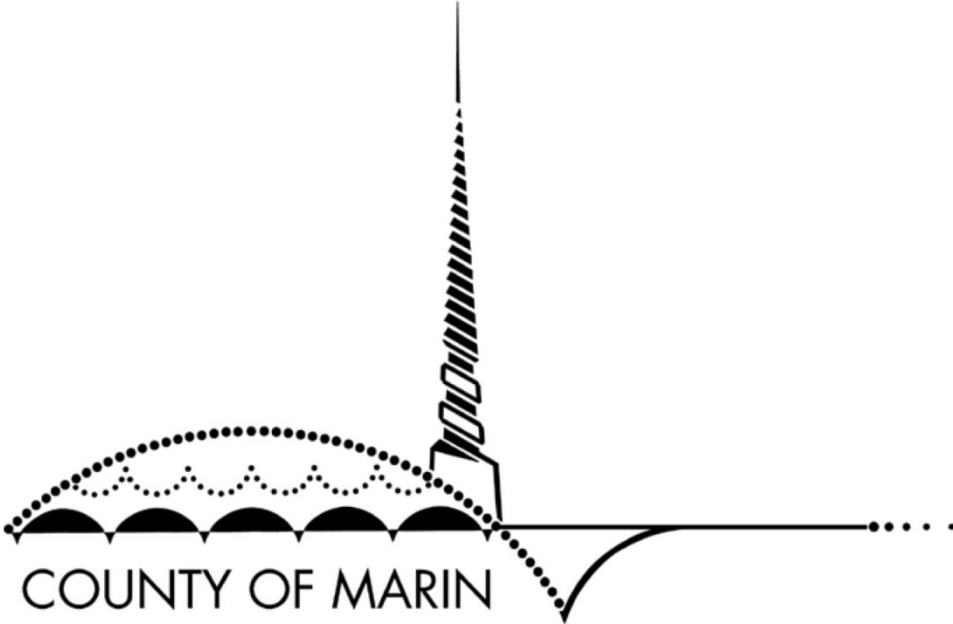
2018–2019 MARIN COUNTY CIVIL GRAND JURY

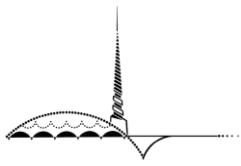
SMART

First Mile/Last Mile Options

Report Date: April 25, 2019

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SMART – First Mile/Last Mile Options

SUMMARY

Sonoma Marin Area Rail Transit (SMART) has been operational since August 2017, providing passenger rail service between the Sonoma County Airport Station north of Santa Rosa and downtown San Rafael. Expansion of service to Larkspur Landing as well as an additional stop in downtown Novato is scheduled to open in late 2019. One of the main objectives of SMART is to provide a transit alternative for commuters between Sonoma and Marin. Whether it will prove to be a boon to Marin and Sonoma Counties' livability, will in part depend on the convenience and feasibility of east-west and north-south connectivity to/from the stations, often referred to as "first mile - last mile."

The Marin County Civil Grand Jury issued two earlier reports on SMART operations prior to the implementation of train service. Now that SMART is operational, the current Grand Jury decided to focus on the connectivity question as it relates to SMART stations located in Marin County. While the Grand Jury looked at information related to SMART stations located in Sonoma and Marin Counties, the scope of this report is limited to Marin SMART stations.

The Grand Jury interviewed transit agency and SMART representatives as well as independent consultants; reviewed management reports; researched the SMART website; and talked with SMART passengers.

Measure Q, the voter initiative that established a sales tax to fund SMART operations, requires SMART to publish a strategic plan update every five years. With previous plans published in 2009 and 2014, the next update is due in 2019. SMART management has assured the Grand Jury that the 2019 update is under development and scheduled to be released in the fall of 2019.

All possibilities to enhance and improve first and last mile connections should be examined, including expansion of Marin Connect to include additional areas outside of the North San Rafael pilot zone. The feasibility of using autonomous shuttles should be considered since the technology is available and is currently deployed in a number of pilot projects.

Given that SMART has been operational for less than two years, they and their partner transit agencies have done a commendable job in developing numerous modes for traveling to and from SMART stations. The expectation is that new options for first and last mile connections will be implemented as the system matures.

BACKGROUND

Marin has never had a comprehensive public transit system because its population is concentrated along its major north-south artery, U.S. 101, and its primary east-west corridor, Sir Francis Drake Boulevard. Prior to 2005, the main source of public transit was Golden Gate Transit (GGT) which ran buses within Marin and to San Francisco with ferry service from Larkspur to the SF Ferry Terminal added in August 1970. In 2005, Marin Transit took over the intra-county bus service. With the growth of Santa Rosa and Sonoma County over the past 30+ years, traffic has increased tremendously between Marin and Sonoma, but public transit between the two counties has not kept pace with this growth. Sonoma and Marin counties added a new public transit option, SMART, which started carrying passengers in August 2017. The Grand Jury decided to investigate how passengers connect to and from SMART stations within Marin County now that it has completed its first year of operation.



SMART Train at the San Rafael Station

METHODOLOGY

The Grand Jury:

- Interviewed transportation experts from Marin agencies, representatives of major employers in the County, as well as independent consultants.
- Reviewed SMART’s website for basic operating information.
- Obtained SMART’s ridership reports and surveys.
- Rode SMART round trip between San Rafael and Santa Rosa.
- Studied prior Grand Jury reports on the development and implementation of SMART as well as documentation from other transportation sources.
- Conducted informal “interviews” with SMART riders.
- Observed passengers making connections at several stations.

DISCUSSION

SMART’s First Year of Operation

Currently SMART has ten stations between downtown San Rafael and a station one mile from the Sonoma County Airport. Construction is underway to expand the SMART system to Larkspur Landing as well as a new downtown stop in Novato, with passenger operation projected to begin by the end of 2019. Additionally, construction is slated to begin on the extension to Windsor shortly thereafter. Eventually, SMART plans to extend service to Healdsburg and Cloverdale in northern Sonoma County when funds become available. In addition, SMART and other regional transit agencies are preparing a study, due in 2019, of the feasibility of utilizing the existing freight line partially paralleling Highway 37 as a passenger train route. Part of this track is owned by SMART. The proposal is for SMART to ultimately connect to Amtrak in the East Bay.

Fares are multi-tiered depending on distance traveled (calibrated by zones), with special rates for youth, seniors, and the disabled. There are also discounted monthly passes and pre-purchased Clipper® cards available to all passengers. Additionally, participating employers can purchase Eco-Passes at a significant discount. They can then pass that discount on to employees, who have the added advantage of paying with pre-tax dollars. See the SMART Fact Sheet on its Eco-Pass in Appendix A for details. SMART reports that Marin businesses have been slow to embrace the use of the Eco-Passes, with only about two dozen employers doing so as of January 2019; this may be due in part to the small number of medium to large size businesses located in the county.

SMART data indicates that more than half of its revenue comes from Clipper single fare riders followed by SMART 31 day discounted monthly passes. SMART has also created a mobile app which many riders are now using. According to SMART, 16% of fare revenue for their first 12 months of operation came from passengers using the mobile app. During its field trip, the Grand

Jury used both the Clipper card and the mobile app and found the app was quite convenient. The app is available online.¹

Data from SMART shows that their average monthly passenger load is approximately 63,000 riders; SMART carried its one-millionth passenger on January 17th of this year. SMART currently has capacity issues during commute hours, often resulting in standing room only, which should be ameliorated when four additional rail cars will be added in the spring of 2019.

Issues Investigated

Key questions to increasing ridership are how do passengers travel to the various stations to start their trip and how do they get to their final destination after they disembark at a SMART station? SMART is attempting to address these questions. What SMART does know is that many passengers live or work at varying distances -- sometimes considerable -- east and west as well as north and south of SMART stations. A recent ridership survey is attached as Appendix B. In its investigation, the Grand Jury found that various modes of connecting to SMART stations are in use or are under consideration. These include walking, driving where parking is available, being dropped off by others, biking and scooters -- motorized and non-motorized, taking a bus or shuttle, and ridesharing in various forms.

Connection Options

In addition to Marin Transit buses, there are several specific “first mile - last mile” options. The most important ones are illustrated below.

¹ [Apple App Store](#), [Google Play Store](#), and [SMART Website](#). Accessed on March 19, 2019.

Modes of First/Last Mile Transit to and from SMART



Marin Connect

Marin Connect is an on-demand, 100% accessible, nine passenger shared bus service operated as a pilot program by Marin Transit. It currently serves northern San Rafael, which includes the Marin Civic Center SMART station. The app for this service is available on-line.² The area served by this pilot program is shown in Appendix C.

A new connection issue will be raised once SMART’s Larkspur terminal is completed. Though SMART is planning on 35 parking spaces plus 4 handicapped spaces at its Larkspur terminal, sufficient parking may be a problem when the station is open. Because there is approximately a quarter mile between the ferry and the SMART terminal, a public transit connection between the two could prove pivotal to increasing ridership on both systems. With the Larkspur SMART station’s lack of substantial on-site parking, the Marin Connect program might become even more important for this new SMART station.



A Marin Connect shuttle stop adjacent to the Civic Center Station

² [Marin Transit/Marin Transit Connect](#). *Marin Transit*. Accessed 19 Mar. 2019.

Hamilton Shuttle

For those passengers living or working in the Hamilton area, there is a free shuttle operated by Whistlestop, funded by the Hamilton Field of Marin Owners Association. It operates during commute hours, with stops at the Hamilton station from 5:50 to 8:20 A.M. and from 4:00 to 7:00 P.M. for the evening commute. See Appendix D for the shuttle’s route.



Hamilton Shuttle at the Novato Hamilton SMART Station

Novato Dial-a-ride

Novato residents have an alternative for transit to and from the San Marin and Hamilton stations, as well as Novato Downtown (once it is operational), called Novato Dial-A-Ride, which can provide curb-to-curb pick-up and drop-off service. This service is available to anyone within Novato (see Appendix E for the service area). To use the service, the passenger must request a ride by calling the scheduling office at 415-892-7899, preferably at least a day in advance; a same day ride request runs the risk that a seat will not be available.

Lyft

The Transportation Authority of Marin (TAM) has partnered with Lyft in a program called “GetSmart 17”. This allows the passenger to obtain up to a \$5/ride subsidy to and from SMART stations in Marin County.³ This program has proven to be extremely popular as it has gone from an initial use by only 60 in its first month of operation in September 2017 to over 1300 rides per month as of September 2018, the last date data is available. Other TAM data shows that approximately 65% of those who used this program had their origin/destination within 4 miles of a SMART station.



Banner Promoting Lyft Credit

Zipcar

For those who want the flexibility of driving themselves to their final destination, Zipcar offers another alternative. Zipcar is a car-sharing service that allows the member to rent a car by the hour or by the day and then return the car to its point of origin. The driver applies online and receives a membership card in the mail. A car can then be reserved using the Zipcar app. Two Zipcars are currently available at the San Rafael SMART station.

Autonomous Vehicles

Another possibility to be examined in the future is the use of autonomous vehicles. In June 2018, Mcity, a University of Michigan public-private partnership, launched the first autonomous shuttle in the United States.⁴ Similar projects are under consideration in the Bay Area. In Marin, such possibilities could include a shuttle between the SMART

³ [“TAM Partners with Lyft and Whistlestop on a \\$5-discount for Lyft to/from SMART Stations in Marin”](#). *Transportation Authority of Marin*. Accessed 19 Mar. 2019.

⁴ [Mcity Driverless Shuttle](#). *University of Michigan*. Accessed 19 Mar. 2019.

terminus and the Larkspur Ferry terminal. Other possibilities could include a loop around Hamilton to the SMART station. In addition, perhaps a circuit through Novato that ends at the downtown Novato SMART station could be developed.

Biking

Biking to and from a SMART station has proven to be a very popular option. SMART has now carried its 100,000th bicyclist as of March 14th, 2019.⁵ While each two-car SMART train has space for 24 bicycles, a potential problem that comes with this popularity, as noted by SMART management, is that bike racks on many trains are usually filled quickly within the first few stations. In a few instances, bike riders have been turned away because there was no more room on the cars for the bikes. However, each SMART station has ten U-racks for bicycles and SMART has installed 34 electronic lockers, accommodating 68 bicycles systemwide. Each station has a minimum of four locker parking spaces and efforts are being implemented to ensure that any new stations will also have electronic lockers, as space allows. According to SMART, these lockers are rarely used, perhaps because those who bike to a SMART station also use their bikes to get to their final destination. SMART is also exploring partnerships to provide bike sharing near some of its stations.⁶

Transit Subsidies

The Grand Jury investigated employer subsidies that encourage employees to take some form of public/shared services transportation. Several of Marin’s largest employers offer a variety of programs. For example, any Kaiser employee that uses public transit three times per week or any combination totaling 12 rides per month receives a monthly subsidy of \$60. Kaiser also has an arrangement with Marin Connect to provide free shuttle service for any employee riding to and from SMART stations and between Kaiser facilities. Marin Connect is also available to the general public for a fee.

Bank of Marin subsidizes any employee up to \$50/month in a commuter benefit account, which is a pre-tax benefit. It also provides Uber subsidies for employees going to and from SMART stations and bank branches.

Similarly, the County of Marin provides a program called “Ride Green” for its employees. The county offers numerous transportation benefits for employees through this program, including several for riders of SMART. Employees can ride Marin Connect shuttles to and from county facilities within the Connect service area with fees currently covered by the county. The Connect app must be downloaded for this service. They can also use the Lyft Line app for a \$5 discount. Additionally, by registering through the Employee Benefits “RideGreen” portal, employees can

⁵ [“Smart To Surpass The 100,000-cyclist Mark.”](#) SMART Website. *Sonoma Marin Area Rail Transit*. Accessed 14 Mar. 2019.

⁶ [“SMART exploring bike sharing partnerships.”](#) SMART Website. *Sonoma Marin Area Rail Transit*. Accessed 14 Mar. 2019.

obtain SMART Eco-Passes by purchasing a Clipper Card using pre-tax dollars and receive up to \$40/month in transit matching benefits.

FINDINGS

- F1. An important key to the success of SMART will be the availability of economical, fast and convenient transit connectivity to and from the stations since many passengers do not live or work in areas close to these stops.
- F2. There are numerous transportation modes to connect with SMART stations. These include: walking, biking, electric bikes and scooters, cars, ride sharing, Lyft, Uber, traditional taxis, group vans, standard sized as well as smaller buses, including shuttles such as Marin Connect, which can be called as needed. In the future, autonomous shuttles and other vehicles will be an option.
- F3. Transportation Authority of Marin in conjunction with Marin Transit, are the agencies charged with fostering public transit connectivity with SMART in Marin.
- F4. Comprehensive surveys of customer riding patterns are extremely useful to the determination of which modes to focus on and put resources into, but the ultimate determination will be driven by customer preferences over the next few years.
- F5. The distance between the SMART Larkspur terminal and the ferry terminal may act as a barrier that could adversely impact SMART ridership since currently there are no known plans for public transit between the two terminals.
- F6. The SMART plan calls for limited parking for passengers at the Larkspur station. This could be an obstacle to SMART ridership northbound.
- F7. There are railroad tracks owned by SMART going east out of southern Novato currently used only for freight. An engineering study is currently underway, due late spring of 2019, to determine the feasibility of extending SMART to Amtrak in the East Bay.

COMMENDATION

In its first year, SMART and the other transit agencies have done a commendable job in developing first and last mile connections to SMART stations. This report attempts to provide a comprehensive guide to the various connection options. To further encourage ridership on SMART, it also makes recommendations to enhance the effectiveness of the connections.

RECOMMENDATIONS

- R1. Transportation Authority of Marin and Marin Transit should conduct surveys and pertinent research, using the criteria of convenience, cost, and accessibility to determine optimal “first mile - last mile” connections to SMART stations.
- R2. Marin Transit should expand the usage of Marin Connect beyond northern San Rafael no later than the first quarter of 2020.
- R3. SMART should complete and publish its feasibility study by July 2019 on the east-west track connecting to an Amtrak station in the East Bay.
- R4. Upon completion of the SMART station in Larkspur, there needs to be a free passenger shuttle between the station and the Larkspur ferry terminal.
- R5. SMART, Transportation Authority of Marin and Marin Transit should prepare a joint feasibility study for the possible implementation of an autonomous shuttle for connection from the Larkspur SMART station to the Larkspur Ferry.

REQUEST FOR RESPONSES

Pursuant to Penal code section 933.05, the Grand Jury requests responses as follows:

From the following governing bodies:


- Sonoma Marin Area Rail Transit (SMART) Board of Directors (R1, R3, R5)
- Marin Transit Board of Directors (R1, R2, R4, R5)
- Transportation Authority of Marin Board of Commissioners (R1, R2, R4, R5)

The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted in accordance with Penal Code section 933 (c) and subject to the notice, agenda and open meeting requirements of the Brown Act.

Note: At the time this report was prepared information was available at the websites listed.
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Reports issued by the Civil Grand Jury do not identify individuals interviewed. Penal Code Section 929 requires that reports of the Grand Jury <u>not</u> contain the name of any person or facts leading to the identity of any person who provides information to the Civil Grand Jury. The California State Legislature has stated that it intends the provisions of Penal Code Section 929 prohibiting disclosure of witness identities to encourage full candor in testimony in Grand Jury investigations by protecting the privacy and confidentiality of those who participate in any Civil Grand Jury investigation.
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APPENDIX A: SMART Eco-Pass Fact Sheet



SMART ECO-PASS FACT SHEET

THE SMART ECO-PASS
Employers, colleges, and veterans' groups can purchase Eco-Passes directly from SMART for their employees or members. Eco-Passes are discounted up to 50%, based on the number of passes purchased. Passes can be purchased in four, six, or twelve-month increments and are loaded onto Clipper® Cards by SMART. All Clipper® products, including the Eco-Pass, are eligible for transfer credits with other local bus operators.

DISCOUNTS FOR ECO-PASSES	
Number of Passes Purchased	Eco-Pass Price (per month)
Up to 50	\$213.00
51-250	\$193.00
251-500	\$174.00
Over 500	\$155.00
College Students & Veterans' Groups	\$138.00

It doesn't matter how far your commute is or how many times you ride the train, SMART's Eco-Pass offers one discounted flat rate.

COMMUTER TAX BENEFITS
The Federal Tax Code allows employees to use up to \$265 per month of pre-tax dollars to pay for transit costs through employer sponsored programs.


EMPLOYEE SAVINGS
Employees can save hundreds of dollars each year by setting aside pre-tax income to pay for transit expenses. For example, an employee who spends \$200 per month on transit will save \$60 per month, or \$720 per year, in taxes (at 30% tax rate).

EMPLOYER SAVINGS
Providing employees with pre-tax commuter tax benefits can save payroll taxes for employers. The value of the benefit paid to employees is considered a tax-free transportation fringe benefit and not wage or salary compensation, therefore, payroll taxes do not apply. Employers can save roughly 7.5% in payroll taxes (including FICA, SUI, SDI and city taxes) on the amount employees set aside.

COMMUTE COST SAVINGS
Taking the train can save commuters time and money. On average, most SMART Eco-Pass users would save close to \$12 each day in fuel and vehicle wear-and-tear costs.

For example, using the 2019 IRS mileage reimbursement rate of 58-cents per mile, a 70-mile round-trip commute costs \$40.60 per day. An Eco-Pass costs between \$6.90 and \$10.65 per day, depending on the number of passes purchased, saving commuters roughly \$30 per day, or \$600 per month, in fuel and vehicle wear-and-tear costs.

For more information on Eco-Passes visit www.SonomaMarinTrain.org, email info@SonomaMarinTrain.org or call (707) 794-3330.


SMART || SONOMA-MARIN AREA RAIL TRANSIT

P: (707) 794-3330 F: (707) 794-3037 www.SonomaMarinTrain.org

[Eco-Pass Fact Sheet](#), Sonoma Marin Area Rail Transit

APPENDIX B: SMART’s Recent Ridership Survey (2017-2018)

Ridership survey data is from [SMART Board of Directors Workshop](#), SMART Board of Directors

MARIN CIVIC CENTER STATION

How did you get to the Marin Civic Center Station?

1. Drove my car (52%)
2. Walked (24%)
3. Dropped off at the station (Ex: Lyft, Uber, friend dropped you off, etc.) (14%)
4. Biked (7%)
5. Rode the bus (3%)

How are you getting to your final destination from the Marin Civic Center Station? (Select all that apply)

1. Walking (44%)
2. County of Marin Employee Shuttle (26%)
3. Getting dropped off (Ex: Lyft, Uber, friend will drop you off, etc.) (13%)
4. Driving my car (8%)
5. Biking (5%)
6. Taking a bus (4%)

SAN RAFAEL STATION DATA

How did you get to the San Rafael Station?

1. Rode a bus (38%)
2. Got dropped off (Ex: Lyft, Uber, friend dropped you off, etc.) (21%)
3. Walked (15%)
4. Drove my car (13%)
5. Biked (13%)

How are you getting to your final destination from the San Rafael Station? (Select all that apply)

1. Walking (30%)
2. Taking a bus (23%)
3. Taking the ferry (21%)
4. Getting picked up (Ex: Lyft, Uber, friend will pick you up, etc.) (12%)
5. Biking (9%)
6. Driving my car (3%)
7. I’m already at my final destination (2%)

APPENDIX B: SMART’s Recent Ridership Survey (2017-2018) (cont’d)

NOVATO HAMILTON STATION DATA

How did you get to the Novato Hamilton Station?

1. Drove my car (32%)
2. Biked (23%)
3. Walked (22%)
4. Dropped off at the station (Ex: Lyft, Uber, friend dropped you off, etc.) (20%)
5. Rode the bus (3%)

How are you getting to your final destination from the Novato Hamilton Station? (Select all that apply)

1. Walking (46%)
2. Biking (26%)
3. Getting dropped off (Ex: Lyft, Uber, friend will drop you off, etc.) (20%)
4. Driving my car (5%)
5. Taking a bus (3%)

NOVATO SAN MARIN DATA

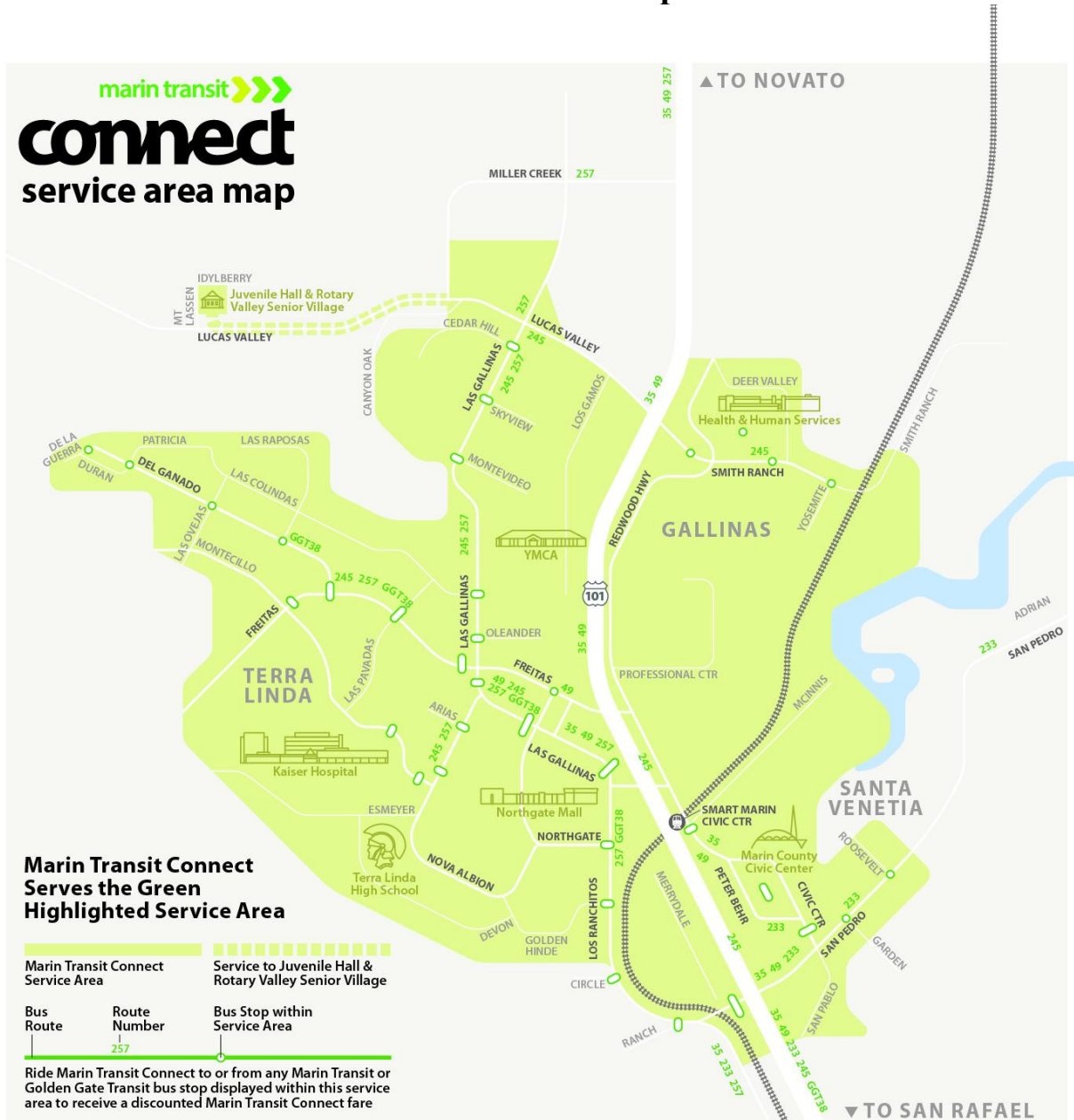
How did you get to the Novato San Marin Station?

1. Drove my car (46%)
2. Dropped off at the station (Ex: Lyft, Uber, friend dropped you off, etc.) (23%)
3. Biked (17%)
4. Walked (12%)
5. Rode the bus (2%)

How are you getting to your final destination from the Novato San Marin Station? (Select all that apply)

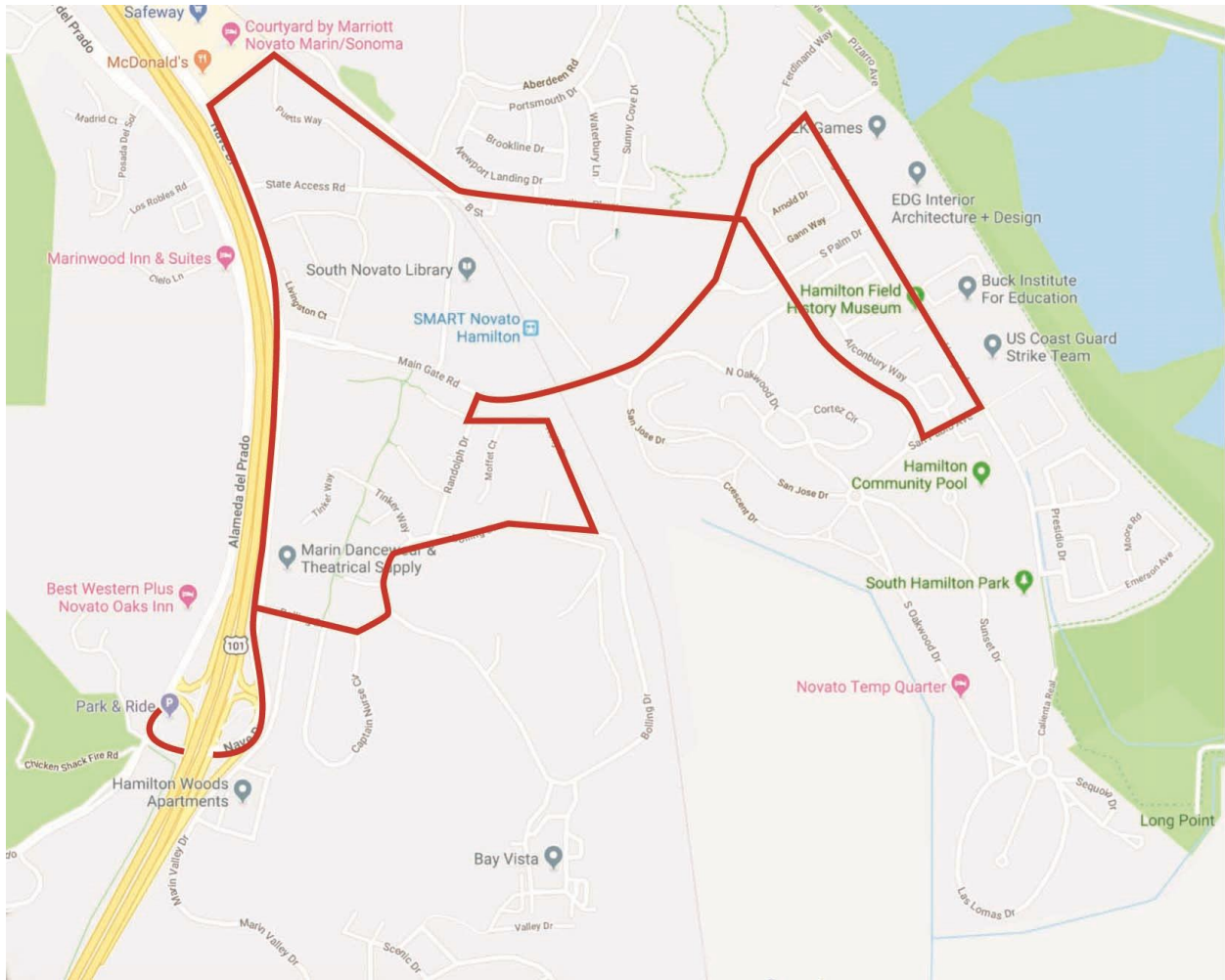
1. Walking (56%)
2. Getting dropped off (Ex: Lyft, Uber, friend will drop you off, etc.) (19%)
3. Driving my car (12%)
4. Biking (9%)
5. Taking a bus (4%)

APPENDIX C: Marin Connect Service Area Map



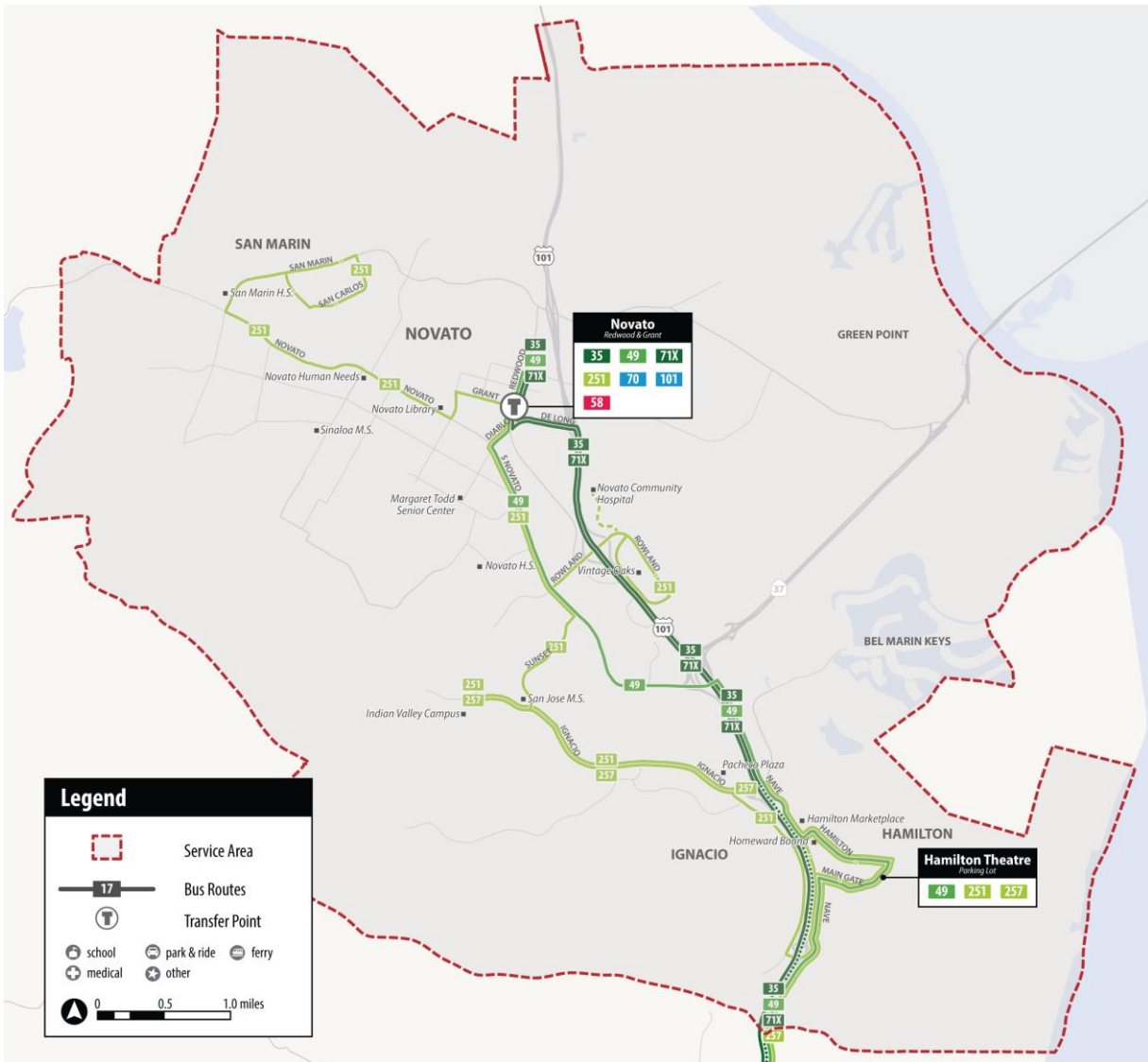
[Marin Connect Service Area Map, Marin Transit](#)

APPENDIX D: Route Map for Hamilton Shuttle



[Route Map for Hamilton Shuttle, Hamilton Field](#)

APPENDIX E: Service Area Map for Novato Dial-A-Ride



[Service Area Map for Novato Dial-A-Ride - Marin Transit](#)