



MARIN COUNTY TRANSIT DISTRICT BOARD OF DIRECTORS

Board of Supervisors Chambers, Room 330
3501 Civic Center Drive, San Rafael, CA 94903

AGENDA

Monday, April 1, 2019

10:00 a.m. Convene as the Marin County Transit District Board of Directors

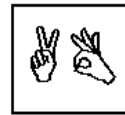
1. Open Time for Public Expression (limited to three minutes speaker on items not on the Transit District's agenda)
2. Board of Directors' Matters
3. General Manager's Report
 - a. General Manager's Oral Report
 - b. Monthly Monitoring Report for January
4. Consent Calendar
 - a. Minutes for March 4, 2019
 - b. Measure A / Measure AA Funded Transportation Services by School

Recommended Action: Approve.
5. Fleet Plan Update
Recommended Action: Information only.
6. Purchase Agreement with Gillig, LLC for Eleven Low Floor Hybrid Diesel-Electric Buses
Recommended Action: Authorize General Manager to complete the purchase of eleven (11) 40-foot hybrid vehicles for local service at a cost not to exceed \$9,057,000 and approve budget amendment (19-07) to add the replacement project.

(continued)

7. Purchase Agreement with Creative Bus Sales, Inc. for Four 29-foot XHF Buses
Recommended Action: Authorize General Manager to complete the purchase of four 29-foot XHF buses for an amount not to exceed \$1,721,000.
8. Authorize Funding Swap for Metropolitan Transportation Commission Cycle 5 Lifeline Program
Recommended Action: Provide approval to the Transportation Authority of Marin (TAM) to reduce Measure AA sales tax in Strategy 4: Local Bus funds by \$248,000 in exchange for an allocation of \$248,000 in State Transit Assistance funds.
9. Marin County Transit District Service Credit Replacement Plan
Recommended Action: Adopt the Marin County Transit District Service Credit Replacement Plan.

Adjourn



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<http://www.marintransit.org>

Late agenda material can be inspected in the office of Marin Transit, between the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday. The office is located at 711 Grand Avenue, Suite 110, San Rafael, CA 94901.

Todas las reuniones públicas de Marin Transit se llevan a cabo en lugares accesibles. Están disponibles copias de los documentos en formatos accesibles, a solicitud. Si usted requiere ayuda con la traducción, intérpretes de Lenguaje Americano de Señas, dispositivos de ayuda auditiva, u otras adaptaciones para participar en esta reunión, puede solicitarlas llamando al (415) 226-0855 (voz) o comunicarse con el Servicio California Relay marcando al 711 para conectarse al número de teléfono mencionado. **Las solicitudes deben recibirse a más tardar cinco días laborables antes de la reunión para ayudar a asegurar la**

disponibilidad. Para obtener información adicional, visite nuestro sitio web en <http://www.marintransit.org>

Material de agenda de última hora puede ser inspeccionado en la oficina de Marin Transit, entre las horas de 8:00 am y 5:00 pm. La oficina está ubicada en 711 Grand Avenue, Suite 110, San Rafael, CA 94901.



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April 1, 2019

Honorable Board of Directors
Marin County Transit District
3501 Civic Center Drive
San Rafael, CA 94903

SUBJECT: General Manager Report – Monthly Report: January 2019

Dear Board Members:

board of directors

damon connolly
president
supervisor district 1

dennis rodoni
vice president
supervisor district 4

kate colin
2nd vice president
city of san rafael

judy arnold
director
supervisor district 5

stephanie moulton-peters
director
city of mill valley

katie rice
director
supervisor district 2

kathrin sears
director
supervisor district 3

eric lucan
alternate
city of novato

RECOMMENDATION: This is a recurring information item.

SUMMARY: The attached monthly report provides an overview of Marin Transit operations for the month ending January 31, 2019. The monthly report summarizes statistics on the performance of Marin Transit services and customer comments.

Overall ridership in January 2019 decreased by 0.3 percent compared to January 2018. Ridership on fixed-route services was slightly lower by 0.1 percent compared to the same month last year. Ridership on Marin Access services increased by 7.9 percent while ridership on yellow bus services decreased by 11.9 percent.

Additional detailed analyses of system performance and trends are provided in separate quarterly and annual reports, including route-level statistics and financials. These reports are available on the District's website at <http://marintransit.org/monitoringreports.html>.

FISCAL/STAFFING IMPACT: None associated with this report.

Respectfully submitted,

Nancy Whelan
General Manager

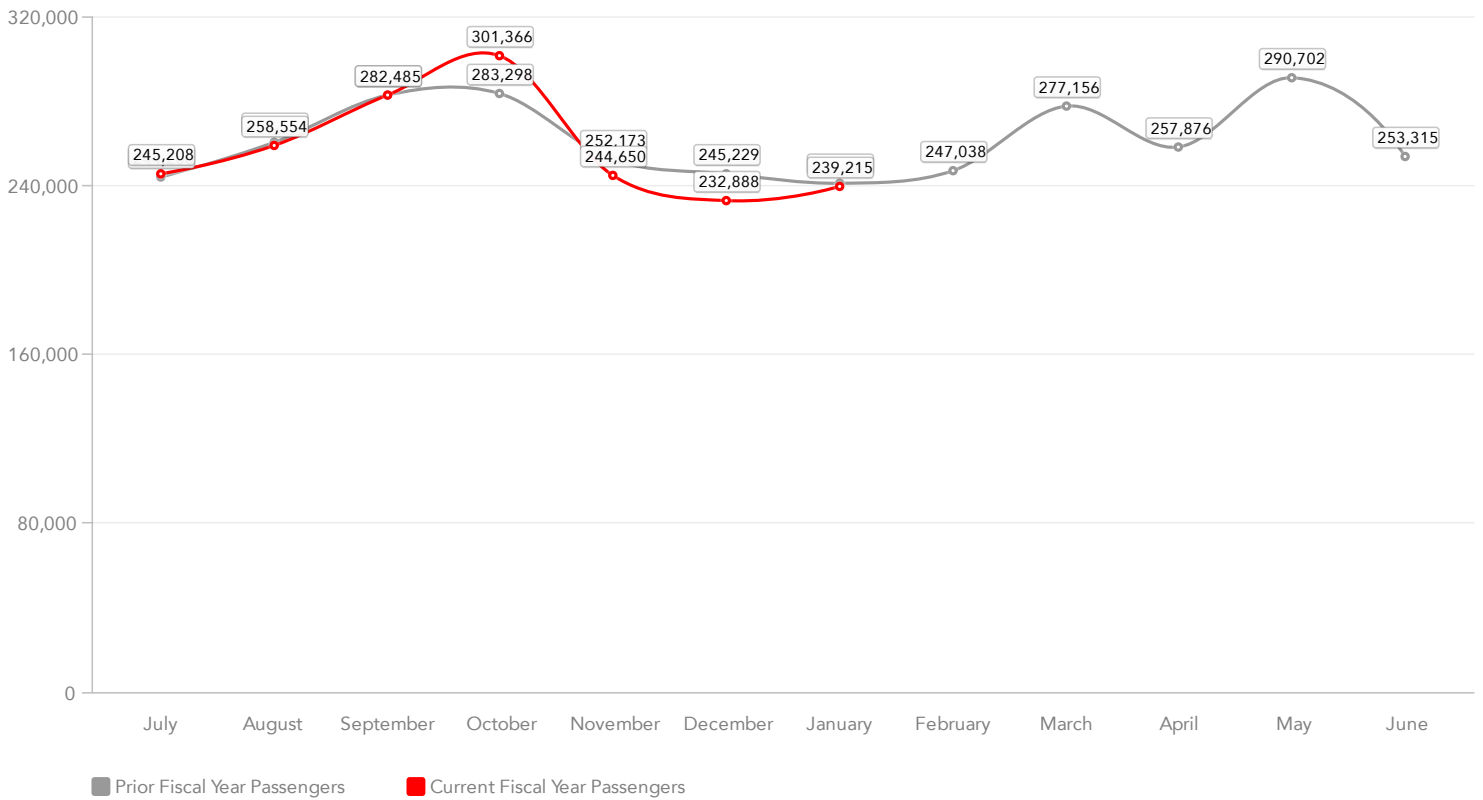
Attachments

FISCAL YEAR

2019

Year-to-Date Ridership Trends

Fixed-Route Passengers (incl. Yellow Bus) by Month



Demand Response Passengers by Month

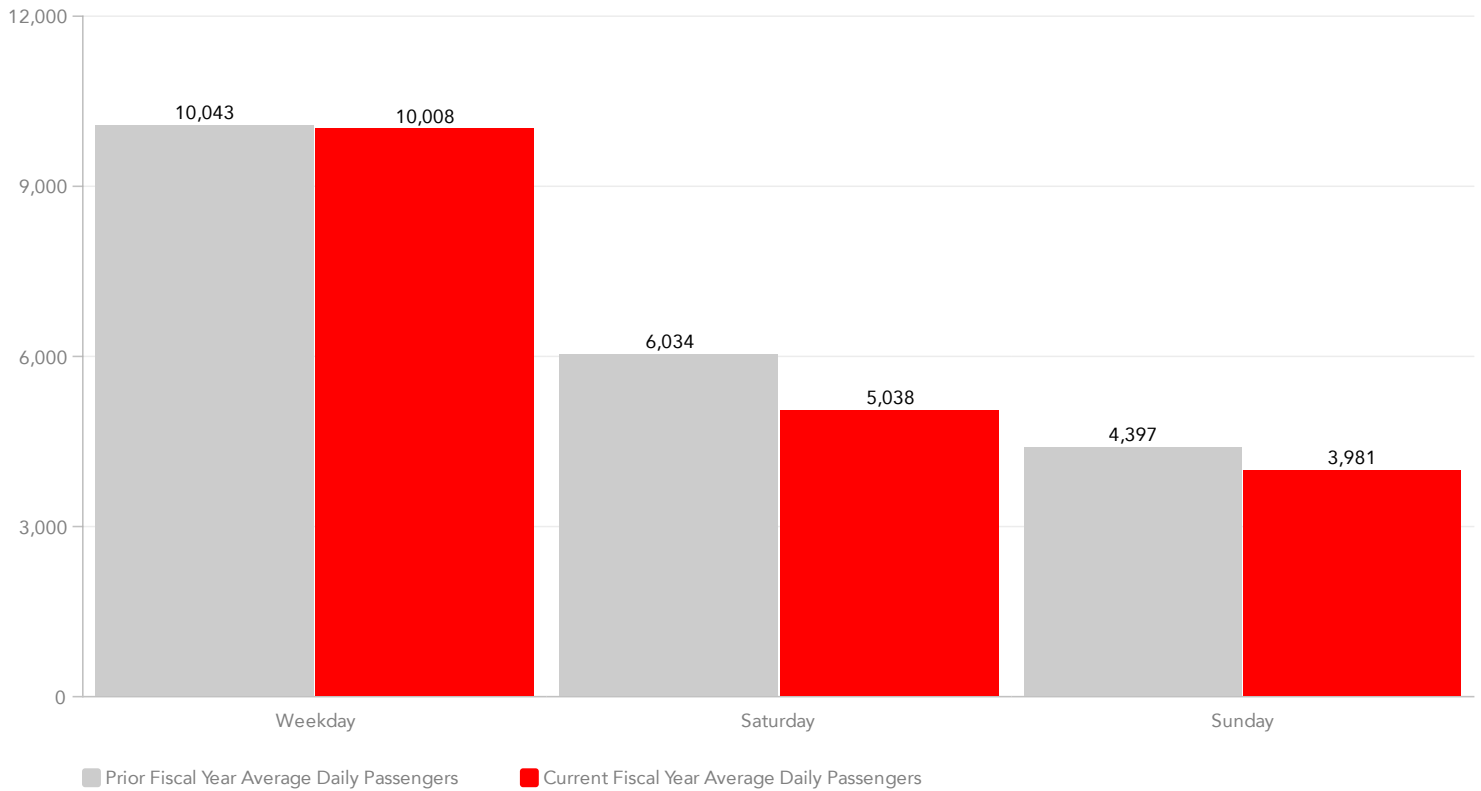


Monthly Statistics

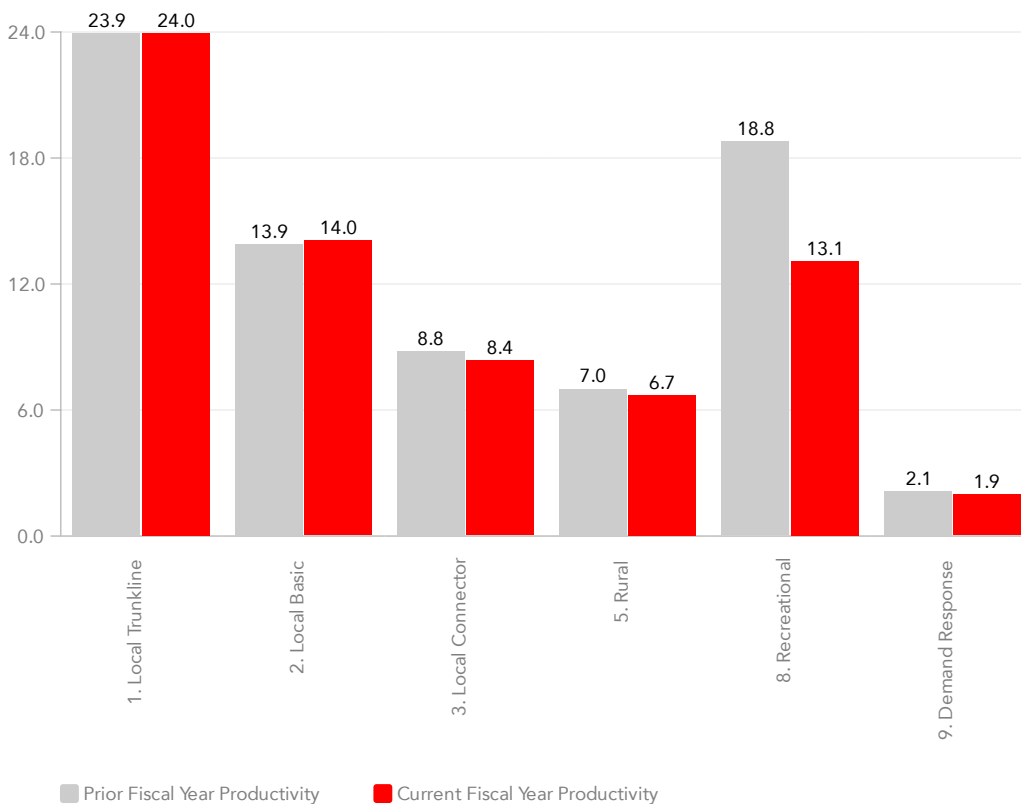
MONTH

January

Average Systemwide Daily Passengers



Productivity (pax/hr) by Typology



Route Typologies

1. Local Trunkline:
Routes 35, 36, 71X
2. Local Basic:
Routes 17, 22, 23, 23X, 29, 49
3. Local Connector:
Routes 219, 228, 233, 245, 251, 257
5. Rural:
Routes 61, 68
8. Recreational:
Routes 66/66F
9. Demand Response:
Local Paratransit, Novato Dial-A-Ride,
Rural Dial-A-Ride



Month: January 2019

| Category | Program | | | | | | | Total |
|------------------------------------|-------------------|---------------------|-------------------------|---------------------------|-----------------|---------------------|------------|-----------|
| | Fixed-Route Local | Fixed-Route Shuttle | Stagecoach & Muir Woods | Supplemental & Yellow Bus | Demand Response | Mobility Management | Systemwide | |
| Commendation | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Service Delivery Complaint | 22 | 7 | 0 | 1 | 0 | 0 | 1 | 31 |
| Accessibility | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Driver Conduct Complaint | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 10 |
| Driving Complaint | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 5 |
| Early Trip | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment Issue | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Farebox | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Late Trip | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 3 |
| Missed Connection | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Missed Trip | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No-Show | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Off-Route | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Pass-Up Complaint | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 10 |
| Service Structure Complaint | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 |
| Bus Stop Improvement Request | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Fares | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Complaint | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scheduling Complaint | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Service Improvement Suggestion | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Safety Complaint | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | |
|-------------------------------|-------|-------|-------|-----|-------|---|--------|--------|
| Total Service Hours | 9,272 | 3,629 | 1,536 | 498 | 5,904 | - | 22,508 | 22,508 |
| Commendations per 1,000 Hours | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.1 |
| Complaints per 1,000 Hours | 2.4 | 2.2 | 0.0 | 2.0 | 0.0 | - | 0.1 | 1.5 |

| | | | | | | | | |
|-----------------------------------|---------|--------|--------|--------|--------|-------|---------|---------|
| Total Passengers | 167,524 | 30,315 | 12,141 | 29,235 | 11,287 | 2,403 | 252,905 | 252,905 |
| Commendations per 1,000 Passenger | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Complaints per 1,000 Passengers | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |

REGULAR MEETING OF THE MARIN COUNTY TRANSIT DISTRICT BOARD OF DIRECTORS

Held Monday, March 4, 2019 at 10:02 A.M.

Roll Call

Present: Vice President Rodoni, Second Vice President Colin, Director Sears, Director Moulton-Peters, Director Rice

Absent: President Connolly, Director Arnold

Vice President Rodoni opened the meeting at 10:02 A.M.

1. [Open Time for Public Expression \(limited to three minutes speaker on items not on the Transit District's agenda\)](#)

Vice President Rodoni asked if any member of the public wished to speak. Seeing none he called for Board of Directors' Matters.

2. [Board of Directors' Matters](#)

Vice President Rodoni asked if any member of the Board wished to speak. Seeing none he called for the General Manager's Report.

{Director Judy Arnold Present at 10:03 A.M.}

3. [General Manager's Report](#)

a. [General Manager's Oral Report](#)

General Manager Nancy Whelan reported that Marin Transit has met with the five Yellow Bus Services sponsors to review the funding agreements for Measure AA funds. The Transportation Authority of Marin approved Marin Transit's request for \$1.1 million in Measure A funds for a permanent location to park buses. Ms. Whelan reported that the joint exercise of powers agreement in Ross Valley has been approved.

Marin Transit's first all-electric bus went into service on February 27. The all-electric bus is serving Routes 23X, 29, and 17.

Director Stephanie Moulton-Peters asked if Ross Valley's Joint Exercise of Powers Agreement (JEPA) is the school services contract holder. Ms. Whelan replied that the JEPA is an advisory body, and Marin Transit contracts for services on its behalf. Director Katie Rice remarked that the JEPA is responsible for policy decisions, such as determining pass price or scheduling changes. Director Stephanie Moulton-Peters requested to see the JEPA agreement. She added that Mill Valley is ready to promote the all-electric bus.

Ms. Whelan reported that overall December 2018 ridership decreased by 4.5 percent compared to December 2017. Ridership on fixed-route services decreased 4.7 percent compared to the same month last year. Ridership on Marin Access services increased by 6.5 percent, and yellow bus service ridership decreased by 12.9 percent.

4. [Consent Calendar](#)

- a. [Minutes for February 4, 2019](#)
- b. [Resolution 2018-02 Low Carbon Transit Operations](#)
- c. [Marin Transit Quarterly Performance Report for the Second Quarter of FY 2018-19](#)
- d. [Marin Transit Quarterly Financial Report for the Second Quarter of FY 2018/19](#)

Director Kate Sears requested more information regarding Item 4b and Marin Transit's plans to purchase more electric vehicles. General Manager Nancy Whelan responded that the Low Carbon Transit Operations Program (LCTOP) provides a formula grant. Board approval of Item 4b indicates that Marin Transit will use the funds for a future purchase of four electric buses.

Director Kate Sears noted that the agreement states that Marin Transit will purchase eleven hybrid buses before purchasing four electric buses. Ms. Sears inquired whether it is possible to convert hybrid buses into electric buses. General Manager Whelan responded that Marin Transit will investigate the possibility.

Recommended Action: Approve.

M/s: Director Arnold - Director Sears

Ayes: Vice President Rodoni, Second Vice President Colin, Director Arnold, Director Moulton-Peters, Director Rice, Director Sears

Noes: None

Absent: President Connolly

5. [Marin School of Environmental Leadership Student Presentation on Bike Expo and Fare Survey](#)

[Item 5 – Staff Report](#)

The Marin School of Environmental Leadership (MarinSEL) presented their LEAD Project to the Marin Transit Board, "Social Equity in Marin Transit". The Terra Linda students reported that they held a Bike Expo at the Pickleweed Community Center in the Canal to create awareness about the opportunities for biking in Marin County. At the event, students administered a survey on transit usage. The students provided details about the Bike Expo event and

survey.

Director Kate Sears remarked that being able to pay a period-based fare over time is an appealing suggestion. Ms. Whelan replied that Marin Transit is conducting research on fare policies and will continue to evaluate period-based pass alternatives. Director Sears remarked that purchasing a pass every week may be challenging for some and an installment plan would be a terrific idea. Ms. Whelan remarked that Marin Transit has identified a monthly payment plan for the Clipper Card as a possible solution. That option will likely not be available until the next generation of Clipper.

Second Vice President Kate Colin thanked the students for their work on the survey. Ms. Colin asked if the individuals they surveyed already use transit passes or if they had not used passes. One of the students responded that most of the survey participants were already Marin Transit riders. However, many of them did not know that a monthly pass is available.

Director Moulton-Peters asked about the barriers passengers experience in signing-up for Clipper. A student responded that the survey identified several challenges. Many riders do not have access to the internet, they may be unwilling to provide credit card information, and they may not have an email address.

Director Katie Rice remarked that she supports the idea of an installment plan. She appreciated that the students highlighted that a big segment of the workforce is low-income in addition to transit dependent. They struggle financially while filling very important roles in the community and local economy.

Peter Mendoza from Marin Center for Independent Living expressed appreciation for the presentation. He receives a lot of questions regarding the Clipper Card when he rides the transit system. One of the main challenges with Clipper is that it is not possible to purchase discounted cards for seniors or disabled persons at electronic Clipper Card vending machines.

Recommended Action: Information only.

6. [Marin Transit's Role in Emergency Transportation Planning and Response](#)

[Item 6 – Staff Report](#)

Amy Van Doren, Director of Policy & Legislative Programs, summarized Marin Transit's role in emergency transportation planning and response.

The organization and lines of authority for Marin County's Emergency Operations Center (EOC) are consistent with the National Incident Command System (ICS) and the National Incident Management System (NIMS). The federal government developed NIMS after September 11, 2001. NIMS is

based on the State of California's emergency management system deployed after the 1991 Oakland hills fire. NIMS establishes universal national protocols for coordinated government response to emergency declarations.

When fully activated, the Marin County EOC consists of designated personnel skilled in emergency management, public safety, fire, public works, transportation, and human services at minimum. Since 2004, Marin Transit staff have consistently participated in EOC exercises and workshops and they serve with the Safety and Training Manager of Whistlestop as members of the EOC Logistics Section in the transportation unit to coordinate requests for emergency transportation.

Chris Riley and Woody Baker-Cohn from the Marin County Office of Emergency Services (OES) commented that Marin Transit has been a great partner and stated that they are preparing more plan updates and exercises related to evacuation and transportation.

Peter Mendoza from Marin Center for Independent Living recognized OES and Marin Transit for taking the lead on addressing the needs of people with special needs during disasters and local emergencies.

Director Stephanie Moulton-Peters asked for clarification on the evacuation of seniors and disabled people and the expected wait times. Mr. Baker-Cohn elaborated that there are several categories of evacuations, and they correspond to where people are located. The OES is developing an alert system and a call center to help evacuate those who live in remote areas or are disabled. The length of time to evacuate depends on the event and available resources.

Director Kate Sears remarked that it is important that Health and Human Services and all County staff work with age-friendly organizations such as Marin Villages as they will have information on where their members live. Mr. Baker-Cohn added that through Medicare the OES is able to obtain location information when there is an emergency.

Second Vice President Kate Colin remarked that the online service Nextdoor is key to getting to know neighbors. Mr. Baker-Cohn added that the OES can send alerts through Nextdoor. Ms. Colin asked for clarification on how entities such as schools will know that evacuation systems are in place. Mr. Baker-Cohn responded that the Marin County Office of Education is the collection point for schools. If there is a school-related emergency the Office of Education will notify the OES. Ms. Van Doren noted that Mike Grant from the Marin County Office of Education is the direct EOC contact for schools.

Second Vice President Colin asked if protocols have changed in response to the fires in the North Bay. Mr. Baker-Cohn responded that emergency response and evacuation is a continuous learning effort after each exercise and activation.

Director Judy Arnold noted that Marin County has produced a study on lessons learned from the North Bay fires, and the fire chief will present the findings and recommendations later this month.

Recommended Action: Information only.

Adjourn Vice President Rodoni adjourned the meeting at 11:02 A.M.

SINE DIE

PRESIDENT

ATTEST:

CLERK



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April 1, 2019

Honorable Board of Directors
Marin County Transit District
3501 Civic Center Drive
San Rafael, CA 94903

SUBJECT: Measure A / Measure AA Funded Transportation Services by School

Dear Board Members:

board of directors

damon connolly
president
supervisor district 1

dennis rodoni
vice president
supervisor district 4

kate colin
2nd vice president
city of san rafael

judy arnold
director
supervisor district 5

stephanie moulton-peters
director
city of mill valley

katie rice
director
supervisor district 2

kathrin sears
director
supervisor district 3

eric lucan
alternate
city of novato

RECOMMENDATION: Information only

SUMMARY: At previous meetings of the Marin Transit Board and the Ad Hoc Committee on School Transportation, Directors have asked staff to provide a concise description of Marin Transit services for students. Specifically, Directors requested a document summarizing the services Marin Transit provides by individual schools and school districts.

Staff developed the attached document to demonstrate Measure A/ Measure AA-funded transportation services by school and school district. The services include yellow bus programs that will receive Measure AA funding starting in July 1, 2019, fixed route and supplemental bus services, and the number of Transit Youth Passes distributed. Fixed routes that serve bus stops within walking distance of the school are also listed. Each of these services are partially funded with Measure A/ Measure AA revenues.

FISCAL/STAFFING IMPACT: None

Respectfully submitted,

Kelly Zalewski
Senior Operations Analyst

Attachment A: Measure AA Funded Transportation Services by School



Measure AA Funded Transportation Services by School

| Public School | City | Yellow Bus Service | Other Fixed Route & Supplemental Service | Transit Youth Passes Distributed |
|---------------------------------------|--------------|--------------------------|---|--|
| Dixie School District | | | | |
| Dixie Elementary | San Rafael | X | 139 | 0 |
| Mary E. Silveira Elementary | San Rafael | X | | 0 |
| Miller Creek | San Rafael | X | 139, 257 | 4 |
| Vallecito Elementary | San Rafael | X | 139, 145, 245, 257 | 0 |
| Lagunitas School | | | | |
| Lagunitas | San Geronimo | | 68, 125 | 8 |
| Larkspur-Corte Madera School District | | | | |
| Cove School | Corte Madera | X | | 0 |
| Hall Middle School | Larkspur | | 117 | 143 |
| Neil Cummins Elementary School | Corte Madera | | 22, 117 | 0 |
| Marin County Office of Education | | | | |
| Phoenix Academy | San Rafael | | 233 | 140 |
| Mill Valley School District | | | | |
| Edna Maguire Elementary School | Mill Valley | X | | 0 |
| Mill Valley Middle School | Mill Valley | X | 17, 61, 115 | 6 |
| Old Mill | Mill Valley | | | 0 |
| Park School | Mill Valley | | 17, 115 | 0 |
| Strawberry Point School | Mill Valley | X | 119, 219 | 0 |
| Tam Valley | Mill Valley | | | 0 |
| Novato Unified School | | | | |
| Hamilton | Novato | | 49, 151, 251, 257 | 56 |
| Loma Verde Elementary School | Novato | | | 4 |
| Lu Sutton Elementary School | Novato | | | 0 |
| Lynwood Elementary School | Novato | | 49, 151, 251 | 36 |
| Olive Elementary School | Novato | | | 0 |
| Pleasant Valley Elementary School | Novato | | | 0 |
| Rancho Elementary School | Novato | | | 0 |
| San Ramon Elementary School | Novato | | 154, 251 | 12 |
| San Jose Middle School | Novato | | 151, 251, 257 | 314 |
| Sinaloa Middle School | Novato | | 154 | 112 |
| Novato High School | Novato | | 49, 151, 251 | 420 |
| San Marin High School | Novato | | 151, 154, 251 | 261 |
| Marin Oaks | Novato | | | 44 |
| Reed Union School District | | | | |
| Bel Aire Elementary School | Tiburon | X | | 0 |
| Del Mar Middle School | Tiburon | X | 119, 219 | 2 |
| Reed Elementary School | Tiburon | X | 119, 219 | 0 |
| Ross Valley School District | | | | |
| Brookside | San Anselmo | | | 0 |
| Hidden Valley School | San Anselmo | X | | 0 |
| Manor | Fairfax | | 23, 23X, 68, 228 | 0 |
| Wade Thomas | San Anselmo | | 22, 228 | 0 |
| White Hill School | Fairfax | X | 23, 23X, 68, 228 | 36 |



Measure AA Funded Transportation Services by School

| Public School | City | Yellow Bus Service | Other Fixed | Transit Youth Passes Distributed |
|--------------------------------------|--------------|--------------------------|------------------------------------|--|
| | | | Route & Supplemental Service | |
| San Rafael City Schools | | | | |
| Bahia Vista | San Rafael | | 23, 35, 36 | 6 |
| Coleman | San Rafael | X | 233, 257 | 0 |
| Glenwood | San Rafael | X | | 0 |
| Laurel Dell | San Rafael | X | | 0 |
| San Pedro | San Rafael | X | | 0 |
| Short | San Rafael | X | | 0 |
| Sun Valley | San Rafael | X | | 0 |
| Venetia Valley | San Rafael | X | 233 | 94 |
| Davidson Middle | San Rafael | X | 23, 23X, 29, 35, 36 | 444 |
| Madrone High | San Rafael | | 23, 23X, 29, 35, 36 | 72 |
| San Rafael High School | San Rafael | | 23, 23X, 29, 35, 36 | 1,136 |
| Terra Linda High School | San Rafael | | 139, 145 | 353 |
| Sausalito-Marin School District | | | | |
| Willow Creek School | Sausalito | | 115 | 192 |
| Bayside MLK Jr Academy | Marin City | | 17, 22, 71X, 115 | 2 |
| Tamalpais Union High School District | | | | |
| Redwood High School | Larkspur | | 113, 119 | 189 |
| San Andreas School | Larkspur | | 113, 119 | 79 |
| Sir Francis Drake High School | San Anselmo | | 23, 23X, 68, 125, 228 | 96 |
| Tamalpais High School | Mill Valley | | 17, 61, 115 | 199 |
| Tamiscal High School | Larkspur | | 113, 119 | 16 |
| Private/Independent | | | | |
| Private/Independent | Marin County | | | 19 |



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April 1, 2019

Honorable Board of Directors
Marin County Transit District
3501 Civic Center Drive
San Rafael, CA 94903

SUBJECT: Fleet Plan Update

Dear Board Members:

board of directors

damon connolly
president
supervisor district 1

dennis rodoni
vice president
supervisor district 4

kate colin
2nd vice president
city of san rafael

judy arnold
director
supervisor district 5

stephanie moulton-peters
director
city of mill valley

katie rice
director
supervisor district 2

kathrin sears
director
supervisor district 3

eric lucan
alternate
city of novato

RECOMMENDATION: Information only

SUMMARY:

The District is committed to reducing emissions and using alternative fuels, as adopted in Marin Transit's Short Range Transit Plan (S RTP). Marin Transit started to shift toward a zero-emission fleet in 2010 with the purchase of seven hybrid diesel-electric buses and has continued to invest in hybrid technology. Three percent of Marin Transit's fixed route fleet is zero emission, and 38 percent is diesel-electric hybrid. Seventy-two percent of Marin Transit diesel vehicles use renewable diesel, which releases up to 80 percent less greenhouse gases throughout its lifecycle than traditional petroleum diesel fuel.

Through its Innovative Clean Transit Rule (ICT), the California Air Resource Board (CARB) has laid out a framework for requiring all transit buses in the state to be zero emission by 2040.

This staff report is the first step in developing the updated fleet replacement plan for the 2020-2029 S RTP. The report will provide background information on ICT rule, present a draft vehicle replacement plan, and provide context for near-term fleet procurement decisions. It will also identify major decision points where staff and your Board may revisit procurement decisions based on anticipated changes in zero-emission technology.

The goals for Marin Transit's update to its Fleet Replacement Plan include:

- Transition the Marin Transit fleet to zero emission;
- Meet or exceed the requirements set in place by the California Air Resources Board;
- Support current service levels;
- Retain flexibility to adjust to rapidly changing technology; and
- Standardize the fleet and consolidate purchases.

California Air Resource Board's Innovative Clean Transit Rule

CARB adopted the Innovative Clean Transit Rule (ICT) in December 2018. The rule outlines a transition of California transit agencies to zero emission bus technology by 2040. Under this rule, Marin Transit is categorized as a small transit agency and will have zero emission purchase requirements beginning in 2026. Table 1 shows the purchase requirements for both large and small transit agencies. Any zero-emission buses (ZEBs) purchased before the purchase requirements are eligible for additional funding through CARB's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP). They can also be used as credits toward future required zero emission bus purchases.

Table 1: Percentage of purchases required to be zero emission under ICT

| Year | Large Transit Agency | Small Transit Agency |
|------|----------------------|----------------------|
| 2023 | 25% | - |
| 2026 | 50% | 25% |
| 2029 | 100% | 100% |

CARB has allowed for exceptions to the requirements if no zero-emission vehicles have been federally certified for a particular vehicle type. Federal safety testing is required before vehicles are available for purchase with federal money. Marin Transit's fleet plan assumes that appropriate zero-emission vehicles will be available for purchase to meet the ICT requirements in the future. At this time, no federally-approved zero-emission alternatives are available for these Marin Transit vehicles types:

- 1) Cutaway shuttles for fixed route service in lower density areas
- 2) Narrow-bodied 30ft and 35ft vehicles that are required for narrow rural roads

Zero Emission Bus Technologies

There are two main types of zero emission bus technologies: hydrogen fuel cell electric buses (FCEBs) and battery electric buses (BEBs). Both are electric, but the former uses a hydrogen fuel cell to create electricity and the latter uses a battery that is charged through the electrical grid. Marin Transit has two BEBs, and staff recommends that the District continue to invest in BEB technology.

As noted above, zero-emissions technology is improving rapidly. However, neither BEB nor FCEB technologies currently meet all requirements for transit operations cost effectively. The risks and advantages of each technology are outlined below. Currently, battery electric technology is the most cost-effective approach to convert the majority of Marin Transit's fleet. Marin Transit staff will revisit this assumption for the FY2027 procurement. Major factors that could change the District's selected technology track include:

- Whether Golden Gate Bridge Highway and Transportation District determines hydrogen-electric technology is the best way to serve their long-distance routes;
- The costs of hydrogen-electric technology and fuel significantly decrease and become a more cost-effective solution for public transit operations.

Hydrogen Fuel Cell Electric Buses (FCEBs)

FCEBs can work well in daily transit operations. They are capable of replacing traditional diesel buses on an almost one for one basis due to the number of miles (range) they can travel in a day. Instead of gasoline or diesel, these buses use hydrogen fuel. They are significantly more expensive at over a \$1 million per bus or almost three times the cost of a diesel bus. The cost of hydrogen can be three times as expensive as diesel.

FCEBs require agencies to install special hydrogen fueling stations. Additionally, hydrogen is highly combustible and transit agencies often must upgrade their maintenance and storage facilities. To minimize leaks, these buses store hydrogen fuel on the roof. As a result, maintenance facilities often need to be retrofitted with higher ceilings to provide for safe clearance. Alameda-Contra Costa Transit District (AC Transit) led a demonstration of this technology in partnership with four large Bay Area transit agencies, including Golden Gate Transit. Through this project, Golden Gate operated FCEBs on Marin Transit local routes. Seeking to reduce the cost of fuel, AC Transit has built a facility to generate hydrogen for their buses.

Battery Electric Buses (BEB)

Most transit agencies, including Marin Transit, are investing in battery electric buses (BEBs). BEBs have batteries that are charged via the electric grid either overnight or while on-route (opportunity charging). Initially transit agencies were forced to choose between the two charging methods. The technology is advancing so that it is now possible to take advantage of both methods: doing the bulk of charging overnight and taking advantage of opportunity charging on route to extend the range of the buses. Opportunity charging can be very expensive in the middle of the day when electricity rates are at their highest, while overnight charging takes advantage of off-peak power pricing. Having chargers in multiple places also adds resiliency to the system. This maximizes the ability to charge and operate buses during an emergency when power might be out in some areas.

The greatest limitations of battery electric buses are the number of miles they can travel between charges and the amount of time it takes to recharge each bus. Marin Transit's two BYD electric buses are advertised as capable of operating for 145 miles on a single charge under ideal conditions. The ability to achieve this range is limited due to heat, ventilation, and air conditioning systems, hills, and driver behavior. Marin Transit expects that battery range and technology will continue to improve.

Marin Transit's first electric bus went into service on February 27, 2019, operating on routes 23X, 29, and 17. The second bus is expected to be in service in April. Staff has been closely monitoring the electric bus performance using Viriciti software to understand the operational limitations. Based on current performance, staff estimates that the BYD buses have a range of 125 miles on routes operating on relatively flat terrain. Over the life of the bus, the battery is estimated to degrade by about 80 percent. At retirement, the bus will be able to travel an estimated 100 miles on flat terrain. At this range, an electric bus could serve about 27 percent of Marin Transit fixed route work blocks. Marin Transit's longest transit route is almost 300 miles.

Staff expects that these ranges will improve over the coming years. Two U.S. traditional transit bus manufacturers, Gillig, LLC and New Flyer, are working on battery electric bus models. Proterra has started to advertise a bus that can travel over 300 miles on a single charge, and the industry is standardizing charging infrastructure. Marin Transit benefits from the experience of larger transit agencies that are required to invest in zero emission bus technology earlier. Some early adopters are encountering challenges in scaling their battery electric bus fleets. These challenges include:

- Developing the necessary infrastructure;
- Implementing technology solutions for charging;
- Scheduling vehicles for service with limited range; and
- Maintaining new vehicle types and related charging infrastructure.

2019 Draft Replacement Plan

In late 2019, your Board will consider a vehicle replacement plan as part of adopting the 2020-2029 SRTP update. Table 2 below shows the draft replacement plan staff has developed to meet the goals identified on page one of this staff report.

Marin Transit's first battery electric bus went into revenue service at the end of February, and staff is collecting information on their range, fueling costs, and capabilities. Based on initial results, the range will not be sufficient for the majority of service blocks (the distance a bus drives in one day) without additional charging. Given the rapid pace of technology change and new electric buses in the pipeline, staff expects that the range for the next generation of zero-emission buses will increase.

For purposes of the draft Fleet Replacement Plan, staff assumed the following:

- An FTA-approved cutaway bus will be available in 2025;
- An FTA-approved narrow body bus will be available in 2030;
- The range of in-depot charged buses will increase from about 125 miles to 300 miles by 2027; and
- Over the next five years, there will not be a significant infusion of capital funding for infrastructure improvements to support on-route vehicle charging or hydrogen fueling stations.

To plan for the technological uncertainty, Marin Transit staff has developed the following plan recommendations:

- 1) Develop a base plan that assumes the zero-emission technology is available to meet the minimum ICT requirements, without significant changes to routing or requiring in-route charging infrastructure;
- 2) Identify decision points that allow time for developing route changes or infrastructure projects, if they are required; and
- 3) Identify decision points that allow the purchase of additional zero-emission vehicles, if technology exceeds expectations and/or there is significant additional capital to pursue in-route charging or other mitigations for deploying zero-emission buses.

To meet the replacement plan goals, the plan first converts the standard bus fleet to electric buses. Converting the narrow-bodied vehicles needed for the rural service, which has vehicle work blocks of 300+ miles over steep, hilly terrain will be more challenging. Their replacement with zero-emission technology is planned to start in FY2031 to allow time for technology improvements. Should a suitable zero emission vehicle type become available sooner, Marin Transit will be able to modify the procurements in FY2024 and FY2027.

In addition to the draft replacement plan in Table 2 below, staff has provided a more detailed chart of the plan as Attachment A to this report.

Table 2: Marin Transit Draft Fixed Route Vehicle Replacement Plan

| Fiscal Year | Zero Emission Fleet Percentage | New Vehicle Purchases - Fixed Route Fleet | | |
|-------------|--------------------------------|--|-----------------------|---|
| | | Standard Size Buses | Cutaways | XHF's - Heavy Duty Narrow Body |
| FY 2019 | 3% | 2 - 35' Electric Buses | 2 - Cutaways | 4 - 29ft XHF's 2 - 35ft XHF's |
| FY 2020 | 3% | 11 - 40ft Hybrid Buses | 9 - Cutaways | 2 - 35ft XHF's |
| FY 2021 | 8% | 4 - 40ft Electric Buses | | |
| FY 2022 | 8% | 7 - 35ft Hybrid Buses | | 2 - 29ft XHF's |
| FY 2023 | 8% | | 1 - Cutaway | |
| FY 2024 | 8% | | | 8- 35ft XHF's |
| FY 2025 | 8% | | | |
| FY 2026 | 10% | | 2 - Electric Cutaway | |
| FY 2027 | 19% | 4 - 30ft Hybrid Buses 7 - 40ft Electric Buses | 9 - Cutaways | 1 - 35ft XHF |
| FY 2028 | 19% | | | 2 - 29ft XHF's |
| FY 2029 | 32% | 10 - 40ft Electric Buses | | |
| FY 2030 | 33% | | 1 - Electric Cutaway | |
| FY 2031 | 41% | 2 - 35ft Electric Buses | | 2 - 35ft Electric Narrow Body 4- 30ft Electric Narrow Body |
| FY 2032 | 57% | 11 - 40ft Electric Buses | | 2 - 35ft Electric Narrow Body |
| FY 2033 | 57% | 4 - 40ft Electric Buses | 2 - Electric Cutaways | |
| FY 2034 | 81% | 7 - 35 ft Zero Emission Buses | 9 - Electric Cutaways | 2 - 30ft Electric Narrow Body |
| FY 2035 | 81% | | | |
| FY 2036 | 81% | | | |
| FY 2037 | 91% | | 1 - Electric Cutaway | 8 - 35 ft Electric Narrow Body |
| FY 2038 | 91% | | | |
| FY 2039 | 97% | 7 - 40ft Electric Buses 4 - 30ft Electric Buses | | 1 - 35 ft Electric Narrow Body |
| FY 2040 | 100% | | 2 - Electric Cutaways | 2 - 30ft Electric Narrow Body |

Decision Points and Next Steps

Staff have identified points in the next ten years when Marin Transit will decide whether to make increased investments in Zero Emission Buses earlier or make other decisions regarding the future of the zero-emission fleet.

- 2019 – Procurement and In-service Plan for FY2021 Electric Vehicles - By the end of 2019, Marin Transit needs a procurement and in-service plan for the four electric vehicles to be purchased in FY2021. This plan will include vehicle selection, an operations plan, associated operations contractor agreements, and a plan for infrastructure and power delivery.
- 2024 – Initial Infrastructure Plan - Marin Transit will complete an initial infrastructure plan allowing three years for implementation and construction before delivery of seven additional electric vehicles in FY2027 and ten additional vehicles in FY2029. The District is currently working to purchase a facility that would accommodate electric vehicle infrastructure. If the District has not purchased a facility, the plan will include alternatives like hydrogen fuel cell buses if the fueling is available or consolidating electric vehicles with contractors that are able to install electrical infrastructure on their properties.
- 2025 – Confirm Vehicle Types for FY2027 Procurement – Marin Transit will evaluate battery range of available zero emission vehicles and the status District's infrastructure and power delivery capabilities to determine if it is possible increase the percentage of zero emission buses purchased in the FY2027 procurement. At this time, the FY2027 procurement is planned to be seven 40-foot electric and four 30-foot hybrid.
- 2025 – Determine if a zero-emission cutaway bus is available – Marin Transit's first planned replacement of a cutaway (shuttle) with zero emission technology is planned for FY2026 to allow additional time for testing and development of a federally approved vehicle. In addition, a price reduction for the technology is needed for it to be cost effective over the shorter vehicle life (seven years). If no federally approved vehicle is available it would be exempt from the CARB requirement, however the District will evaluate replacing shuttles with a standard size battery electric buses or replacing with standard gasoline vehicles until a zero-emission alternative is available.
- 2027 – Confirm Vehicle Types for FY2029 Procurement - Determine whether battery range has improved enough to deliver the District's existing service profile. If not, this allows time for Marin Transit to evaluate purchasing additional vehicles, cutting or re-designing service to match vehicle constraints, and/or negotiating with jurisdictions to install opportunity charging at strategic locations throughout the county.
- 2028 – Confirm Vehicle Types for FY2031 Procurement of Narrow-Bodied Vehicles - Decide whether there is a zero-emission bus that is capable of providing the West Marin Stage and Muir Woods Shuttle services. If not, Marin Transit will have to consider cutting these programs. If there is a narrow-bodied vehicle available and the range limitation is the only concern, the district will evaluate purchasing additional vehicles to provide the service and/or whether installing opportunity charging along the routes is feasible.
- 2029 – Update Initial Infrastructure Plan – Based on the current fleet status and the state of zero-emissions bus technology, Marin Transit will update the infrastructure plan

in advance of the FY2032 procurements that will bring the District's fleet to over 50% electric.

The evolution of electric buses is happening rapidly. Marin Transit values the benefits of zero-emission buses and will recommend investments that take advantage of proven technologies while closely monitoring new developments. The District needs to be flexible as it develops the quickest, most reliable path toward a sustainable and completely zero-emission fleet. Staff will explore technology options as each of these decision points nears and will provide your Board with an evaluation of the best investments to move the District toward a battery electric fleet at a faster pace than the draft vehicle replacement plan provided in this report.

FISCAL IMPACT:

There are no immediate fiscal impacts in this report. However, converting Marin Transit's fleet to 100 percent electric will have financial implications for the future. While the cost of an electric bus is comparable to a hybrid bus, the investments in required infrastructure will be significant as the fleet grows.

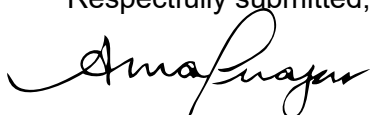
Marin Transit does not own a facility for charging electric buses, and the ability to charge is limited to how much power can be delivered to a contract operator's location. Investing in the first two electric buses was a relatively low commitment and our contractor, Golden Gate Transit, was able to accommodate the additional electricity needed on its existing electrical infrastructure. For a full fleet of battery electric buses, capital-intensive improvements will be needed at a Marin Transit-owned site or on contractor sites to add the load capacity required.

Utilities across the state are urging transit agencies to engage with them early to plan for the required infrastructure improvements needed to bring additional power to their sites. PG&E has a "fleet ready" program to help build and plan for required infrastructure. Under this program, they cover the cost of the electrical infrastructure upgrades, and the participant is responsible for installing the charging infrastructure on site. Marin Transit would have to plan for these future costs.

Current industry estimates are that at least 20 percent more vehicles will be needed to operate an all-electric fleet at the same service levels as their traditional counterparts. Marin Transit will need to plan and budget for expansion vehicles if the range on these vehicles do not improve.

The cost of power is also subject to change. There is a lot of uncertainty around the future of electric pricing. PG&E has developed a Commercial Electric Vehicle Rate that will make charging simpler by removing demand charges and adding a program subscription fee. There will still be time of use charges to encourage power usage when generation costs are lower. Staff will continue to monitor changes in utility pricing structure to find the most economical and green pricing structure to power our fleet.

Respectfully submitted,



Anna Penoyar
Senior Capital Analyst

Attachment A – Detailed Fleet Plan
Attachment B – Current Fleet Summary
Attachment C – Fleet Composition Timeline

| | | | | | Replacements (In-service year) | | | | | | | | | | | | | | | | | | | | | |
|---------------------|------------------|------------------|------------------|---------------|--------------------------------|---------|----------------|---------|---------|----------------|----------------|----------------------|---------|---------|----------------------|---------|---------|---------|-----------------|---------|---------|---------|---------|---------|---------|---------|
| Contractor | Vehicle Type | Life Cycle (yrs) | Current Vehicles | Final Vehicle | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | FY 2026 ^b | FY 2027 | FY 2028 | FY 2029 ^e | FY 2030 | FY 2031 | FY 2032 | FY 2033 | FY 2034 | FY 2035 | FY 2036 | FY 2037 | FY 2038 | FY 2039 | FY 2040 |
| Golden Gate Transit | 60 ft Artic | 12 | 10 | 0 | | | | | | | | | | | | | | | | | | | | | | |
| | 35ft Hybrid | 12 | 7 | 0 | | | | 7 | | | | | | | | | | | | | | | | | | |
| | 35ft Electric | 12 | 2 | 9 | 2 | | | | | | | | | | | | 2 | | | 7 | | | | | | |
| | 40ft Hybrid | 12 | 10 | 0 | | 11 | | | | | | | | | | | | | | | | | | | | |
| | 40ft Electric | 12 | 0 | 25 | | | 4 ^a | | | | | | | | 10 | | | | 15 ^d | | | | | | | |
| | Shuttle | 7 | 12 | 0 | 2 | | | | 1 | | | | 9 | | | | | | | | | | | | | |
| | Electric Cutaway | 7 | 0 | 12 | | | | | | | | 2 | | | | 1 | | | 2 | 9 | | | 1 | | | 2 |
| | 40ft Hybrid | 12 | 7 | 0 | | | | | | | | | | | | | | | | | | | | | | |
| | 40ft Electric | 12 | 0 | 7 | | | | | | | | | 7 | | | | | | | | | | | | 7 | |
| | 30ft Hybrid | 12 | 4 | 0 | | | | | | | | | | 4 | | | | | | | | | | | 4 | |
| Marin Airporter | 30 ft Electric | 12 | 0 | 4 | | | | | | | | | | | | | | | | | | | | | | |
| | Stage Cutaway | 7 | 6 | 0 | | | | | | | | | | | | | | | | | | | | | | |
| | 29ft XHF | 12 | 3 | 0 | 4 | | | 2 | | | | | | 2 | | | 4 | | | | | | | | | |
| | 30 ft Electric | 12 | 0 | 9 | | | | | | | | | | | | | | | | | | | | | | 2 |
| | 35ft XHF | 12 | 10 | 0 | 2 | 2 | | | | 3 ^c | 5 ^c | | 1 | | | | | | | | | | | | | |
| MV Transportation | 35ft Electric | 12 | 0 | 10 | | | | | | | | | | | | | 2 | 2 | | | | | 8 | | 1 | |
| | NPS | N/A | 2 | 0 | | | | | | | | | | | | | | | | | | | | | | |


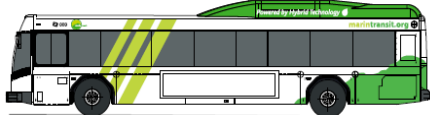
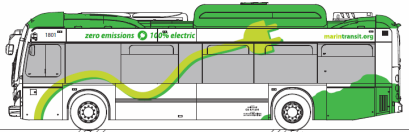





- A - Purchase of 4 Electric Buses in FY 2021 (and replacement in 2033) going on GGT contract is contingent upon service levels and GGT ability/willingness to operate Vehicle type
- B - Replacement of 11 - 40ft Hybrids and 4 - 40ft Electric Vehicles combined in FY 2033:
- C - Will combine purchase of 3 - 35ft XHFs and 5 - 35ft XHFs in either FY 2024 or FY 2025
- D - 25% of purchases are Required to be Zero-Emission under CARB's Innovative Clean Transit Rule
- E - 100% of purchases are Required to be Zero-Emission under CARB's Innovative Clean Transit Rule

= Electric Fleet

= Fleet No Longer Exists

2019 Fleet Summary

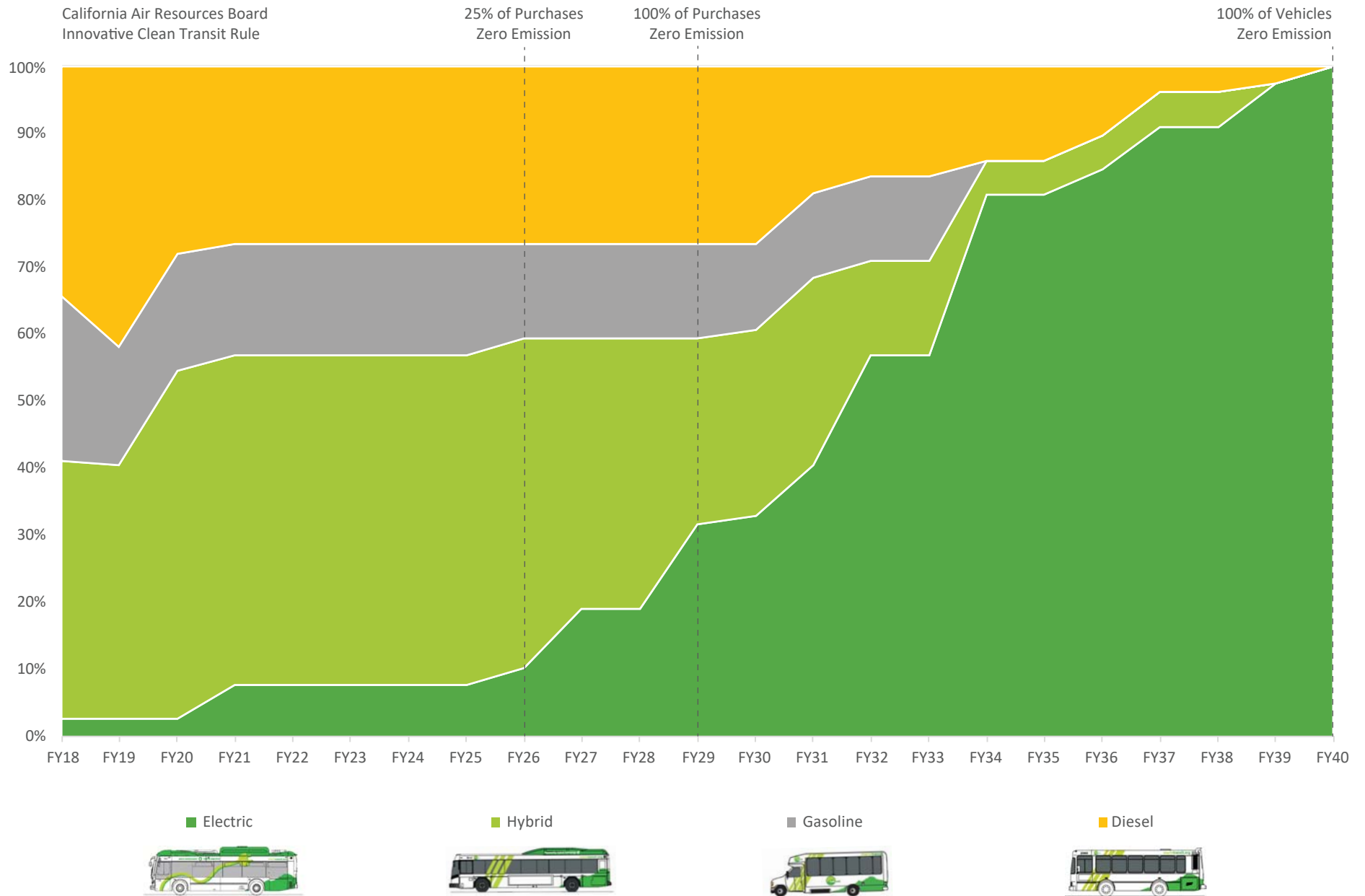
21

| No. of Vehicles | Vehicle Type | Vehicle | Contractor | Service | Vehicle Length | Seating Capacity |
|-----------------|---|---|--|-----------------------|--------------------------|------------------|
| 10 | Articulated Vehicle |  | Golden Gate Transit | Fixed Route Local | 60.7 ft | 63 |
| 17 7 4 | 40ft Hybrid Vehicle 35ft Hybrid Vehicle 29ft Hybrid Vehicle |  | Golden Gate Transit Marin Airporter | Fixed Route Local | 40 ft 35.8 ft 30ft | 38 29 26 |
| 2 | 35ft Battery Electric |  | Golden Gate Transit | Fixed Route Local | 35 ft | 32 |
| 12 3 | 35 ft XHF 29 ft XHF |  | MV Transportation | West Marin Stagecoach | 29 ft | 29 |
| 6 | 30ft Cutaway |  | MV Transportation | West Marin Stagecoach | 32 ft | 30 |
| 13 | 24ft Cutaway |  | Marin Airporter | Local Shuttle | 24ft | 20 |
| 34 | 20-22ft Cutaway |  | Whistlestop | Paratransit | 20ft 22ft | 8 12 |
| 4 | Ford Transit Vans |  | Whistlestop | Marin Transit Connect | 22ft | 6 |

updated 3.13.2019

Item 5

MARIN TRANSIT FIXED ROUTE FLEET COMPOSITION





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April 1, 2019

Honorable Board of Directors
Marin County Transit District
3501 Civic Center Drive
San Rafael, CA 94903

SUBJECT: Purchase Agreement with Gillig, LLC for Eleven Low Floor Hybrid Diesel-Electric Buses

Dear Board Members:

board of directors

damon connolly
president
supervisor district 1

dennis rodoni
vice president
supervisor district 4

kate colin
2nd vice president
city of san rafael

judy arnold
director
supervisor district 5

stephanie moulton-peters
director
city of mill valley

katie rice
director
supervisor district 2

kathrin sears
director
supervisor district 3

eric lucan
alternate
city of novato

RECOMMENDATION: Authorize General Manager to complete the purchase of eleven (11) 40-foot hybrid vehicles for local service at a cost not to exceed \$9,057,000 and approve budget amendment (19-07) to add the replacement project.

SUMMARY:

Staff recommends that your Board authorize the General Manager to purchase eleven 40-foot hybrid diesel-electric low-floor vehicles through an agreement with Gillig, LLC. The vehicles will replace eight 60-foot articulated vehicles currently operated by Golden Gate Bridge Highway and Transportation District (GGBHTD) that are beyond their useful life. Instead of a bus for bus replacement, the District is conducting the replacement on a seat for seat basis to retain the same capacity and service levels. In fiscal year 2020, the remaining three articulated vehicles will be replaced by four 40-foot Battery Electric Buses.

The vehicles will be purchased off a contract competitively bid by Livermore Amador Valley Transit Authority (LAVTA) in 2015. That agreement included a quantity of 45 to 90 buses that could be assigned to other agencies. By assignment, LAVTA transferred the options to purchase these eleven buses to Marin Transit.

As outlined in Marin Transit's 2016 Short Range Transit Plan, the District is committed to reducing emissions and pursuing alternative fuels and technologies. Marin Transit started purchasing hybrid buses in 2010 and now owns a fleet of 28 hybrid buses that operate on local routes throughout the county.

Marin Transit initially evaluated battery electric buses for this purchase. However, the range limitations and required infrastructure is prohibitive for replacing the entire articulated bus fleet at this time with battery electric buses. For this reason, staff recommends that the District replace eight of the ten articulated buses with hybrid

diesel-electric buses this year and plan to replace the remaining two with four battery electric buses.

The ten articulated buses produce the most emissions of the vehicles in our fleet, at 3.11 pounds of CO₂ per mile. Replacing these vehicles with hybrid buses will reduce Marin Transit's carbon emissions by an estimated 40%.

With your Board's authorization, Marin Transit will initiate the vehicle order with Gillig, LLC. The vehicles will meet Americans with Disabilities Act requirements, and have a useful life of twelve years. The buses will be used for GGBHTD-operated fixed route local service and will be consistent with the rest of Marin Transit's fleet operated by GGBHTD. Due to an opening in Gillig's build schedule, Marin Transit anticipates delivery in January 2020.

These buses have a planned mid-life battery refresh at six years. If at this time, the technology is available and it is cost-effective, Marin Transit will evaluate converting this fleet to battery electric.

SERVICE IMPACT/STUDY:

The ten articulated vehicles were purchased in 2008 when local transit service in Marin County was structured differently. Two to four trips per hour served the Canal area of San Rafael on Route 35, the part of the local transit system with the highest concentration of riders. These routes would connect to Downtown San Rafael and offered limited direct connectivity to other parts of Marin. As resources increased, Marin Transit restructured and expanded countywide services including service to the Canal. In June 2016, Marin Transit created five routes to serve the Canal and each provided direct connections to other parts of the county. Today, six to eight trips per hour serve the Canal, an increase in service of 200-300% over service levels in 2006 when these vehicles were originally purchased.

While service levels expanded, ridership has not expanded at the same rate. When Marin Transit operated two to four trips per hour, Route 35 experienced very high ridership. The larger articulated vehicles accommodated these high ridership levels. Most of these Canal riders then transferred to/from other service in Downtown San Rafael and the articulated buses would return to the Canal for another "loop" connection. Today's Canal neighborhood service levels and route configurations only require the passenger capacity of an articulated bus to support service on some peak trips.

In Spring 2018, Marin Transit initiated work with a consultant to analyze the articulated bus replacement and develop recommendations for the future fleet purchase. In addition to evaluating ridership levels on current services to identify capacity needs, the consultant talked with Golden Gate Transit Operations, Scheduling, and Maintenance staff to better understand how the replacements need to support all aspects of service delivery. The recommendation to purchase the Gillig 40-foot hybrid vehicles supports current and future operational needs and fleet consistency, increases efficiency in operations and maintenance, and advances the District's goal to reduce emissions and "green" the fleet.

Staff has continued to identify potential adjustments to service due to using 40-foot buses in place of 60-foot buses serving the Canal. The final scheduling and routing recommendations will be part of the District's upcoming Short Range Transit Plan. Staff's initial estimate is that six to eight additional hours of weekday peak hour service may be needed to support peak ridership or 1,500-2,000 service hours annually.

FISCAL/STAFFING IMPACT:

The total cost for each 40-foot hybrid low-floor bus is expected to be \$840,000, which is \$260,000 more than the cost of an equivalent clean diesel bus. Combined, staff estimates that the eleven hybrid buses will cost \$9,057,000. Approximately 98 percent of the total cost will be applied to the Gillig contract. The remainder will be assigned to vehicle inspection, staff time, and ancillary equipment.

The eleven buses are part of a federally-funded project to replace eight articulated buses that have reached the end of their useful life. Budget Amendment 19-07 will add the replacement project to the District's FY 2018/19 Capital Budget, though the majority of expenditures will occur in FY 2019/20. Eighty percent of the funding is from Federal Transit Administration (FTA) Section 5307. Marin Transit will use its FY2019/20 allocation of California's State of Good Repair Funds under Senate Bill 1 for the purchase. The remaining 16 percent will be funded through local sales tax Measure A/AA revenues.

Table 1: Budget Amendment 19-07 – Purchase Eleven 40ft Hybrid Vehicles

| Funding Source | Amount |
|---|--------------------|
| FTA Section 5307 | \$7,216,000 |
| California - State of Good Repair (SB1) | \$216,827 |
| Measure A/AA Local Sales Tax | \$1,624,173 |
| | \$9,057,000 |

The cost to deliver estimated 1,500-2,000 additional annual service hours on the Canal routes during peak periods is estimated to be between \$198,000 and \$264,000 annually. The additional service hours and operating costs will be included in the FY2019/20 budget and funded with State Transportation Act revenues. There will need to be a service change to add the hours which will not occur until March 2020.

Respectfully submitted,



Anna Penoyar
Senior Capital Analyst

Attachment A: Vehicle Description

11 - 40ft Gillig Low Floor Hybrid Buses



Vehicle Facts

Useful Life: 12 years

Engine: Cummins 280HP Diesel Engine

Transmission: Allison H40EP Parallel Electric Drive System

Passenger Seating: AMSECO Insight (38 seats)

Fareboxes: GFI 36" High Odyssey

Clipper Regional Fare System Reader: One mounting location

Surveillance Cameras: Seon Explorer TX8, (7) Color Cameras

AVL: Syncromatics with Voice Annunciator

Destination Sign: Hanover 100% Amber LED

Wheelchair Ramp: Lift-U, LU-18, front door

Wheelchair Postions: 2

Bicycle Rack: Sportworks, 3 position

Project Timeline

- **March 2019:** Board Approval, Order Placed
- **April 2019:** Pre-Production Meeting (Specs finalized)
- **December 2019:** Start of Build
- **December 2019/January 2020:** Final Delivery





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April 1, 2019

Honorable Board of Directors
Marin County Transit District
3501 Civic Center Drive
San Rafael, CA 94903

**SUBJECT: Purchase Agreement with Creative Bus Sales, Inc.
for Four 29-foot XHF Buses**

Dear Board Members:

board of directors

damon connolly
president
supervisor district 1

dennis rodoni
vice president
supervisor district 4

kate colin
2nd vice president
city of san rafael

judy arnold
director
supervisor district 5

stephanie moulton-peters
director
city of mill valley

katie rice
director
supervisor district 2

kathrin sears
director
supervisor district 3

eric lucan
alternate
city of novato

RECOMMENDATION: Authorize General Manager to complete the purchase of four 29-foot XHF buses for an amount not to exceed \$1,710,000 and approve budget amendment 19-08.

SUMMARY:

Staff recommends that your Board authorize the General Manager to purchase four 29-foot heavy duty XHFs to replace three 27-foot and one 32-foot cutaway buses that are beyond their useful life.

Due to the demanding terrain, Marin Transit began purchasing XHF buses in 2016 to replace cutaway buses that operate on the West Marin Stagecoach routes. The XHFs are similar to those used on the Muir Woods Shuttle since 2010. While the XHF bus is initially more expensive, it has proven to be more reliable than a cutaway shuttle vehicle. In addition, XHFs have a longer useful life at 12 years as opposed to seven years for a cutaway. They have a narrow body and shorter wheelbase to navigate the tight turns on rural routes in West Marin and can also be used for supplemental school services. With this purchase, 17 out of the 19 vehicles operated under MV Transportation's contract will be 29-foot or 35-foot XHFs. This fleet consistency provide flexibility for assigning vehicles to routes and streamlines maintenance.

The new XHFs will replace four vehicles that are beyond their useful life and will be operated under contract by MV Transportation. Each bus will be equipped with Clipper, fareboxes, and Syncromatics real-time vehicle tracking, consistent with the rest of Marin Transit's fleet.

The District will procure these vehicles through a cooperative vehicle purchasing agreement with the Morongo Basin Transit Authority (MBTA) and CalACT. The cooperative agreement enables transit agencies to purchase a variety of vehicles from different vendors and manufacturers, while avoiding the administrative burden of issuing bid packages. This arrangement reduces agency costs and

the time required to purchase smaller quantities of vehicles and complies with federal statutes and regulations applicable to all third-party contracts.

In preparing to replace the four vehicles, Marin Transit evaluated available zero-emission battery electric bus options. At this time, a battery electric bus cannot travel the distances and grades required for the Stage and Muir Woods Shuttle routes. There is no Federally-approved option for a zero-emission narrow body bus that can navigate the terrain of West Marin. In addition, the District does not have the ability to install charging infrastructure at MV Transportation's leased storage yard in Novato.

FISCAL/STAFFING IMPACT:

Staff is requesting authorization for a purchase order with Creative Bus Sales for an amount not to exceed \$1,710,000 based on previous purchases and a contingency. The project is included in the FY2018/19 Capital Budget as "Purchase 4 Replacement Rural Vehicles" with a project budget of \$1,600,000. Budget amendment 19-08 will increase the total project budget of \$1,710,000, as shown in the table below, with the majority of expenditures in FY2019/20.

Table 1: Capital Budget – Purchase Four Rural Vehicles

| Funding Source | Amount |
|---|--------------------|
| FTA Section 5307 | \$559,600 |
| FTA Paul Sarbanes Discretionary Grant | \$151,494 |
| California – State of Good Repair (SB1) | \$286,651 |
| Measure A/AA Local Sales Tax | \$712,255 |
| | \$1,710,000 |

Funding for these buses comes from a combination of federal, state, and local funding sources. Under the MTC Transit Capital Priorities (TCP) program, the available Section 5307 funds reflect an upgrade to the designated vehicle type. Federal Transit Administration Section 5307 formula funds cover 33 percent of the total purchase cost. Funding from the District's Paul Sarbanes Grant will cover nine percent of the purchase. California State of Good Repair funds from Senate Bill 1 will fund 17 percent, and the remaining 41 percent will be funded through Measure A revenues for transit capital projects.

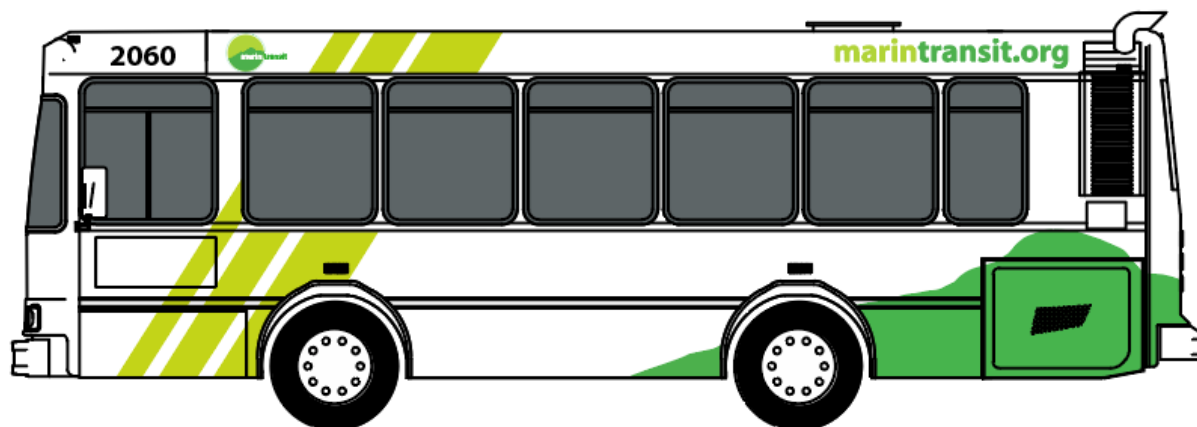
Respectfully Submitted,



Anna Penoyar
Senior Capital Analyst

Attachment A: Vehicle Description

4 - 29ft El Dorado National XHF Buses



Vehicle Facts

Useful Life: 12 years

Engine: Diesel

Passenger Seating: Freedman Mid High (29 seats)

Fareboxes: GFI 36" High Odyssey

Clipper Regional Fare System Reader: One mounting location

Surveillance Cameras: Seon Explorer TX8, (6) Color Cameras

AVL: Syncromatics with Voice Annunciator

Destination Sign: Hanover 100% Amber LED

Wheelchair Ramp: Lift-U, LU-18, front door

Wheelchair Postions: 2

Bicycle Rack: Sportworks, 2 position

Project Timeline

- **March 4, 2019:** Board Approval
- **March 2019:** Receive CalACT Letter of Assignment, place order
- **January 2020:** Estimated Vehicle Delivery





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April 1, 2019

Honorable Board of Directors
Marin County Transit District
3501 Civic Center Drive
San Rafael, CA 94903

SUBJECT: Authorize Funding Swap for Metropolitan Transportation Commission Cycle 5 Lifeline Program

Dear Board Members:

board of directors

damon connolly
president
supervisor district 1

dennis rodoni
vice president
supervisor district 4

kate colin
2nd vice president
city of san rafael

judy arnold
director
supervisor district 5

stephanie moulton-peters
director
city of mill valley

katie rice
director
supervisor district 2

kathrin sears
director
supervisor district 3

eric lucan
alternate
city of novato

RECOMMENDATION: Provide approval to the Transportation Authority of Marin (TAM) to reduce Measure AA sales tax in *Strategy 4: Local Bus* funds by \$248,000 in exchange for an allocation of \$248,000 in State Transit Assistance (STA) funds.

SUMMARY:

The Metropolitan Transportation Commission (MTC) established the Lifeline Transportation Program (Lifeline) to provide funding for projects that improve mobility for low-income residents. The Lifeline program initially included diverse funding sources. In the last two cycles, MTC has limited funding for eligible projects to transit operations and transit capital projects.

The Transportation Authority of Marin (TAM) has requested that Marin Transit accept a reduction of Measure AA sales tax funds in exchange for an additional allocation of STA funds. TAM requests this funding exchange to enable their agency to implement their Cycle 5 Lifeline Transportation Program.

Staff is recommending this exchange to allow TAM to fund their selected projects in the Marin County Cycle 5 Lifeline Program.

This type of funding exchange reduces the availability of transit funds in Marin County and increases funding for pedestrian projects. Before the exchange, the Measure A local sales tax funds and the state funds were available for allocation solely to transit projects in Marin County. After the exchange, TAM will allocate the Measure A local transit funds to pedestrian projects. However, this is expected to be the last of these types of exchanges for two reasons:

A. MTC recently updated the process for allocating STA population-based funds to move the programming to the County level. The three Marin County transit agencies (Golden Gate Bridge Highway and Transportation District, Sonoma Marin Area Rail Transit, and

Marin Transit) signed an agreement to share these funds. The formula is based on the amount of service delivered (passenger trips) and coverage provided (total service hours/train hours). The agreement allows Marin Transit to continue to use its STA allocation to support Lifeline transit projects identified in future Community Based Transportation Plans.

- B. Marin Transit staff have advised TAM to develop project requests (Call for Projects) that reflect available funds. This will avoid the need for these types of funding exchanges in the future.

BACKGROUND:

The TAM Board adopted a policy to use Lifeline funds for three targeted communities that have Community Based Transportation Plans (CBTPs). These include the City of Novato, the Canal neighborhood in San Rafael, and unincorporated Marin City. As the local transit provider, Marin Transit is the primary transit provider in each of these communities, and over 50 percent of Marin Transit riders live in the Canal. In the past, Marin Transit has used Lifeline funds to significantly increase service frequency and provide better connections to these communities.

Marin Transit is committed to providing services to Lifeline communities. Approximately 75 percent of Marin Transit riders are transit dependent, 79 percent of households qualify as low income according to MTC (incomes under \$50,000), and 63 percent identify as minority. At least 40 percent of local riders speak Spanish. TAM has a role in prioritizing transit expenditures for low-income communities as a part of the Lifeline program.

In Cycle 5, Marin Transit staff submitted applications to TAM for four projects that provide mobility for low-income residents and are included in a CBTP. The four projects exceeded the total available funding of \$560,201. These projects are identified in Table 1 below.

Table 1: Marin Transit's Cycle 5 Lifeline Applications

| Marin Transit Proposed Projects | <i>Requested</i> | <i>Awarded</i> |
|--|-------------------------|-----------------------|
| Route 245 – Provide continued support for the Route 245 Shuttle San Rafael, Dominican University, the Marin Employment Center, and vocational programs at the College of Marin. This route provides job access - the target for this subset of FTA 5307 funds | \$174,163 | \$0 |
| Route 36 - Operations funding for Route 36 between Marin City and Canal, including school day service to North San Pedro School | \$200,000 | \$0 |
| Novato School Service - Operations funding to expand school transportation service in Novato | \$200,000 | \$44,204 |
| Bus Stop Improvements - Capital funding for bus stop improvements and real-time information signs in the Canal neighborhood of San Rafael | \$200,000 | \$200,000 |

Following the MTC guidelines, TAM staff worked with an evaluation panel to review all submitted applications. The panel recommended award for two of Marin Transit's proposed projects: Bus Stop Improvements and a partial award of funding to improve school service in

Novato. Your Board approved a funding resolution for all four proposed Cycle 5 Lifeline projects in November 2018.

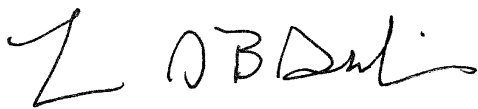
Unlike other Counties, TAM did not limit projects and project applicants to eligible recipients and eligible uses for the current available fund sources in the Lifeline Program. As a result, the review committee and the TAM Board selected two projects that do not meet the requirements for the available funding sources. To fund these additional non-transit projects, TAM has proposed replacing the Local Bus Share with Measure AA Sales Tax funding. In exchange, TAM will program the remaining Marin County State Transit Assistance funding to Marin Transit. At its March 11, 2019 meeting, the TAM Executive Committee asked that the Marin Transit Board approve the proposed funding exchange. Table 2 shows the funding exchange.

Table 2: Transportation Authority of Marin's (TAM) Funding Exchange Proposal

| Sponsor | Project | Lifeline Cycle 5 Funding Recommendation | Type of Funds | | |
|---------------|--|---|----------------------------|-----------------------------|--------------------------------|
| | | | STA Funds (Lifeline) | 5307 Funds (Lifeline) | Measure AA Transit Funds |
| Marin Transit | Bus Stop Improvements | \$200,000 | \$25,837 | \$174,163 | |
| Marin Transit | School Transportation Service in Novato | \$75,151 | | | \$75,151 |
| Marin County | Drake/Cole Pedestrian Improvements | \$68,000 | | | \$68,000 |
| San Rafael | Canal Neighborhood Crosswalk Improvements | \$248,000 | | | \$248,000 |
| Marin Transit | Route 36 (Canal – Marin City) | \$0 | \$391,151 | | (\$391,151) |
| | Total | \$591,151 | \$416,988 | \$174,163 | \$0 |

FISCAL/STAFFING IMPACT: Approval of the funding exchange will maintain Marin Transit's allocation level of Measure AA sales tax funds by allocating additional Marin County STA funding to Marin Transit. The additional STA projects will be added to upcoming FY2019/20 State funding allocation and will not create a significant administrative burden for Marin Transit staff.

Respectfully submitted,



Lauren Gradia
Director Finance and Capital Programs



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April 1, 2019

Honorable Board of Directors
Marin County Transit District
3501 Civic Center Drive
San Rafael, CA 94903

SUBJECT: Marin County Transit District Service Credit Replacement Plan

Dear Board Members:

board of directors

damon connolly
president
supervisor district 1

dennis rodoni
vice president
supervisor district 4

kate colin
2nd vice president
city of san rafael

judy arnold
director
supervisor district 5

stephanie moulton-peters
director
city of mill valley

katie rice
director
supervisor district 2

kathrin sears
director
supervisor district 3

eric lucan
alternate
city of novato

RECOMMENDATION: Adopt the Marin County Transit District Service Credit Replacement Plan ("Plan").

SUMMARY: The Plan, Attachment A, will provide replacement retirement benefits for six Local Government Services ("LGS") employees assigned to the Marin County Transit District under contract for the period May 2010 through October 2013 for approximately 3.5 years. One employee subsequently withdrew from the LGS Public Employees Retirement System (PERS) plan, and the Plan provides an option for that employee to re-enroll to receive his replacement service credits. Staff engaged the services of Pillsbury Winthrop Shaw Pittman LLP ("Pillsbury") to assist in drafting the Plan and to ensure that it meets all legal and tax requirements.

BACKGROUND: Marin County Transit District has evolved into an independent agency over the past twelve years. Initially the District was staffed in the County's Public Works Department and the County effectively managed all the administrative functions of the District. Over time, Marin Transit used different employment models and various means of performing the administrative functions of the agency.

From May 2010 through October 2013, Marin Transit contracted with LGS for six professional and administrative employees to serve the agency. Under this contract, LGS paid the salary and benefits and performed the Human Resources function for these employees. The employees were directly paid by LGS, which also provided PERS retirement benefits and other traditional employee benefits.

In October 2013, the District decided to "in-source" these personnel and administrative activities. Marin Transit elected to not become a member agency of PERS and instead established a defined contribution retirement program for employees. The defined

contribution retirement program has significantly reduced costs and potential future financial liability for the agency.

In May 2017, PERS issued an audit of LGS finding that the LGS employees were “common law” employees of LGS client agencies including Marin Transit. PERS notified Marin Transit and the six employees that their service credits earned while under LGS employment would be reversed.

With assistance from Matsumoto Consulting and County Counsel, staff has been assessing options to preserve the affected employees’ benefits. Of the options under consideration, establishing a service credit replacement plan appears to be the most promising. This approach will provide a defined benefit pension plan with essentially the identical retirement benefit that the impacted employees would have received through LGS.

Procedurally, because your Board has been presented with actuarial figures at its February 2019 meeting, your Board may adopt the Plan at today’s meeting, consistent with state law. If adopted at today’s meeting, the effective date of the Plan will be April 1, 2019.

The valuation presented in February 2019 shows an unfunded liability of \$41,121, with the annual cost for FY2019 of \$4,364. The annual cost for the Plan retirement benefits is the contribution toward the 15-year pay-down of the unfunded liability. Annual Plan administration costs are estimated to be approximately \$3,100 for trustee fees and actuarial services.

Additional funds could be required to establish the Service Credit Replacement Plan if PERS does not return all moneys paid by Marin Transit through LGS to PERS. If PERS does not return these funds, staff will return to your Board to consider additional funding for the Service Credit Replacement Plan or to pursue an alternative course of action.

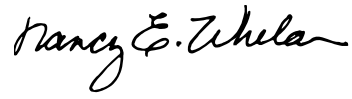
PERS had agreed to not reverse the employees’ service credits while Marin Transit makes good faith efforts to pursue an appropriate correction to the service credits in question. LGS took the appropriate actions to cease operations as of December 31, 2018 and created a successor entity to wind-up liabilities. We further understand from LGS’s former Executive Director that discussions have continued regarding the status of the funds between the parties. These discussions have not been concluded at the time of this writing. PERS has also not taken actions to close out any LGS employee member or LGS employer accounts at PERS.

Next steps include

- Continuing to follow up with PERS/LGS with the goal of having PERS return all the moneys paid by the District through LGS to PERS: obtaining a Plan trust account;
- Select an investment advisor to manage the Plan’s funds held in the trust account;
- Develop a plan administration manual that describes the roles and responsibilities for self-administering the Plan until such time that the District can secure a third-party plan administrator, and
- Develop a fund transfer agreement with PERS, if necessary.

FISCAL IMPACT: Approval of the recommended action and implementation of the Plan will commit the Agency to those future costs described in the February 4, 2019 report. Annual costs are estimated to be approximately \$7,464 to contribute toward the unfunded liability over a 15-year pay-down period and for plan administration. Staff will return to your Board to consider approval of additional funds or alternatives should PERS/LGS not return all funds paid to PERS.

Respectfully submitted,

A handwritten signature in black ink, reading "Nancy E. Whelan". The signature is written in a cursive style with a large, stylized 'N' and 'W'.

Nancy Whelan
General Manager

Attachment A: Marin County Transit District Service Credit Replacement Plan

**MARIN COUNTY TRANSIT DISTRICT
SERVICE CREDIT REPLACEMENT PLAN**

As Amended and Restated Effective _____

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INTRODUCTION

The Marin County Transit District (hereinafter referred to as the “Employer”) previously entered into an arrangement that provided benefits under a tax-qualified governmental defined benefit plan to certain leased employees for their service to the Employer. Effective _____, the Employer has adopted this Marin County Transit District Service Credit Replacement Plan, as an amendment and restatement of that arrangement, for the benefit of those leased employees.

It is intended that this Plan and the Trust established to hold the assets of the Plan be qualified under Section 401(a) and tax-exempt under Section 501(a) of the Internal Revenue Code of 1986, together with any amendments thereto (“Code”). It is further intended that this Plan and the Trust established hereunder meet the requirements of a pension trust under California Government Code Sections 53215–53224, or their successor sections (“Act”). Furthermore, this Plan is intended to satisfy the requirements of a “governmental plan” as defined in Section 414(d) of the Code and, as such, exempt from the nondiscrimination requirements and minimum coverage requirements of Section 401(a) of the Code. At any time prior to the satisfaction of all liabilities with respect to Participants and their Beneficiaries, the Trust assets may not be used for, or diverted to, purposes other than the exclusive benefit of Participants or their Beneficiaries, as prescribed in Section 401(a)(2) of the Code.

Unless otherwise indicated, capitalized terms used in the Plan are defined in Article VII.

ARTICLE I

PARTICIPATION

1.1. Eligibility and Commencement of Participation

Each person who was a Participant as of the close of business on the day before the Effective Date will continue to be a Participant on the Effective Date. (Such continuing Participants are identified in Appendix 2.) Each other person will become a Participant on the later of the Effective Date or the date he or she first becomes an Eligible Employee. Only Eligible Employees may become Participants on and after the Effective Date.

1.2. Cessation of Participation

A Participant's participation in the Plan will cease upon distribution from the Plan of his or her entire interest in benefits under the Plan.

ARTICLE II

BENEFITS

2.1. **Introduction**

The Plan provides for two types of benefits, a Retirement Benefit under Section 2.2, and a pre-retirement death benefit under Section 2.3. Only Participants who are vested under Article III (and who meet other requirements specified in Section 2.2) are entitled to a Retirement Benefit. Upon a Participant's death before retirement, a Participant's Beneficiary will receive a pre-retirement death benefit regardless of vesting, but the amount and type of benefit differs depending on the Participant's eligibility to retire when he or she dies. Apart from the pre-retirement death benefit, no death benefits will be provided under the Plan.

2.2. **Retirement Benefit**

(a) A Participant is eligible to retire under the Plan and receive a Retirement Benefit if the Participant is not an Employee, is age 50 or older, and is vested under Article III.

(b) Upon his or her retirement under the Plan, a Participant will be entitled to receive an annual Retirement Benefit equal to the product of the following factors:

Age Factor at retirement X Benefit Service X Final Pay

(c) The Retirement Benefit is payable at the time described under Section 4.1 and in the form determined under Sections 4.2 or 4.3, as applicable.

2.3. **Pre-Retirement Death Benefit**

(a) If a Participant who is both vested under Article III and age 50 or older dies before retiring, the following death benefits will be provided:

(1) If the Participant's Beneficiary upon death is his or her surviving Spouse or Domestic Partner, then such surviving Spouse or Domestic Partner will be entitled to

receive a benefit from the Plan, commencing on the first day of the month after the Participant's death. Such benefit will be equal to the benefit that the surviving Spouse or Domestic Partner would have received if, on the date of death, the Participant had retired and elected under Section 4.3(a) to receive his or her Retirement Benefit in the form of a Joint and 100% Survivor Continuance with the surviving Spouse or Domestic Partner as Beneficiary. Upon the surviving Spouse's or Domestic Partner's death, the benefit will continue to the Participant's natural or adopted unmarried children under age 18, but only through the date the child reaches age 18.

(2) If the Participant's Beneficiary upon death is not his or her surviving Spouse or Domestic Partner (if any), the Beneficiary will be entitled to receive, as soon as administratively practicable after the Participant's death, a lump-sum payment from the Plan equal to the sum of (i) an amount equal to $1/12^{\text{th}}$ of Final Pay for each month of Benefit Service completed by the Participant, up to six months, and (ii) a refund of the Participant's Member Contributions, determined in accordance with Section 2.5.

(b) If a Participant dies before becoming vested under Article III or before reaching age 50, then his or her Beneficiary will be entitled to receive, as soon as administratively practicable after the Participant's death, a lump-sum payment from the Plan equal to the sum of (i) an amount equal to $1/12^{\text{th}}$ of Final Pay for each month of Benefit Service completed by the Participant, up to six months, and (ii) a refund of the Participant's Member Contributions, determined in accordance with Section 2.5.

2.4. Designation of Beneficiary

(a) Each Participant has the right to designate a Beneficiary to receive the pre-retirement death benefit or, if upon retirement the Participant selects an optional form of payment

under Section 4.3, the applicable survivor continuance. Such designation does not permit the Participant to change a person identified under another provision of the Plan as being eligible to receive a benefit. Such designation must be evidenced by a written instrument filed with the Plan Administrator, on a form prescribed by the Plan Administrator, and signed by the Participant.

(b) Upon a Participant's death, the Beneficiary will be the Participant's surviving Spouse or Domestic Partner, unless the Participant has designated another person as Beneficiary and either (i) that Spouse or Domestic Partner has provided written consent upon a form acceptable to the Employer to the Participant's designation of a different Beneficiary, or (ii) the Spouse's or Domestic Partner's consent is not required due to any of the reasons described in Section 2.4(c). Each such designation for death benefits must be evidenced by a written instrument filed with the Plan Administrator, at the time and in the manner prescribed by the Plan Administrator. If no such designation is on file with the Plan Administrator at the time of the death of the Participant, or if for any reason at the sole discretion of the Plan Administrator, such designation is defective, then the Spouse or Domestic Partner of such Participant will be conclusively deemed to be the Beneficiary.

(c) The signature of the Participant's Spouse or Domestic Partner is required on a designation of beneficiary form or an application for a benefit under the Plan if the Spouse or Domestic Partner is not the Beneficiary, unless the Participant declares in writing that one of the following conditions exists:

- (1) The Participant does not have a Spouse or Domestic Partner;
- (2) The Participant does not know, and has taken all reasonable steps to determine the whereabouts of the Spouse or Domestic Partner;

(3) The Spouse or Domestic Partner is incapable of executing the acknowledgment because of an incapacitating mental or physical condition;

(4) The Participant and Spouse or Domestic Partner have executed a settlement agreement that makes the community property laws inapplicable to the marriage or domestic partnership; or

(5) The current Spouse or Domestic Partner has no identifiable community property interest in the benefits.

2.5. Refund of Member Contributions

A Participant who is not an Employee and who has not retired may elect to receive a refund of his or her Member Contributions, plus interest. For this purpose, interest will be determined using the same interest rates that CalPERS uses to calculate refunds of member contributions to its individual members. Upon payment of such refund, the Participant will forfeit all benefits under the Plan accrued through the date of the refund. The benefits may not be subsequently reinstated.

ARTICLE III

VESTING

A Participant is vested in his or her benefits under the Plan upon completing five years of Vesting Service.

ARTICLE IV

DISTRIBUTIONS

4.1. **Timing of Retirement Benefit**

To retire and begin receiving a Retirement Benefit, a Participant must follow the procedural requirements for retiring, as established by the Plan Administrator in its sole discretion. The retirement will be effective upon the Plan Administrator's approval of the Participant's retirement. Payment of the Participant's Retirement Benefit will begin on the first day of the month after the effective date of retirement. If for any reason the payment does not begin until a later date, the first payment will include all past benefit payments owed from the first day of the month following the effective date of retirement, without interest.

4.2. **Normal Form of Benefit**

Unless the Participant elects an optional form of benefit under Section 4.3, payments to a Participant of a Retirement Benefit will be made in the form of monthly payments in the amount determined in accordance with Section 2.2(b), commencing on the date specified in Section 4.1 and ending on the first day of the month in which the Participant's death occurs. This form of payment is the "Normal Form of Benefit."

4.3. **Optional Forms of Benefit**

In lieu of the Normal Form of Benefit, a Participant may elect to receive monthly payments in the form described under Section 4.3(a) or (b), commencing on the date specified in Section 4.1. If elected, such form of benefit payment will be equal to the Actuarial Equivalence of the Normal Form of Benefit.

- (a) **Joint and 100% Survivor Continuance:** Under this form of payment:

(1) The Participant receives a reduced monthly benefit, and if the Participant predeceases the Beneficiary, the Beneficiary will receive a monthly payment for the life of the Beneficiary equal to 100% of such reduced monthly benefit; provided, however, that if the Beneficiary is not the Spouse of the Participant, this form of payment shall be available only to the extent permitted pursuant to Section 4.5(b)(4)(A). The benefit shall terminate as of the first day following the Beneficiary's death.

(2) If the Beneficiary predeceases the Participant, the Participant's reduced monthly payment will not increase.

(3) A Participant's designation of a Beneficiary will become irrevocable upon the Participant's retirement if electing this form of payment.

(b) **Joint and 50% Survivor Continuance:** Under this form of payment:

(1) The Participant receives a reduced monthly benefit, and if the Participant predeceases the Beneficiary, the Beneficiary will receive a monthly payment for the life of the Beneficiary equal to 50% of such reduced monthly benefit; provided, however, that if the Beneficiary is not the Spouse of the Participant, this form of payment shall be available only to the extent permitted pursuant to Section 4.5(b)(4)(A). The benefit shall terminate as of the first day following the Beneficiary's death.

(2) If the Beneficiary predeceases the Participant, the Participant's reduced monthly payment will not increase.

(3) A Participant's designation of a Beneficiary shall become irrevocable upon the Participant's retirement if electing this form of payment.

4.4. Cost of Living Adjustment

The Retirement Benefit, whether paid in the normal form of distribution or one of the optional forms, will be subject to an annual compounding cost-of-living adjustment effective on each anniversary date of commencement of the Retirement Benefit. The amount of such cost of living adjustment will be 2% per year, but the payment for any year may not exceed the payment that would have resulted from the cumulative application since the date of benefit commencement (on an annually-compounded basis) of the lesser of (i) a 2% annual increase, or (ii) an annual increase equal to the increase in the Consumer Price Index for All Urban Consumers issued by the Bureau of Labor Statistics. If the application of the foregoing proviso causes the increase to the payment in any year to be less than 2%, then the increase to the payment in any subsequent year may be greater than 2%. Furthermore, in no circumstances will the amount of the payment be decreased.

4.5. Limitations

(a) In the case of a Participant who attains age 70-1/2, distribution of such Participant's entire interest must commence not later than the first day of April following the later of the calendar year in which such Participant attains age 70-1/2 or the calendar year in which the Participant retires (the "Required Beginning Date"). In all cases, distributions shall be made in at least the amounts determined in accordance with Section 401(a)(9) of the Code and the Regulations thereunder, as described in Section 4.5(b) below.

(b) With respect to required minimum distributions under this Section 4.5 for calendar years beginning after December 31, 2002, the following rules shall apply:

(1) All distributions required under this Section 4.5 shall be determined and made in accordance with the Treasury Regulations under Section 401(a)(9) of the Code.

The requirements of this Section 4.5 will take precedence over any inconsistent provisions of the Plan, provided that this Section 4.5 shall not be considered to allow a Participant or Beneficiary to delay a distribution or elect an optional form of benefit not otherwise provided in the Plan.

(2) Time and Manner of Distribution

(A) The Participant's entire interest will begin to be distributed to the Participant no later than the Participant's Required Beginning Date as defined in Section 4.5(a).

(B) If the Participant dies before distributions begin, then the Participant's entire interest will begin to be distributed no later than as follows:

(I) If the Participant's surviving Spouse is the Participant's sole designated Beneficiary, then distributions to the surviving Spouse will begin by December 31 of the calendar year immediately following the calendar year in which the Participant died, or by December 31 of the calendar year in which the Participant would have attained age 70-1/2, if later.

(II) If the Participant's surviving Spouse is not the Participant's sole designated Beneficiary, then distributions to the designated Beneficiary will begin by December 31 of the calendar year immediately following the calendar year in which the Participant died.

(III) If there is no designated Beneficiary as of September 30 of the year following the year of the Participant's death, the Participant's entire

interest will be distributed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(IV) If the Participant's surviving Spouse is the Participant's sole designated Beneficiary and the surviving Spouse dies after the Participant but before distributions to the surviving Spouse begin, this Section 4.5(b)(2)(B), other than Section 4.5(b)(2)(B)(I), will apply as if the surviving Spouse were the Participant.

For purposes of this Section 4.5(b)(2)(B) and Section 4.5(b)(5), distributions are considered to begin on the Participant's Required Beginning Date (or, if Section 4.5(b)(2)(B)(IV) applies, the date distributions are required to begin to the surviving Spouse under Section 4.5(b)(2)(B)(I)). If annuity payments irrevocably commence to the Participant before the Participant's Required Beginning Date (or to the Participant's surviving Spouse before the date distributions are required to begin to the surviving Spouse under Section 4.5(b)(2)(B)(I)), the date distributions are considered to begin is the date distributions actually commence.

(C) Unless the Participant's interest is distributed in the form of an annuity purchased from an insurance company or in a single sum on or before the Required Beginning Date, as of the first distribution calendar year distributions will be made in accordance with Sections 4.3(b)(3), (4) and (5). If the Participant's interest is distributed in the form of an annuity purchased from an insurance company, distributions thereunder will be made in accordance with the requirements of Section 401(a)(9) of the Code and the Treasury Regulations.

(3) Determination of Amount to be Distributed Each Year

(A) If the Participant's interest is paid in the form of annuity distributions under the Plan, payments under the annuity will satisfy the following requirements:

(I) the annuity distributions will be paid in periodic payments made at intervals not longer than one year;

(II) the distribution period will be over a life (or lives) or over a period certain not longer than the period described in Sections 4.3(b)(4) or (5);

(III) once payments have begun under a fixed-term payout under the Plan (if such a benefit is available), the fixed-term payout period will not be changed even if the period certain is shorter than the maximum permitted;

(IV) payments will either be non-increasing or increase only as follows:

(i) by an annual percentage increase that does not exceed the annual percentage increase in a cost-of-living index that is based on prices of all items and issued by the Bureau of Labor Statistics;

(ii) to the extent of the reduction in the amount of the Participant's payments to provide for a survivor benefit upon death, but only if the Beneficiary whose life was being used to determine the distribution period described in Section 4.5(b)(4) dies or is no

longer the Participant's Beneficiary pursuant to a qualified domestic relations order within the meaning of Section 414(p) of the Code; or

(iii) to pay increased benefits that result from a Plan amendment.

(B) The amount that must be distributed on or before the Participant's Required Beginning Date (or, if the Participant dies before distributions begin, the date distributions are required to begin under Sections 4.3(b)(2)(B)(I) or (II)) is the payment that is required for one payment interval. The second payment need not be made until the end of the next payment interval even if that payment interval ends in the next calendar year. Payment intervals are the periods for which payments are received, e.g., bi-monthly, monthly, semi-annually, or annually. All of the Participant's benefit accruals as of the last day of the first distribution calendar year will be included in the calculation of the amount of the annuity payments for payment intervals ending on or after the Participant's Required Beginning Date.

(C) Any additional benefits accruing to the Participant in a calendar year after the first distribution calendar year will be distributed beginning with the first payment interval ending in the calendar year immediately following the calendar year in which such amount accrues.

(4) Requirements For Annuity Distributions That Commence During Participant's Lifetime

(A) If the Participant's interest is being distributed in the form of a benefit described in Section 4.3 for the joint lives of the Participant and a non-

Spouse Beneficiary, annuity payments to be made on or after the Participant's Required Beginning Date to the designated Beneficiary after the Participant's death must not at any time exceed the applicable percentage of the annuity payment for such period that would have been payable to the Participant using the table set forth in Q&A-2 of Section 1.401(a)(9)-6 of the Treasury Regulations. If the form of distribution combines a benefit described in Section 4.3 for the joint lives of the Participant and a non-Spouse Beneficiary and a fixed-term payout annuity, the requirement in the preceding sentence will apply to annuity payments to be made to the designated Beneficiary after the expiration of the fixed-term payout period.

(B) Unless the Participant's Spouse is the sole designated Beneficiary and the form of distribution is a fixed-term payout annuity, the fixed-term payout period for an annuity distribution commencing during the Participant's lifetime may not exceed the applicable distribution period for the Participant under the Uniform Lifetime Table set forth in Section 1.401(a)(9)-9 of the Treasury Regulations for the calendar year that contains the annuity starting date. If the benefit commencement date precedes the year in which the Participant reaches age 70, the applicable distribution period for the Participant is the distribution period for age 70 under the Uniform Lifetime Table set forth in Section 1.401(a)(9)-9 of the Treasury Regulations plus the excess of 70 over the age of the Participant as of the Participant's birthday in the year that contains the benefit commencement date. If the Participant's Spouse is the Participant's sole designated Beneficiary and the form of distribution is a fixed-term payout annuity, the fixed-term payout period may not exceed the longer of the Participant's applicable distribution period, as

determined under this Section 4.5(b)(4), or the joint life and last survivor expectancy of the Participant and the Participant's Spouse as determined under the Joint and Last Survivor Table set forth in Section 1.401(a)(9)-9 of the Treasury Regulations, using the Participant's and Spouse's attained ages as of the Participant's and Spouse's birthdays in the calendar year that contains the benefit commencement date.

(5) Requirements For Minimum Distributions Where Participant Dies Before Date Distributions Begin

(A) If the Participant dies before the date distribution of his or her interest begins and there is a designated Beneficiary, the Participant's entire interest will be distributed, beginning no later than the time described in Sections 4.3(b)(2)(B)(I) or (II), over the life of the designated Beneficiary or over a fixed-term payout period not exceeding:

(I) unless the benefit commencement date is before the first distribution calendar year, the life expectancy of the designated Beneficiary is determined using the Beneficiary's age as of the Beneficiary's birthday in the calendar year immediately following the calendar year of the Participant's death; or

(II) if the benefit commencement date is before the first distribution calendar year, the life expectancy of the designated Beneficiary is determined using the Beneficiary's age as of the Beneficiary's birthday in the calendar year that contains the benefit commencement date.

(B) If the Participant dies before the date distributions begin and there is no designated Beneficiary as of September 30 of the year following the year of the Participant's death, distribution of the Participant's entire interest will be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(C) If the Participant dies before the date distribution of his or her interest begins, the Participant's surviving Spouse is the Participant's sole designated Beneficiary, and the surviving Spouse dies before distributions to the surviving Spouse begin, this Section 4.5(b)(5) will apply as if the surviving Spouse were the Participant, except that the time by which distributions must begin will be determined without regard to Section 4.5(b)(2)(B)(I).

(6) Definitions

(A) Designated Beneficiary. The individual who is designated as the Beneficiary under Section 2.4 and is the designated Beneficiary under Section 401(a)(9) of the Code and Section 1.401(a)(9)-1, Q&A-4, of the Treasury Regulations.

(B) Distribution Calendar Year. A calendar year for which a minimum distribution is required. For distributions beginning before the Participant's death, the first distribution calendar year is the calendar year immediately preceding the calendar year that contains the Participant's Required Beginning Date. For distributions beginning after the Participant's death, the first distribution calendar year is the calendar year in which distributions are required to begin pursuant to Section 4.5(b)(2)(B).

(C) Life Expectancy. Life expectancy as computed by use of the Single Life Table in Section 1.401(a)(9)-9 of the Treasury Regulations.

(D) Required Beginning Date. The date set forth in Section 4.5(a).

4.6. Cash Out of Small Benefits

If a Participant retires under the Plan when the Actuarial Equivalence of his or her Retirement Benefit is less than \$5,000, such benefit will be paid as a single cash lump sum in lieu of any other benefits hereunder.

4.7. Direct Rollovers

(a) Notwithstanding any provision of the Plan to the contrary that would otherwise limit a distributee's election under this Plan, a distributee may elect, at the time and in the manner prescribed by the Plan Administrator, to have any portion of an eligible rollover distribution paid directly to an eligible retirement plan specified by the distributee in a direct rollover. A distributee includes a Participant. In addition, the Participant's surviving Spouse and the Participant's Spouse or former Spouse who is the alternate payee under a qualified domestic relations order, as defined in Section 414(p) of the Code, are distributees with regard to the interest of the Spouse or former Spouse.

(b) A Beneficiary who is not the Spouse of the Participant may elect a direct trustee to trustee transfer that qualifies as an eligible rollover distribution under this Section 4.7. Such transfer shall be made to an individual retirement plan described in Section 408(a) of the Code or a Roth IRA described in Section 408A of the Code that is established for the purpose of receiving the distribution on behalf of such Beneficiary. Such individual retirement account shall be deemed an inherited IRA pursuant to the provisions of Section 402(c)(11) of the Code. Also, in this case, the determination of any required minimum distribution under Section 401(a)(9) of the Code that

is ineligible for rollover shall be made in accordance with Notice 2007-7, Q&A 17 and 18, 2007-5 I.R.B. 395.

(c) Definitions

(1) Eligible Rollover Distribution

An eligible rollover distribution is any distribution of all or any portion of the balance to the credit of the distributee, except that an eligible rollover distribution does not include the following: (i) any distribution that is one of a series of substantially equal periodic payments (not less frequently than annually) made for the life (or the life expectancy) of the distributee or the joint lives (or joint life expectancies) of the distributee and the distributee's designated Beneficiary, or for a specified period of ten (10) years or more; (ii) any distribution to the extent such distribution is required under Section 401(a)(9) of the Code; and (iii) any hardship distribution. A portion of a distribution shall not fail to be an eligible rollover distribution merely because the portion consists of after-tax employee contributions which are not includible in gross income. However, such portion may be transferred only: (A) to an individual retirement account or annuity described in Section 408(a) or (b) of the Code, a Roth IRA described in Section 408A of the Code or (B) to a qualified defined contribution, defined benefit or annuity plan described in Section 401(a) of the Code or Section 403(b) of the Code, that agrees to separately account for amounts so transferred (and earnings thereon), including separately accounting for the portion of the distribution that is includible in gross income and the portion of the distribution that is not so includible.

(2) Eligible Retirement Plan

An eligible retirement plan is an individual retirement account described in Section 408(a) of the Code, an individual retirement annuity described in Section 408(b) of the Code, a qualified

plan described in Section 401(a) of the Code that accepts the distributee's eligible rollover distribution, an annuity contract described in Section 403(b) of the Code, a Roth IRA described in Section 408A of the Code and an eligible plan under Section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state and which agrees to separately account for amounts transferred into such plan from this Plan. The definition of eligible retirement plan shall also apply in the case of a distribution to a surviving Spouse, or to a Spouse or former Spouse who is the alternate payee under a qualified domestic relation order, as defined in Section 414(p) of the Code.

(3) Direct Rollover

A direct rollover is a payment by the Plan to the eligible retirement plan specified by the distributee.

ARTICLE V

ADMINISTRATION AND AMENDMENT OF PLAN

5.1. **Participant's Rights Not Subject To Execution**

The right of a Participant to a benefit under this Plan is not assignable and is not subject to execution or any other process whatsoever, except to the extent permitted by the Code of Civil Procedure and the Family Code of the State of California. Any payment hereunder required under the California Family Code to a person other than the Participant must not alter the form or amount of benefits hereunder, except that to the extent provided in a valid court order, an Actuarial Equivalent payment may be made to the Spouse or child of a Beneficiary pursuant to a qualified domestic relations order (as defined in Section 414(p) of the Code) prior to the Participant's retirement.

5.2. **Rules and Regulations**

The Employer has full discretionary authority to supervise and control the operation of this Plan in accordance with its terms and may make rules and regulations for the administration of this Plan that are not inconsistent with the terms and provisions hereof. The Employer shall determine any questions arising in connection with the interpretation, application or administration of the Plan (including any question of fact relating to age, employment, compensation or eligibility of Participants and other persons) and its decisions or actions in respect thereof shall be conclusive and binding upon any and all persons and parties.

The Employer shall have all powers necessary to accomplish its purposes, including, but not by way of limitation, the following:

- (a) To determine all questions relating to the eligibility of individuals to participate;
- (b) To construe and interpret the terms and provisions of the Plan;

(c) To compute, certify to, and direct the Trustee with regard to the amount and kind of benefits payable to the Participants and their Beneficiaries;

(d) To authorize all disbursements by the Trustee from the Trust;

(e) To maintain all records that may be necessary for the administration of the Plan other than those maintained by the Trustee; and

(f) To appoint a Plan Administrator or, any other agent, and to delegate to them or to the Trustee such powers and duties in connection with the administration of the Plan as it may from time to time prescribe, and to designate each such administrator or agent as a fiduciary with regard to matters delegated to him.

With respect to management and control of investments, the Employer shall have the power to direct the Trustee in writing with respect to the investment of the Trust assets or any part thereof. Where investment authority, management and control of Trust assets have been delegated to the Trustee by the Employer, the Trustee shall be a fiduciary with respect to the investment, management and control of the Trust assets contributed by the Employer and Participants with full discretion in the exercise of such investment, management and control. Where investment authority, management and control of Trust assets are not specifically delegated to the Trustee, the Trustee shall be subject to the direction of the Employer.

Expenses and fees in connection with the administration of the Plan and the Trust shall be paid from the Trust assets to the fullest extent permitted by law, unless the Employer determines otherwise.

To the extent determined by the Employer or its delegatee, elections and consents made by means of electronic media shall be permissible if made according to the relevant provisions of Treasury Regulation Section 1.401(a)-21.

5.3. Amendment and Termination

The Employer shall have the right to amend, modify or terminate this Plan at any time. In the event of the complete discontinuance of this Plan, the entire interest of each Participant affected thereby shall immediately become 100% Vested. All benefits hereunder shall be payable solely from the assets of the Trust. After all liabilities of this Plan to Participants and their Beneficiaries have been satisfied, any residual assets of this Plan shall be used for such purposes as determined by the Employer, including a distribution of the assets to the general funds of the Employer.

5.4. Military Service

Notwithstanding any provision of this Plan to the contrary, contributions, benefits, and service credit with respect to qualified military service will be provided in accordance with Section 414(u) of the Code. In the case of a Participant who dies while performing qualified military service, the survivors of the Participant are entitled to any additional benefits (other than benefit accruals relating to the period of qualified military service) provided under the Plan had the Participant resumed and then terminated employment on account of death.

ARTICLE VI

ANNUAL BENEFIT LIMITATIONS

6.1. **Definitions and Application**

As used in this Article VI, the following terms have the meanings specified below.

“Annual Benefit” means a benefit payable annually in the form of a straight life annuity (with no ancillary benefits) under a plan to which Participants do not contribute and under which no rollover contributions are made, or to which assets have been transferred from a qualified plan that was not maintained by the Employer. If the benefit is payable in a form other than a straight life annuity, such form must be adjusted actuarially to be the equivalent of a straight life annuity before applying the limitations of Section 6.2(a). The actuarial adjustment to the equivalent of a straight life annuity will apply to all plan benefits except as set forth herein. The actuarial adjustment shall be made in accordance with the provisions of Treasury Regulation Section 1.415(b)-1(c), which are incorporated herein by reference. No actuarial adjustment is required for the following: qualified joint and survivor annuity benefits, pre-retirement disability benefits, pre-retirement death benefits, post-retirement medical benefits, and the value of an automatic benefit increase feature made in accordance with applicable Treasury Regulations.

“Limitation Year” means the Plan Year. If the Limitation Year is amended to a different twelve-consecutive month period, the new Limitation Year must begin on a date within the Limitation Year in which the amendment is made.

“Year of Participation” means the Participant will be credited with a Year of Participation for each year in which he or she is a Participant. A Participant who is permanently and totally disabled within the meaning of Section 415(c)(3)(C)(i) of the Code for an accrual computation period shall receive a Year of Participation with respect to that period. In addition, for a Participant to receive a Year of Participation for an accrual computation period, the Plan must be established

no later than the last day of such accrual computation period. In no event will more than one Year of Participation be credited for any twelve-month period.

6.2. Annual Limitation on Benefits

Notwithstanding any other provision of the Plan:

(a) The Annual Benefit payable with respect to a Participant under the Plan for any Limitation Year shall not exceed an amount equal to \$225,000, or such other dollar limitation determined for the Limitation Year by automatically adjusting the \$225,000 limitation by the cost of living adjustment factor prescribed by the Secretary of the Treasury under Section 415(d) of the Code in such manner as the Secretary shall prescribe. The new dollar limitation shall apply to Limitation Years ending within the calendar year of the date of the adjustment. Cost of living adjustments to the dollar limitation occurring after severance from employment are taken into account.

(b) If the Participant has less than ten Years of Participation with the Employer, the limitation in Section 6.2(a) shall be reduced by multiplying it by a fraction, the numerator of which is the Participant's full and partial Years of Participation, and the denominator of which is ten. To the extent provided in Treasury Regulations or in other guidance issued by the Internal Revenue Service, the preceding sentence shall be applied separately with respect to each change in the benefit structure of the Plan. The reduction provided in this paragraph does not apply to payments made to the Participant if his payments commence after he has become disabled (within the meaning of Section 415(b)(2)(I) of the Code) and does not apply to payments made on account of the Participant's death.

(c) If the Annual Benefit of a Participant begins prior to age 62, the limitation under Section 6.2(a) applicable to the Participant at such earlier age is an Annual Benefit payable in the

form of a straight life annuity beginning at the earlier age that is the actuarial equivalent of the limitation applicable to the Participant at age 62 (adjusted under Section 6.2(b), if required). The limitation applicable at an age prior to age 62 shall be determined in accordance with the provisions of Treasury Regulation Section 1.415(b)-1(d), which are incorporated herein by reference. The reduction in this Section 6.2(c) shall not apply for a Participant who is a “qualified participant,” as defined in Section 415(b)(2)(H) of the Code.

(d) If the Annual Benefit of a Participant begins after age 65, the limitation under Section 6.2(a) applicable to the Participant at such later age is an Annual Benefit payable in the form of a straight life annuity beginning at the later age that is the actuarial equivalent of the limitation applicable to the Participant at age 65 (adjusted under Section 6.2(b), if required). The limitation applicable at an age after age 65 shall be determined in accordance with the provisions of Treasury Regulation Section 1.415(b)-1(e), which are incorporated herein by reference.

(e) Pursuant to Treasury Regulation Section 1.415(b)-1(a)(7)(iii), the rate of a Participant’s accrual shall not be limited by this Article VI (but at all times the annual benefit payable to the Participant is subject to the limits set forth in this Article VI).

(f) The limitation in Section 6.2(a) is deemed satisfied if the Annual Benefit payable to a Participant is not more than \$1,000 multiplied by the Participant’s number of years of service or parts thereof (not to exceed ten) with the Employer, and the Employer (or a predecessor employer) has not at any time maintained a defined contribution plan in which such Participant participated.

If the Employer maintains one or more defined benefit plans, in addition to this Plan, covering an Employee who is also a Participant in this Plan, the sum of the Annual Benefits of all the plans will be treated as a single benefit for the purposes of applying the limitations of Section

6.2(a). For purposes of the preceding sentence, Annual Benefits under a “qualified governmental excess benefit arrangement,” as described in Section 415(m)(3) of the Code, shall be disregarded. If the Annual Benefits exceed, in the aggregate, the limitations of Section 6.2(a), the Annual Benefits under this Plan will be reduced (but not below zero) until the sum of the benefits of the relevant defined benefit plans satisfy the limitations. In the case of an individual who was an Employee in one or more defined benefit plans of the Employer as of the first day of the first Limitation Year beginning after December 31, 1986, the application of the limitations of this Section 6.2 shall not cause the limitation under Section 6.2(a) for such individual under all such defined benefit plans to be less than the individual’s current accrued benefit. The preceding sentence applies only if such defined benefit plans met the requirements of Section 415 of the Code, for all Limitation Years beginning before May 6, 1986. For purposes of this Section 6.2(f), an individual’s current accrued benefit means a Participant’s accrued benefit under the Plan, determined as if the Participant had separated from service as of the close of the last Limitation Year beginning before January 1, 1987, when expressed as an annual benefit within the meaning of Section 415(b)(2) of the Code. In determining the amount of a Participant’s current accrued benefit, the following shall be disregarded: (i) any change in the terms and conditions of the Plan after May 5, 1986; and (ii) any cost of living adjustments occurring after May 5, 1986.

(g) If a Participant makes one or more contributions to the Plan to purchase “permissive service credit,” as defined in Section 415(n)(3) of the Code, then the limitations of this Article VI shall be treated as met only if either (i) the limitations provided in Section 415(b) of the Code are met, determined by treating the accrued benefit derived from such contributions as an annual benefit for purposes of Section 415(b) of the Code, or (ii) the requirements of Section 415(c) of

the Code are met, determined by treating all such contributions as annual additions for purposes of Section 415(c) of the Code.

ARTICLE VII

DEFINITIONS

Unless otherwise specified, capitalized terms used in the Plan have the meanings specified below.

“**Act**” means California Government Code, as amended.

“**Actuarial Equivalence**” means an actuarially equivalent amount determined using the 1983 Group Annuity Mortality (GAM) table blended 50% Male and 50% Female, and interest rate of 7% per annum.

“**Age Factor**” means the following factors:

| Age at Retirement under Plan | Age Factor |
|---|-------------------|
| 50 | 1.426% |
| 51 | 1.522% |
| 52 | 1.628% |
| 53 | 1.742% |
| 54 | 1.866% |
| 55 | 2.000% |
| 56 | 2.052% |
| 57 | 2.104% |
| 58 | 2.156% |
| 59 | 2.210% |
| 60 | 2.262% |
| 61 | 2.314% |
| 62 | 2.366% |
| 63 or older | 2.418% |

“**Beneficiary**” means the person described in Section 2.4 who is entitled to receive either a pre-retirement death benefit under the Plan or, if the Participant dies while receiving a Retirement Benefit in an optional form under Section 4.3, the continuance benefit. A Participant may designate different Beneficiaries to receive each such benefit. If no Beneficiary under Section 2.4 survives a

Participant, then the pre-retirement benefit, if applicable, will be provided to such person, trust, or estate entitled by will or the laws of descent and distribution to receive the benefit.

“Benefit Service” a Participant’s services to the Employer, but only if and to the extent (i) such services were provided under the terms of an agreement between the Staffing Agency and the Employer, and (ii) if the Participant made member contributions to CalPERS with respect to such services, either those contributions (together with any allocable interest) are transferred directly from CalPERS to the Trust under this Plan, or the Participant elects to and receives a refund of his or her member contributions (together with any allocable interest) from CalPERS and effectuates a deposit of those refunds in this Plan. In addition to Benefit Service determined under the preceding sentence, the Plan Administrator may, in its sole discretion, permit a Participant to purchase additional Benefit Service for any prior service with a governmental entity other than the Employer, but only to the extent the Participant is not already entitled to receive a retirement benefit for that service under a pension plan other than this Plan; for this purpose, a refund of employee contributions from any such other plan does not constitute a retirement benefit for service.

“CalPERS” means the California Public Employees’ Retirement System, a governmental, multiple-employer pension plan that is qualified under Section 401(a) of the Internal Revenue Code and whose terms are set out under Title 2, Division 5, Parts 3 through 8, Sections 20000 through 22970.89 of the Act.

“CalPERS Member” means either (i) a governmental entity that provides pension benefits to its eligible employees under CalPERS, in accordance with and subject a contract between the entity and CalPERS, or (ii) a governmental entity that maintains a pension plan qualified under Section 401(a) of the Code, but only if that plan has reciprocity with CalPERS.

“Code” means the Internal Revenue Code of 1986, as amended from time to time.

“Compensation” means compensation received by a Participant for employment with a Staffing Agency or CalPERS Member, but only to the extent such compensation would constitute “compensation earnable” within the meaning of Sections 20636 or 20636.1 of the Act, as applicable to individual CalPERS participants who are not “new members” within the meaning of Section 7522.04 of the Act. Compensation in excess of \$280,000 (as adjusted for the relevant Plan Year) will be disregarded. Such amount will be adjusted for future increases in the cost of living in accordance with Section 401(a)(17) of the Code. For any short Plan Year, the Compensation limit will be an amount equal to the Compensation limit for the calendar year in which the Plan Year begins multiplied by a ratio obtained by dividing the number of full months in the short Plan Year by 12.

“Domestic Partner” means the person who is registered in accordance with California law as a Participant’s domestic partner.

“Effective Date” means _____, the effective date of this amendment and restatement of the Plan.

“Eligible Employee” means an Employee whom the Employer, in its sole discretion, designates as eligible by action of the Employer’s Board of Directors.

“Employee” means a person whom the Employer classifies on its payroll records as a common-law employee. For any period, “Employee” does not include any person who is not so classified for that period, even if a court or other authority later determines that he or she was a common-law employee of the Employer during any part of that period.

“Employer” means Marin County Transit District.

“Final Pay” means the highest Compensation earned by a Participant, before his or her retirement under the Plan, during any 12 consecutive months of employment with a Staffing Agency or a CalPERS Member.

“Member Contributions” means with the following amounts, as applicable: (i) any amount contributed by a Participant to the Plan in order to purchase Benefit Service (as described in the above definition of Benefit Service), and (ii) any member contributions made by a Participant CalPERS that are either transferred to this Plan directly from CalPERS or contributed to the Plan by the Participant.

“Normal Form of Benefit” means the form of benefit described in Section 4.2.

“Participant” means a person who has commenced participation in the Plan under Section 1.1 and whose participation has not ceased under Section 1.2.

“Plan” means this Marin County Transit District Service Credit Replacement Plan.

“Plan Administrator” means the individual or position designated by the Employer to act on behalf of the Employer in matters relating to this Plan. If no designation is made, the Employer shall be the Plan Administrator. If a Plan Administrator has been appointed the word “Employer” as used in this Plan shall mean Plan Administrator unless the context indicates a different meaning is intended.

“Plan Year” means the 12-month period spanning July 1 through June 30.

“Regulations” or **“Treasury Regulations”** means the regulations adopted or proposed by the Department of Treasury from time to time pursuant to the Code.

“Retirement Benefit” means the benefit payable to the Participant following retirement, as described in Article II.

“Spouse” means the person who is recognized as the Participant’s spouse in accordance with the laws of any state, the District of Columbia, a United States territory, or a foreign jurisdiction. A Spouse does not include a Domestic Partner or a civil union partner.

“Staffing Agency” means any employee-leasing agency listed in Appendix 2 that, under an agreement between the leasing agency and the Employer, has provided staffing services to the Employer by placing persons then classified as the leasing agency’s employees in work positions with the Employer.

“Trust” means the trust established to hold the assets of the Plan.

“Trustee” means the trustee of the Trust.

“Vesting Service” means cumulative, combined years of full-time employment with: (i) a Staffing Agency, but only during such period that the Participant was providing services to the Employer through the Staffing Agency, (ii) a CalPERS Member, or (iii) a CalPERS reciprocal agency.

APPENDIX 1

STAFFING AGENCIES

Each of following entities constitutes a Staffing Agency for all purposes under the Plan:

Local Government Services Authority, a governmental entity formed under the laws of the State of California

Regional Government Services Authority, a governmental entity formed under the laws of the State of California

APPENDIX 2**CONTINUING PARTICIPANTS**

The following Participants as of [Insert day before effective date] will continue as Participants on [Insert effective date]:

Mary Archer

Robert Betts

Lauren Gradia

Amber Johnson

Melody Reeb

ADOPTION OF AMENDED AND RESTATED PLAN

The Marin County Transit District hereby adopts this Marin County Transit District Service Credit Replacement Plan, as amended and restated effective _____, on the date below.

By: _____
[Type Name]

Title: [Type Title] _____

Date: _____