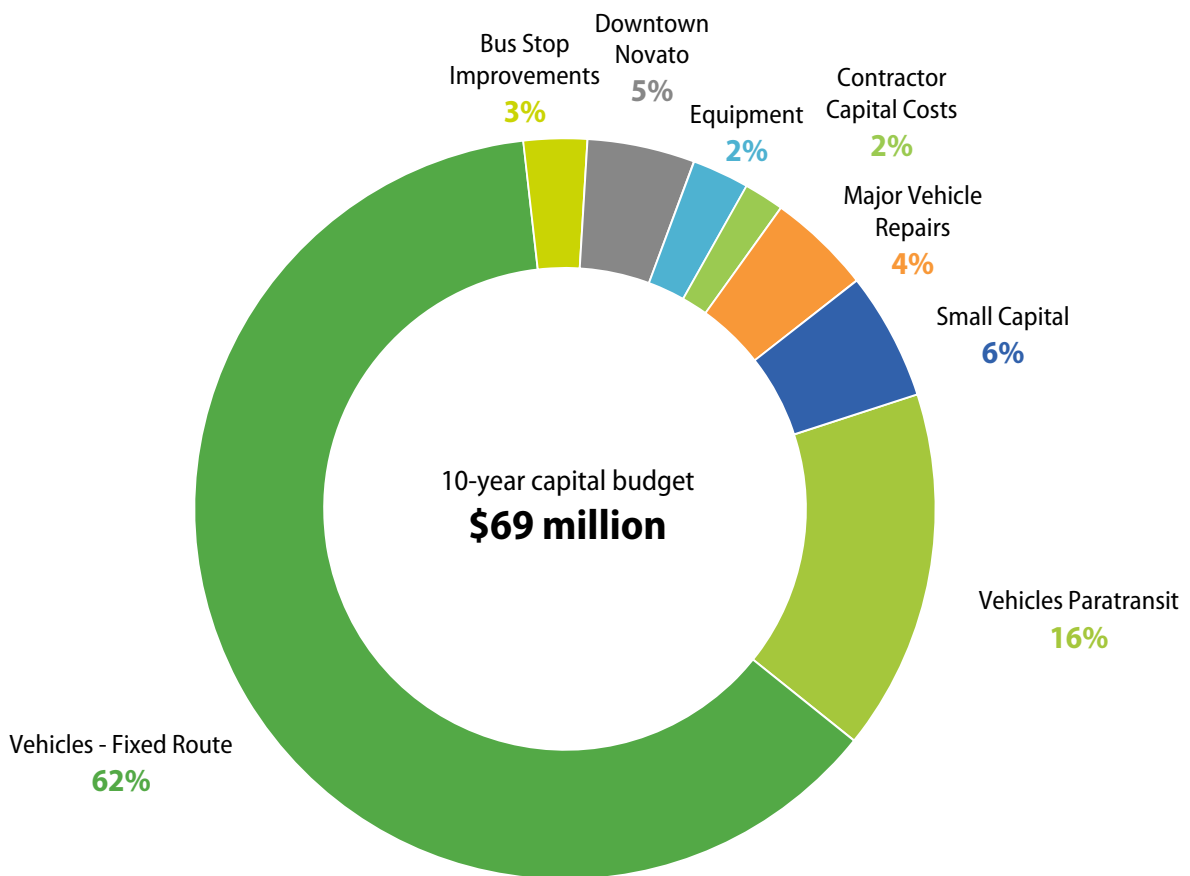


Chapter 4: Capital Plan

Marin Transit’s Capital Improvement and Funding Plan has expanded as Marin Transit has taken increasing responsibility for transit service in Marin County. The District’s primary capital responsibilities and priorities are to (1) maintain a sufficient fleet of clean fueled vehicles for local transit service, (2) improve and maintain the amenities and accessibility of Marin County bus stops, (3) improve major bus transfer locations, (4) provide passenger information and (5) provide needed operations equipment and infrastructure.

Marin Transit’s baseline capital resources limit the Capital Plan to primarily maintaining a state of good repair for existing assets and making the minimal level of investment required to maintain and operate the local bus system. The 10-year Capital Plan includes expenditures of \$69 million (Figure 4-1) of which 78% is for purchasing transit vehicles. Other major capital expenditures included in the plan are major vehicles repairs, bus stop improvements, and small capital.

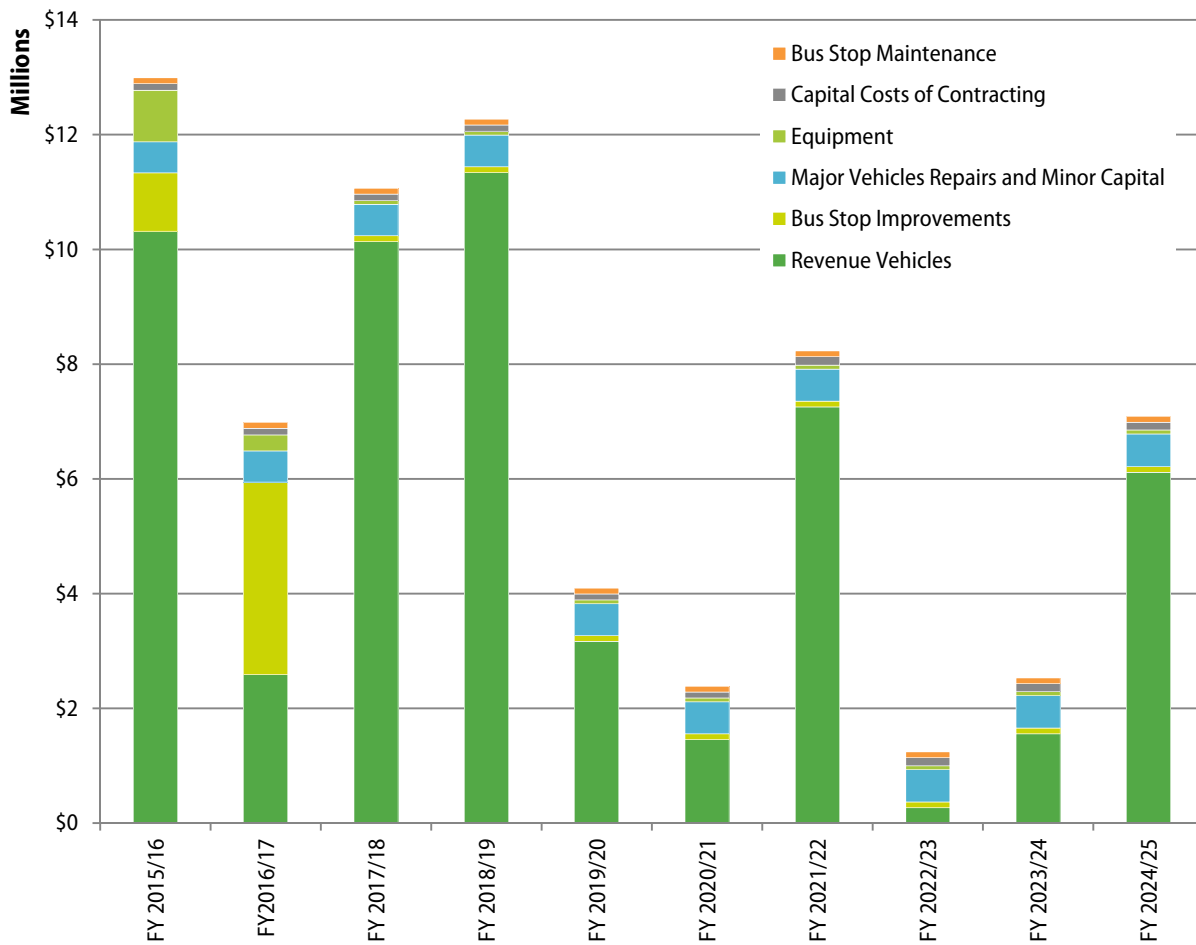
Figure 4-1: 10-Year Capital Expenditures By Type



Marin Transit currently has 1.25 staff members that are dedicated to Capital projects including a Capital Analyst and part of the Director of Finance and Capital Program’s time. These staff members are responsible for vehicle procurements, bus stop signage, bus stop maintenance, and design and construction of bus stop and passenger facility improvements. With help from other Marin Transit staff, the capital team supports other capital projects including fare collection, review and participation in partner agency projects, and implementation of other technology projects. Marin Transit maintains various support contracts and utilizes multi-agency joint procurement contracts to supplement staff time and ensure effective use of resources. The District has found that implementing bus stop improvements projects takes significant staff resources and the District needs to be strategic in how it leverages partner agency resources (Cities, County, TAM), determines project timelines, and commits to additional projects.

Figure 4-2 shows capital expenditures by type for each of the plan years. Unlike operating expenses, capital expenditures vary considerably between years. The level of expenditure in a given year is very dependent on the number of vehicle replacements.

Figure 4-2: 10-Year Capital Expenditures by Year



Capital Funding

Marin Transit is allocated six percent of Measure A sales tax funds for investment in bus transit facilities (Strategy 1.4), which is currently about \$1.3 million per year. While this funding is critical to Marin Transit's ability to provide matching grant funds, it is only a fraction of what is needed to maintain and improve the capital assets related to the local bus transit. Federal FTA Section 5307 Urbanized Area Formula funds that are programmed through the Metropolitan Transportation Commission (MTC) provide 80% of funds for vehicles replacement projects. Competitive federal grant programs can provide additional funding for vehicles and bus stop improvement projects.

Marin Transit is currently finishing a 5309 State of Good Repair grant of \$1.6 million for bus stop improvement projects. Marin Transit also has an open grant for federal Paul S. Sarbanes, Transit in the Parks funds for improvements to bus stops with service to the Muir Woods National Park. Successful future applications for funding will be critical to the success of identified project needs like an electric vehicle pilot project and additional bus stop and passenger facilities improvement projects.

Over the past five years, Marin Transit has received state funding under the Proposition 1B PTMISEA program. This program provided funds that allowed Marin Transit to upgrade vehicle replacement projects to hybrids and create a capital Measure A reserve. The last year of funding available is FY2014/15. Over the life of the bond, Marin Transit expects to have received \$6.2 million in State funding for capital projects. To date, these state funds have been expended or are programmed for the purchase of five (5) shuttle vehicles, the purchase of five (5) transit buses, the local matching funds for 18 hybrid buses, and the local match for the State of Good Repair bus stop improvement project. An additional \$750,000 is available as matching funds for Marin Transit's next vehicle replacement project.

Marin Transit's vehicle replacement costs over the next 10 years are estimated to be \$52.9 million. Federal Transit Administration (FTA) Section 5307 funds are available to Marin Transit through MTC's Transit Capital Priorities program and are anticipated to fund 82% of vehicle replacement costs. The remaining \$9.5 million will need to be funded with state and local funding.

MTC has committed to \$22 million in State Cap and Trade funds over 25 years that would be shared by Golden Gate Transit and Marin Transit and could be used on either operating or capital projects. This Cap and Trade funding may provide additional funding for vehicle replacements but initial guidelines are targeted at new service and alternative fuels rather than baseline vehicle replacement costs. The capital plan assumes some Cap and Trade funding will be available for hybrid vehicle purchases and additional funds that may be available for unfunded projects including upgrading additional vehicles to alternative fuels, funding an electric vehicle pilot project or investing in accessible taxis are not included in the baseline plan. Competitive Cap and Trade grant funds will also be available, but it is unclear how competitive our District will be based on the demographics of our County.

Table 4-1: Capital Funding and Improvement Plan

Project Costs	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
Fixed Route Vehicles Costs	\$8,865,690	\$-	\$10,138,360	\$11,341,897	\$1,101,469	\$-	\$5,406,915	\$267,468	\$1,557,263	\$3,349,840	\$42,028,901
Paratransit Replacement Vehicles	\$870,000	\$2,588,733	\$-	\$-	\$1,740,787	\$1,456,821	\$1,500,526	\$-	\$-	\$2,763,797	\$10,920,664
Paratransit Expansion Vehicles	\$580,000	\$-	\$-	\$-	\$326,398	\$-	\$346,275	\$-	\$-	\$-	\$1,252,673
Bus Stop Improvements SGR	\$519,395	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$1,419,395
Downtown Novato-Design	\$50,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Downtown Novato- Construction	\$-	\$3,255,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$3,255,000
Muir Woods Infrastructure Improvements	\$500,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$500,000
Automated Vehicles Location Equipment	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Fareboxes	\$30,000	\$240,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$510,000
Demand Response Fareboxes	\$121,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$121,000
Mobility Management Technology Backbone	\$360,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$360,000
Mobile Data Terminals for Paratransit Vehicles	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$125,000
Radio Communications	\$374,000	\$25,979	\$25,979	\$25,979	\$25,979	\$25,979	\$25,980	\$25,981	\$25,982	\$25,983	\$607,818
Golden Gate Capital Costs	\$117,127	\$113,613	\$110,205	\$106,899	\$103,691	\$100,581	\$147,125	\$142,712	\$138,430	\$134,277	\$1,214,661
Bus Stop Maintenance	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$1,000,000
Major Vehicle Repairs	\$300,000	\$303,000	\$306,030	\$309,090	\$312,181	\$315,303	\$318,456	\$321,641	\$324,857	\$328,106	\$3,138,664
Infrastructure Support	\$241,496	\$250,484	\$259,799	\$269,433	\$279,398	\$289,705	\$300,366	\$311,393	\$322,797	\$334,594	\$2,859,466
TOTAL	\$12,991,208	\$6,989,309	\$11,082,872	\$12,295,798	\$4,132,403	\$2,430,889	\$8,288,143	\$1,311,693	\$2,611,829	\$7,179,096	\$69,313,241
Funding Plan	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
LOCAL											
Golden Gate Transit	\$21,580	\$8,503	\$8,503	\$8,503	\$8,503	\$8,503	\$8,503	\$8,503	\$8,503	\$8,504	\$98,107
Measure A	\$1,307,655	\$1,747,530	\$1,439,169	\$3,198,232	\$1,793,251	\$1,227,793	\$2,615,539	\$1,083,866	\$1,326,370	\$2,458,648	\$18,198,053
Subtotal Local	\$1,329,234	\$1,756,033	\$1,447,672	\$3,206,735	\$1,801,753	\$1,236,296	\$2,624,042	\$1,092,370	\$1,334,874	\$2,467,152	\$18,296,160
STATE											
PTMISEA (State Infrastructure Bond)	\$2,280,414	\$1,772,196	\$761,745	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$4,814,355
Cap and Trade	\$45,699	\$0	\$560,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$605,699
Subtotal State	\$2,326,113	\$1,772,196	\$1,321,745	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$5,420,054
FEDERAL											
Section 5307	\$7,988,059	\$2,294,961	\$8,313,455	\$9,089,063	\$2,330,650	\$1,194,593	\$5,664,101	\$219,324	\$1,276,956	\$4,711,944	\$43,083,107
Paul Sarbanes	\$500,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$500,000
JARC	\$300,000	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$300,000
Section 5339	\$597,802	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$597,802
Subtotal Federal	\$9,385,861	\$2,294,961	\$8,313,455	\$9,089,063	\$2,330,650	\$1,194,593	\$5,664,101	\$219,324	\$1,276,956	\$4,711,944	\$44,480,908
TOTAL	\$13,041,208	\$5,823,190	\$11,082,872	\$12,295,798	\$4,132,403	\$2,430,889	\$8,288,143	\$1,311,693	\$2,611,829	\$7,179,096	\$68,197,122
Annual Surplus (Shortfall)	\$-	(\$1,166,119)	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	(\$1,166,119)

Vehicles

Marin Transit uses a mixed fleet of 115 vehicles to operate local fixed route and demand response services in Marin County (Table 4-2). Service and maintenance for these vehicles is provided by the associated contract operators. Marin Transit is responsible for major repairs including engine and transmission replacements. Marin Transit's vehicles include vehicles owned directly by the District (53), vehicles owned by a Contractor or other public agency (45), and vehicles Marin Transit has ownership rights to (17 vehicles).

Replacing fixed route and paratransit vehicles and purchasing expansion vehicles needed for the growing mandated paratransit, account for 78% of the expenditures in the Capital Plan. As vehicles are replaced, Marin Transit will take direct ownership of all required vehicles. By FY2018/19, Marin Transit is expected to have direct ownership 100% of the vehicles needed for local service. One exception may be vehicles GGBHTD uses in shared service. Vehicle replacements are the first priority in the Marin Transit capital plan and essential for maintaining the State of Good Repair for the local transit system. Traditional transit vehicles (30ft – 60ft) cost between \$500,000 and \$900,000 each and are replaced every 12 years. Shuttle vehicles cost significantly less (\$140,000), but need to be replaced every seven (7) years. Lighter duty demand response vehicles cost around \$100,000 each and are replaced every five (5) years.

Table 4-2: Vehicle Summary by Type and Service

Primary Service	60ft Articulated	40ft	35ft	30ft	Shuttles	Demand Response Shuttle	Total Vehicles
Community Shuttles	-	-	-	-	11	1	12
Stagecoach	-	-	-	-	7	-	7
Muir Woods	-	-	10	-	2 ⁽¹⁾	-	12
School	-	3	-	-	-	-	3
General Local	10 ⁽²⁾	20 ⁽⁴⁾	7 ⁽²⁾	4 ⁽⁴⁾	-	-	41
Local Paratransit	-	-	-	-	-	40 ⁽³⁾	40
Total	10	23	17	4	20	41	115
<i>Regional Paratransit</i>	-	-	-	-	-	14 ⁽⁴⁾	14

Notes:

- (1) Vehicles owned by National Park Service
- (2) Vehicle titles held by GGBHTD, Local match paid by Marin Transit
- (3) Vehicles partially owned by Whistlestop Wheels
- (4) Vehicles owned by GGBHTD

Alternative Fuels

Reducing emissions and using alternative fuels is a priority for the District. Marin Transit purchased seven 35ft hybrid buses in 2010 and is in contract to purchase 13 additional hybrid vehicles in FY2015/16. Additionally, a purchase of 13-40ft hybrid vehicles is programmed for F2017/18. Marin Transit will continue to strive to purchase hybrid and alternative fuel vehicles when additional funds are available. For the purposes

of this plan, all replacement vehicles beyond FY2017/18 are assumed to be clean diesel and costs estimates were developed based on MTC’s regional bus/van price list.



Peter Oppenheimer

(7) – 35ft Hybrids



(10) – 60ft Articulated



(23) – 40ft Vehicles

(4) – 30ft Vehicles



Peter Oppenheimer

(10) – XHF 35ft

(2) – Shuttle



(12) – Shuttles



(7) – Stage Vehicles



(40) – Paratransit Vehicles

Table 4-3: Vehicle Service Life Guidance

Asset Class ⁽¹⁾	Service Life
35'-40' heavy duty and articulated transit bus	12 years or 500,000 miles
30' heavy duty transit bus	10 years or 350,000 miles
30' medium-duty transit bus	7 years or 200,000 miles
25'-35' light-duty transit bus	5 years or 150,000 miles
Other vehicles (e.g., small buses, regular and specialized vans)	4 years or 100,000 miles

Notes:

(1) A heavy duty transit bus is manufactured as a bus for urban and/or high passenger volume utilization. A medium-duty bus is manufactured for a lighter duty cycle.

Local Fixed Route Vehicles

The local fixed route program requires an estimated 68 vehicles to operate service and maintain an adequate spare ratio. These vehicles are currently deployed for different services under multiple service contracts as shown in Table 4-2. Additional shared vehicles are also used for the services provided by GGBHTD however this number has decreased over the years and is expected to drop further in FY 2015/16 as the District shifts supplemental school routes to yellow bus. The Capital Plan assumes a replacement schedule in accordance with the service lives set in Marin Transit’s Fixed Asset Management policy (FA-01) and that corresponds to federal and regional guidelines and policies (Table 4-3).

Table 4-4 and Table 4-5 provide a summary of the local transit buses replacement schedule. A full vehicle inventory is included in Appendix D.

Table 4-4: Fixed Route Vehicle Summary

	Marin Transit Owned	Contractor Owned/Leased	Total
FY 2014/15 Vehicles	38	37	75
<i>Replacement (FY 2015/16 – FY 2024/25)</i>	75	-	75
<i>Expansion (FY 2015/16 – FY 2024/25)</i>	-	-	-
FY 2024/25 Vehicles	75	-	75

Table 4-5: Local Transit Bus Replacement Schedule

Fiscal Year	Replacements	Total Cost	Local Share	Vehicle Type	Seating Capacity	Service
FY 2015/16	7	\$5,080,372	\$1,014,293	40ft hybrid	38	BB
	4	\$2,832,000	\$595,928	30ft hybrid	26	BB
	3	\$720,190	\$182,870	29ft	22	SG
	2	\$244,000	\$43,920	24ft	20	SH
FY 2016/17	0	\$-	\$-	-	-	-
FY 2017/18	13	\$10,023,000	\$2,555,366	40ft hybrid	39	BB
	1	\$115,360	\$20,765	24ft	20	SH
FY 2018/19	10	\$10,564,617	\$2,112,923	60ft	63	BB
	4	\$777,280	\$139,910	29ft	22	SG
FY 2019/20	8	\$979,083	\$176,234	24ft	20	SH
FY 2020/21	0	\$-	\$-	-	-	-
FY 2021/22	7	\$4,003,657	\$720,658	35ft	32	BB
	2	\$424,678	\$76,442	29ft	22	SG
	2	\$978,580	\$176,144	35ft XHF	37	MW
FY 2022/23	2	\$267,468	\$48,144	24ft	20	SH
FY 2023/24	3	\$1,557,263	\$280,307	35ft XHF	37	MW
FY 2024/25	1	\$141,878	\$25,538	24ft	20	SH
	6	\$3,207,962	\$577,433	35ft XHF	37	MW/SG

Notes:

Service Types: BB – Big Bus, SH- Shuttle, SG- Rural Stagecoach, MW- Seasonal Muir Woods and School

Expansion Needs

When considering service expansions, vehicles are often a constraint on the amount of service that can be added. Expansion vehicles are a lower priority in the regional capital plan and typically do not receive federal funds. Local, state or discretionary grants are required for vehicle expansions. Based on the current service plan, Marin Transit will not need any expansion vehicles for the local fixed route program.

Demand Response Vehicles

Marin Transit currently has 54 vehicles available for local and regional paratransit service. Accounting for adequate vehicle spares this allows for a maximum service of about 46 vehicles. GGBHTD currently owns a share of the vehicles (14 vehicles) based on the percent of regional service provided. Under the new GGBHTD contract, GGBHTD will share costs for local paratransit and this may include vehicle replacements. While the paratransit contractor owns additional vehicles used on the paratransit service, over time these will be replaced with publicly-owned vehicles.

To accommodate the growing paratransit service levels, vehicle expansions are needed. Historically, Marin Transit has also relied on keeping vehicles in service after their replacement due date to ensure adequate vehicles are available.

Table 4-6: Paratransit Vehicle Summary

	Marin Transit Owned	Contractor Owned/Leased	GGBHTD (Regional Paratransit)	Total
FY 2014/15 Vehicles	24	16	14	54
<i>Replacement (FY 2015/16 – FY 2024/25)</i>	85	-	14	99
<i>Expansion (FY 2015/16 – FY 2024/25)</i>	15	-	-	-
FY 2024/25 Vehicles	53	0	14	67

Table 4-7: Paratransit Vehicle Replacement and Expansions Schedule

Fiscal Year	Qty. Replacements (R) / Expansion (E)	Total Cost	Local Share	Vehicle Type	Seating Capacity	Wheelchair Capacity
FY 2015/16	9 (R)	\$870,000	\$465,972	Cutaways	8	2
	6 (E)	\$580,000	\$580,000	Cutaways	8	2
FY 2016/17	13 (R)	\$2,588,733	\$465,972	Cutaways	8	2
FY 2017/18	0	-	-	-	-	-
FY 2018/19	0	-	-	-	-	-
FY 2019/20	16 (R)	\$1,740,787	\$313,342	Cutaways	8	2
	3 (E)	\$326,398	\$326,398	Cutaways	8	2
FY 2020/21	15 (R)	\$3,922,211	\$1,073,565	Cutaways	8	2
FY 2021/22	13 (R)	\$1,500,526	\$270,095	Cutaways	8	2
	3 (E)	\$345,275	\$345,532	Cutaways	8	2
FY 2022/23	0	\$2,615,532	\$958,238	Cutaways	8	2
FY 2023/24	0	-	-	-	-	-
FY 2024/25	19 (R)	\$2,396,433	\$431,358	Cutaways	8	2
	3 (E)	\$367,363	\$367,363	Cutaways	8	2

Expansion Needs

To keep pace with the anticipated growth in ADA mandated paratransit, the Capital Plan includes the purchase of three additional paratransit vehicles every other year. These vehicle purchases are funded with 100% Measure A capital funds.

Electric Vehicle Pilot (unfunded)

Marin Transit, in partnership with other local organizations (Marin Clean Energy, Golden Gate Transit, and the Transportation Authority of Marin), is interested in investing in clean air technology. The goal of the project is to test the technology in transit operations and help Marin Transit and Golden Gate transit with long-term fleet planning and vehicle replacement needs related to electric buses. Investment in zero emission technology may also be requirement of new California Air Resource board regulations. This project may be a good candidate for competitive grant funding or Cap and Trade funding.

Accessible Taxis (unfunded)

The availability of taxis, and in particular wheelchair accessible taxis, is a challenge in Marin County. General public taxi rides, as well as trips provided through the District's non-ADA-mandated taxi subsidy program, Marin Catch-A-Ride, rely on taxis and accommodation for wheelchairs on these vehicles is needed. The District purchased four accessible minivans in 2008 and leased them to the On-the-Move until they reached the end of their useful life. At that time they were sold to the taxi company who recently closed business in Marin County. This closure has left Marin residents without a wheelchair accessible taxi option.

The District is exploring options to make wheelchair accessible vehicles available to the general public. The District also continues to pursue options for wheelchair accessible taxis and incentives for the taxi industry to operate these vehicles.

Stop and Facility Improvements

Bus Stop Improvements

Marin Transit has made a commitment to improve local bus stops in Marin County. Marin Transit is working on formal relationships with the local jurisdictions and Golden Gate Transit to establish roles and responsibilities for bus stop improvements. Improvements will be focused on shelters, signage (both eye level and bus stop flags), and other stop amenities that improve the rider environment. These improvements are part of an ongoing project to work with local jurisdictions to ensure that all bus stops are accessible according to the Americans with Disabilities Act (ADA).

Over the last five years, Marin Transit has successfully made improvements to local bus stops including new shelters, benches, signage, roadway repair and accessibility improvements. Marin Transit received a Federal State of Good Repair grant for \$1.6 million that has been the source for an ongoing project that has replaced all bus stop signs throughout the County, added new bus stop amenities and accessibility improvements at 12 locations and funded other minor upgrades to stops in West Marin and San Rafael. While completing these

projects, staff has gained valuable experience and has found they are resource intensive projects due to the unique nature of each bus stop and multiple jurisdictions.

To plan for a next phase of bus stop improvements, Marin Transit plans to initiate an update to the 2005 bus stop inventory in 2016 to ensure it reflects recent improvements and to help better quantify the needs and prioritize stop improvements throughout the County. The bus stop at College of Marin (Sir Francis Drake and Elm) has been identified a location that needs significant work to relocate closer to the College.

Major Improvements at Transfer Locations

In addition to general bus stop improvements and maintenance, Marin Transit has a vested interest in improving major transfer locations within the County to facilitate transfers between services, improve operations and attract riders. Active projects include the Downtown Novato Bus Facility, Pohono Park and Ride, the San Rafael Transit Center and SMART stations. Other locations that have been identified for future projects include the San Anselmo Hub, and the transfer location in Fairfax.

Downtown Novato Bus Facility - In partnership with the City of Novato and GGBHTD, Marin Transit is completing a design for the downtown Novato Transit Facility to improve operations and passenger access and replace the aging facility. Construction of the facility is estimated to be \$3.2 million and PTMISEA funding is programmed to the project through the regional Lifeline program. An additional estimated \$1.2 million is needed to fully fund the project.

Pohono Park and Ride – Marin Transit has grant funding to add a more permanent shelter and seating at the Pohono Park and Ride for the Muir Woods Shuttle service. The highly successful Muir Woods shuttle provides congestion relief and access to the Muir Woods National Monument by operating frequent, high capacity service out of the Pohono Park and Ride. While increasing bus frequency has reduced passenger waits and lines, the boarding location can still experience up to 50 people waiting at one time. Marin Transit has been actively working on scoping the project in coordination with the adjacent office complex, the County of Marin, and Caltrans.

San Rafael Transit Center (unfunded) – With the extension of SMART to Larkspur, the San Rafael Transit Center will be bifurcated and need to be significantly redesigned. This multi-agency project is currently being led by the City of San Rafael with participation from the District and GGBHTD. No funding is included in the Marin Transit Capital Plan for improvement or relocation of this transit center. Marin Transit's current operations rely heavily on this location for transfers and the project will be critical to the District.

SMART Stations- SMART stations are being design and constructed by SMART in partnership with the local jurisdictions. Marin Transit is supportive of ensuring all stations allow for convenient bus access to support multi-modal trips. As such, Marin Transit has provided feedback and comments on SMART's design plans. A summary of the opportunities for local bus service at each station is below:

- At the Civic Center station, the County has taken a leadership role on street bus stops to modify them so that Marin Transit services can support SMART ridership.
- (Unfunded) At the Novato Atherton Station, it is not clear from preliminary designs that 40 -60 ft. buses will be able to turn around at the station or near the station. Previous design options included a roundabout at Redwood Blvd. and Rush Landing Rd. to allow cars and buses to turnaround north of the station. Without some form of accommodation to turnaround, Marin Transit local service cannot be adjusted to connect to the station. The District will continue to work with SMART and the City of Novato to identify improvements and funding to allow local services to extend to this station.
- (Unfunded) At the Novato Hamilton Station, new on street stops along Main Gate Road would allow all local buses to serve the station without delays. Alternatively, if buses need to enter the station area to service riders, more limited service can be provided. The District will continue to work with SMART and the City of Novato to identify funding to allow all local services to serve this station using curbside turnouts along Main Gate Dr.

Transit Corridor Improvements (unfunded)

The proposed service plan includes new limited stop or express service that reduce the transit travel time through elimination of low ridership stops. These service target major travel corridors such as Highway 101, Sir Francis Drake Blvd., 4th Street/Miracle Mile, and areas of the Canal. Travel time savings for transit can also be achieved through capital infrastructure investments in these corridors including traffic signaling priority, transit queue jump lanes, and bus stop bulb outs. These features not only speed up transit operations but also make transit more competitive with automobile travel.

The District is currently participating in a number of projects that are studying the benefits of capital infrastructure investments in key transit corridors. These efforts include the Sir Francis Drake Boulevard Rehabilitation Project, US101/East Blithedale Ave-Tiburon Blvd. Interchange Pedestrian and Bicycle Access Planning Study, Fairfax-San Rafael Transit Corridor Feasibility Study, and Caltrans Ramp Metering efforts.

Administrative and Operations Facilities

Bus Operations and Maintenance Facilities

Marin Transit has been exploring the need to purchase operations facilities in an effort to improve efficiencies and reduce ongoing operations costs. This may include space for consolidation of fixed route and paratransit operations, vehicle layover, customer service functions, transfer locations and administrative staff. The District will evaluate potential opportunities and look for cost effective solutions for the District, local transit riders, and the County. Additional research and funding is needed.

Staff Offices

Marin Transit currently leases staff offices in San Rafael. The current lease extends through 2018. If a bus operations and maintenance facility was purchased, the District would look at the cost savings and operational efficiencies that could be gained from co-locating the staff offices with operations.

Technology and Other Capital Needs

Communication equipment, fare collection and major vehicles repairs make up the majority of the other capital expenditures. Staff time not charged directly to capitalize projects is also included in the infrastructure support costs.

Radio Project

Marin Transit relies on multiple radio systems for basic and emergency communication. The paratransit service is connected to the Marin Emergency Radio Authority (MERA) system. Marin County voters recently passed a bond Measure to upgrade the system. The shuttle and rural systems uses Motorola radio systems and the service operated by GGBHTD is using an in-house radio system. The District needs outside resources to help evaluate the current communication systems and may need to consolidate communication systems or invest in additional systems for the shuttle and rural programs. Limited funding is programmed for this project, and the complete project costs need to be developed as part on the initial project work.

Advance Vehicle Location (AVL)

The Marin Transit AVL system has been active for three years now on the Shuttle and Rural programs. This includes real time arrival information on mobile devices and on the internet. Limited real-time signs have also been installed at stops across the County. GGBHTD has been working on implementing a real-time information system and it is expected to be deployed soon. This system will be active on all routes operated by GGBHTD. Marin Transit and GGBHTD have been working with MTC and vendors to create a real-time sign that displays all Route information on a single sign. This technology is available for transit hubs and will be deployed at the San Rafael Transit Center.

Once an integrated stop level sign is available and real-time information is available on all services, Marin Transit would like work with GGBHTD to deploy real-time signs at all transfer points, freeway bus pads and some high use bus stops. This would be about 50 stops throughout the County. For projects that do not require significant design review or engineering the installation cost is estimated to be \$12,000 per stop for total project cost of \$600,000. Marin Transit's goal is to do this project in cooperation with GGBHTD. This project not currently included in the funded capital plan. Grant funds or other additional revenue will be needed to implement it.

Fare Collection

As discussed in the service plan section, Marin Transit maintains a fare structure that is embedded into GGBHTD regional zone based system. This embedded flat fare within a zone based system creates

complicated programming and limitation for both Marin Transit and GGBHTD. Marin Transit would like to move away from an integrated fare system to a transfer agreement similar to the new structure with SMART.

Marin Transit is supportive of the Clipper regional fare payment card and the system is now deployed on all services. To accelerate the implementation on local bus service, Marin Transit deployed the system under GGBHTD using functionality designed for the GGBHTD regional system. The current Clipper implementation cannot support Marin Transit's pass products and requires a tag on and tag off to get the correct fare. If a passenger fails to tag off the rider is charged the maximum regional fare (up to \$7.00). The potential for incurring this maximum fare (instead of the \$2.00 flat fare) has been shown to be too high of a risk for a low income rider and thus is a deterrent to using Clipper. Marin Transit would like to separate the District's Clipper implementation from GGBHTD and implement a simple flat fare system with passes. This will allow for much higher usages on local routes.

Marin Transit uses a highly sophisticated Genfare (GFI) validating farebox to collect cash fares and magnetic cards on the fixed route system. Marin Transit will continue to maintain this system until a new Clipper system is implemented that can support monthly and weekly passes. At that time, the District will also either need to re-program the GFI fareboxes or consider a simplified farebox solution.

Paratransit fares are currently paid by cash to the driver. Marin Transit would like add a pre-paid electronic option. Marin Transit also has funding to added non-validating fareboxes to all paratransit vehicles to increase security. Marin Transit will be adding a non-validating farebox to paratransit vehicles within the next two years.

Capital Contribution to Contractor

Marin Transit's annual capital contribution to GGBHTD was reduced significantly under the new operations contract effective July 1, 2015. This payment now pays for the depreciation on the local share of assets purchased prior to 2006. Payments for major vehicle repairs or significant capital expenditures for all contracts are budgeted under Major Vehicle Repairs and Infrastructure Support.

Bus Stop Maintenance

This expense, funded by Measure A is for ongoing maintenance contracts to clean and repair Marin Transit local bus stops. Currently, the majority maintenance of bus stop maintenance is done by GGBHTD or by local jurisdictions (City of Novato and San Rafael) under advertising agreements.

Major Vehicle Repairs

Service and maintenance for vehicles is provided by the associated contract operators. Marin Transit is responsible for major repairs including engine and transmission replacements. Under the previous contract with GGBHTD, Marin Transit paid for major vehicle repairs through the Capital Contribution. Marin Transit will now directly pay for these repairs and the associated budget has increased in anticipation of this.

Infrastructure Support

This includes Marin Transit staff time on capital programs that is not directly billed to projects. It also includes low value capital assets and other equipment.