

STAFF REPORT

SUBJECT: Approval of the Capital Improvement Program for Fiscal Years 22 through 31

FROM: Tamara Edwards, Director of Finance

DATE: March 7, 2022

Action Requested

It is requested that the Board of Directors approve the Capital Improvement Program for Fiscal Years 2022-2031 and adopt Resolution 07-2022.

Background

The MTC and Federal Transit Administration require submission of capital programs spanning a 10-year horizon. LAVTA develops our Short-Range Transportation Plan (SRTP) and updates it every four years. The SRTP on file was completed in 2016, at which time LAVTA's plan was to replace current buses in our fleet with Diesel Hybrids. LAVTA updated the plan in FY 2021, at which time the plan identified replacing only four buses in FY 2023 with Zero Emission Buses and purchasing eight Diesel Hybrids. However, that plan has changed and LAVTA desires to replace all twelve of the buses with Hydrogen Powered Zero Emission Buses. Therefore, we need a new Capital Improvement Program (CIP) approved by the Board for submission to MTC in order to receive funding for the more expensive Zero Emission Buses rather than funding for Diesel Hybrids. Additionally, some other projects have been added and refined from last year's plan. This plan should also be reflected in the updated SRTP which will be brought to the Board hopefully later this year.

Discussion

The current CIP adopted in FY 2021 has LAVTA replacing 12 buses in FY 2023 with 4 Zero Emission Buses and 8 Diesel Hybrids (bus delivery is at least a year lag). LAVTA would like to change that to reflect replacing all 12 buses with Hydrogen Powered Zero Emission Buses. In order for MTC to program the Federal Funding for the more expensive Hydrogen Powered Zero Emission Buses, MTC would like a board approved CIP with these purchases identified to match our request. Staff has also updated the CIP to include additional projects such as purchases of needed equipment for the Atlantis Facility and updating facility and maintenance needs. In addition to meeting the MTC requirement the CIP will feed into our FY 2023 Capital Budget request that will come to the Board with our annual Operating Budget in May for approval.

Recommendation

The Finance and Administration Committee recommends that the Board of Directors approve the Capital Improvement Program for Fiscal Years 2022-2031 and adopt Resolution 07-2022.

Attachments:

1. FY 22 through FY 31 Capital Improvement Plan
2. Resolution 07-2022

Approved: _____

**Capital Improvement Plan Fiscal Year 2022-2031
Livermore Amador Valley Transit Authority**

CAPITAL IMPROVEMENT PLAN

This plan provides a ten-year budget for fiscal years 2022-2031 that is based on historical data, policies, guidelines, and vehicle prices set by MTC. The largest expenses in capital within the next ten years are expected to come from the design and construction of the Atlantis facility, revenue fleet purchases, followed by major components rehab. FTA Sections 5307, and 5339, and TDA Article 4.0 are two of the major revenue sources that LAVTA is dependent on in balancing the ten-year capital improvement program budget.

Expenses within LAVTA's capital improvement program include the replacement, maintenance, and repair of: revenue and non-revenue vehicles (though significantly less often than years before), non-vehicle items (including equipment, furniture, IT, security, etc.), and facilities (Rutan, Atlantis, bus stops, etc.).

Assumptions for the ten-year capital improvement program include:

- Fiscal years where revenue vehicles are expected to be replaced are: 2022, 2023, 2028 and 2029 although with funding delays the vehicles will be received on a year lag.
- Fiscal years where non-revenue vehicles are expected to be replaced are: 2023, 2024, 2025, 2028 and 2029.
- Costs for many facility and major component capital needs for each increase CIP year are based on an inflation rate of 3%.

CAPITAL BUDGET

Figure 1 below presents the capital improvement program over the ten-year period. The total amount of funding needed for the capital improvement program over the period will be \$175,851,877.

Capital Improvement Plan Fiscal Year 2022-2031
Livermore Amador Valley Transit Authority

Figure 1: Capital Improvement Program for CIP Period FY 2022-2031

EXPENSES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
Fixed Route Vehicle Program	\$13,552,000	\$15,168,000	\$0	\$0	\$0	\$0	\$29,800,243	\$30,992,253	\$0	\$0	\$89,512,496
<i># of Vehicles</i>	16	12	0	0	0	0	20	20	0	0	68
Support Vehicle Replacement	\$0	\$50,000	\$85,000	\$217,583	\$0	\$0	\$265,500	\$629,200	\$0	\$0	\$1,247,283
<i># of Vehicles</i>	0	1	2	3	0	0	3	6	0	0	15
<i>SAV Vehicle Project</i>	\$0	\$0	\$3,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000,000
Components for Bus Purchases	\$917,296	\$722,184	\$0	\$0	\$0	\$0	\$1,261,282	\$1,318,613	\$0	\$0	\$4,219,375
Major Components	\$850,265	\$952,204	\$980,770	\$640,415	\$659,627	\$679,416	\$761,292	\$784,131	\$707,839	\$626,265	\$7,642,224
Miscellaneous Needs	\$741,766	\$6,524,759	\$1,262,409	\$361,024	\$333,389	\$130,911	\$138,448	\$226,002	\$135,572	\$209,159	\$10,063,437
Facility	\$1,241,900	\$34,365,500	\$18,258,263	\$426,000	\$5,114,400	\$113,000	\$125,400	\$123,000	\$293,600	\$106,000	\$60,167,063
TOTAL CAPITAL EXPENSES	\$17,303,227	\$57,782,647	\$23,586,442	\$1,645,021	\$6,107,416	\$923,327	\$32,352,165	\$34,073,198	\$1,137,011	\$941,424	\$175,851,877

REVENUES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
FTA	\$11,781,437	\$17,664,327	\$218,545	\$0	\$0	\$0	\$24,849,220	\$25,848,693	\$0	\$0	\$80,362,222
RM2	\$0	\$250,000	\$2,500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,750,000
Other Local Funds	\$51,500	\$2,654,968	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,206,468
TDA Article 4.0	\$4,770,290	\$6,691,351	\$6,477,606	\$2,193,021	\$6,107,416	\$923,327	\$7,502,945	\$8,224,505	\$1,137,011	\$941,424	\$44,420,896
Funding Not Secured	\$700,000	\$30,522,000	\$13,890,290	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45,112,290
TOTAL CAPITAL REVENUES	\$17,303,227	\$57,782,647	\$23,586,442	\$1,645,021	\$6,107,416	\$923,327	\$32,352,165	\$34,073,198	\$1,137,011	\$941,424	\$175,851,877

Vehicle replacement program costs are based on MTC's price list as show in the next section.

**Capital Improvement Plan Fiscal Year 2022-2031
Livermore Amador Valley Transit Authority**

REVENUE VEHICLES

The existing LAVTA revenue fleet is shown below in Figure 2. The current fleet size is 66 vehicles, there are 54 vehicles used at maximum pullout, and the spare ratio is 21. In 2018 LAVTA retired the buses purchased in 2003, all but 6 were sold. Those six were put in the “contingency fleet” and brought back out and put in the active fleet to accommodate the unprecedented ridership growth LAVTA was experiencing. Vehicles that are removed from the fleet are typically sold. The vehicle replacement schedule is shown in Figure 7.

Figure 2: Current Revenue Fleet

MANUFACTURER	YEAR OF MANUFACTURE	VIN	SIZE	SEATING CAPACITY	WHEELCHAIR CAPACITY	MODE OF POWER	MAJOR REHAB	YEAR OF RETIRE
Gillig Hybrid	2009	15GGD301891078670	40	39	2	Diesel Electric	No	2023
Gillig Hybrid	2009	15GGD301X91078671	40	39	2	Diesel Electric	No	2023
Gillig Hybrid	2009	15GGD301191078672	40	39	2	Diesel Electric	No	2023
Gillig Hybrid	2009	15GGD301391078673	40	39	2	Diesel Electric	No	2023
Gillig Hybrid	2009	15GGD301591078674	40	39	2	Diesel Electric	No	2023
Gillig Hybrid	2009	15GGD301791078675	40	39	2	Diesel Electric	No	2023
Gillig Hybrid	2009	15GGD301991078676	40	39	2	Diesel Electric	No	2024
Gillig Hybrid	2009	15GGD301091078677	40	39	2	Diesel Electric	No	2024
Gillig Hybrid	2009	15GGD301291078678	40	39	2	Diesel Electric	No	2024
Gillig Hybrid	2009	15GGD301491078679	40	39	2	Diesel Electric	No	2024
Gillig Hybrid	2009	15GGD301091078680	40	39	2	Diesel Electric	No	2024
Gillig Hybrid	2009	15GGD301291078681	40	39	2	Diesel Electric	No	2024
Gillig	2003	15GGD201531073704	40	39	2	Diesel	No	2023
Gillig	2003	15GGD201431073712	40	39	2	Diesel	No	2023
Gillig	2003	15GGD201631073713	40	39	2	Diesel	No	2023
Gillig	2003	15GGD201831073714	40	39	2	Diesel	No	2023
Gillig	2003	15GGD201531073717	40	39	2	Diesel	No	2023
Gillig	2003	15GGD201031073724	40	39	2	Diesel	No	2023
Gillig Hybrid	2007	15GGE191871091288	29	22	2	Diesel Electric	No	2023
Gillig Hybrid	2007	15GGE191X71091289	29	22	2	Diesel Electric	No	2023
Gillig Hybrid	2009	15GGE301491091784	29	22	2	Diesel Electric	No	2023
Gillig Hybrid	2009	15GGE301691091785	29	22	2	Diesel Electric	No	2023
Gillig Hybrid	2011	15GGE3019B1092287	29	22	2	Diesel Electric	No	2024
Gillig Hybrid	2011	15GGE3010B1092288	29	22	2	Diesel Electric	No	2024
Gillig Hybrid	2011	15GGE3012B1092289	29	22	2	Diesel Electric	No	2024
Gillig Hybrid	2011	15GGE3012B1092289	29	22	2	Diesel Electric	No	2024
Gillig BAE Hybrid	2016	15GGB301XG1187554	35	28	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGB3011G1187555	35	28	2	Diesel Electric	No	2029

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MANUFACTURER	YEAR OF MANUFACTURE	VIN	SIZE	SEATING CAPACITY	WHEELCHAIR CAPACITY	MODE OF POWER	MAJOR REHAB	YEAR OF RETIRE
Gillig BAE Hybrid	2016	15GGB3013G1187556	35	28	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGB3015G1187557	35	28	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGB3017G1187558	35	28	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGB3019G1187559	35	28	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGB3015G1187560	35	28	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGB3017G1187561	35	28	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGB3019G1187562	35	28	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGB3010G1187563	35	28	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGD301XG1187564	40	34	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGD3011G1187565	40	34	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGD3013G1187566	40	34	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGD3015G1187567	40	34	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGD3017G1187568	40	37	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGD3019G1187569	40	37	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGD3015G1187570	40	37	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGD3017G1187571	40	37	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGD3019G1187572	40	37	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2016	15GGD3010G1187573	40	37	2	Diesel Electric	No	2029
Gillig BAE Hybrid	2017	15GGD3019H3189358	40	34	2	Diesel Electric	No	2030
Gillig BAE Hybrid	2017	15GGD3010H3189359	40	34	2	Diesel Electric	No	2030
Gillig BAE Hybrid	2017	15GGD3017H3189360	40	34	2	Diesel Electric	No	2030
Gillig BAE Hybrid	2017	15GGD3019H3189361	40	34	2	Diesel Electric	No	2030
Gillig BAE Hybrid	2017	15GGD3010H3189362	40	34	2	Diesel Electric	No	2030
Gillig BAE Hybrid	2017	15GGD3012H3189363	40	34	2	Diesel Electric	No	2030
Gillig BAE Hybrid	2017	15GGD3014H3189364	40	34	2	Diesel Electric	No	2030
Gillig BAE Hybrid	2017	15GGD3016H3189365	40	34	2	Diesel Electric	No	2030
Gillig BAE Hybrid	2017	15GGD3018H3189366	40	34	2	Diesel Electric	No	2030
Gillig BAE Hybrid	2017	15GGD301XH3189367	40	34	2	Diesel Electric	No	2030
Gillig BAE Hybrid	2017	15GGD3011H3189368	40	35	2	Diesel Electric	No	2030
Gillig Hybrid	2017	15GGE3015H3093305	29	22	2	Diesel Electric	No	2030
Gillig Hybrid	2017	15GGE3017H3093306	29	22	2	Diesel Electric	No	2030
Gillig Hybrid	2017	15GGE3019H3093307	29	22	2	Diesel Electric	No	2030
Gillig Hybrid	2017	15GGE3010H3093308	29	22	2	Diesel Electric	No	2030
Gillig Hybrid	2017	15GGE3012H3093309	29	22	2	Diesel Electric	No	2030
Gillig Hybrid	2017	15GGE3019H3093310	29	22	2	Diesel Electric	No	2030

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MANUFACTURER	YEAR OF MANUFACTURE	VIN	SIZE	SEATING CAPACITY	WHEELCHAIR CAPACITY	MODE OF POWER	MAJOR REHAB	YEAR OF RETIRE
Gillig Hybrid	2017	15GGE3010H3093311	29	22	2	Diesel Electric	No	2030
Gillig Hybrid	2017	15GGE3012H3093312	29	22	2	Diesel Electric	No	2030
Gillig Hybrid	2017	15GGE3014H3093313	29	22	2	Diesel Electric	No	2030

Based on MTC vehicle price guidelines (see Figure 3), LAVTA will require \$89,512,500 to replace 68 revenue vehicles over the ten-year period. These vehicles will be replaced, because they will be at the end of their life cycles. In 2011, LAVTA was experiencing a ridership decline and 12 vehicles were retired, but only 4 were replaced. LAVTA took a “full life deferral” credit. However, in 2023 LAVTA is eligible to replace those vehicles and with the ridership increase, and the possibility of the need to continue social distancing LAVTA plans to purchase the additional 8 vehicles.

Additionally, to accommodate the ridership increase LAVTA will be replacing the 29’ vehicles with 40’ vehicles. This is not usually allowed. However, LAVTA is due to replace some paratransit “cutaway” vehicles, but with the current paratransit model these vehicles are not needed. Therefore, the seating capacity of this “deferred” vehicles are added to the seating capacity of the 29’ vehicles to allow for the purchase of 40’ vehicles.

Figure 4 lists the breakdown of revenue vehicles to be purchased, the costs associated, and the revenue sources that will be used to purchase the vehicles for the ten-year period. Fleet replacement is expected to occur in FY 2022, 2023, 2028 and 2029 with buses in service in FY 2022, 2023, 2028 and 2029. Sixteen of the sixty-eight planned purchases are diesel-electric hybrid vehicles. The remaining four will be Hydrogen Powered-Zero Emission Buses.

Figure 6 lists the additional components needed for the revenue vehicles. These are the Automatic Vehicle Locator (AVL) system, the fareboxes, and the radios.

In addition to the regular Fixed Route Fleet LAVTA is looking to establish a fleet of Shared Autonomous Vehicles to provide “last mile” service. Figure 5 shows the expenses and revenues for these purchases.

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Figure 3: MTC Vehicle Price List

MTC VEHICLE PRICE	FY2022	FY 2023	FY 2024	FY 2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031
40' bus Hybrid										
Federal	\$677,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local	\$169,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$847,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40' bus Fuel Cell										
Federal	\$992,800	\$1,011,200	\$1,030,400	\$1,049,600	\$1,102,080	\$1,146,163	\$1,192,010	\$1,239,690	\$1,289,278	\$1,340,849
Local	\$248,200	\$252,800	\$257,600	\$262,400	\$275,520	\$286,541	\$298,002	\$309,923	\$322,319	\$335,212
Total	\$1,241,000	\$1,264,000	\$1,288,000	\$1,312,000	\$1,377,600	\$1,432,704	\$1,490,012	\$1,549,613	\$1,611,597	\$1,676,061
Notes: LAVTA is increasing its fleet size due to increased ridership. LAVTA took a full life deferral on 8 vehicles in 2011 which will be replaced in the 2023 purchase. Only purchased 4 replacement vehicles in 2011. Deferred replacement of 8 of the 12 vehicles in 2011 for the full 12 years. All 12 will be replaced in FY 2023.										

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Figure 4: Fixed-Route Revenue Vehicle Procurement Program for CIP Period

EXPENDITURES	REPLACEMENT VEHICLES	# OF VEHICLES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
2007 Gillig Coaches (29 ft)	40 ft standard hybrid coaches	2	\$1,694,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,694,000
2009 Gillig Rapid Coaches (29 & 40 ft)	40 ft standard hybrid coaches	14	\$11,858,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,858,000
2011 Gillig Hybrid Coaches (29')	40 ft standard Zero Emission coaches	4	\$0	\$5,056,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,056,000
2011 Gillig Hybrid Coaches previously deferred	40 ft standard Zero Emission coaches	8	\$0	\$10,112,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,112,000
2016 Gillig Rapid Coaches (35 & 40 ft)	40 ft standard Zero Emission coaches	20	\$0	\$0	\$0	\$0	\$0	\$0	\$29,800,243	\$0	\$0	\$0	\$29,800,243
2017 Gillig Rapid Coaches (29 & 40 ft)	40 ft standard Zero Emission coaches	20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,992,253	\$0	\$0	\$30,992,253
TOTAL CAPITAL EXPENSES		68	\$13,552,000	\$15,168,000	\$0	\$0	\$0	\$0	\$29,800,243	\$30,992,253	\$0	\$0	\$89,512,496
# of vehicles			16 40'	12 40'					20 40'	20 40'			

REVENUES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
FTA Section 5307/5339	\$10,841,600	\$12,134,400	\$0	\$0	\$0	\$0	\$23,840,195	\$24,793,802	\$0	\$0	\$71,609,997
TDA Article 4.0	\$2,710,400	\$2,088,624	\$0	\$0	\$0	\$0	\$5,960,049	\$6,198,451	\$0	\$0	\$16,957,523
LCTOP	\$0	\$944,976	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$944,976
Funding Not Secured	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REVENUES	\$13,552,000	\$15,168,000	\$0	\$0	\$0	\$0	\$29,800,243	\$30,992,253	\$0	\$0	\$89,512,496
Additional Local Match Needed	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

*5307 and 5339 Funding assumed for replacement purchases. TDA additional local match may be required when purchasing replacements as shown in table.

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Figure 5: SAV Revenue Vehicle Procurement Program for CIP Period

EXPENDITURES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
Vehicles	\$0	\$0	\$3,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000,000
TOTAL CAPITAL EXPENSES	\$0	\$0	\$3,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000,000

REVENUES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
FTA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TDA	\$0	\$0	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000
RM2	\$0	\$0	\$2,500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500,000
TOTAL CAPITAL REVENUES	\$0	\$0	\$3,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000,000

Figure 6: Summary of Additional Components for Bus Purchases

COMPONENTS FOR BUS PURCHASES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
AVL	\$522,240	\$415,536	\$0	\$0	\$0	\$0	\$718,080	\$750,720	\$0	\$0	\$2,406,576
Fareboxes	\$332,016	\$256,488	\$0	\$0	\$0	\$0	\$456,522	\$477,273	\$0	\$0	\$1,522,299
Radios	\$63,040	\$50,160	\$0	\$0	\$0	\$0	\$86,680	\$90,620	\$0	\$0	\$290,500
TOTAL BUS PURCHASE COMPONENTS	\$917,296	\$722,184	\$0	\$0	\$0	\$0	\$1,261,282	\$1,318,613	\$0	\$0	\$4,219,375
# of vehicles	16	12	0	0	0	0	20	20	0	0	68

REVENUES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
FTA	\$733,837	\$577,747	\$0	\$0	\$0	\$0	\$1,009,026	\$1,054,890	\$0	\$0	\$3,375,500
Other local funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TDA Article 4.0	\$183,459	\$144,437	\$0	\$0	\$0	\$0	\$252,256	\$263,723	\$0	\$0	\$843,875
Funding Not Secured	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REVENUES	\$917,296	\$722,184	\$0	\$0	\$0	\$0	\$1,261,282	\$1,318,613	\$0	\$0	\$4,219,375

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Figure 7: Summary of Fleet and Vehicle Replacement Schedule

IN OR OUT OF SERVICE	IN		OUT		IN		OUT		IN		OUT		IN		OUT		IN		OUT		IN		OUT	
Year & Manufacturer	2022		2023		2024		2025		2026		2027		2028		2029		2030		2031					
40' 2003 Gillig Low-Floor	0	6																						
29' 2007 Gillig Hybrid	0	1																						
29' 2009 Gillig Hybrid	0	2																						
40' 2009 Gillig Hybrid	6	6	6		6		0	6																
29' 2011 Gillig Hybrid	4		4		4		0	4																
35' 2016 Fixed Route Replacement	10		10		10		10		10		10			10										
40' 2016 Fixed Route Replacement	10		10		10		10		10		10			10										
29' 2017 Fixed Route Replacement	5		5		5		5		5		5		5		0	5								
40' 2017 Fixed Route Replacement	15		15		15		15		15		15		15		0	15								
40' 2022 Fixed Route Replacement	16		16		16		16		16		16		16		16		16		16		16		16	
40' 2025 Fixed Route Replacement <i>b</i>							12		12		12		12		12		12		12		12		12	
40' 2028 Fixed Route Replacement <i>b</i>													20		20		20		20		20		20	
40' 2029 Fixed Route Replacement <i>b</i>															20		20		20		20		20	
40' 2034 Fixed Route Replacement <i>b</i>																								
40' 2037 Fixed Route Replacement <i>b</i>																								
Buses Retired	15	0	0	0	0	0	10	0	0	0	0	0	20	0	20	0	0	0	0	0	0	0	0	0
Replacement buses purchased	16	0	0	0	0	0	12	0	0	0	0	0	20	0	20	0	0	0	0	0	0	0	0	0
FTA Reported Fleet Size	66	66	66	66	66	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
Spare Ratio <i>a</i>	22%	22%	22%	22%	22%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%

a Spare ratio assumes a 54 bus peak pull-out through 2025. 56 thereafter
b ZEB Bus

**Capital Improvement Plan Fiscal Year 2022-2031
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NON-REVENUE VEHICLES

Existing non-revenue vehicle details are shown in Figure 8 below. There are currently a total of fourteen vehicles, although an additional one is scheduled to be purchased in FY 2025. Non-revenue vehicles have a variety of uses, including supervision, operator shift changes, marketing, maintenance department use, and other uses.

Figure 8: Current Non-Revenue Vehicles

MAKE	MODEL	YEAR	ESTIMATED REPLACEMENT YEAR	ESTIMATED REPLACEMENT COST	VEHICLE TYPE	MODE OF POWER
Chrysler	Town and Country	2008	2025	\$35,000	Mini Van	Gas
Ford	F 550	2003	2023*	\$50,000	Truck	Diesel
Chevrolet	3500 HD	2008	2024*	\$50,000	Truck	Diesel
Dodge	Ram 150	2015	2025	\$100,000	Truck	Diesel
Toyota	Prius	2005	2024	\$35,000	Car	Gas
Ford	Fusion Hybrid	2018	2028	\$88,500	Car	Gas
Ford	Fusion Hybrid	2018	2028	\$88,500	Car	Gas
Ford	Fusion Hybrid	2018	2028	\$88,500	Car	Gas
Ford	Transit 150	2019	2029	\$90,750	Van w/wheelchair ramp	Gas
Ford	Transit 150	2019	2029	\$90,750	Van w/wheelchair ramp	Gas
Ford	Transit Connect	2019	2029	\$90,750	Van	Gas
Ford	Transit Connect	2019	2029	\$90,750	Van	Gas
Ford	F 550	2019	2029	\$133,100	Truck	Diesel
Ford	F 350	2019	2029	\$133,100	Truck	Diesel

*Previously replaced but kept in the fleet for other uses

These vehicles will be replaced as needed. Figure 9 lists the breakdown of non-revenue vehicles to be purchased, the costs associated, and the revenue sources that will be used to purchase the vehicles over the CIP period. Non-revenue vehicles are expected to be replaced in FY 2023, 2024, 2025, 2028, 2029. The total cost for non-revenue vehicle replacements will be \$1,247,283.

**Capital Improvement Plan Fiscal Year 2022-2031
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Figure 9: Non-Revenue Vehicle Procurement Program for CIP Period

EXPENDITURES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
2015 Dodge Ram	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
2018 Ford Fusion Hybrid	\$0	\$0	\$0	\$0	\$0	\$0	\$88,500	\$0	\$0	\$0	\$88,500
2018 Ford Fusion Hybrid	\$0	\$0	\$0	\$0	\$0	\$0	\$88,500	\$0	\$0	\$0	\$88,500
2018 Ford Fusion Hybrid	\$0	\$0	\$0	\$0	\$0	\$0	\$88,500	\$0	\$0	\$0	\$88,500
2019 Transit 150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90,750	\$0	\$0	\$90,750
2019 Transit 150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90,750	\$0	\$0	\$90,750
2019 Transit Connect	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90,750	\$0	\$0	\$90,750
2019 Transit Connect	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90,750	\$0	\$0	\$90,750
2019 Ford 550	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$133,100	\$0	\$0	\$133,100
2019 Ford 350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$133,100	\$0	\$0	\$133,100
2003 Ford F 550	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000
2008 3500 HD	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000
Additional vehicle for increase service	\$0	\$0	\$0	\$82,583	\$0	\$0	\$0	\$0	\$0	\$0	\$82,583
2008 Town and Country	\$0	\$0	\$0	\$35,000	\$0	\$0	\$0	\$0	\$0	\$0	\$35,000
2005 Prius Hybrid (6420)	\$0	\$0	\$35,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,000
TOTAL VEHICLE EXPENSES	\$0	\$50,000	\$85,000	\$217,583	\$0	\$0	\$265,500	\$629,200	\$0	\$0	\$1,247,283
# of vehicles	0	1	2	3	0	0	3	6	0	0	15
TDA Article 4.0	\$0	\$50,000	\$85,000	\$217,583	\$0	\$0	\$265,500	\$629,200	\$0	\$0	\$1,247,283
Funding Not Secured	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REVENUES	\$0	\$50,000	\$85,000	\$217,583	\$0	\$0	\$265,500	\$629,200	\$0	\$0	\$1,247,283

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FACILITIES & NON-VEHICLES

Figure 10 shows facility costs over the CIP period. Maintenance facility expenses are expected to be most significant in FY 2025. Funding sources are expected to be limited to PTMISEA, TDA Article 4.0 and FTA. Maintenance facility costs include any equipment, and tree maintenance at owned facilities.

Other miscellaneous categories not categorized as revenue vehicles, non-revenue vehicles, or maintenance are shown in Figure 11 and Figure 12 on the following pages.

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Figure 10: Facility Needs for the CIP Period

FACILITY	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
Administration, Operations	\$100,000	\$375,000	\$100,000	\$355,000	\$100,000	\$100,000	\$100,000	\$100,000	\$279,200	\$100,000	\$1,709,200
Maintenance Facility	\$141,900	\$235,500	\$237,400	\$65,000	\$5,014,400	\$8,000	\$19,400	\$23,000	\$9,400	\$0	\$5,754,000
Transit Center	\$0	\$570,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$570,000
Atlantis	\$1,000,000	\$33,185,000	\$17,920,863	\$6,000	\$0	\$5,000	\$6,000	\$0	\$5,000	\$6,000	\$52,133,863
TOTAL FACILITY	\$1,241,900	\$34,365,500	\$18,258,263	\$426,000	\$5,114,400	\$113,000	\$125,400	\$123,000	\$293,600	\$106,000	\$60,167,063
REVENUES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
FTA	\$0	\$440,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$440,000
PTMISEA	\$0	\$94,102	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$94,102
Bridge Tolls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TDA Article 4.0	\$541,900	\$3,309,398	\$4,367,973	\$426,000	\$5,114,400	\$113,000	\$125,400	\$123,000	\$293,600	\$106,000	\$14,520,671
Other local funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Funding Not Secured	\$700,000	\$30,522,000	\$13,890,290	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45,112,290
TOTAL CAPITAL REVENUES	\$1,241,900	\$34,365,500	\$18,258,263	\$426,000	\$5,114,400	\$113,000	\$125,400	\$123,000	\$293,600	\$106,000	\$60,167,063

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Figure 11: Miscellaneous Capital Improvement Program for CIP Period

FACILITIES NEEDS	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
Miscellaneous Facility/Office Equipment	\$6,000	\$3,000	\$10,000	\$5,000	\$6,000	\$3,000	\$10,000	\$5,000	\$6,000	\$3,000	\$57,000
Other Facility Needs	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$100,000
Mobility Hubs (2)	\$0	\$1,550,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,550,000
SAV Mobility Hubs	\$0	\$1,275,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,275,000
Traffic Signal Communications (3)	\$0	\$225,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$225,000
Bike/Scooter Program	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000
Computers	\$15,450	\$15,914	\$16,391	\$16,883	\$17,389	\$17,911	\$18,448	\$19,002	\$19,572	\$20,159	\$177,117
Servers, Server Software	\$75,000	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105,000
Windows and Office Upgrade	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$12,000	\$0	\$0	\$22,000
Server Operating System Upgrade	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000
Exchange Server Migration	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$30,000
VM Host upgrade	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$90,000
SAN Replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$76,000	\$76,000
Atlantis Network upgrade	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000
Switch, router, network upgrades	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000
SQL Software Upgrade	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000
Secure facility access	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
Shelter upgrades (HBP)	\$0	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$200,000
SAV Street improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bus Stop Improvements	\$425,000	\$2,000,000	\$600,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$3,725,000
TOTAL FACILITY NEEDS	\$546,450	\$5,318,914	\$1,046,391	\$131,883	\$333,389	\$130,911	\$138,448	\$226,002	\$135,572	\$209,159	\$8,217,117

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Livermore Amador Valley Transit Authority**

VEHICLE NEEDS	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
Trapeze Upgrade	\$195,316	\$1,205,845	\$216,018	\$229,141	\$0	\$0	\$0	\$0	\$0	\$0	\$1,846,320
TOTAL VEHICLE NEEDS	\$195,316	\$1,205,845	\$216,018	\$229,141	\$0	\$0	\$0	\$0	\$0	\$0	\$1,846,320

TOTAL MISCELLANEOUS NEEDS	\$741,766	\$6,524,759	\$1,262,409	\$361,024	\$333,389	\$130,911	\$138,448	\$226,002	\$135,572	\$209,159	\$10,063,437
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REVENUES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
FTA	\$0	\$4,300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,300,000
Other Local Funds	\$0	\$1,562,845	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,062,845
RM2	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000
TDA Article 4.0	\$741,766	\$411,914	\$762,409	\$361,024	\$333,389	\$130,911	\$138,448	\$226,002	\$135,572	\$209,159	\$3,450,592
Funding Not Secured	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REVENUES	\$741,766	\$6,524,759	\$1,262,409	\$361,024	\$333,389	\$130,911	\$138,448	\$226,002	\$135,572	\$209,159	\$10,063,437

Figure 12: Major Components Rehab Plan for CIP Period

ENGINES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
2009 Gillig BRT Coaches Engine Repower per CARB	\$157,590	\$157,590	\$162,318	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$477,498
Battery Refresh (2009 40' Fleet [8] done in conjunction with above repower)	\$185,400	\$190,962	\$196,691	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$573,053
2016 Mid-life rebuild	\$78,795	\$81,159	\$83,594	\$86,101	\$88,684	\$91,345	\$94,085	\$96,908	\$0	\$0	\$700,672
2017 Mid-life rebuild	\$0	\$81,159	\$83,594	\$86,101	\$88,684	\$91,345	\$94,085	\$96,908	\$99,815	\$0	\$721,692
2022 Mid-Life rebuild	\$0	\$0	\$0	\$0	\$0	\$0	\$61,494	\$63,339	\$65,239	\$67,196	\$257,267
TOTAL ENGINES EXPENSES	\$421,785	\$510,870	\$526,196	\$172,203	\$177,369	\$182,690	\$249,664	\$257,154	\$165,054	\$67,196	\$2,730,181

**Capital Improvement Plan Fiscal Year 2022-2031
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OTHER MAJOR COMPONENTS	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
Transmissions - Allison	\$92,700	\$95,481	\$98,345	\$101,296	\$104,335	\$107,465	\$110,689	\$114,009	\$117,430	\$120,952	\$1,062,702
Quantity	2	2	2	2	2	2	2	2	2	2	20
Transmissions - BAE	\$51,500	\$53,045	\$54,636	\$56,275	\$57,964	\$59,703	\$61,494	\$63,339	\$65,239	\$67,196	\$590,390
Quantity	2	2	2	2	2	2	2	2	2	2	20
Batteries for Hybrids - Allison	\$92,700	\$95,481	\$98,345	\$101,296	\$104,335	\$107,465	\$110,689	\$114,009	\$117,430	\$120,952	\$1,062,702
Quantity	2	2	2	2	2	2	2	2	2	2	20
Batteries for Hybrids - BAE	\$164,800	\$169,744	\$174,836	\$180,081	\$185,484	\$191,048	\$196,780	\$202,683	\$208,764	\$215,027	\$1,889,247
Quantity	2	2	2	2	2	2	2	2	2	2	20
Engine, transmission for Service Vehicles - Cars	\$16,480	\$16,974	\$17,484	\$18,008	\$18,548	\$19,105	\$19,678	\$20,268	\$20,876	\$21,503	\$188,925
Quantity	2	2	2	2	2	2	2	2	2	2	20
Engine, transmission for Service Vehicles - Trucks	\$10,300	\$10,609	\$10,927	\$11,255	\$11,593	\$11,941	\$12,299	\$12,668	\$13,048	\$13,439	\$118,078
Quantity	1	1	1	1	1	1	1	1	1	1	10
TOTAL OTHER EXPENSES	\$428,480	\$441,334	\$454,573	\$468,212	\$482,258	\$496,726	\$511,628	\$526,976	\$542,786	\$559,069	\$4,912,043
TOTAL MAJOR COMPONENTS	\$850,265	\$952,204	\$980,770	\$640,415	\$659,627	\$679,416	\$761,292	\$784,131	\$707,839	\$626,265	\$7,642,224

REVENUES	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	10 Year Total
FTA	\$206,000	\$212,180	\$218,545	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$636,725
SGR	\$51,500	\$53,045	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,545
Bridge Tolls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TDA Article 4.0	\$592,765	\$686,979	\$762,225	\$640,415	\$659,627	\$679,416	\$761,292	\$784,131	\$707,839	\$626,265	\$6,900,954
Funding Not Secured	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL CAPITAL REVENUES	\$850,265	\$952,204	\$980,770	\$640,415	\$659,627	\$679,416	\$761,292	\$784,131	\$707,839	\$626,265	\$7,642,224

RESOLUTION NO. 07-2022

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE LIVERMORE
AMADOR VALLEY TRANSIT AUTHORITY ADOPTING A CAPITAL
IMPROVEMENT PROGRAM FOR FISCAL YEARS 2022-2031**

WHEREAS LAVTA Staff has identified Capital Projects that would benefit the Agency and our riders to be completed during Fiscal Years 2022 to 2031 resulting in a need to adopt a Capital Improvement Program; and

WHEREAS the Board of Directors of the Livermore Amador Valley Transit Authority at their meeting of March 7, 2022 reviewed and approved the Capital Improvement Program for Fiscal Years 2022 to 2031,

NOW, THEREFORE, IT IS HEREBY RESOLVED by the Board of Directors that the Capital Improvement Program for the Livermore Amador Valley Transit Authority for Fiscal Years 2022 through 2031, attached hereto and incorporated herein as Attachment 1, is hereby adopted.

APPROVED AND PASSED this 7th day of March 2022.

Karla Brown, Chair

ATTEST:

Michael Tree, Executive Director