

# **Livermore Amador Valley Transit Authority (LAVTA)**



## **Final Mini-Short Range Transit Plan FY 2010 to 2019**

**March 2010**

**Adopted by LAVTA Board of Directors: Monday, March 1, 2010**

Federal transportation statutes require that the Metropolitan Transportation Commission (MTC), in partnership with state and local agencies, develop and periodically update a long-range Regional Transportation Plan (RTP), and a Transportation Improvement Program (TIP) which implements the RTP by programming federal funds to transportation projects contained in the RTP. In order to effectively execute these planning and programming responsibilities, MTC requires that each transit operator in its region which receives federal funding through the TIP, prepare, adopt, and submit to MTC a Short Range Transit Plan (SRTP).

**RESOLUTION 04-2010**

**A RESOLUTION OF THE LIVERMORE AMADOR VALLEY TRANSIT  
AUTHORITY ADOPTING THE FY 2010-2019 MINI SHORT RANGE TRANSIT  
PLAN**

**WHEREAS**, the Metropolitan Transportation Commission (MTC) requires transit operators in the nine county region including LAVTA to complete an annual short range transit plan (SRTP) in compliance with MTC guidelines and financial projections; and

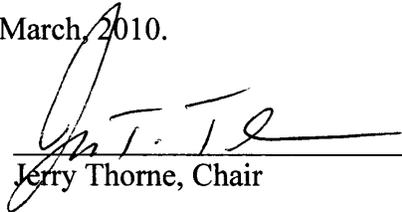
**WHEREAS**, LAVTA staff completed and submitted a draft short range transit plan to MTC before the December 31, 2009 deadline; and

**WHEREAS**, MTC has reviewed and found the draft SRTP to be in compliance with MTC guidelines and procedures; and

**WHEREAS**, the LAVTA Board must approve the draft plan before the plan can be finalized and provided to MTC before the March 30, 2010 deadline.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of the Livermore Amador Valley Transit Authority that the FY 2010-2019 LAVTA Mini-SRTP is accepted and may be delivered in its final format to MTC.

**PASSED AND ADOPTED** this 1st day of March, 2010.

  
\_\_\_\_\_  
Jerry Thorne, Chair

ATTEST:

  
\_\_\_\_\_  
Paul Matsuoka, Executive Director

Approved as to form:

  
\_\_\_\_\_  
Michael Conneran, Legal Counsel

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## Introduction

The Metropolitan Transportation Commission (MTC) requires transit operators in the nine-county Bay Area to complete an annual update to their short range transit plans (SRTPs) covering the ten-year planning horizon. MTC gave operators an option this fiscal year to perform their mini-SRTP updates or forego them in order to fund the region-wide sustainability study spearheaded by MTC. LAVTA opted to update the mini-SRTP for FY 2010-2019 in order to provide agency staff with an updated and more accurate picture of the agency's current and future capital and operating needs. This report was completed to meet MTC's requirement.

## Funding Overview

The financial information in this document is based on ten-year revenue forecasts provided by MTC of the major funding sources (TDA, STA, FTA formula funds). LAVTA, like many other operators, will be experiencing funding shortfalls in the projected future due to declining revenues and increasing costs. In order to provide a constrained financial scenario, many capital needs will go unfunded through the planning horizon unless future funding sources can be secured in order to expend all available TDA funding on maintaining operations. Despite suspension of capital projects, service hours on local fixed-route services will need to be reduced to reflect funding levels and maintain a balanced budget.

LAVTA has included all necessary capital projects for the agency even though many are unfunded. LAVTA fully intends upon competing and obtaining yet-unsecured regional, state, and federal funding for the wide array of needed capital projects. The Atlantis O&M Facility Project represents LAVTA's largest capital project moving forward and is not fully funded at this time. The project will require commitments of over \$60 million and is included in the SRTP and RTP to enable LAVTA to pursue federal (and other) discretionary funding.

Weathering current economic climate, combined with the introduction of the Rapid Bus, will require LAVTA to start drawing down on the current TDA reserves in FY 2011. Once the reserves are depleted, LAVTA will likely be required to reduce service hours. Reserves are projected to be depleted between 2014 and 2015.

When funding levels begin to rise again, LAVTA will work to fund capital projects and gradually bring service levels back to their pre-FY 2009 levels in a financially sustainable manner as well as replenish TDA reserves as directed by our Board of Directors.

## Funding Assumptions

The following lists MTC's and LAVTA's funding assumptions for the SRTP:

### MTC Assumptions

- TDA will increase through the life of the plan at 3% annually
- Measure B funding will increase at 3% annually
- FTA Section 5307 funding for the Livermore UA will increase at 4% annually
- STA will resume in FY 2014 and increase 5% annually

### LAVTA Assumptions

- To support operations, TDA reserves will be fully expended
- The plan does not include revenues we do not already have secured
- Assumes a \$0.25 fixed-route fare increase in FY 2014

- Bridge tolls will provide the 20% local match for revenue vehicle replacement projects starting in FY 2012
- FTA Section 5307 Livermore UA funding not used for revenue vehicle procurement will be used for capitalized vehicle maintenance
- RM-2 and Measure B will support BRT operations through the life of the plan, increasing at 1.5% annually
- Assumes Measure B operating support for fixed-route operations ends after FY 2012
- Assumes FTA Section 5316 and 5317 (New Freedom and JARC) funding for paratransit operations ends after FY 2012

### Bus Rapid Transit Funding

Despite declining revenues and reduced funding for capital and general operating, LAVTA intends on debuting its new Rapid Bus project in January 2011. Capital funding for the Rapid project is fully secured, and LAVTA has starter operations funding committed to the project by the Alameda County Transportation Improvement Authority (ACTIA, Measure B Express Bus) and MTC RM2 (Express Bus Operations) that will help subsidize at least the first two years of Rapid operations. The plan assumes these revenues will continue to partially fund the service through the life of the plan.

With the introduction of BRT service and its dedicated funding sources, LAVTA can reorganize the current system and redistribute resources from Route 10 and duplicative route segments in order to mitigate any necessary service cuts to the local fixed-route service that may be necessary due to funding shortfalls.

# Service Evaluation

An overview of LAVTA's three-year system performance is provided in Figure 1 combining fixed-route and dial-a-ride operations.

Figure 1 Three-Year System Performance

<b>SYSTEM SUMMARY (FIXED-ROUTE &amp; DIAL-A-RIDE)</b>			
	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>
Operating Cost	\$12,468,335	\$14,467,735	\$14,647,037
<i>Percent Change</i>		16.0%	1.2%
Passengers	2,205,022	2,286,721	2,262,338
<i>Percent Change</i>		3.7%	-1.1%
Revenue Hours	151,787	173,676	169,006
<i>Percent Change</i>		14.4%	-2.7%
Revenue Miles	2,095,149	2,111,098	2,399,544
<i>Percent Change</i>		0.8%	13.7%
Farebox Revenue	\$2,171,707	\$2,439,990	\$2,563,937
<i>Percent Change</i>		12.4%	5.1%
Operating Cost/Passenger	\$5.65	\$6.33	\$6.47
<i>Percent Change</i>		11.9%	2.3%
Operating Cost/Revenue Hour	\$82.14	\$83.30	\$86.67
<i>Percent Change</i>		1.4%	4.0%
Passengers/Revenue Hour	14.5	13.2	13.4
<i>Percent Change</i>		-9.4%	1.7%
Average Fare/Passenger	\$0.98	\$1.07	\$1.13
<i>Percent Change</i>		8.3%	6.2%
Farebox Recovery Ratio	17%	17%	18%
<i>Percent Change</i>		-3.2%	3.8%

In FY 2009, LAVTA cost approximately \$14.6 million to operate. The overall cost only increased 1% from FY 2008 to 2009 but increased by 16% between 2007 and 2008. Overall ridership has increased since 2007 but was down slightly in 2009 most likely due to service cuts, the fare increase, and the general state of the economy. Revenue hours also declined in 2009. Revenue miles increased by nearly 14% in 2009 while revenue hours decreased due to the initiation of more express service which travels longer distances. The cost per passenger was at \$6.47 in FY 2009, a 14.5% over the three year retrospective. The overall cost per hour increased 5% since 2007 to \$86.67. The system carried an average of 13.4 passengers per hour in 2009, a decline from 2007 but slight increase from 2008.

## Fixed-Route

Fixed-route only statistics for the last three years are presented in Figure 2.

Figure 2 Three-Year Fixed-Route Statistics

FIXED-ROUTE			
	FY 2007	FY 2008	FY 2009
Operating Cost	\$10,817,403	\$12,336,377	\$12,764,264
<i>Percent Change</i>		14.0%	3.5%
Passengers	2,136,006	2,220,007	2,195,408
<i>Percent Change</i>		3.9%	-1.1%
Revenue Hours	121,476	137,452	139,304
<i>Percent Change</i>		13.2%	1.3%
Revenue Miles	1,758,314	1,752,712	2,017,218
<i>Percent Change</i>		-0.3%	15.1%
Farebox Revenue	\$2,013,280	\$2,245,507	\$2,318,883
<i>Percent Change</i>		11.5%	3.3%
Operating Cost/Passenger	\$5.06	\$5.56	\$5.81
<i>Percent Change</i>		9.7%	4.6%
Operating Cost/Revenue Hour	\$89.05	\$89.75	\$91.63
<i>Percent Change</i>		0.8%	2.1%
Passengers/Revenue Hour	17.6	16.2	15.8
<i>Percent Change</i>		-8.1%	-2.4%
Average Fare/Passenger	\$0.94	\$1.01	\$1.06
<i>Percent Change</i>		7.3%	4.4%
Farebox Recovery Ratio	19%	18%	18%
<i>Percent Change</i>		-2.2%	-0.2%

Fixed-route service consumes a large majority of LAVTA’s annual budget. Operating costs have increased almost 18% which is slightly higher than the 15% increase in revenue hours. Ridership declined slightly in FY 2009 due to March 2009 service cuts. Fare revenues are up 15% since FY 2007, outpacing increases in ridership but not increases in operating costs leading to a slight reduction in the farebox recovery ratio over the last three fiscal years.

The number of passengers carried per revenue hour fell over the last three fiscal years from 17.6 passengers in FY 2007 to 15.8 in FY 2009 because revenue hours have increased at a faster pace than ridership. On a positive note, the average fare per passenger increased 13% since FY 2007 and the operating cost per revenue hour only increased 3%.

With the large level of service cuts that went into effect right before FY 2010, LAVTA expects to see a large decline in ridership in the current fiscal year.

### Local Fixed-Route and Express Fixed-Route Service Hours

Currently LAVTA operates local fixed-route vehicles providing service in the Tri-Valley on local roads and express routes provide a component of their service on the freeway. Current express routes include the 70X to Walnut Creek and Pleasant Hill and 20X between Lawrence Livermore

National Laboratory and the Dublin/Pleasanton BART Station. The following chart breaks down the total fixed-route hours, miles, and ridership into local and express components.

Figure 3 Local and Express Route Summary

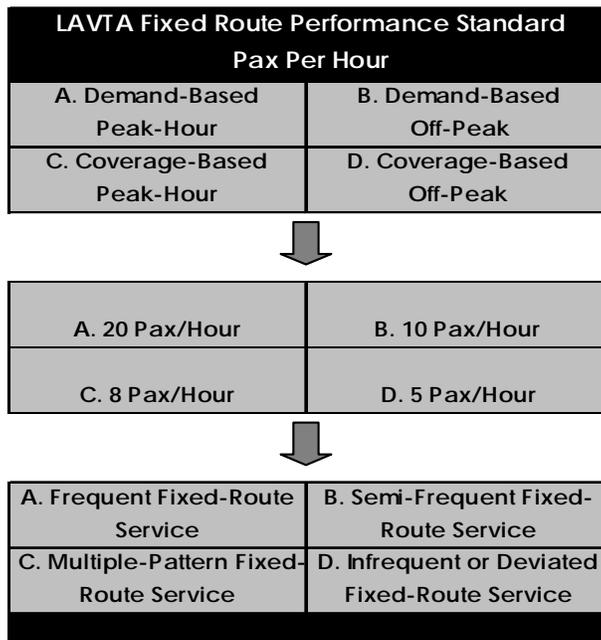
	FY 2007	FY 2008	FY 2009
<b>Revenue Hours</b>			
Local Fixed-Route	118,194	132,112	130,541
Express Fixed-Route	3,282	5,340	8,763
<b>Revenue Miles</b>			
Local Fixed-Route	1,671,968	1,660,192	1,802,502
Express Fixed-Route	86,346	92,520	214,716
<b>Ridership</b>			
Local Fixed-Route	2,088,149	2,156,092	2,107,145
Express Fixed-Route	47,857	63,915	88,263

Express routes comprise 6% of LAVTA’s total FY 2009 service hours and 11% of service miles but only accounted for approximately 4% of fixed-route ridership. A large increase in the service level in FY 2009 has resulted in additional ridership.

### Route Productivity Summary

The 2004 LAVTA Short Range Transit Plan established fixed-route passenger per revenue hour performance standards for the range of services operated (see table below).

Figure 4 Fixed-Route Performance Standards



LAVTA’s systemwide fixed-route passenger per revenue hour performance was 15.8 passengers per revenue hour in FY 2009. This figure consists of all services LAVTA provides, including many routes that are coverage-based, several of which run all day long, which can dilute the overall performance of the system. LAVTA’s aggregate 15.8 passengers per revenue hour exceeds adopted standards for all types of routes except demand-based peak hour. Service reductions undertaken in 2009 largely focused on routes and timeframes with low productivity. On the mainline routes, Routes 54, 15, 12, and 10 carried the highest number of passengers per revenue hour. Route 54 operates a limited service connecting passengers from the ACE Train Station in Pleasanton to employment hubs around the Hacienda Business Park. Routes 10 and 12 are LAVTA’s highest ridership routes and carry a combined 60% of passengers annually. Productivity by route is presented in the following chart.

Figure 5 September 2009 Route Productivity Performance

Route Level Performance, September 2009 <i>Versus SRTP Standard</i>					
Route	Classification	Pax/h		Meets Standard?	
		Peak Hour	Off-Peak	Peak	Off-Peak
1	Coverage-Based	10.2	6.2	Yes	Yes
2	Coverage-Based	11.3	n/a	Yes	n/a
3	Coverage-Based	15.8	3.5	Yes	No
8	Coverage-Based	15.9	8.5	Yes	Yes
9	Coverage-Based	9.4	n/a	Yes	n/a
10	Demand-Based	23.5	16.7	Yes	Yes
11	Demand-Based	8.8	n/a	No	n/a
12	Demand-Based	16.4	18.0	No	Yes
14	Demand-Based	18.6	10.6	No	Yes
15	Demand-Based	25.3	19.5	Yes	Yes
18	Coverage-Based	4.7	3.5	No	No
20	Coverage-Based	14.6	n/a	Yes	n/a
53	Coverage-Based	14.9	n/a	Yes	n/a
54	Demand-Based	27.2	5.8	Yes	No
70	Coverage-Based	14.8	n/a	Yes	n/a

### Route-by-Route Descriptions and Summary

During FY 2009, LAVTA conducted an evaluation of each route in the system. The purpose of this effort was to place the general route statistics in context, and included trip-by-trip ridership analyses as well as on-board and other qualitative assessments of patronage.

Although originally intended with service development and expansion in mind, the route evaluation exercise helped guide the agency in identifying services that were recommended for service reductions when LAVTA’s revenue situation rapidly deteriorated in the wake of the current economic downturn.

Due to the extensive reductions in service that had to be implemented, affecting all routes in the Wheels system, the route evaluations that took place in the fall of 2008 can no longer apply at the detailed level. The following narrative however illustrates the current state of the system based on regularly collected statistical data, staff observations, and customer input. Route-level performance refers to those that were observed in October 2009.

## *MAINLINE ROUTES*

### ROUTE 1A/B

- Serves east Dublin and northeast Pleasanton; land-uses are residential, commercial, and office; commute-hour oriented. Hubs from Dublin BART, and operates all day at 30-minute frequencies.
- Performs moderately at 9.1 pax/h; trips are relatively evenly used.
- Operates along mostly uncongested streets, and has good on-time performance.
- Recommendations: Current setup works generally well; efficiencies could be gained by midday interlining similar to that on weekends.

### ROUTE 1C

- Serves east Dublin and northeast Pleasanton, using a more southeasterly pattern within Dublin than the 1A/B. Land-uses are primarily residential, with some office and commercial developments served. Service is limited to the peak period only, at a 30-minute frequency.
- Performs moderately at 11.5 pax/h; trips are relatively evenly used.
- Despite minimal recovery time in its cycle, the route was found to have good on-time performance in the fall 2008 evaluation.
- Recommendations: This route is being continued as a placeholder service; upon opening of the Fallon Road interchange, the local Route 12 will cover the easterly extension of Dublin Boulevard, and the 1C will no longer be necessary.

### ROUTE 2

- Serves east Dublin, including the north Dublin Ranch development. Hubs from Dublin BART. Surrounding land-uses are primarily residential, with some office uses. Service is peak periods only, at a 30-minute frequency. Was renamed from 1E in 2009.
- Performs moderately-to-well at 12.4 pax/h; most ridership is concentrated around a handful of the overall trips. Some of the numbers comprise student ridership to/from Fallon Middle School.
- Some operationally related on-time performance issues were identified in the fall 2008 evaluation, but none that seemed related to the schedule itself.
- Recommendations: In the short- to medium term, the current setup seems to work, serving three markets (office/employment, residential, school) at the same time. Longer-term, some trips could be extended to Silvera Ranch to the north.

### ROUTE 3

- Covers a large area of west Dublin, including most residential areas east of I-680. Also serves northwest Pleasanton, including Stoneridge Mall. Land-uses are primarily residential on the Dublin side, and mostly employment and commercial on the Pleasanton side. Hubs from Dublin BART and Stoneridge Mall. As part of the spring 2009 reductions, service on this line was drastically reduced, from operating all day on 15-60 minute frequencies to now only hourly during the peak period in the peak period direction.
- Performs moderately at 10.7 pax/h.
- Current and past observations indicate that the current route schedule is well-timed and the line less subjected to variable traffic conditions than other Wheels routes.
- Recommendations: Despite its relatively weak overall performance, this route provides critical and unique coverage, serving – as of 2010 – two BART stations, and this should be factored in when making decisions about this service. At a minimum, 30-minute frequencies should be restored during peak periods when funding becomes available, either on a unidirectional basis or in a staggered bidirectional setup, in order to function in the commute market. Will be routed to serve the new West Dublin/Pleasanton BART station directly from the Dublin side as well, upon opening of the station.

#### ROUTE 3V

- Complements the base Route 3 by extending its coverage to the residential areas west of I-680 on the Dublin side; its coverage in other parts of west Dublin and on the Pleasanton side is abbreviated relative to the regular Route 3. Service is peak period only, and was reduced from a 60-minute frequency to three trips as part of the spring 2009 service reductions. Hubs at Dublin BART.
- Productivity was not derived separately from the main Route 3 pattern at the time of writing, but is highly concentrated around student ridership once in the AM and once in the PM. Its ridership on the other trips is generally very low.
- On-time performance in the fall 2008 evaluations appeared good; some slack exists on non-student trips due to their low boarding activity.
- Recommendations: Some restoration in the number of daily trips may be warranted, when possible. The route could also be considered for Dublin side-only service, since its current practical utility on the Pleasanton side is limited.

#### ROUTE 8

- Route serves a parallel north-south corridor to the 10 line in the Pleasanton area, with primary service areas being the Hopyard Road area, downtown Pleasanton, and Vintage Hills. Frequencies were reduced in the spring of 2009; operates all day on an hourly frequency. Land-uses are mainly commercial and residential, with some office uses in between - primarily the Bernal Business Park. Hubs at Dublin BART and Neal/First.
- Performs moderately at 11.5 pax/h, with more steady boardings throughout the day than some of the other local Dublin/Pleasanton routes. Also, more of the ridership activity is local-to-local rather than hub-to-local.

- Despite operating in mixed traffic conditions through some major intersections, the fall 2008 evaluation showed relatively good on-time performance with no significant re-timings necessary.
- Recommendations: Peak period frequency should be restored to 30 minutes, once funding improves. Geographically, the route might be a candidate for an anchor realignment from the east Dublin to the new West Dublin/Pleasanton BART station, though this should only be done when and if there is apparent demand and/or substantial active requests.

## ROUTE 9

- Serves Hacienda Business Park in Pleasanton as a frequent BART feeder route in a loop configuration. Service is peak periods only, on a 15-minute frequency. Hubs at the Dublin/Pleasanton Bart Station. Replaced former Route 50 in summer 2009.
- Productivity is moderate at 13.1 pax/h; due to the newness of this route, it was not part of the fall 2008 evaluations. The route was combined operationally with the Route 70, which has helped its productivity without any corresponding net loss in service.
- Schedule adherence is excellent for buses that operate only within the 9 segments; occasional delays spill over from interlined routes.
- Recommendations: Having been recently revamped and upgraded, there are no current recommendations for alterations of this line; it matches BART train frequencies during its hours of operation, and the route appears well-timed.

## ROUTE 10

- The backbone route in the Wheels system, providing east-west trunk service, crossing all three downtowns of Livermore, Pleasanton, and Dublin, and carrying half of LAVTA's total fixed route ridership. Land-uses around the line cover the whole spectrum from residential, commercial, and offices. 24-hour service – implemented in 2005 as part of the regional AllNighter program – was suspended as part of the spring 2009 service reduction, along with implementing frequency reductions during off-peak times. Current frequencies vary from 15 to 40 minutes. Hubs at the Lawrence Livermore National Laboratory, the Livermore Transit Center, Dublin/Pleasanton BART, and Stoneridge Mall.
- Productivity is very good at 23.0 pax/h, with robust boarding activity all along the route. Ridership patterns are slightly directional, in accordance with those of the general east-west commutes within and through the Valley. Most rides are intermunicipal, but not totally end-to-end.
- Peak period on-time performance of the line is generally good, thanks to a robustly timed schedule with terminus as well as intermediate recovery points at hubs along the line. However, due to the substantially congested nature of the roadway segments used by the route (especially the Livermore portion of Stanley Boulevard in the commute direction), delays are not uncommon in the peak period, peak-direction – particularly in the PM. Also, due to off-peak service reductions implemented in spring 2009, on-time

performance has deteriorated during those times. Those, however, are being addressed as part of the upcoming February 2010 schedule revisions.

- Recommendations: Given its extraordinary and consistent ridership, the large number of activity centers served, and its intermunicipal function, this route should be the first to receive service improvements and the last to receive service cuts. In the short term, improvement of off-peak frequencies and restoration of 24-hour service should be considered. The line operates in corridors suitable for traffic signal priority, which would allow for speedier and more reliable service.

## ROUTE 11

- Limited-service route, connecting downtown Livermore with mostly warehouse, distribution, and some commercial highway uses in eastern Livermore. Operates during a short peak period window in the morning and afternoon on a 45-minute frequency. Hubs at the Livermore Transit Center. This route was reduced to five weekday trips as part of the spring 2009 service reductions.
- Productivity is modest at 7.5 pax/h; boarding activity is somewhat concentrated to the first trip in the AM and the first trip in the PM. During the fall 2008 evaluation, only one trip had any substantial boarding activity near the highway commercial area at I-580/Vasco Road.
- No recent issues with schedule adherence have been observed on the route.
- Recommendations: While struggling with productivity, the agency should carefully consider any savings on this line due to the unique origin and destination opportunities that it provides between downtown Livermore and the Industrial Way area, as well as along portions of First Street (old SR-84). On the other hand, the current configuration is likely all that can be justifiably warranted until current development patterns in its corridor(s) change.

## ROUTE 12

- Intermunicipal line serving northwest Livermore – including Las Positas College – and east Dublin. Land-uses along the route are residential, commercial, and light industrial. An express pattern (V) bypasses the North Canyons Parkway loop and the College; a special pattern also serves the Hagemann Park neighborhood for Junction Avenue Middle School. Operates all day with service frequencies of 30-60 minutes. Hubs at the Livermore Transit Center and Dublin/Pleasanton BART. Received frequency and cycle time reductions as part of the spring 2009 budget-driven cutbacks.
- Second-highest route in terms of raw ridership, and – following the service reductions – performs well on a vehicle hour basis at 18.3 pax/h. In the fall 2008 evaluation, boarding activity in east Dublin was less than expected given the heavy presence of commercial uses in the area, including the Hacienda Crossings shopping center. Other findings were that the ridership was less directional than expected and that midday boarding activity was quite strong; this is likely influenced by the College.
- Route encounters rush hour traffic in the commute direction on Railroad Avenue and I-580, and general schedule reliability has deteriorated, following the spring 2009

reductions. This, however, is being addressed as part of the February 2010 schedule revisions.

- Recommendations: The I-580 / SR-84 interchange project will substantially alter circulation patterns along central parts of the route. In addition, the planned Rapid line will operate in the sphere-of-influence of Route 12, which may result in undesired coverage redundancy. With this in mind, Staff is currently studying the long-term options for this route.

## ROUTE 14

- Route serves near-downtown areas of Livermore, connecting residential blocks to the north with commercial and civic uses to the south. Shaped in the form of an “8”, it operates every 30 minutes throughout the day. Hubs at the Livermore Transit Center.
- Productivity is satisfactory at 16.7 pax/h; boarding activity is relatively consistent throughout the day until 6:30 PM, after which ridership becomes more scattered. The fall 2008 evaluation observed that more trips than expected were non-hub o/d boardings, especially in the neighborhoods to the north.
- Schedule adherence is poor, with both intra-trip and spillover delays frequently occurring, especially in the PM. Many boardings involve strollers or mobility devices that require longer-than-average dwelling times beyond that taken into account in the scheduling process.
- Recommendations: The route could be retimed, and potentially, the cycle time reviewed. In the medium-term, consolidation efficiency improvements from a potential combination or interlining with the 12 route should be considered.

## ROUTE 15

- Robust local route connecting downtown Livermore with commercial land-uses along the North Livermore Avenue / Las Positas Road area as well as residential uses in the Springtown district. It is a balloon route, with the balloon piece served bi-directionally. Service frequency is 30 minutes during peak periods, but was decreased to hourly during midday as part of the systemwide spring 2009 service reductions. Hubs at the Livermore Transit Center.
- Productivity at 21.1 pax/h, the second best along the mainline Wheels routes. Boarding activity is remarkably strong across trips and across segments of the route; 2-3 trips each morning and afternoon also see significant numbers of high school students that walk up to the Transit Center or transfer there from other lines. Strollers and shopping carts are commonly brought onboard.
- Observations indicate relatively good schedule adherence, provided that buses do not depart late at the beginning of their trip. Some adherence issues exist in the PM, though spillover delays do not seem to be an issue.
- Recommendations: Being a good performer within the Wheels fixed-route system, any reductions should – similar to the 10 line – be limited to schedule efficiency improvements and/or targeted frequency reductions in the off-peak times. Conversely, it should be an early candidate for frequency reinstatements. In the long-term, peak frequencies could potentially be considered for 20 or even 15 minutes.

## ROUTE 16

- Local, zig-zag route between downtown Livermore and the Big Trees Park neighborhood. The route is primarily set up to serve ridership for Livermore High School and East Avenue Middle School, and operates only during school days. Service was reduced from six trips to four trips as part of the spring 2009 systemwide cuts.
- Productivity is at 23.7 pax/h; seemingly quite good, but given the school tripper nature of this route, considered at the lower range. Boardings within the neighborhood portion are relatively evenly distributed; while boardings at the Transit Center are few.
- The route appears generally well timed; minor adjustments could be considered, for example between the East Avenue Middle and East/Mines timepoints.
- Recommendations: The current service is likely the lowest level that can meaningfully be provided, as the middle and high school students arrive and leave on differing bell schedules. Serving its neighborhood well geographically – and having very little redundancy with other service once off East Avenue – the route appears to be a candidate for enhanced service. However, past service enhancements have failed to yield additional ridership beyond that of students at bell times. Potentially, reinstatement of one additional trip later in the PM could be considered.

## ROUTE 18

- Functionally, the line is a loop route with a clockwise and a counterclockwise pattern, serving the Granada neighborhood of Livermore, including a middle school and a high school. A few daily trips extend to Ravenswood Park, primarily to accommodate students. Land-uses along the route outside the immediate downtown area are almost exclusively low-density residential. Frequencies are 30-45 minutes during peak periods, midday service was discontinued as part of the spring 2009 systemwide service reductions. Hubs at the Livermore Transit Center.
- Given that the route recently received reductions, its productivity is alarmingly low at 5.5 pax/h. Student usage from the adjoining schools (Granada High School and Mendenhall Middle School) is low; the reasons for this are not well known.
- In the past, the route has suffered from on-time performance issues, primarily in the PM, with spillover delays between trips being common. Runtimes have not been increased, but recent schedule changes have progressively increased average layover times at the Transit Center for this line.
- Recommendations: South of Murrieta Boulevard, there is no geographical redundancy, so options for rationalization while still continuing to serve the area are limited. A careful continued reduction in the route's time span could possibly be considered. Other options could include altering the route's coverage to the east to interline with other routes or serve additional activity points, such as the Civic Center.

## ROUTE 20

- Semi-express route serving a niche market of reverse-direction commuters between Dublin/Pleasanton BART and employment areas in east Livermore, including LLNL.

Attractors along the Livermore (local) portion of the route are primarily light industrial and warehouse uses, and LLNL. Service is every 45 minutes, peak periods only.

- Productivity is modest at 7.5 pax/h; ridership is relatively consistent across trips with a slight skew toward an early commute both in the morning and afternoon. A slight majority of ridership is at or along the LLNL perimeter.
- Schedule adherence in the fall 2008 evaluation sample was moderate, indicating a potentially over-tight schedule on certain segments of the route. Cycle times appeared adequate, however, as no spillover delays were observed.
- Recommendations: This route was optimized operationally in March 2009 by interlining it with another route in the direction that is opposite to that of the ridership on this route. The advent of the LAVTA Route 10 Rapid project may change some of the ridership dynamics, and may affect the viability of the 20 line. Alternative local Livermore catchment areas could be considered, such as that of the Springtown area.

## ROUTE 70

- Express route between the BART stations of Pleasant Hill, Walnut Creek, and Dublin/Pleasanton; interlines to/from Route 9, effectively serving local streets in the Hacienda Business Park in Pleasanton. Service is peak-period only, on a 30-minute frequency. A “V” pattern was introduced in the summer of 2009, providing two daily trips directly to/from Stoneridge Mall area.
- Productivity is modest at 8.8 pax/h; while loads are good southbound in the AM and northbound in the PM, buses run with few or no passengers in the other direction. Ridership is relatively well distributed across trips, with slightly lower loads at first/last trips in the AM and PM, respectively. Boarding activity on the south end was found in the fall 2008 evaluation to be split about 50-50 between Hacienda and the Dublin/Pleasanton BART station (data from the north end could not be obtained from APCs).
- Schedule adherence is generally good on this line; sporadic delays occur when traveling on freeway segments in the peak direction.
- Recommendations: Despite its relatively weak overall performance, this route was not subject to reductions as part of the 2009 savings measures. However, performance is not consistent across trips, and certain trips could potentially be reshuffled or reduced. As ridership continues to be highly directional, consideration to express reverse-commute direction trips (either in deadhead or revenue service) should be made where possible. New opportunities should be pursued to serve park-and-ride facilities in the Walnut Creek area, as parking shortages has been reported to be an impediment to further ridership growth in the peak direction of the line.

## *SHUTTLE ROUTES*

These routes operate on a limited schedule, and serve a particular market. They were not part of the detailed fall 2008 route evaluation, and are thus presented here in a more summary way than the mainline routes.

## ROUTE 51

- Operates between Dublin/Pleasanton BART and the Santa Rita Jail during Saturdays, as the 1 line does not run on that day.
- Productivity is modest at 7.5 pax/h, with ridership spread out relatively evenly over the day. The primary rider group is visiting friends/relatives at the Jail.
- No known on-time performance issues.
- Recommendations: Operationally a tag-on to the 8 and 12 lines, this service setup is efficient at times when the 1A/B doesn't run. If 1A/B service is implemented on Saturdays, the 51 route would be superfluous.

#### ROUTE 53

- Operates between the Pleasanton ACE station and the Stoneridge Mall area, via Hopyard Road.
- Productivity has held steady at a moderate rate since the route's inception in 2005, and is currently at 12.3 pax/h. At the trip level, the first trips of both the AM and PM carry smaller loads than the other trips.
- Route is well-timed; major delays only occur due to late arriving ACE trains, for which buses hold.
- Recommendations: Upon opening of the new West Dublin/Pleasanton BART station at Stoneridge, the route will operate express from the ACE station to the Stoneridge Mall Road loop. Future service levels are contingent upon funding contributions from ACE.

#### ROUTE 54

- Operates between the Pleasanton ACE station and the Hacienda Business Park area, including the (existing) Dublin/Pleasanton BART station; also serves a small portion of Dublin.
- Productivity is good at 20.4 pax/h, and ridership is distributed across all trips.
- Route is well-timed; major delays only occur due to late arriving ACE trains, for which buses hold.
- Recommendations: Upon opening of the new West Dublin/Pleasanton BART station, this route will be modified from being an expedited service to the existing BART station, and instead be more directly geared locally toward Hacienda.

#### ROUTE 55

- Grant-funded trial service that began in fall 2008, connecting four senior living complexes in Livermore with the Transit Center and the VA Hospital. The route setup is that of a feeder to fixed route rather than a point-to-point service, and was done in the hopes to "graduate" a number of specific paratransit group trips into a fixed route.
- Ridership is limited to a handful of boardings per day, and productivity is very low at 1.7 pax/h.
- There are no known operational or on-time performance issues.
- Recommendation: Despite extensive outreach efforts, this route has not been able to build a ridership base. Having only four specific dwelling complexes as its primary base, its market is not expandable in the route's current form. This service should be discontinued,

and revert to the Wheels paratransit operations as group and/or subscription trips if grant funding is discontinued.

### *SUPPLEMENTAL (TRIPPER) ROUTES*

These routes are operated where there is sufficient middle- and high school demand in areas where mainline Wheels routes do not operate. These routes only operate during bell times on school days and are expected to have higher than usual per-vehicle-hour boardings. This is due to the short operating time per day (often times less than one revenue hour per trip).

Many of the schools in the LAVTA service area are well served by Wheels mainlines, in which case supplemental routes are not typically provided. Some mainline routes, such as the 3 and 12, have limited-service special patterns that are scheduled with student transportation needs in mind.

#### ROUTE 202

- Connects eastern Dublin with Dublin High School. In the AM, one bus operates a full loop, while in the PM, two buses are provided that split east of Central/Tassajara.
- Productivity is excellent at 77.9 pax/h.
- There are no known operational issues at this point, although morning loads are near capacity.
- Recommendations: Although the current route setup appears to be the most efficient at this point, the service is being split into two separate routes in January 2010, in anticipation of further near-future growth and to increase the travel speed.

#### ROUTE 601

- Connects Ruby Hill with Pleasanton Middle School. Overflow buses are operated; in the AM, service is provided with two buses, in the PM service is provided with three buses.
- The route's productivity of 34.7 pax/h is at the lower end of the expected spectrum for school trippers.
- Some issues with disorderly conduct are reported for afternoon runs, some of which have occasionally been severe enough to cause disruptions in service. Loads appear to be lighter than in the past.
- Recommendations: Current routing appears to be optimal; when operationally feasible, a routing via the new Thiessen Street subdivision could be considered. PM loads should be monitored, as it may no longer be necessary to operate two overflow buses at that time. Combination possibilities may exist with the 606 route.

#### ROUTE 602

- Connects Del Prado Park, Parkside, and Valley Trails with Foothill High School. In the AM, one bus serves all three neighborhoods; in the PM, three buses serve one area each. Current interlinings are set up to enable Foothill-to-Ruby Hill travel in the PM.
- Route productivity is good at 58.6 pax/h.
- There are no known on-time or operational issues.

- Recommendations: Despite overall good productivity, the route may be over-served in the PM, and current loads should be reviewed. New service to recent residential developments south of Bernal Avenue could be considered in the context of this route. At some point, a separate AM service to Foothill High could be considered.

#### ROUTE 603

- Connects Stoneridge and Muirwood Park with Hart Middle School.
- Top Wheels performer at 99.8 pax/h
- There are no known on-time or operational issues.
- Recommendations: Current setup is logistically very efficient. At the same time, requests for service exist from developments along and behind the western side of Foothill Road; this route may or may not be suitable to accommodate these requests.

#### ROUTE 604

- Connects Fairlands, Hacienda, Stoneridge, and Muirwood Park with Foothill High School. Originally serving only Hacienda, the route was extended to serve additional areas when the school district implemented Fairlands as a “choice” area for high school students.
- Performs well at 55.4 pax/h
- An overflow bus is provided in the PM; there are no known on-time or operational issues.
- Recommendations: The current setup seems to be working well. The requests to serve developments west of Foothill Road for the Route 603 could potentially involve this route as well.

#### ROUTE 605

- Connects Fairlands and Amaral Park with Amador Valley High School. Although the Route 10 serves Amador High School and skirts the neighborhoods mentioned above, this route provides a more direct service for students and helps mitigate overflow issues on the Route 10.
- Performs acceptably at 41.5 pax/h
- There are no known on-time or operational issues.
- Recommendations: The current setup appears to be working well, but should be continually reviewed for potential efficiency enhancements.

#### ROUTE 606

- Connects Vintage Hills with Pleasanton Middle School.
- Performs well at 59.9 pax/h
- There are no known on-time issues; a near-overflow situation occurred at the beginning of the fall 2009 semester, but has since subsided.
- Recommendations: This route serves partially as an overflow and a geographic extension of the Route 8, and seems to be working well in its current setup. Some straightening out of the route could be considered.

## ROUTE 607

- Connects Laguna Oaks and Oak Hill with Hart Middle School.
- Performs well at 58.4 pax/h, although the absolute ridership numbers are relatively modest.
- There are no known on-time or operational issues.
- Recommendations: Serving a relatively limited area, this route could be a candidate for expansion toward the new developments south of Bernal Avenue.

## ROUTE 608

- Connects Amaral/Nielsen Park with Harvest Park Middle School. An extension of the route further west in 2005 was implemented in a full/abbreviated pattern setup. Although done as a way to avoid traffic congestion at Mohr Elementary School, the extra-early schedule for the full pattern in the AM allows the same bus to complete both loops.
- Performs well at 63.7 pax/h.
- In the PM, an overflow bus is provided; there are no known on-time or operational issues.
- Recommendations: Generally, this route operates well in its current setup.

## ROUTE 609

- Connects Del Prado Park, Parkside, and Valley Trails with Hart Middle School.
- Performs poorly for a tripper at 16.8 pax/h.
- There are no known operational issues; a minor schedule revision is being implemented in February 2010 to optimize running times.
- Recommendations: Once a busy route, ridership has dropped to a very low level during the current academic year. This is despite the relatively recent expansions that were implemented on this route, and might be caused by cyclical transitions that some neighborhoods sometimes naturally go through. As such, this route should be monitored and potentially subjected to rationalization measures; one possible option would be to combine it with the Route 607.

## ROUTE 610

- Connects Fairlands with Hart Middle School.
- Performs very well at 96.1 pax/h.
- There are no known operational or on-time performance issues on this line. An overflow bus is provided in the PM.
- Recommendations: As the current routing appears to be optimal and working well, there are no recommendations for changes at this time.

## ROUTE 611

- Connects Ruby Hill and Vintage Hills with Amador Valley High School. This service was split into two lines (611/613) in 2008, but recombined in 2009 as a rationalization

measure. However, the PM service is effectively still split, with the principal bus traveling directly to Ruby Hill, and the overflow bus operating the interior of Vintage Hills.

- Performs well at 51.1 pax/h.
- There are no known operational or on-time performance issues on this line. Two buses operate a split pattern in the PM.
- There are no further rationalization opportunities identified at this time. Similar to the 601, this line could potentially serve the Thiessen Street development if and when the City can accommodate the required modifications requested by LAVTA.

## ROUTE 612

- Connects Del Prado Park with Harvest Park Middle School. This route was created in the fall of 2008 in response to a reassignment of south Del Prado from Pleasanton Middle School to Harvest Park Middle School.
- Performance is poor at 18.9 pax/h; absolute daily ridership is only in the mid 10s.
- There are no known operational or on-time performance issues on this route. Originally intended to also serve Hansen Park, the City of Pleasanton staff resisted LAVTA's request to operate the route through there based on the objection of some residents, depriving the route of both expediency and ridership base.
- Recommendations: This route should be considered for discontinuation in its current form.

## Dial-A-Ride

Dial-A-Ride statistics for the last three years are presented in Figure 6.

Figure 6 Three-Year Dial-A-Ride Statistics

<b>DIAL-A-RIDE</b>			
	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>
Operating Cost	\$1,650,932	\$2,131,358	\$1,882,773
<i>Percent Change</i>		29.1%	-11.7%
Passengers	69,016	66,714	66,930
<i>Percent Change</i>		-3.3%	0.3%
Revenue Hours	30,311	36,224	29,702
<i>Percent Change</i>		19.5%	-18.0%
Revenue Miles	336,835	358,386	382,326
<i>Percent Change</i>		6.4%	6.7%
Farebox Revenue	\$158,427	\$194,483	\$245,054
<i>Percent Change</i>		22.8%	26.0%
Operating Cost/Passenger	\$23.92	\$31.95	\$28.13
<i>Percent Change</i>		33.6%	-11.9%
Operating Cost/Revenue Hour	\$54.47	\$58.84	\$63.39
<i>Percent Change</i>		8.0%	7.7%
Passengers/Revenue Hour	2.3	1.8	2.3
<i>Percent Change</i>		-19.1%	22.4%
Average Fare/Passenger	\$2.30	\$2.92	\$3.66
<i>Percent Change</i>		27.0%	25.6%
Farebox Recovery Ratio	10%	9%	13%
<i>Percent Change</i>		-4.9%	42.6%

Dial-a-ride costs increased almost 30% in FY 2008 compared to FY 2009 due to service inefficiencies which led to a 20% increase in revenue hours and a large drop in the number of passengers carried by revenue hour. LAVTA staff took a more active roll in monitoring the service in FY 2009 and as a result, costs are back in check and service productivity is back above 2.0 passengers per revenue hour. Ridership has remained steady over the last three years and fare revenues are up over 50%. While, overall costs declined last year, the cost per revenue hour has increased by 16% since FY 2007 because costs have escalated faster overall than revenue hours.

## Bus Rapid Transit Program

As of December 2009, LAVTA is in the construction stage of the implementation of a Bus Rapid Transit program. Originally envisioned as a project that would act as an overlay upon the WHEELS Route 10 alignment, the project alignment evolved over time. The Route 10 Rapid, or “Rapid”, was shaped by public opposition to the original alignment near downtown Pleasanton. Faced with no quick options to traverse downtown Pleasanton, the LAVTA Board of Directors changed the project’s preferred local alignment from the Pleasanton portion of Route 10 to a more northerly, Dublin oriented alignment. The Livermore segment remains an overlay of Route 10, with limited stops and a dedicated Signature Stop on Railroad Avenue in Downtown Livermore. This project is designed to provide fast, accessible service from the east side of Livermore (LLNL), through downtown Livermore, to eastern Dublin, including the current East Dublin/Pleasanton BART station, and culminating at the Stoneridge Mall. The expedited trip is made possible by increased stop spacing and use of Transit Signal Priority (TSP), which is a system designed to enable buses the ability to “hold” green lights a bit longer to enable quicker passage, thus reducing schedule and dwell time. LAVTA has utilized the professional planning and engineering services of Kimley Horn, Inc., Nelson/Nygaard, Community Design & Architecture, and VBN Architects to create a project that will expedite transit trips, but also elevate the profile of LAVTA by creating 49 new Rapid “stations”, featuring enhanced passenger waiting facilities (lighted shelters and benches), system information, wayfinding, and real-time electronic bus arrival signage.

Figure 7 BRT Capital Funding

Funding Source	Phase	Program Year	Amount
TDA Article 4	PS&E	2008	\$ 1,000,000
Other Local Funding	PS&E	2007	\$ 310,000
FTA Section 5309 Very Small Starts	Construction	2008	\$ 2,940,000
FTA Section 5309 Very Small Starts	Construction	2009	\$ 7,990,000
TFCA	Construction	2009	\$ 444,750
Proposition 1B PTMISEA Population Based	PS&E	2008	\$ 429,294
Proposition 1B PTMISEA Population Based	Construction	2008	\$ 241,834
Proposition 1B PTMISEA Revenue Based	PS&E	2009	\$ 267,621
Proposition 1B PTMISEA Revenue Based	Construction	2009	\$ 150,759
<b>TOTAL</b>			<b>\$ 13,774,258</b>

LAVTA, has dedicated \$1 million in local TDA funding, \$1.1 million in Prop 1B funds, \$444,000 in TFCA, and obtained \$10.9 million in FTA 5309 Very Small Starts in a congressional earmark.

### Operations

With transit operators everywhere, including LAVTA, facing budget shortfalls and service reductions, LAVTA has been fortunate enough to have successfully obtained operating support from a variety of sources for the Rapid project. Three major sources of revenue are farebox, Regional Measure 2, and Measure B. Financial forecasts assume that the ACTIA Measure B Express Bus operating funds will continue after the initial start-up, although ACTIA will require

LAVTA to re-apply for these funds in competitive cycles. LAVTA will continue to apply for these vital operating funds in future rounds of Measure B funding. The LAVTA Rapid is included in the Regional Measure 2 list of regional transit (express bus) operations projects, with an estimated allocation of \$480,000 annually from RM2 funds to continue as a dedicated funding source as long as the project maintains a 30% farebox recovery ratio. RM2 operations requires projects to achieve a 30% farebox recovery ratio to retain funding eligibility. LAVTA feels that the Rapid will be able to meet this standard due to the current performance of the Route 10 Local. LAVTA currently receives just under \$1 fare per boarding, and Route 10 produced \$1,126,000 in fare revenue (boardings) for a 30% farebox recovery rate, on overall operations costs of \$3,750,000 (using \$70/revenue hour as operating rate). LAVTA anticipates the Rapid to attract more ridership and as a result, receive more fare revenue. LAVTA is also working with MTC and the Alameda County Congestion Management Agency (ACCMA) to obtain I-580 HOT (High Occupancy Toll) Lane revenues for the Rapid in the future when this innovative congestion-pricing mechanism is deployed.

Figure 8 Non-Farebox Revenue Sources (First Three Operating Years)

Funding Source	FY 2011	FY 2012	FY 2013
Regional Measure 2	\$ 480,836	\$ 480,836	\$ 488,049
Measure B	\$ 120,000	\$ 645,120	\$ 605,120
<b>Total Subsidized Funding Sources</b>	<b>\$ 600,836</b>	<b>\$ 1,125,956</b>	<b>\$ 1,093,169</b>

### Ten -Year Revenue Hour Plan

Based on projected revenues, LAVTA will need to reduce local fixed-route and dial-a-ride service to balance the annual budget through the ten-year planning horizon. While the number of local fixed-route may change significantly over the life of the plan from FY 2010, the level of total revenue hours operated including the BRT service will remain at approximately the same level as FY 2010 or above the FY 2010 level of service. With the Rapid in operations, staff can redistribute service to mitigate local fixed-route service changes and maintain coverage through reducing frequency and route duplicity along the Rapid corridor where service will operate every 10 minutes during the peak period and 15 minutes off-peak. Rapid funding cannot be redistributed to other local services. Total service hours for the ten-year horizon are displayed in Figure 9. Figure 10 shows the operating plan on a more detailed level for FY 2011. The first half of FY 2011 will operate status quo service. In January 2011, total service hours are reduced on the local fixed-route when the Rapid comes online. If funding does not improve by FY 2016, LAVTA will have exhausted all reserves and will need to once again cut service to remain financially solvent.

Figure 9 Ten-Year Annual Operating Hours

	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Local Fixed-Route	139,304	101,466	90,000	85,000	85,000	85,000	85,000	70,000	75,000	75,000	75,000
Dial-A-Ride	29,689	32,679	32,000	30,000	30,000	30,000	27,750	28,000	30,000	30,000	30,000
Bus Rapid Transit		0	17,033	34,066	34,066	38,616	38,616	45,294	45,294	45,294	45,294
<b>Total</b>	<b>168,993</b>	<b>134,145</b>	<b>139,033</b>	<b>149,066</b>	<b>149,066</b>	<b>153,616</b>	<b>151,366</b>	<b>143,294</b>	<b>150,294</b>	<b>150,294</b>	<b>150,294</b>
Change over base year (FY 2010)			4%	11%	11%	15%	13%	7%	12%	12%	12%

Figure 10 FY 2011 Operating Hours

	FY 2011	
	1st Half	2nd Half
Local Fixed-Route	50,000	40,000
Dial-A-Ride	16,000	16,000
Bus Rapid Transit	0	17,033
<b>Total</b>	<b>66,000</b>	<b>73,033</b>

# Capital Improvement Program

## Overview

This chapter describes the projects in LAVTA's ten-year capital program (excluding the two major projects described separately) and the associated revenue sources. The baseline capital plan is fiscally constrained. Exhibit 4 at the end of this section provides a list of all capital improvement projects, proposed revenue sources, and funding shortfalls.

Because TDA will be used to support operations, many capital projects will remain unfunded including the replacement of 12 New Flyer buses, non-revenue service vehicles, security upgrades, bus stop improvements, miscellaneous office equipment, and some engine rebuilds. LAVTA will aggressively pursue alternate funding sources for these projects.

Individual ten-year capital project financial summaries are provided in Appendix A.

## Revenue Source Descriptions

### **Federal Transit Administration (FTA) Section 5307 Funds**

These funds are distributed by the Federal Transit Administration to the various urbanized areas based on a formula that takes into account population, population density and passenger miles. Beginning in FY 2003, LAVTA received FTA Section 5307 funds from two urbanized areas: Livermore and Concord. Based on MTC's Regional Transit Capital Priorities process, this plan assumes that Livermore UA funds will be utilized first for major transit capital replacement (for LAVTA, this is bus replacement), and then any remaining major capital expenditure left unfunded will be allocated resources from the Concord UA. On the other hand, if the funds from the Livermore UA are not required entirely to fund vehicle replacements and rehabilitations, the excess funds will be used to fund (in score order as established by the regional model) other miscellaneous capital needs.

### **FTA Section 5309 Bus Funds**

This is a discretionary pool of federal funds designated for public transit operators to purchase buses and improve facilities. LAVTA has been the beneficiary of several earmarks (Annual Appropriations and SAFETEA-LU) drawn from 5309 funds for over \$5.1 million for the Satellite Facility project. LAVTA is actively pursuing additional funding for the Satellite Facility. Nested within the overall Federal 5309 section is the New Starts/Small Starts/Very Small Starts funding described separately below.

### **FTA Section 5309 Small Starts & Very Small Starts Funds**

This competitive funding source is dedicated to capital funding for major transit expansion projects, like subway, light rail, and bus rapid transit (BRT). LAVTA has received an earmark of \$2.9 million in 2008 from Pleasanton Congressman Jerry McNerney. In addition, LAVTA received \$7.9 million in additional Very Small Starts funding from the FTA in FY 2009. This \$10.9 million will complete the funding of the design and the initial capital construction of the project.

### **FTA American Reinvestment and Recovery Act Funds**

In FY 2009 the Obama administration passed the American Recovery and Reinvestment Act of 2009. LAVTA received just over \$3 million from this program, \$1 million of which was programmed for capital rehab and replacement projects.

### **State and Regional Funds**

\$5.5 million dollars has been programmed from the State Transportation Improvement Program (STIP) for LAVTA's Satellite Facility. Recently, LAVTA obtained a \$4 million STIP programming for the Rapid project during the 2008 Countywide Transportation Plan process, which feeds into the program of projects for MTC's 2009 RTP. However, these 2012 STIP funds will not become available to the Rapid until well after the service begins. LAVTA may elect to introduce different buses to the project at that time, or use these funds for construction of queue jump lanes or park and ride lots along the Rapid corridor.

### **Bridge Tolls**

These funds come from the base toll on state-owned bridges and are available to transit operators in the Bay Area. This money is used primarily to match FTA Section 5307 grants. This plan assumes that all vehicle replacements and rehabilitations will have a Bridge Toll match.

### **Transportation Development Act (TDA) Article 4.0**

This is LAVTA's primary source of revenue for both operating and small capital projects. It comes from a ¼ cent sales tax levied throughout California. This is LAVTA's most flexible funding source; it is used to fund all projects that cannot be funded from another source.

### **Transportation Funds for Clean Air (TFCA)**

LAVTA has received \$444,000 in funding from the Alameda County Congestion Management Agency (ACMA) in the form of TFCA. These funds will be used in order to install Transit Signal Priority (TSP) for the BRT service.

## **Fleet Projects**

### **Fixed Route Fleet**

The fixed-route fleet consists of 75 vehicles ranging in size from 29 to 40 feet, designed to provide local, intra-city transit services. The fleet includes two sub-fleets. LAVTA owns nine "suburban" coaches with upgraded interiors (high-back passenger seating with tray tables and footrests, luggage racks with individual lights and fans) to provide inter-city commute service between Walnut Creek and the Tri-Valley, and between Dublin/Pleasanton BART and the Livermore Labs. The agency also received 14 BRT style Gillig buses with modern styling, a unique brand, and transit signal priority devices to operate on the Rapid service. All fixed-route vehicles have a 12-year useful lifespan as stipulated by the Department of Transportation through its Altoona Testing Program.

Passenger Amenities include a fully functional and ADA-compliant wheelchair ramp (lift on the 9 suburbans), 2 securement locations, ergonomic passenger seating, digital surveillance systems (for security and safety), electronic farebox, automatic vehicle location system, voice annunciation system, automatic passenger counters, front-mounted bicycle (2 and 3) racks, and

head, side and rear destination signs. Since fall 2003, the majority of LAVTA's fixed route fleet consists of low-floor coaches to enable easier and more efficient access/egress.

The LAVTA Board of Directors elected to place the agency on the diesel fuel path in 2000 citing infrastructure costs considerations. Beginning in 2002, LAVTA has placed diesel-emissions control strategies on its entire fixed-route fleet. These units greatly reduce the harmful emissions from diesel fuel, however, the overall fuel economy of the vehicle is reduced due to these technologies. Recently, the LAVTA Board of Directors' adopted a policy to embrace diesel-electric hybrid buses as LAVTA's preferred technology on all new fixed-route bus procurements. LAVTA took delivery on the first (2) diesel-electric hybrid buses in 2007 and received 14 more from Gillig in 2009 to complete the BRT bus purchase.

#### *Rehabilitation and Retrofit*

Life Cycle – All heavy-duty coaches are rehabilitated as needed, however, LAVTA has programmed replacements for all engines in this SRTP at mid-life (6 years). This rehabilitation consists of an engine replacement, a transmission replacement, and a review of all major components on the vehicle.

Passenger Amenities – seating and other direct passenger amenities are rehabilitated on an “as needed” basis to ensure patron safety and comfort.

Emissions Considerations – As stated above, LAVTA has placed diesel-emissions control strategies on its entire fixed route fleet. These units have an anticipated replacement cycle of 6 years, at which time the reactive portion of the device must be replaced. Additionally, the diesel-electric hybrid coaches will require a new battery pack purchase at the midlife of the coach.

#### *Fleet Expansion*

At this time LAVTA does not project needing additional vehicles to operate the service. If revenues increase and service expands over the planning horizon, expansion vehicles may be necessary and will be programmed into future SRTPs.

### **Complementary Paratransit Services Fleet**

The paratransit fleet consists of 18 vehicles, from 22 to 24 feet in length, designed to provide local, intra-city and sub-regional demand responsive paratransit services pursuant to ADA regulation.

#### *Revenue Vehicle Replacement, Rehabilitation, and Expansion*

Life Cycle – these vehicles have a 7-year useful lifespan as designated by MTC. Industry standards stipulate that this style of vehicle (Diesel, dual-wheel, cutaway) has a 5 year lifespan; however, MTC has added an additional 2 years to its useful life. This has not led to any operational and maintenance detriment to the agency.

Passenger Amenities - amenities include a fully functional and ADA-compliant wheelchair lift and 2 to 4 securement locations, ergonomic passenger seating, digital surveillance systems (for security and safety), electronic farebox, automatic vehicle location system, audio and visual announcement system, automatic passenger counters, front-mounted bicycle (2) racks, and head, and side destination signs.

Mode of Power and Emissions Considerations – the LAVTA Board of Directors elected to place the agency on the diesel fuel path in 2000 citing infrastructure costs considerations. These vehicles fall under the CARB Transit Fleet Vehicle (TFV) category and are regulated accordingly. Beginning in 2007, LAVTA began placing diesel-emissions control strategies on required units to comply with CARB mandates for these TFVs.

#### *Rehabilitation and Retrofit*

Life Cycle – All medium-duty coaches are rehabilitated on an as-needed basis. Rehabilitation would consist of an engine replacement, a transmission replacement, and a review of all major components on the vehicle.

Passenger Amenities – seating and other direct passenger amenities are rehabilitated on an “as needed” basis to ensure patron safety and comfort.

Emissions Considerations – As stated above, these vehicles emissions are regulated by the CARB mandate. As dictated by the mandate, LAVTA began placing diesel-emissions control strategies on required units in 2007 to comply with CARB mandates for these TFVs.

#### *Fleet Expansion*

LAVTA currently operates up to 15 out of 18 vehicles on a daily basis. With the growth forecast for the LAVTA service area for seniors and the disabled community, additional service may be required. LAVTA has recently implemented several strategies to control the escalating paratransit demand, including fare increases, intensified eligibility scrutiny, and the initiation of a taxi program in 2008. However, it remains to be seen if, in the long run, these demand management tools, combined with providing training on fixed route usage, will stabilize the increase in paratransit demand. Although no expansion vehicles are included in the plan, additional vehicles may be necessary over the planning horizon.

### **Non-Revenue Vehicle Replacement and Expansion**

LAVTA has an ongoing program of non-revenue vehicle replacement. LAVTA has four types of non-revenue vehicles in its active fleet: four low-floor, ADA accessible supervision vans; three pickup trucks used by the maintenance department; two shift change vans used by operations, one hybrid sedan used by operations, three passenger vans used by LAVTA; and one LAVTA hybrid sedan car. Each of these vehicles has a six-year useful life expectancy. Over the life of this plan LAVTA will replace some of these vehicles if funding permits.

### **LAVTA Fleet Plan**

In December 2008, LAVTA updated its fixed route fleet plan in connection its annual CARB reporting requirements. The end of year CY 2009 LAVTA fleet is contained in this mini-SRTP. LAVTA has moved vehicles into its contingency fleet and will be selling older excess vehicles in order to comply with FTA’s required 20% spare ratio for the fixed route fleet. Exhibit 8 documents LAVTA’s December 2009 active fleet.

A detailed fleet inventory and replacement schedule is located in Appendix B.

## Bus Stop and Shelter Program

Since FY 2006 LAVTA has elevated the priority of its bus stop amenities. LAVTA's emergent focus on bus stop amenities and accessibility began with the study completed by a team from the University of California, Berkeley Transportation Institute in 2005 that highlighted certain LAVTA bus stops with various deficiencies. The 2008 LAVTA Short Range Transit Plan dedicated an entire chapter to a follow up analysis of systemwide bus stop deficiencies identified by staff and riders (during the 2007 Market Segmentation Study). These deficiencies include information deficiencies, safety and lighting concerns, accessibility concerns, pedestrian crossing concerns, as well as other considerations. In the 2008 SRTP, LAVTA dedicated a large amount of funding (\$1.7 million over FY 2008-2011) to begin a systematic process to correct the identified deficiencies on an annual basis by dedicating increased annual funding to bus stop projects. Improvements required can range from simple solutions (schedule holders) to retrofitting solar lighting on dark shelters, up to and including actual stop re-location in extreme cases of accessibility challenges. Acknowledging the current funding crisis, and the difficulty spending down funds in such an expedient manner, this mini-SRTP reduces the amount of funding dedicated to bus stop improvements and rehabilitation.

## Safety and Security Improvements

The mini-SRTP programs \$60,000 every three years for safety and security capital improvements. These improvements could include additional or replacement surveillance equipment on buses and at facilities.

## Office/Facility Equipment/Miscellaneous Capital

Each year LAVTA allocates funds to acquire new and replacement office and facility equipment. Over \$100,000 has been programmed annually for these routine replacements, generally from TDA revenues. Additionally, from time to time, larger improvements and replacements are required. Past examples are replacing the bus washer, upgrading the GFI farebox system, implementing a local area network.

## ARRA Funded Projects

Thanks to stimulus funding in FY 2009 and 2010, LAVTA was able to fund a number of projects that were not fully funded.

## **Rutan Facility Improvements**

LAVTA has an acute need to replace the roof and HVAC units at its current Rutan Court facility. This \$322,000 project will be completed in FY 2010.

## **Livermore Transit Center Maintenance**

LAVTA's primary transfer hub in Livermore is the Livermore Transit Center (LTC). The LTC was constructed in 1991 to serve as a convenient, central, off-street transit transfer center with intermodal connectivity to future commuter rail (ACE). The LTC features 12 Bus bays and limited-time parking for 14 cars (including disabled stalls). In addition, the City of Livermore constructed a 500-space parking garage directly adjacent to the LTC to provide both commuter parking for LAVTA and ACE, and additional downtown parking. Pedestrian connectivity to the adjacent ACE (Altamont Commuter Express) Livermore Station is clear, and LAVTA staffs the

indoor cashier area on weekdays during daytime hours. The LTC is a functional, but not elaborate facility. LAVTA is often requested to provide a higher level of passenger comforts and security at the LTC, such as enclosing an area for passengers to wait inside, out of the intense summer heat or wet, chilly winter weather.

Prior to any major expansion of the LTC, LAVTA desires to redesign the interior of the facility, to enhance employee security and comfort by creating interior access to restroom facilities. This minor renovation project will include Door installation from office utility room to adjoining bathroom, relocate utility room equipment and electrical outlets. Install new door frame and metal door with locks and trim, repainting, and a minor reconfiguration/expansion of the LTC surveillance facility. This project will enhance the efficiency of the facility and prepare for later improvements. LAVTA will also refurbish the exterior of the facility by repainting all of the painted surfaces, including benches and receptacles, and replacing the chipped and outdated tile on the building and kiosks. The estimated cost of the interior and exterior projects total \$50,000.

In addition, the City of Livermore has approached LAVTA to place the historic Sante Fe Train Depot onto LAVTA property at the LTC. The city is paying to relocate the building from its current location on L Street to the area adjacent to the ACE tracks, between the LTC and the newly constructed downtown parking garage. The relocation of the Train Depot is scheduled for 2010 or later.

### **Livermore Facility Security System Update**

In 2007, LAVTA installed a 14 camera, web-based surveillance system to provide video recording and real-time monitoring of activity outside the Livermore Transit Center. While this initial project has been well received, invariably incidents that have occurred at the LTC facility fail to be clearly captured by our current system. Additional cameras and microphones are required to bolster surveillance coverage. In addition, LAVTA deployed the same technology at its Rutan Court Administration, Operations, and Maintenance facility, using a 13-camera setup. LAVTA is considering all options to increase security at the LTC, including absorbing increased operations costs to provide additional security guard coverage, or live remote monitoring of the facility. The estimated cost is \$5,000.

### **Energy Efficiency Improvements Project**

This project has replaced older lighting fixtures with modern, energy efficient conveyances in order to reduce energy usage of the Rutan Administration, Operations, and Maintenance facility for approximately \$5,700.

### **Bus Wash Replacement**

This project will remove and dispose of existing bus wash system & equipment, and install an all new bus wash system & equipment. The project vendor will be responsible for all permits necessary to complete installation, and will provide training to personnel in the proper operation and preventive maintenance of new bus wash. The project is estimated to cost \$170,000.

### **Off-Site Bus Parking Lot Re-pavement (Airport)**

LAVTA leased parking lot space from the Livermore Airport for many years to provide parking for overflow revenue vehicles. Upon the opening of the new Atlantis Operations and Maintenance Facility, Phase I (secured parking facility) in June 2008, LAVTA terminated its

lease with the Airport. Airport officials determined that the years of bus usage of the parking lot had caused significant damage, and required LAVTA to pay to resurface the area utilized for bus parking as a condition of lease termination. The total cost was approximately \$64,500.

### **Fuel Management System**

This project will install an automated fuel management dispensing system onto LAVTA's current Rutan facility fuel island. The new dispenser will integrate completely with LAVTA's fleet management software (RTS) to enable far more accurate fuel allocation reporting and fleet efficiency analysis. The cost estimate is \$90,000.

### **Bus Stop Equipment Storage and Maintenance Storage Building Code Update**

This project will upgrade fire suppression system within LAVTA's bus stop equipment storage and maintenance building. The vendor will install fire code compliant sprinkler system. The estimated cost is \$22,000.

### **Rutan IT Network Upgrades**

The project will implement various IT network improvements to the LAVTA Rutan Administration, Operations, and Maintenance facility. The project includes new battery backup systems (including one off-site, redundant backup server) for all servers, replacement of the SQL server and upgrade of the SQL software, relocation of the GFI system wiring to the fuel island, upgrade network firewall hardware, and a complete redesign of the server room, including the procurement of temperature controlled racks which provide the correct environment for electronic equipment, while ensuring that the current fire suppression system can be maintained without potential damage to the network equipment. The cost estimate is \$160,000.

### **Other Projects**

In addition to the projects detailed above, LAVTA has other minor capital needs that ARRA funds will be used to fulfill.

- Boardroom PA System: Currently the board meetings are recorded using a small tape recorder which can be hard to interpret during playback. A full PA system will cost approximately \$15,000.
- Copier Machine: LAVTA's copier machine is old and unreliable. A new copier machine will cost approximately \$25,500.
- Office Equipment: LAVTA has requested approximately \$29,000 for miscellaneous office equipment needs included new computers for the operations and administration staff.
- Part washer: The maintenance division received two new parts washers earlier in FY 2009 at a cost of \$7,200.

### **Future Capital Projects**

Due to funding constraints, many capital projects are not included in the SRTP. The following presents LAVTA's "wish list" for future projects that are not necessary but desired if funding becomes available.

### **GFI Farebox Upgrade**

LAVTA has operated using older-generation GFI fareboxes with limited capabilities for many years. LAVTA's vehicles now feature GFI Sense-A-Bill fareboxes that count bills and coins but

are not equipped to process various kinds of modern fare media, and do not dispense day passes or electronic transfers. This limits the array of fare media that LAVTA can offer to its customers, such as day and weekly passes (utilizing magnetic strip media). LAVTA is seeking to upgrade the entire fixed route and paratransit fleet (93 buses and vans, plus spares) at a cost of \$13,000 per unit, plus installation, for a total project cost of \$1,250,000.

### **Rutan Dial-A-Ride Dispatch Area Renovation**

This project will move Dial-A-Ride to a new office location and convert the current Dial A Ride (DAR) office into a drivers quiet room. The project will relocate lockers in driver's area, couches and chairs, television and accessories, food and drink machines. The contractor will move cable TV wiring to the quiet room, and build a new DAR office with walls, windows, doorways, trim, refinish the inner walls, and paint. The new quiet room will have walls, a window, and a door. The estimated cost is \$40,000.

### **Historic Rideo Vehicle Rehabilitation**

This project will restore the last remaining revenue vehicle from LAVTA's predecessor system, the City of Livermore's RIDEO system. LAVTA has retained one RIDEO 1970s GMC bus that is a prime candidate for renovation. LAVTA may then display this vehicle in the community at events, to promote transit's rich history in the Tri-Valley. The project will renovate the bus inside and out, with new interior amenities, and repaired and replaced body panels, windows, and seats. Mechanical improvements will be undertaken on the engine and transmission to enable reliable non-revenue service usage. The estimated cost is \$175,000.

Figure 11  
LAVTA Ten-Year Capital Plan FY 2010-2019 (includes first year budgeted and 9 years projected)  
Summary

EXPENSES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total
Fixed-Route Vehicle Program	\$0	\$1,034,855	\$3,490,361	\$0	\$5,924,678	\$0	\$26,713,338	\$0	\$0	\$1,620,528	\$38,783,761
<i># of Vehicles</i>	0	12	5	0	8	0	34	0	0	2	61
Paratransit Vehicle Program	\$0	\$438,780	\$0	\$931,003	\$0	\$1,481,552	\$0	\$0	\$539,644	\$0	\$3,390,980
<i># of Vehicles</i>	0	3	0	6	0	9	0	0	3	0	21
Service Vehicle Program	\$0	\$100,940	\$103,968	\$107,087	\$140,689	\$143,255	\$0	\$120,528	\$127,868	\$127,868	\$972,202
<i># of Vehicles</i>	0	2	2	2	3	3	0	2	2	2	18
Engine Rebuilds and Rehab	\$147,511	\$763,368	\$684,741	\$272,579	\$0	\$0	\$846,198	\$750,699	\$323,739	\$134,028	\$3,922,863
<i># of Vehicles</i>	3	15	13	5	0	0	14	12	5	2	69
ARRA Projects	\$881,498	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$881,498
Safety & Security Upgrades	\$0	\$0	\$60,000	\$0	\$0	\$0	\$60,000	\$0	\$0	\$0	\$120,000
Bus Stop Improvements	\$0	\$25,000	\$25,750	\$26,523	\$27,318	\$28,138	\$28,982	\$29,851	\$30,747	\$31,669	\$253,978
Office Equipment Upgrades & Replacement	\$0	\$80,000	\$80,400	\$80,802	\$81,206	\$81,612	\$82,020	\$82,430	\$82,842	\$83,257	\$734,569
Bus Rapid Transit	\$8,938,682	\$2,234,670	\$1,094,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,267,352
<b>Total Capital Expenses</b>	<b>\$9,967,690</b>	<b>\$4,677,613</b>	<b>\$5,539,220</b>	<b>\$1,417,995</b>	<b>\$6,173,891</b>	<b>\$1,734,557</b>	<b>\$27,730,538</b>	<b>\$983,508</b>	<b>\$1,104,840</b>	<b>\$1,997,350</b>	<b>\$61,327,202</b>

REVENUES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total
American Recovery & Reinvestment Act (ARRA)Funding	\$ 881,498	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 881,498
FTA Section 5307	\$ -	\$ -	\$ 2,813,929	\$ -	\$ 4,776,476	\$ -	\$ 21,370,670	\$ -	\$ -	\$ 1,296,423	\$ 30,257,498
FTA Section 5307 Livermore	\$ -	\$ 364,187	\$ 1,255,214	\$ 772,733	\$ 1,357,639	\$ 1,229,688	\$ 1,468,423	\$ -	\$ 447,905	\$ 1,296,423	\$ 8,192,212
FTA Section 5307 Concord	\$ -	\$ -	\$ 1,558,715	\$ -	\$ 3,418,836	\$ -	\$ 19,902,247	\$ -	\$ -	\$ -	\$ 24,879,799
FTA Section 5309	\$ 7,571,527	\$ 2,234,670	\$ 1,094,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,900,197
Other Federal Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
State/Regional Funds	\$ 1,002,697	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,002,697
Bridge Tolls	\$ -	\$ 74,593	\$ 676,432	\$ 158,271	\$ 1,148,203	\$ 251,864	\$ 5,342,668	\$ -	\$ 91,739	\$ 324,106	\$ 8,067,874
TDA Article 4.0	\$ 364,458	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 364,458
Proposition 1B PTMISEA	\$ 147,511	\$ 546,377	\$ 299,553	\$ 272,579	\$ -	\$ -	\$ 846,198	\$ 378,986	\$ 299,553	\$ 134,028	\$ 2,924,785
Funding Not Secured	\$ -	\$ 1,457,786	\$ 655,306	\$ 214,412	\$ 249,213	\$ 253,005	\$ 171,002	\$ 604,522	\$ 265,643	\$ 242,794	\$ 4,113,682
<b>Total Capital Revenues</b>	<b>\$ 9,967,691</b>	<b>\$ 4,677,612</b>	<b>\$ 5,539,220</b>	<b>\$ 1,417,995</b>	<b>\$ 6,173,891</b>	<b>\$ 1,734,557</b>	<b>\$ 27,730,538</b>	<b>\$ 983,508</b>	<b>\$ 1,104,840</b>	<b>\$ 1,997,350</b>	<b>\$ 61,327,202</b>

(1) All vehicle replacement program costs based on MTC's replacement vehicle cost estimates for vehicles funded with FTA Section 5307.  
(2) Bridge Toll Revenues are assumed to contribute 20% towards the cost of replacing fixed route and paratransit revenue vehicles except for the FY 2011 New Flyer replacement.  
(3) TDA Article 4.0 funds needed to balance the capital budget

## Atlantis O&M Facility

Not included in the ten-year capital plan is the construction of an additional Operations and Maintenance (O&M) facility. The facility is planned to provide for additional capacity for LAVTA future growth. Presently, LAVTA's Maintenance, Operations and Administration facility at Rutan Court has capacity to store 43 vehicles; however, the revenue fleet currently stands at 93 active vehicles and 3 contingency buses. The agency has secured and spent approximately \$10 million in recent years to develop the project, obtain the land (in the nearby Oaks Business Park, less than a mile from the existing Rutan Facility), design and build phase 1 (bus parking) and complete preliminary engineering (30% Design) on the entire project. LAVTA secured previous funding for this project from a variety of sources, including FTA Section 5309 earmarks, STIP funding, and TDA Article 4.0 funds. The phase 1 parking facility was completed in June 2008, enabling LAVTA to end its lease of parking facilities at the Livermore Airport for its fleet that could not be accommodated at Rutan Court. LAVTA is now considering different options for completing the project, including construction in phases.

LAVTA will continue to seek federal funding support for the Atlantis O&M Facility, however it may become imperative to identify other methods of assembling the funding for this project. LAVTA recently completed the 30% design phase of the entire project, and has put Final Design and Construction on hold pending new funding. LAVTA may find mechanisms for obtaining all or portions of the needed funding for the Facility in the upcoming Federal Transportation Bill reauthorization, through additional STIP funding, or through some other as-yet-unidentified funding sources.

The current phasing strategy is as follows:

Phase 1: Construct Secured Bus Parking (completed)

Phase 2: Bus Wash and Fueling Center

Phase 3: Construct Operations Building

Phase 4: Construct Rutan Facility Improvements

Phase 5: Construct Maintenance Building

Because funding for this project is anticipated to be federal discretionary, LAVTA has not included funding or expenses for this project in the SRTP.

# Ten-Year Operating Plan

The following tables present LAVTA’s ten-year operating plan. The operating plan is fiscally constrained based on MTC parameters and LAVTA assumptions detailed at the beginning of this document. The BRT service is presented on a separate page since the service is not yet in operations.

Figure 12 FIXED ROUTE FINANCIAL PLAN AND OPERATING CHARACTERISTICS FY 2010-2019

	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
	<i>Actual</i>	<i>Budget</i>									
<b>EXPENSES</b>											
Operating Expenses(1)	12,764,264	\$11,851,826	11,433,967	\$10,737,673	\$11,059,803	\$11,612,793	\$11,961,177	\$10,145,893	\$11,414,129	\$11,756,553	\$12,109,250
Capital Expenses (fixed route and paratransit)		9,967,690	4,677,613	5,539,220	1,417,995	6,173,891	1,734,557	27,730,538	983,508	1,104,840	1,997,350
<b>Total Fixed Route Expenses</b>	<b>\$ 12,764,264</b>	<b>\$ 21,819,516</b>	<b>\$ 16,111,580</b>	<b>\$ 16,276,893</b>	<b>\$ 12,477,798</b>	<b>\$ 17,786,685</b>	<b>\$ 13,695,734</b>	<b>\$ 37,876,431</b>	<b>\$ 12,397,637</b>	<b>\$ 12,861,393</b>	<b>\$ 14,106,600</b>
<b>REVENUES</b>											
Passenger Fares (2)	1,809,886	1,747,440	1,981,511	1,922,066	1,950,897	2,085,021	2,116,296	2,148,040	2,223,222	2,256,570	2,290,419
Fare Revenue Spillover from BRT			306,521	553,855	503,904	545,076	509,727	225,511	102,518	47,186	-10,681
Business Parks (3)	239,549	243,432	250,735	258,257	266,005	273,985	282,204	290,671	299,391	308,372	317,624
Special Contract Fares	269,448	265,559	265,559	265,559	265,559	265,559	265,559	265,559	265,559	265,559	265,559
Concessions	61,458	34,100	34,100	34,100	34,100	34,100	34,100	34,100	34,100	34,100	34,100
Bus Lease/Miscellaneous	0	0	9,000								
Advertising Revenue	275,000	275,000	283,250	291,748	300,500	309,515	318,800	328,364	338,215	348,362	358,813
Interest (4)	16,169	7,000	8,214	8,490	8,776	9,072	9,377	9,693	10,019	10,357	10,705
<b>Subtotal</b>	<b>2,671,510</b>	<b>2,572,531</b>	<b>3,138,890</b>	<b>3,334,074</b>	<b>3,329,741</b>	<b>3,522,327</b>	<b>3,536,064</b>	<b>3,301,938</b>	<b>3,273,024</b>	<b>3,270,506</b>	<b>3,266,538</b>
STA (Population Based)(5)(6)	1,121,346	652,661	0	0	0	1,453,800	1,528,699	1,607,663	1,690,921	1,778,716	1,871,303
STA (Revenue Based)(5)(6)	274,147	0	0	0	0	176,527	187,207	198,533	210,544	223,282	236,791
STA (Prop. 42)(5)	98,475	0	0	0	0	167,995	175,065	182,452	190,172	198,239	206,672
Regional Measure 2 (7)	101,500	0	0	0	0	0	0	0	0	0	0
Measure B Express Bus (8)	0	500,000	500,000	500,000	0	0	0	0	0	0	0
FTA 5303 - Planning	18,128	30,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
FTA 5307 - Formula(9)	1,636,015	1,945,055	1,089,015	256,116	799,051	277,015	470,352	299,620	1,838,765	1,464,410	692,385
Lifeline(10)	121,744	156,000	166,154		0	0	0	0	0	0	0
BART Subsidy(11)	343,115	276,000	280,637	285,127	289,689	294,324	299,033	303,818	308,679	313,618	318,636
Measure B(12)	750,014	724,268	731,511	753,456	778,822	805,042	832,145	860,160	889,119	919,052	949,993
<b>Subtotal</b>	<b>4,464,484</b>	<b>4,283,984</b>	<b>2,782,316</b>	<b>1,809,699</b>	<b>1,882,562</b>	<b>3,189,703</b>	<b>3,507,502</b>	<b>3,467,246</b>	<b>5,143,199</b>	<b>4,912,317</b>	<b>4,290,780</b>
TDA 4.0 Funds needed to balance budget	5,628,270	4,995,311	5,512,761	6,438,451	6,733,467	5,732,325	5,791,595	5,745,254	4,869,434	5,521,058	6,578,022
<b>Total Operating Revenues</b>	<b>\$ 12,764,264</b>	<b>\$ 11,851,826</b>	<b>\$ 11,433,967</b>	<b>\$ 11,582,224</b>	<b>\$ 11,945,770</b>	<b>\$ 12,444,356</b>	<b>\$ 12,835,161</b>	<b>\$ 12,514,437</b>	<b>\$ 13,285,657</b>	<b>\$ 13,703,881</b>	<b>\$ 14,135,340</b>
<b>CAPITAL REVENUES</b>											
American Reinvestment & Recovery Act (ARRA)		881,498	0	0	0	0	0	0	0	0	0
FTA Section 5307 - Livermore UA		0	364,187	1,255,214	772,733	1,357,639	1,229,688	1,468,423	0	447,905	1,296,423
FTA Section 5307 - Concord UA		0	0	1,558,715	0	3,418,836	0	19,902,247	0	0	0
FTA Section 5309		7,571,527	2,234,670	1,094,000	0	0	0	0	0	0	0
Other Federal Funds		0	0	0	0	0	0	0	0	0	0
State Funds		1,002,697	0	0	0	0	0	0	0	0	0
Bridge Tolls		0	74,593	676,432	158,271	1,148,203	251,864	5,342,668	0	91,739	324,106
TDA Article 4.0	866,877	364,458	0	0	0	0	0	0	0	0	0
Proposition 1B PTMISEA		147,511	546,377	299,553	272,579	0	0	846,198	378,986	299,553	134,028
Funding Not Secured		0	1,457,786	655,306	214,412	249,213	253,005	171,002	604,522	265,643	242,794
<b>Total Capital Revenue</b>		<b>\$ 9,820,180</b>	<b>\$ 4,677,612</b>	<b>\$ 5,539,220</b>	<b>\$ 1,417,995</b>	<b>\$ 6,173,891</b>	<b>\$ 1,734,557</b>	<b>\$ 27,730,538</b>	<b>\$ 983,508</b>	<b>\$ 1,104,840</b>	<b>\$ 1,997,350</b>
<b>Total Fixed Route Revenue</b>	<b>\$ 12,764,264</b>	<b>\$ 21,672,006</b>	<b>\$ 16,111,579</b>	<b>\$ 17,121,444</b>	<b>\$ 13,363,764</b>	<b>\$ 18,618,247</b>	<b>\$ 14,569,717</b>	<b>\$ 40,244,976</b>	<b>\$ 14,269,165</b>	<b>\$ 14,808,721</b>	<b>\$ 16,132,690</b>
<b>OPERATING CHARACTERISTICS</b>											
Revenue Hours(13)	139,304	101,466	90,000	85,000	85,000	85,000	85,000	70,000	75,000	75,000	75,000
change in revenue hours	1,852	(37,838)	(11,466)	(5,000)	0	0	0	(15,000)	5,000	0	0
Ridership(14)	2,194,898	1,975,408	1,856,884	1,801,177	1,828,195	1,736,785	1,762,837	1,789,279	1,851,904	1,879,683	1,907,878
% Ridership Increase	-2%	-10%	-6%	-3.0%	1.5%	-5.0%	1.5%	1.5%	3.5%	1.5%	1.5%
Average Fare Per Passenger	\$0.93	\$0.88	\$1.07	\$1.07	\$1.07	\$1.20	\$1.20	\$1.20	\$1.20	\$1.20	\$1.20
Passenger per Revenue Hour	15.8	19.5	20.6	21.2	21.5	20.4	20.7	25.6	24.7	25.1	25.4
Farebox Recovery Ratio (W/ B Parks & Special)	18%	19%	25%	28%	27%	27%	27%	29%	25%	24%	24%
Cost Per Hour	\$91.63	\$116.81	\$122.65	\$126.33	\$130.12	\$136.62	\$140.72	\$144.94	\$152.19	\$156.75	\$161.46

Figure 13 PARATRANSIT FINANCIAL PLAN AND OPERATING CHARACTERISTICS

	FY2009 <i>Actual</i>	FY2010 <i>Budget</i>	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
<b>EXPENSES</b>											
Operating Expenses(1)	1,882,773	2,139,923	2,261,671	2,183,926	2,249,444	2,361,916	2,250,316	2,338,706	2,631,045	2,709,976	2,791,275
<b>REVENUES</b>											
Passenger Fares (2)	160,283	146,378	185,510	179,945	182,644	185,384	181,676	184,401	187,167	189,975	192,824
Special Contract Fares	84,771	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
Interest	2,514										
<b>Subtotal</b>	247,568	221,378	260,510	254,945	257,644	260,384	256,676	259,401	262,167	264,975	267,824
TDA 4.5 (15)	89,467	74,878	76,138	78,702	81,351	84,090	86,921	89,847	92,872	95,999	99,231
STA Regional Paratransit (15)	31,091		0	0	0	0	0	0	0	0	0
Measure B Paratransit (12)	181,837	259,748	137,485	141,610	146,377	151,305	156,399	161,665	167,107	172,733	178,548
FTA Secions 5316 and 5317		35,604	67,093	60,240							
FTA Section 5307 ADA Paratransit	295,734	592,186	321,212	334,060	347,423	361,320	375,772	390,803	406,436	422,693	439,601
<b>Subtotal</b>	598,129	962,416	601,929	614,612	575,151	596,715	619,093	642,315	666,415	691,425	717,380
TDA 4.0 Funds needed to balance budget	1,037,076	956,129	1,399,232	1,314,369	1,416,648	1,504,817	1,374,547	1,436,990	1,702,462	1,753,576	1,806,071
<b>Total Operating Revenues</b>	\$ 1,882,773	\$ 2,139,923	\$ 2,261,671	\$ 2,183,926	\$ 2,249,444	\$ 2,361,916	\$ 2,250,316	\$ 2,338,706	\$ 2,631,045	\$ 2,709,976	\$ 2,791,275
<b>OPERATING CHARACTERISTICS</b>											
Revenue Hours	29,689	32,679	32,000	30,000	30,000	30,000	27,750	28,000	30,000	30,000	30,000
Ridership	66,870	65,358	66,338	64,348	65,313	66,293	64,967	65,942	66,931	67,935	68,954
% Ridership Increase	0%	-2%	1%	-3.0%	1.5%	1.5%	-2.0%	1.5%	1.5%	1.5%	1.5%
Average Fare Per Passenger	\$2.40	\$2.24	\$2.80	\$2.80	\$2.80	\$2.80	\$2.80	\$2.80	\$2.80	\$2.80	\$2.80
Passenger per Revenue Hour	2.3	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.2	2.3	2.3
Farebox Recovery Ratio (W/ Special Contract)	13%	10%	12%	12%	11%	11%	11%	11%	10%	10%	10%
Cost Per Hour	\$63.42	\$65.48	\$70.68	\$72.80	\$74.98	\$78.73	\$81.09	\$83.53	\$87.70	\$90.33	\$93.04

Figure 14 SYSTEMWIDE OPERATING INFORMATION AND NOTES

	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
<b>TDA 4.0 RESERVE BALANCE</b>											
Prior Year TDA Carryover	5,018,207	3,964,067	3,971,087	3,338,669	2,053,852	547,575	130,683	1,345	88,796	1,033,960	1,557,724
TDA 4.0 Interest earned on reserves (Alameda Cty)			119,133	100,160	61,616	16,427	3,920	40	2,664	31,019	46,732
TDA 4.0 Revenue Forecast	6,478,083	6,058,460	6,160,443	6,367,842	6,582,224	6,803,823	7,032,883	7,269,654	7,514,397	7,767,379	8,028,878
TDA 4.0 Usage:											
Operations	6,665,346	5,951,440	6,911,993	7,752,820	8,150,116	7,237,143	7,166,141	7,182,244	6,571,897	7,274,634	8,384,093
Capital (excludes prior year allocations)	866,877	100,000	0	0	0	0	0	0	0	0	0
Reserve Balance	\$ 3,964,067	\$ 3,971,087	\$ 3,338,669	\$ 2,053,852	\$ 547,575	\$ 130,683	\$ 1,345	\$ 88,796	\$ 1,033,960	\$ 1,557,724	\$ 1,249,240

**OPERATING CHARACTERISTICS - Systemwide**

Revenue Hours	168,993	134,145	122,000	115,000	115,000	115,000	112,750	98,000	105,000	105,000	105,000
Total Operating Expense	14,647,037	13,991,749	13,695,638	12,921,599	13,309,247	13,974,709	14,211,493	12,484,599	14,045,174	14,466,529	14,900,525
Ridership (16)	2,261,768	2,040,766	1,923,222	1,865,525	1,893,508	1,803,078	1,827,804	1,855,221	1,918,835	1,947,618	1,976,832
% Ridership Change		-10%	-6%	-3%	1%	-5%	1%	2%	3%	1%	1%
Average Fare Per Passenger	\$0.98	\$0.93	\$1.13	\$1.13	\$1.13	\$1.26	\$1.26	\$1.26	\$1.26	\$1.26	\$1.26
Passenger per Revenue Hour	13.4	15.2	15.8	16.2	16.5	15.7	16.2	18.9	18.3	18.5	18.8
Farebox Recovery Ratio (W/ Special Contract)	0.18	18%	22%	25%	24%	25%	24%	26%	22%	22%	21%
Cost per Hour	\$86.67	\$104.30	\$112.26	\$112.36	\$115.73	\$121.52	\$126.04	\$127.39	\$133.76	\$137.78	\$141.91
% Change in Cost per Hour	4%	20%	8%	0%	3%	5%	4%	1%	5%	3%	3%

(1) Operating cost per revenue hour increases 3% annually starting in FY 2012. Costs increase 5% in every third year

(2) Assumes no fare increase

(3) Business Parks- Assumes 3% increase

(4) Interest calculation: TDA/12 times average interest

(5) Assumes STA program reinstated in FY 2014 per MTC projections

(6) Assumes STA program reinstated in FY 2014 per MTC projections

(7) RM2 funds for OWL service discontinued after FY 09

(8) \$1.5 million awarded for FY 2010-2012

(9) FTA 5307 10% of set aside (total regional pool of funds) to be used for preventative maintenance. Annual excess 5307 from the Livermore UA is also used for preventative maintenance

(10) Lifeline is through CMA. These funds cover cost of Route 14

(11) BART's TDA/STA/Bridge Toll payments to LAVTA for providing feeder bus service to BART. Assumes contributions increase by 1.6% annually

(12) Forecasts based on FY10 base amount projections and escalated at the same rate as TDA

(13) Estimated annual hours increase/decrease based on available funding level

(14) Estimated annual fixed-route ridership based on ridership/revenue hour elasticity of .1

(15) Assumed discontinuation of STA program

(16) Dial-A-Ride ridership based on revenue hour and a passenger productivity of 2.5 passengers per revenue hour

Figure 15 BUS RAPID TRANSIT PROGRAM BUDGET

	Previous Years	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
<b>EXPENSES</b>											
Operating Expenses(1)			1,148,968	2,366,874	2,437,880	2,901,668	2,988,718	3,610,735	3,791,272	3,905,010	4,022,160
Capital Expenses	1,506,906	8,938,682	2,234,670	1,094,000	0	0	0	0	0	0	0
<b>Total Fixed Route Expenses</b>	\$ 1,506,906	\$ 8,938,682	\$ 3,383,638	\$ 3,460,874	\$ 2,437,880	\$ 2,901,668	\$ 2,988,718	\$ 3,610,735	\$ 3,791,272	\$ 3,905,010	\$ 4,022,160
<b>REVENUES</b>											
Passenger Fares (2)			854,653	1,794,772	1,848,615	2,337,178	2,372,236	2,693,143	2,733,540	2,774,543	2,816,161
Business Parks											
Advertising Revenue											
STA Express											
RM2 - BRT (3)			480,836	480,836	488,049	495,369	502,800	510,342	517,997	525,767	533,653
CMAQ Express Bus											
Measure B (4)			120,000	645,120	605,120	614,197	623,410	632,761	642,252	651,886	661,664
HOT Lane Revenue (5)											
<b>Total Operating Revenues</b>			\$ 1,455,489	\$ 2,920,728	\$ 2,941,784	\$ 3,446,744	\$ 3,498,446	\$ 3,836,245	\$ 3,893,789	\$ 3,952,196	\$ 4,011,479
<b>CAPITAL REVENUES</b>											
FTA Section 5307 - Livermore UA	0	0	0	0	0	0	0	0	0	0	0
FTA Section 5307 -Concord UA	0	0	0	0	0	0	0	0	0	0	0
FTA Section 5309	29,803	7,571,527	2,234,670	1,094,000	0	0	0	0	0	0	0
Other Federal Funds	0	0	0	0	0	0	0	0	0	0	0
State Funds	841,561	1,002,697	0	0	0	0	0	0	0	0	0
Bridge Tolls	0	0	0	0	0	0	0	0	0	0	0
TDA Article 4.0	635,542	364,458	0	0	0	0	0	0	0	0	0
<b>Total Capital Revenue</b>	\$ 1,506,906	\$ 8,938,682	\$ 2,234,670	\$ 1,094,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Fixed Route Revenue</b>		\$ 8,938,682	\$ 3,690,159	\$ 4,014,728	\$ 2,941,784	\$ 3,446,744	\$ 3,498,446	\$ 3,836,245	\$ 3,893,789	\$ 3,952,196	\$ 4,011,479

<b>Annual BRT Surplus/(Deficit)</b>			\$ 306,521	\$ 553,855	\$ 503,904	\$ 545,076	\$ 509,727	\$ 225,511	\$ 102,516	\$ 47,186	\$ (10,681)
<b>Cummulative BRT Surplus/(Deficit)</b>			\$ 306,521	\$ 860,376	\$ 1,364,280	\$ 1,909,356	\$ 2,419,083	\$ 2,644,594	\$ 2,747,112	\$ 2,794,298	\$ 2,783,617

**OPERATING CHARACTERISTICS**

Revenue Hours			17,033	34,066	34,066	38,616	38,616	45,294	45,294	45,294	45,294
change in revenue hours			17,033	17,033	0	4,550	0	6,678	0	0	0
Ridership (6)			800,900	1,681,890	1,732,347	1,946,828	1,976,030	2,243,340	2,276,990	2,311,145	2,345,812
% Ridership Increase				110%	3%	12%	2%	14%	2%	2%	2%
Average Fare Per Passenger			\$1.07	\$1.07	\$1.07	\$1.20	\$1.20	\$1.20	\$1.20	\$1.20	\$1.20
Passenger per Revenue Hour			47.0	49.4	50.9	50.4	51.2	49.5	50.3	51.0	51.8
Farebox Recovery Ratio			74%	76%	76%	81%	79%	75%	72%	71%	70%
Marginal Cost Per Hour			\$67.46	\$69.48	\$71.56	\$75.14	\$77.40	\$79.72	\$83.70	\$86.21	\$88.80

(1) Annual operating cost based on revenue hours and the marginal cost per hour

(2) Annual surplus in passenger fare revenue is diverted to fund local fixed-route operations when available

(3) Assumes RM-2 funding increases 1.5% annually

(4) Assumes Measure B funding will increase 1.5% annually beginning in FY 2014

(5) Assumes no HOT lane revenues

(6) Ridership projections provided by Nelson\Nygaard Consulting Associates, Inc. in the Route 10 Rapid Study

# Appendix A: Capital Projects

LAVTA Ten-Year Capital Plan FY 2010-2019 (includes first year budgeted and 9 years projected)

Fixed-Route Vehicle Program

EXPENDITURES	Replacement Vehicles	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total	Vehicles
1996 New Flyer Coaches (40ft)*	29 ft standard hybrid coaches		\$1,034,855									\$1,034,855	12
2000 Gillig Commuter (40 ft)	40 ft standard hybrid coaches			\$3,490,361								\$3,490,361	5
2002 Gillig Coaches (40 ft)	40 ft standard hybrid coaches					\$2,962,339						\$2,962,339	4
2002 Gillig Commuter (40 ft)	40 ft standard hybrid coaches					\$2,962,339						\$2,962,339	4
2003 Gillig Coaches (29 & 40 ft)	40 ft standard hybrid coaches							\$26,713,338				\$26,713,338	34
2007 Gillig Coaches (29 ft)	29 ft standard hybrid coaches										\$1,620,528	\$1,620,528	2
<b>TOTAL CAPITAL EXPENSES</b>		\$0	\$1,034,855	\$3,490,361	\$0	\$5,924,678	\$0	\$26,713,338	\$0	\$0	\$1,620,528	\$38,783,761	61
# of vehicles			12	5		8		34			2		

REVENUES													
FTA Section 5307			\$0	\$2,813,929	\$0	\$4,776,476	\$0	\$21,370,670	\$0	\$0	\$1,296,423	\$30,257,498	
FTA Section 5307 Livermore				\$1,255,214		\$1,357,639		\$1,468,423			\$1,296,423	\$5,377,699	
FTA Section 5307 Concord				\$1,558,715		\$3,418,836		\$19,902,247				\$24,879,799	
FTA Section 5309												\$0	
Other Federal Funds												\$0	
State/Regional Funds												\$0	
Bridge Tolls				\$676,432	\$0	\$1,148,203	\$0	\$5,342,668	\$0	\$0	\$324,106	\$7,491,408	
TDA Article 4.0												\$0	
Proposition 1B PTMISEA												\$0	
Funding Not Secured			\$1,034,855									\$1,034,855	
<b>TOTAL CAPITAL REVENUES</b>		\$0	\$1,034,855	\$3,490,361	\$0	\$5,924,678	\$0	\$26,713,338	\$0	\$0	\$1,620,528	\$38,783,761	

\*5307 Funding and Bridge Toll money already set aside in FY 2011 for replacement purchase. TDA additional local match will be required when purchasing replacements as shown in table.

MTC VEHICLE PRICE											
40' bus Hybrid											
Federal	\$530,480	\$546,394	\$562,786	\$579,669	\$597,059	\$614,971	\$633,420	\$652,423	\$671,996	\$692,156	
Local	\$127,520	\$131,346	\$135,286	\$139,345	\$143,525	\$147,831	\$152,266	\$156,834	\$161,539	\$166,385	
Total	\$658,000	\$677,740	\$698,072	\$719,014	\$740,585	\$762,802	\$785,686	\$809,257	\$833,535	\$858,541	
30' bus Hybrid											
Federal	\$500,650	\$515,670	\$531,140	\$547,074	\$563,486	\$580,391	\$597,803	\$615,737	\$634,209	\$653,235	
Local	\$120,350	\$123,960	\$127,679	\$131,509	\$135,455	\$139,518	\$143,704	\$148,015	\$152,456	\$157,029	
Total	\$621,000	\$639,630	\$658,819	\$678,583	\$698,941	\$719,909	\$741,506	\$763,752	\$786,664	\$810,264	

LAVTA Ten-Year Capital Plan FY 2010-2019 (includes first year budgeted and 9 years projected)  
 Paratransit Vehicle Program

EXPENDITURES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total	Vehicles
2002 El Dorados		\$438,780									\$438,780	3
2006 El Dorados				\$931,003							\$931,003	6
2008 El Dorados						\$1,481,552					\$1,481,552	9
2011 El Dorados									\$539,644		\$539,644	3
<b>TOTAL CAPITAL EXPENSES</b>	\$0	\$438,780	\$0	\$931,003	\$0	\$1,481,552	\$0	\$0	\$539,644	\$0	\$3,390,980	21
# of vehicles		3		6		9			3			

Note first replacement cycle increased by 1 year to 8 years due to preventative maintenance agreement in FY04

REVENUES												
FTA Section 5307	\$0	\$364,187	\$0	\$772,733	\$0	\$1,229,688	\$0	\$0	\$447,905	\$0	\$2,814,513	
FTA Section 5307 Livermore	\$0	\$364,187	\$0	\$772,733	\$0	\$1,229,688	\$0	\$0	\$447,905	\$0	\$2,814,513	
FTA Section 5307 Concord											\$0	
FTA Section 5309											\$0	
Other Federal Funds											\$0	
State/Regional Funds											\$0	
Bridge Tolls	\$0	\$74,593	\$0	\$158,271	\$0	\$251,864	\$0	\$0	\$91,739	\$0	\$576,467	
TDA Article 4.0											\$0	
Proposition 1B PTMISEA											\$0	
Funding Not Secured											\$0	
<b>TOTAL CAPITAL REVENUES</b>	\$0	\$438,780	\$0	\$931,003	\$0	\$1,481,552	\$0	\$0	\$539,644	\$0	\$3,390,979	

MTC VEHICLE PRICE											
Small Medium Duty Coach (7-yr)											
Federal	\$117,860	\$121,396	\$125,038	\$128,789	\$132,652	\$136,632	\$140,731	\$144,953	\$149,302	\$153,781	
Local	\$24,140	\$24,864	\$25,610	\$26,378	\$27,170	\$27,985	\$28,824	\$29,689	\$30,580	\$31,497	
<b>Total</b>	<b>\$142,000</b>	<b>\$146,260</b>	<b>\$150,648</b>	<b>\$155,167</b>	<b>\$159,822</b>	<b>\$164,617</b>	<b>\$169,555</b>	<b>\$174,642</b>	<b>\$179,881</b>	<b>\$185,278</b>	

LAVTA Ten-Year Capital Plan FY 2010-2019 (includes first year budgeted and 9 years projected)

Service Vehicle Replacement

EXPENDITURES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total	Vehicles
2008 Chrysler Town & Country (6306)				\$53,544						\$63,934	\$117,478	2
1999 Dodge Ram (6317)		\$50,470						\$60,264			\$110,734	2
1999 Dodge Caravan (6318)		\$50,470						\$60,264			\$110,734	2
2002 Low Floor Activan (6401)			\$51,984						\$63,934		\$115,918	2
2002 Low Floor Activan (6402)			\$51,984						\$63,934		\$115,918	2
2003 Ford F550 Truck (6403)				\$53,544						\$63,934	\$117,478	2
2007 Chrysler Town & Country (6404)					\$55,150						\$55,150	1
2007 Chrysler Town & Country (6405)					\$55,150						\$55,150	1
2008 Chevy Uplander (6406)						\$55,150					\$55,150	1
2007 Honda Civic Hybrid (6407)					\$30,389						\$30,389	1
2008 Chevy Truck (6408)						\$56,804					\$56,804	1
2005 Prius Hybrid (6420)						\$31,300					\$31,300	1
<b>TOTAL CAPITAL EXPENSES</b>	\$0	\$100,940	\$103,968	\$107,087	\$140,689	\$143,255	\$0	\$120,528	\$127,868	\$127,868	\$972,202	
# of vehicles	\$0	\$2	\$2	\$2	\$3	\$3	\$0	\$2	\$2	\$2		18

REVENUES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total
FTA Section 5307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FTA Section 5307 Livermore											\$0
FTA Section 5307 Concord											\$0
FTA Section 5309											\$0
Other Federal Funds											\$0
State/Regional Funds											\$0
Bridge Tolls											\$0
TDA Article 4.0											\$0
Proposition 1B PTMISEA											\$0
Funding Not Secured	\$0	\$100,940	\$103,968	\$107,087	\$140,689	\$143,255		\$120,528	\$127,868	\$127,868	\$972,202
<b>TOTAL CAPITAL REVENUES</b>	\$0	\$100,940	\$103,968	\$107,087	\$140,689	\$143,255	\$0	\$120,528	\$127,868	\$127,868	\$972,202

MTC VEHICLE PRICE	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
<b>Minivan Under 22'</b>										
Federal	\$40,886	\$42,112	\$43,376	\$44,677	\$46,017	\$47,398	\$48,820	\$50,284	\$51,793	\$53,346
Local	\$8,114	\$8,358	\$8,609	\$8,867	\$9,133	\$9,407	\$9,689	\$9,980	\$10,279	\$10,587
<b>Total</b>	\$49,000	\$50,470	\$51,984	\$53,544	\$55,150	\$56,804	\$58,509	\$60,264	\$62,072	\$63,934
<b>Auto</b>										
Federal	\$22,529	\$23,205	\$23,901	\$24,618	\$25,356	\$26,117	\$26,901	\$27,708	\$28,539	\$29,395
Local	\$4,471	\$4,605	\$4,743	\$4,886	\$5,032	\$5,183	\$5,339	\$5,499	\$5,664	\$5,834
<b>Total</b>	\$27,000	\$27,810	\$28,644	\$29,504	\$30,389	\$31,300	\$32,239	\$33,207	\$34,203	\$35,229

LAVTA Ten-Year Capital Plan FY 2010-2019 (includes first year budgeted and 9 years projected)

Engine Rebuilds and Rehab

EXPENDITURES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total	Vehicles
2003 Gillig Coaches (29 & 40 ft)	\$147,511	\$763,368	\$684,741								\$1,595,619	34
2007 Gillig Coaches (29 ft)				\$272,579							\$272,579	2
2010 Gillig BRT Coaches							\$846,198				\$846,198	14
1996 New Flyer Replacements								\$750,699			\$750,699	12
2000 Gillig Commuter Replacements									\$323,739		\$323,739	5
2007 Gillig Coaches (29 ft)										\$134,028	\$134,028	2
<b>TOTAL CAPITAL EXPENSES</b>	<b>\$147,511</b>	<b>\$763,368</b>	<b>\$684,741</b>	<b>\$272,579</b>	<b>\$0</b>	<b>\$0</b>	<b>\$846,198</b>	<b>\$750,699</b>	<b>\$323,739</b>	<b>\$134,028</b>	<b>\$3,922,863</b>	<b>69</b>
# of vehicles	3	15	13	5			14	12	5	2		

\*\* Hybrid buses repowers have been estimated to include an additional 25,000 for a new power system. Based on mfr.

REVENUES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total
FTA Section 5307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FTA Section 5307 Livermore											\$0
FTA Section 5307 Concord											\$0
FTA Section 5309											\$0
Other Federal Funds											\$0
State/Regional Funds											\$0
Bridge Tolls											\$0
TDA Article 4.0											\$0
Proposition 1B PTMISEA	\$147,511	\$546,377	\$299,553	\$272,579			\$846,198	\$378,986	\$299,553	\$134,028	\$2,924,785
Funding Not Secured	\$0	\$216,991	\$385,188	\$0	\$0	\$0	\$0	\$371,713	\$24,186	\$0	\$998,078
<b>TOTAL CAPITAL REVENUES</b>	<b>\$147,511</b>	<b>\$763,368</b>	<b>\$684,741</b>	<b>\$272,579</b>	<b>\$0</b>	<b>\$0</b>	<b>\$846,198</b>	<b>\$750,699</b>	<b>\$323,739</b>	<b>\$134,028</b>	<b>\$3,922,863</b>

Estimated Rebuild/Rehab Cost escalating at 3.5% annually	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Federal	\$39,336	\$40,713	\$42,138	\$43,613	\$45,139	\$46,719	\$48,354	\$50,047	\$51,798	\$53,611
Local	\$9,834	\$10,178	\$10,534	\$10,903	\$11,285	\$11,680	\$12,089	\$12,512	\$12,950	\$13,403
<b>Total</b>	<b>\$49,170</b>	<b>\$50,891</b>	<b>\$52,672</b>	<b>\$54,516</b>	<b>\$56,424</b>	<b>\$58,399</b>	<b>\$60,443</b>	<b>\$62,558</b>	<b>\$64,748</b>	<b>\$67,014</b>



LAVTA Ten-Year Capital Plan FY 2010-2019 (includes first year budgeted and 9 years projected)  
 Safety & Security Upgrades

EXPENDITURES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total
LAVTA Facilities Security			\$60,000				\$60,000				\$120,000

REVENUES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total
FTA Section 5307	0	0	0	0	0	0	0	0	0	0	0
FTA Section 5307 Livermore											0
FTA Section 5307 Concord											0
FTA Section 5309											0
Other Federal Funds											0
State/Regional Funds											0
Bridge Tolls											0
TDA Article 4.0											0
Proposition 1B PTMISEA											0
Funding Not Secured			60,000				60,000				120,000
<b>TOTAL CAPITAL REVENUES</b>	<b>0</b>	<b>0</b>	<b>60,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120,000</b>

LAVTA Ten-Year Capital Plan FY 2010-2019 (includes first year budgeted and 9 years projected)

Bus Stop Improvements

EXPENDITURES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total
Bus Stop/Shelter Program		\$25,000	\$25,750	\$26,523	\$27,318	\$28,138	\$28,982	\$29,851	\$30,747	\$31,669	\$253,978
<b>REVENUES</b>											
FTA Section 5307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FTA Section 5307 Livermore											\$0
FTA Section 5307 Concord											\$0
FTA Section 5309											\$0
Other Federal Funds											\$0
State/Regional Funds											\$0
Bridge Tolls											\$0
TDA Article 4.0											\$0
Proposition 1B PTMISEA											\$0
Funding Not Secured	\$0	\$25,000	\$25,750	\$26,523	\$27,318	\$28,138	\$28,982	\$29,851	\$30,747	\$31,669	\$253,978
<b>TOTAL CAPITAL REVENUES</b>	\$0	\$25,000	\$25,750	\$26,523	\$27,318	\$28,138	\$28,982	\$29,851	\$30,747	\$31,669	\$253,978

\*Inflates at 3% annually starting in FY2012

LAVTA Ten-Year Capital Plan FY 2010-2019 (includes first year budgeted and 9 years projected)

Office Equipment Upgrades & Replacement

EXPENDITURES	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	10 Year Total
Office/Facility Equipment		\$80,000	\$80,400	\$80,802	\$81,206	\$81,612	\$82,020	\$82,430	\$82,842	\$83,257	\$734,569
<b>REVENUES</b>											
FTA Section 5307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FTA Section 5307 Livermore											\$0
FTA Section 5307 Concord											\$0
FTA Section 5309											\$0
Other Federal Funds											\$0
State/Regional Funds											\$0
Bridge Tolls											\$0
TDA Article 4.0											\$0
Proposition 1B PTMISEA											\$0
Funding Not Secured	\$0	\$80,000	\$80,400	\$80,802	\$81,206	\$81,612	\$82,020	\$82,430	\$82,842	\$83,257	\$734,569
<b>TOTAL CAPITAL REVENUES</b>	\$0	\$80,000	\$80,400	\$80,802	\$81,206	\$81,612	\$82,020	\$82,430	\$82,842	\$83,257	\$734,569

\*Inflates at 3% annually starting in FY2011



# Appendix B: Fleet Inventory & Replacement Schedule

Existing Revenue Fixed Route and Paratransit Fleet (December 2009)

Fixed Route Fleet											
Number of Vehicles	Fleet ID	Manufacturer	Year Mfg.	Length (ft)	Vehicle Type	Seating Capacity	Wheelchair Capacity	Power Mode	Rehabilitation Performed? Life Extended?	Year to be Retired?	Typical Service
12	4021-32	New Flyer	1996	40	Low Floor Motorbus	39	2	Diesel	Yes (No)	2011	Local Fixed-Route
5	4081-85	Gillig	2000	40	Standard Motorbus	41	2	Diesel	No	2012	Local Fixed-Route
4	4075-78	Gillig	2002	40	Standard Motorbus	37	2	Diesel	No	2014	Regional Express
4	4009-12	Gillig	2002	40	Low Floor Motorbus	40	2	Diesel	No	2014	Local Fixed-Route
24	0311-34	Gillig	2003	40	Low Floor Motorbus	39	2	Diesel	No	2016	Local Fixed-Route
10	0301-10	Gillig	2003	29	Low Floor Motorbus	23	2	Diesel	No	2016	Local Fixed-Route
2	0701-02	Gillig	2007	29	Low Floor Motorbus	23	2	Diesel Electric Hybrid	No	2019	Local Fixed-Route
2	0901-02	Gillig	2009	29	Low Floor Motorbus	23	2	Diesel Electric Hybrid	No	2021	Bus Rapid Transit
12	0903-12	Gillig	2009	40	Low Floor Motorbus	39	2	Diesel Electric Hybrid	No	2021	Bus Rapid Transit

Demand Response Fleet											
Number of Vehicles	Fleet ID	Manufacturer	Year Mfg.	Length (ft)	Vehicle Type	Seating Capacity	Wheelchair Capacity	Power Mode	Rehabilitation Performed? Life Extended?	Year to be Retired?	Typical Service
3	2401-03	El Dorado	2002	22	Cutaway Van	13	4	Diesel	No	2011	Demand-Responsive
6	2201-06	El Dorado	2006	22	Cutaway Van	13	4	Diesel	No	2013	Demand-Responsive
9	2207-15	El Dorado	2008	22	Cutaway Van	13	4	Diesel	No	2015	Demand-Responsive

75	Total Fixed-Route Fleet
18	Total Demand Response Fleet
93	<b>Total Revenue Fleet</b>

Existing Non-Revenue Fleet (December 2009)

Non Revenue Fleet											
Number of Vehicles	Fleet ID	Manufacturer	Mfg Year	Year In Service	Retirement Year	Replacement Vehicles In Service	Seating Capacity	Wheelchair Capacity	Type	Power Mode	Typical Service
1	6300	Dodge Ram	1999	1999	--	--	7	0	Staff Van	Gasoline	Administration
1	6317	Dodge Ram	1999	1999	2011	2011	2	0	Service Truck	Gasoline	Maintenance
1	6318	Dodge Caravan	1999	1999	2011	2011	7	1	Low Floor, ADA Accessible Vans	Gasoline	Administration
2	6401-02	Chevy ActiVans	2002	2002	2012	2012	7	1	Low Floor, ADA Accessible Vans	Gasoline	Operations
1	6306	Chrysler T&C Van	2008	2008	2013	2013	7	0	Staff Car	Gasoline	Administration
1	6403	Ford	2003	2003	2013	2013	2	0	Service Truck	Diesel	Maintenance
2	6404-05	Chrysler T&C Van	2007	2008	2014	2014	7	0	Shift Change Vehicle	Gasoline	Operations
1	6406	Chevy Uplander	2008	2008	2015	2015	7	1	Low Floor, ADA Accessible Vans	Gasoline	Operations
1	6408	Chevy 3500 HD	2008	2008	2015	2015	2	0	Service Truck	Diesel	Maintenance
1	6420	Toyota	2005	2005	2015	2015	5	0	Staff Car	Gasoline / Electric Hybrid	Administration
1	6407	Honda Civic	2007	2007	2014	2014	5	0	Staff Car	Gasoline / Electric Hybrid	Operations
<b>13</b>	<b>Non Revenue Total Fleet</b>										

Replacement Fixed Route and Paratransit Fleet Schedule

Replacement Fixed Route Fleet									
Number of Vehicles	Anticipated Mfg Year	Vehicle Length	Anticipated Year In Service	Vehicle Type	Seating Capacity	Wheelchair Capacity	Power Mode	Fund Sources	Typical Service
12	2011	29	2011	Low Floor Motorbus	23	2	Diesel Electric Hybrid	Section 5307	Local Fixed-Route
5	2012	40	2012	Low Floor Motorbus	40	2	Diesel Electric Hybrid	Section 5307	Local Fixed-Route
8	2014	40	2014	Low Floor Motorbus	40	2	Diesel Electric Hybrid	Section 5307	Local Fixed-Route
34	2016	40	2016	Low Floor Motorbus	40	2	Diesel Electric Hybrid	Section 5307	Local Fixed-Route
2	2019	29	2019	Low Floor Motorbus	23	2	Diesel Electric Hybrid	Section 5307	Local Fixed-Route

Replacement Demand Response Fleet									
Number of Vehicles	Anticipated Mfg Year	Vehicle Length	Anticipated Year In Service	Vehicle Type	Seating Capacity	Wheelchair Capacity	Power Mode	Fund Sources	Typical Service
3	2011	22	2011	Cutaway Van	12	4	Diesel	Section 5307	Demand-Responsive
6	2013	22	2013	Cutaway Van	12	4	Diesel	Section 5307	Demand-Responsive
9	2015	22	2015	Cutaway Van	12	4	Diesel	Section 5307	Demand-Responsive
3	2018	22	2018	Cutaway Van	12	4	Diesel	Section 5307	Demand-Responsive

61	Total Fixed-Route Replacements
21	Total Demand Response Replacements
82	<b>Total Revenue Fleet Replacements</b>