

**S T A F F   R E P O R T**

SUBJECT:   Farebox Upgrade

FROM:       David Massa, Senior Fleet & Technology Management Specialist

DATE:       February 27, 2018

---

**Action Requested**

Staff requests that the Finance and Administration Committee recommend the Board of Directors authorize the Executive Director to execute an Agreement between LAVTA and Sealed Power Corporation to replace obsolete fareboxes on 20 LAVTA-owned buses.

**Background**

LAVTA has utilized Sealed Power Corporation, also known as SPX, as its cash fare collection system since 1999, and in particular SPX's "Cents-A-Bill" model of farebox on-board LAVTA buses. Up until 2016, with every bus procurement, the agency has recycled these fareboxes from retired buses into the new buses. However, this model has now become technologically obsolete and is no longer supported by the manufacturer. A newer farebox model, FastFare, was purchased with the 2016 and 2017 bus procurements. Following those procurements, LAVTA now has 20 remaining buses with the outdated farebox model on them.

**Discussion**

Because the manufacturer no longer supports the Cents-A-Bill model of farebox, it has become very difficult to obtain parts for repair of these critical agency assets. Replacing the obsolete fareboxes will maintain a standardized fleet and cash fare collection system. Additional benefits of replacing the obsolete Cents-A-Bill fareboxes with FastFare units include:

- Integration with the agency's AVL system
- Bill validators which validate the legitimacy of currency
- Ability to issue transfers directly from the farebox that are imprinted with the date and time and include a magnetic stripe that can be swiped in other similarly equipped fareboxes for authentication
- Capability to read contactless cards and dispense day passes should the agency choose to offer those fare-payment options in the future.

In May 2017, staff presented a study to Committee that included discussion of replacing the Cents-A-Bill fareboxes as part of an overall Fare Policy update. The staff report with preliminary recommendations is included as Attachment 1.

Staff recommends utilizing a sole-source procurement for the FastFare fareboxes in order to maintain the consistency of the fareboxes on the LAVTA fleet as is allowable per FTA third-

party contracting guidance. A cost analysis was conducted by staff and staff determined that the price received from SPX for the fareboxes and necessary interfaces is both reasonable and fair.

### **Fiscal Impact**

This project was included in the FY 2018 budget. FTA funds will provide 80% of the revenue to pay for this project, with the remaining 20% provided by local TDA funds. The project budget is \$399,051.35 and consists of the contract award amount of \$365,487.35 for all materials necessary, labor to install, shipping and tax and a 10% project contingency of \$33,564.00.

### **Next Steps**

Upon execution of the agreement with SPX Corporation, LAVTA will issue a purchase order for the equipment and installation of 20 FastFare fareboxes.

### **Recommendation**

Staff requests that the Finance and Administration Committee recommend the Board of Directors authorize the Executive Director to execute an Agreement between LAVTA and Sealed Power Corporation to replace obsolete fareboxes on 20 LAVTA-owned buses.

### **Attachments**

1. May 2017 Staff Report - Fare Policy Discussion
2. Resolution 10-2018

<b>LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY</b>
--

<b>S T A F F   R E P O R T</b>
--------------------------------

SUBJECT: Fare Policy Discussion

FROM: Christy Wegener, Director of Planning and Operations

DATE: May 23, 2017

**Action Requested**

None – Information only

**Background**

Notwithstanding the projected growth in fixed route ridership as a result of the cost-neutral changes implemented as a part of the Comprehensive Operations Analysis, as well as the new revenues that will flow from SB1, staff remains cautious and expects operating costs to likely outpace revenues in the future. Additionally, as more and more discretionary funds are being tied to a healthy farebox recovery ratio (>20%), it is imperative that the agency maintain a competitive cost per hour and average passenger fare.

The following table summarizes the past 16 years of cash fare amounts and categories:

**History of the Wheels Bus Fares**

Fare Category	2001-2006	August 2006	August 2007	March 2009	Clipper Nov 2015
Regular cash fare	\$1.25	\$1.50	\$1.75	\$2.00	\$2.00
Discount “Fare Buster” ticket	\$0.75	\$1.15	\$1.40	\$1.60	N/A
Day Pass	N/A	N/A	N/A	N/A	\$3.75
Regular monthly pass	N/A	\$45.00	\$53.00	\$60.00	\$60.00
Senior/disabled cash fare	\$0.40	\$0.65	\$0.85	\$1.00	\$1.00
Senior/disabled monthly pass	\$8.00	\$12.00	\$16.00	\$18.00	\$18.00
BART transfer fare	--	--	\$0.85	\$1.00	\$1.00
Paratransit (Dial A Ride)	\$1.25	\$1.75* *(2007)	\$2.50** **(2008)	\$3.50	N/A
Transfers	One (1 hr)	Unlimited (2 hrs)	Unlimited (2 hrs)	Unlimited (2 hrs)	One (2 hrs)

The most current fares for cash and Clipper® were codified in Resolution 27-2015 (Attachment 1).

### ***Discussion***

As a part of LAVTA's 2016 Comprehensive Operational Analysis (COA), the planning team completed a fare study (Attachment 2) to evaluate LAVTA's current fare policy and make recommendations for potential adjustments. The report includes an analysis of agency trends, a snapshot of the current fare breakdown, an examination of potential fare policy adjustments and associated ridership/revenue impacts, and a package of recommendations. Included in the review was a comparison to other Bay Area transit properties of similar size and operating condition.

A peer review chart taken from the report (Figure 5-2, page 5-3) is included as Attachment 2. As noted in the chart, the current Wheels base cash fare of \$2.00 remains in-line with the majority of Bay Area transit agencies. LAVTA is also aligned with the 50% discount offered for senior and disabled fares, and offers very affordable monthly pass products. Unlike many other agencies, LAVTA has a lower paratransit fare at \$3.50 (only 1.5x the base fare of \$2). The Federal Transit Administration (FTA) states that agencies can charge up to 2x their base fare for paratransit, which most transit agencies do.

### ***Potential Fare Modifications***

As a part of the study, specific fare changes have been analyzed for impacts to revenue and ridership. The fare changes analyzed do not consider any modifications to Clipper® fares or fare policies. The following fare changes have been included as a part of the fare study:

- 1) Eliminate Transfers and Replace with a Day Pass
- 2) Eliminate Farebusters and Replace with a Day Pass
- 3) Monthly Pass price increase - senior/disabled
- 4) Implement Youth Fare (\$1)
- 5) Modify the Regional Express Fare
- 6) Modify Transfer Policy (to one transfer every 2 hours)
- 7) Demand Response: Increase Paratransit Fare to \$4

Each potential fare change has associated ridership and revenue impacts, some of which can be mitigated. In cases where there are fare increases or fare policy changes that tend to have a negative impact on riders, the cumulative impacts of the fare changes can be more significant. Careful attention must be paid to the impact on sensitive groups and populations.

The following table is a chart of the package/scenarios of fare changes that were analyzed as a part of the study, as well as their impacts on revenue and ridership:

	Change in Annual Ridership	Ridership Percent Change	Change in Annual Revenue	Revenue Percent Change
Scenario 1A: Eliminate Transfers and Add Day Pass (\$3.75)	-2,700	-0.2%	\$531,300	26.5%
Scenario 1B: Eliminate Transfers and Add Day Pass (\$4.00)	-7,600	-0.5%	\$519,600	25.9%
Scenario 1C: Eliminate Transfers and Add Day Pass (\$4.50)	-17,300	-1.1%	\$496,300	24.7%
Scenario 1D: Eliminate Transfers and Add Day Pass (\$5.00)	-27,100	-1.6%	\$473,000	23.6%
Scenario 2: Eliminate FareBuster Tickets and Add Day Pass	-48,500	-2.9%	-\$2,300	-0.1%
Scenario 3A: Modify Senior/Disabled Monthly Pass Price (\$20)	-2,300	-0.1%	\$4,300	0.2%
Scenario 3B: Modify Senior/Disabled Monthly Pass Price (\$25)	-7,900	-0.5%	\$14,000	0.7%
Scenario 3C: Modify Senior/Disabled Monthly Pass Price (\$30)	-13,600	-0.8%	\$22,000	1.1%
Scenario 4: Modify Youth Fare	32,100	1.9%	-\$285,600	-14.2%
Scenario 5: Modify Regional Express Fare	-12,500	-0.8%	\$33,500	1.7%
Scenario 6: Allow <u>One</u> Transfer within Two-Hour Window	-28,600	-1.7%	\$121,200	6.0%

	Change in Annual Ridership	Ridership Percent Change	Change in Annual Revenue	Revenue Percent Change
Demand Response Scenario	-1,200	-2.3%	\$27,100	11.7%

Staff is particularly sensitive to ridership losses at this point in the COA implementation, so would not recommend the Board consider anything that is significantly impactful to the ridership without proper mitigation. For whatever changes may be considered, a phased-approach to implementation may be appropriate.

### Monthly Pass Price Increase

The multiplier for regular monthly passes is currently 30x the base fare of \$2.00, which is in line with a monthly pass price offered by peer agencies. Currently, senior and disabled monthly passes are sold at a lower price point than peer agencies, at 18x the current base fare of \$1.00.

**Transfers and Day Pass Discussion:** Currently, the Agency policy is to allow for an unlimited number of transfers within a two hour window of first boarding. Older buses are equipped with a paper tear-sheet transfers that operators remit to passengers when requested. The transfer slips are stamped with the date and have an adjustable time stamp that operators use for authentication. Newer buses dispense transfers from the farebox; these transfers are imprinted with the date and time, and include a magnetic stripe that can be swiped in the farebox reader for authentication. Shifting away from transfers and incorporating a day pass is something many transit agencies are moving to, and it is something LAVTA staff has been discussing for some time. The study modeled different day pass prices, and each price has associated ridership and revenue impacts.

For any scenario that adds in a day pass, it must be noted that the agency currently does not have the capability to dispense day passes onboard the buses. Currently, the LAVTA day pass is only available on Clipper and is available as an accumulator (so, once a passenger pays \$3.75 in fares on a given day, they automatically get a day pass and ride free the rest of that day). No such cash option currently exists, which is important for low-income riders. The Wheels bus fleet has a mix of farebox technology; the newest buses (2016 and upcoming 2017 bus order) will have the upgraded fareboxes that can dispense day passes. The remaining fleet (20 buses) have antiquated fareboxes that would need to be upgraded; a farebox retrofit is programmed in the FY2018 budget.

Eliminating transfers and implementing a day pass at \$4.00 would result in a 0.5% decrease in ridership and a 25.9% increase in revenue. The Clipper® day pass would remain at \$3.75 to encourage the switch to electronic fare media.

Until the fleet can be upgraded, one idea would be to consider a first step of going to a one-transfer within a two hour window, and then a full elimination of transfers/day pass implementation when the farebox upgrade is complete. Currently, the breakdown of transfers among LAVTA ridership are: 45% of passengers don't transfer at all; 35% of passengers transfer once; 16% transfer twice; and 4% transfer three or more times. Moving to a one-transfer policy with no day pass was modeled as a part of the study (Scenario 6, above), and results in a 1.7% decrease in ridership, and a 6% increase in revenue.

### **Farebusters and Day Passes**

Eliminating Farebusters and replacing with a Day Pass results in a significant decrease in ridership (-2.9%) and a slight decrease in revenue (-0.1%). The decrease in revenue is because passengers are expected to shift to pass products (monthly or day pass) where less revenue is ultimately collected across the same or greater number of trips. There may be options to consider raising the farebuster price from \$1.60 to \$1.80 per ticket; or holding off on any changes until the fareboxes can be fully upgraded. The ridership appears to be very sensitive to this fare product.

### **Youth Fare Discussion**

For the past several years, there have been numerous inquiries as to whether the Agency should (or will ever) offer a discounted youth fare. Offering a youth discount is more common than not among transit agencies, and LAVTA is out of alignment in that sense. The study team modeled a youth fare discount of 50% discount, which results in an increase in ridership of 1.9% and a significant loss in revenue of over 14%. It should also be noted that many of the school tripper routes serving some of the schools in Pleasanton and Dublin do not have capacity for more students; additional buses would need to be deployed as overflow service to safely transport students, which could become a constraint with the fleet. In fiscal year 2017, LAVTA piloted two different student pass programs in Livermore. The following paragraphs describe the pilots:

Alameda County Measure BB Affordable Student Transit Pass: The first pass pilot is administered by Alameda County Transportation Commission (ACTC) and is funded through Measure BB. The Affordable Student Transit Pass Pilot (ASTPP) has been rolled out throughout the county in partnership with ACTC, numerous schools and schools districts, and the three

county bus operators (LAVTA, AC Transit, and Union City). In the Tri-Valley, the ASTPP includes two Livermore schools – East Avenue Middle and Livermore High. For the first year of the pilot, students who receive free or reduced-price lunches were given access to a free Wheels pass, and the remaining study body was offered 50% discount on a Wheels pass. The pass was administered quarterly, so students who were taking advantage of the discount had to pay \$120 a quarter. Ridership has been lower than expected, and feedback from students/parents and schools indicate that the cost remains to be a barrier for those who want to use the bus as an occasional option.

After comprehensive mid-year program evaluations were completed by Alameda County Transportation Commission (Attachment 3), it was recommended that, for the second year of the pilot (2017/2018), the pass model would be expanded to *free and universal pass* model: every student at the pilot schools would have access to a free yearly pass on Wheels. For the 2017/18 year, the pilot pass is also being converted from a flash student ID pass to Clipper® card, which will be administered by LAVTA. A shift to Clipper® will result in improved accuracy of data available for program evaluation. Additionally, the Alameda County Transportation Commission recently approved expanding the ASTPP to two additional schools for the second pilot year: Christensen Middle School and Del Valle Continuation High School in Livermore. This will bring the total number of students with access to a free Wheels pass to approximately 3,200 for the upcoming year.

Las Positas Easy Pass and Livermore Valley Charter Prep: The second pilot launched in fiscal year 2017 are Easy Pass pilots: The Las Positas College Easy Pass and the Livermore Valley Charter Prep (LVCP) Easy Pass. This is a LAVTA-sponsored pilot where free Wheels passes are available for all students enrolled in the 2016/17 academic year. Both passes are being administered as a student ID flash pass.

The Las Positas Easy Pass has resulted in ridership gains of over 75% from pre-COA levels at the College and currently there are nearly 450 trips taken per day on school day weekdays. Feedback from student riders is extremely positive. LAVTA staff has been developing a relationship with key members of the school administration and student body to facilitate a student vote on long-term funding within the next academic year. Accordingly, LAVTA staff has recommended funding the pilot one additional year through LAVTA's Low-Carbon Transit Operations (LCTOP) fund allocation of approximately \$144,000, as well as through \$25,000 from the Las Positas College student association. The pilot costs an estimated \$180,000 per year.

The LVCP pass has been less successful at an average use of 40 trips per day, and the school administration has not expressed an interest in funding the pass a second year.

### **Express Fare Discussion**

Many transit agencies offer a premium fare for express services that travel outside the base service area. An express fare would apply to LAVTA's Route 70X, which provides peak service on the I-680 corridor between Dublin/Pleasanton BART, Walnut Creek BART, and Pleasanton Hill BART. The fare study modeled an express fare of \$3.50 (from the current \$2 fare), which results in a ridership loss of 0.8% and an increase in fare revenue of 1.7%. A more modest

express fare of \$2.25 or \$2.50 may make more sense initially. It should be noted that there may be implications to the Agency's monthly pass policies (paper pass and Clipper) with moving to a higher express fare that will need to be considered.

**Demand Response Fare Increase:**

Staff is recommending that the paratransit fare increase to \$4.00 not be considered at this time. The paratransit fare increase will be considered as a part of the Tri-Valley Comprehensive Paratransit Assessment and weighed against other programmatic changes through the course of that study later in 2017.

**Preliminary Recommendations**

For discussion purposes, staff is recommending the Committee provide feedback on the following potential fare changes:

- 1) Increase in the Senior/Disabled Monthly Pass from \$18 to \$20 or \$25
- 2) Implementing a two-phased modification in the transfer policy: The first phase would include a shift to a one-transfer per two hour policy; the second phase would be to eliminate transfers and implement a cash day pass at \$4.00 when the fareboxes are upgraded.
- 3) Increasing the farebuster price to \$1.80.
- 4) Increasing the express fare on Route 70X to \$2.25 or \$2.50.

**Next Steps**

After receiving the Committee's feedback, staff will finalize draft recommendations and will prepare a staff report for the June Committee and July Board meetings. Staff will be presenting the draft fare recommendations to the Wheels Accessible Advisory Committee at their July 5th meeting.

**Recommendation**

None –Information Only

**Attachment:**

1. Resolution 27-2015 Fare Amounts and Categories
2. LAVTA Fare Study Draft Report
3. Peer Review Chart
4. ACTC Staff Report

**RESOLUTION NO. 10-2018**

**A RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY  
AUTHORIZING THE EXECUTIVE DIRECTOR TO EXECUTE A CONTRACT  
FOR THE PURCHASE OF TWENTY FASTFARE FAREBOXES WITH  
GENFARE, A DIVISION OF SPX CORPORATION**

**WHEREAS** the Livermore Amador Valley Transit Authority has identified a need to replace obsolete fareboxes on twenty 2007, 2009 and 2010 model-year buses; and

**WHEREAS** LAVTA has utilized SPX as its cash fare collection system since 1999 and a crucial part of this system is the fareboxes located on each bus; and

**WHEREAS** the SPX farebox model “Cents-A-Bill” LAVTA has utilized since 1999 is now obsolete; and

**WHEREAS** LAVTA’s 2016 and 2017 model-year buses were equipped with SPX’s Cents-A-Bill successor product known as FastFare; and

**WHEREAS** acquiring additional FastFare-model fareboxes from SPX on a sole-source basis to maintain consistency across LAVTA’s fleet has been deemed permissible under FTA third-party contracting guidance by LAVTA’s Legal Counsel; and

**WHEREAS**, this project was included in the FY 2018 budget that was approved by the Board of Directors of the Livermore Amador Valley Transit Authority;

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of the Livermore Amador Valley Transit Authority that the Executive Director is authorized to execute a contract with Genfare, A Division of SPX Corporation, for a not-to-exceed amount of \$365,487.35; and

**NOW, THEREFORE, BE IT FURTHER RESOLVED** that the Board of Directors authorizes the Executive Director to expend a 10% contingency amount not to exceed \$33,564.00.

**PASSED AND ADOPTED** by the governing body of the Livermore Amador Valley Transit Authority (LAVTA) this 5th day of March 2018.

BY \_\_\_\_\_  
Karla Brown, Chair

ATTEST \_\_\_\_\_  
Michael Tree, Executive Director