EXECUTIVE SUMMARY Reports and Presentations Item 6a Collier Area Transit's Fare Study

Objective:

To give an update on the Fare Study

Considerations:

Preliminary scenarios for modifications to the fare structure for Fixed Route and Paratransit were brought before the PTAC on January 16, 2018. The committee reviewed the seven (7) scenarios presented and recommended that four (4) of the seven be presented to the public to obtain their feedback. The selected scenarios were made public to the riders and the communities on January 30th, 2018 through Public Meetings.

Since that time staff and consultants have tabulated the survey results and conducted further analysis which is being brought back to the committee for consideration.

The Study includes the following recommendations:

Scenario 6 as the preferred scenario. This includes:

- Increase the Fixed Route fare by \$0.50, provide a free 90-minute transfer, and reduce the day pass to \$3 as part of a consolidated package to optimize use of the day pass while reducing possible ridership reduction associated with increasing the one-way fare.
- Eliminate the existing 7-day pass and replace with a 15-day pass at 50% of the cost of the 30-day pass. The 15-day pass would be priced at \$20 (\$10 for reduced fare) based on increasing the cost of the 30-day pass to \$40 as the next bullet describes.
- Increase the cost of the 30-day pass from \$35 to \$40 (\$20 for reduced fare).
- Increase the cost of the Marco Express single fare from \$2.50 to \$3 (\$1.50 for reduced fare) to bring it more in line with the cost of the Marco Express monthly pass.
- Explore the potential for sale of passes at third party vendors (such as grocery and convenience stores). This had considerable support by the public.
- Explore the potential to use a phone/computer app to purchase passes/fares. This concept was also desired by the public.
- Implement a policy to include college-age students and active/retired military personnel as eligible for reduced fare with valid ID.
- Provide a single ADA/TD fare of \$4 (\$1.25 for reduced fare), consistent with the increase to the one-way fixed-route fare to \$2.00 (\$1.00 for reduced fare).

Recommendation: To endorse the fare study recommendations to be forwarded to the Board of County Commissioners for their approval.

Attachments:

Fare Analysis Summary

| Prepared by: Omar De Leon, Senior Planner | Date: |
|-------------------------------------------|---------------|
| Approved by: Michelle Arnold, Director | Date: 2-16-18 |



To: Michelle Arnold/Omar Deleon/Matthew Liveringhouse, CAT

CC: Brandy Otero, Collier MPO

From: Elisabeth Schuck/Randy Farwell, Tindale Oliver

RE: Summary of Ridership and Revenue Impacts for Proposed Fare Changes

Date: December 6, 2017 (updated February 12, 2018)

Michelle, Matt, and Omar,

This memo discusses potential changes to the existing CAT fixed-route, ADA, and Transportation Disadvantaged (TD) fare structures and estimates ridership and revenue impacts to be considered moving forward. The initial update to this memorandum reflected the addition of Scenarios 6 and 7, which take into account a free 90-minute transfer along with other proposed fare changes.

This subsequent update reflects an additional scenario that provides for a single fare for both ADA and TD services. Also included are Tindale Oliver's recommended changes to CAT's fare structure based on the analysis completed and documented herein and public outreach conducted through intercept surveys and two public workshops in January 2018.

CAT Fixed-Route System

Based on the fare concepts discussed during our November 14th conference call, as well as subsequent discussions which added the two scenarios involving a free 90-minute transfer, we have developed and present seven fare change scenarios. Each scenario estimates the potential impacts to ridership and revenue. Each of the scenarios is designed to measure potential changes in ridership and revenue with the overall objective of defining a scenario that increases ridership, increases revenue, and does not disproportionately adversely impact low-income riders. The seven scenarios are described as follows:

Scenario 1

- 1.A) Eliminate transfers; no change to base fare price
- 1.B) Decrease the cost of a day pass from \$4 to \$3/reduced day pass from \$2 to \$1.50
- 1.C) Eliminate 7 day pass and replace with 15 day pass at 50% of 30 day pass price

Scenario 2 (same as Scenario 1 but no change cost of day pass)

- 2.A) Eliminate transfers; no change to base fare price
- 2.B) No change to the cost of a day pass
- 2.C) Eliminate 7 day pass and replace with 15 day pass at 50% of 30 day pass price

Scenario 3 (same as Scenario 2 but increase base fare/Marco Express fares)

- 3.A) Eliminate transfers
- 3.B) No change to the cost of a day pass



- 3.C) Eliminate 7 day pass and replace with 15 day pass at 50% of 30 day pass price
- 3.D) Increase base fare to \$2/reduced base fare to \$1
- 3.E) Increase Marco Express base fare to \$3/reduced ME base fare to \$1.50

Scenario 4 (same as Scenario 1 but reduce cost of day pass)

- 4.A) Eliminate transfers
- 4.B) Decrease the cost of a day pass from \$4 to \$3/reduced day pass from \$2 to \$1.50
- 4.C) Eliminate 7 day pass and replace with 15 day pass at 50% of 30 day pass price
- 4.D) Increase base fare to \$2/reduced base fare to \$1
- 4.E) Increase Marco Express base fare to \$3/reduced Marco Express base fare to \$1.50

Scenario 5 (same as Scenario 4 but increase cost of the 30 day pass)

- 5.A) Eliminate transfers
- 5.B) Decrease the cost of a day pass from \$4 to \$3/reduced day pass from \$2 to \$1.50
- 5.C) Eliminate 7 day pass and replace with 15 day pass at 50% of 30 day pass price
- 5.D) Increase base fare to \$2/reduced base fare to \$1
- 5.E) Increase Marco Express base fare to \$3/reduced ME base fare to \$1.50
- 5.F) Increase 30 day pass fare to \$40/reduced 30 day pass to \$20

Scenario 6 (same as Scenario 5 but allows for a free 90-minute transfer)

- 6.A) Free 90-minute transfer to a different route
- 6.B) Decrease the cost of a day pass from \$4 to \$3/reduced day pass from \$2 to \$1.50
- 6.C) Eliminate 7 day pass and replace with 15 day pass at 50% of 30 day pass price
- 6.D) Increase base fare to \$2/reduced base fare to \$1
- 6.E) Increase Marco Express base fare to \$3/reduced ME base fare to \$1.50
- 6.F) Increase 30 day pass fare to \$40/reduced 30 day pass to \$20

Scenario 7 (same as Scenario 6 but no increase to cost of the day pass)

- 7.A) Free 90-minute transfer to a different route
- 7.B) No change to the cost of a day pass
- 7.C) Eliminate 7 day pass and replace with 15 day pass at 50% of 30 day pass price
- 7.D) Increase base fare to \$2/reduced base fare to \$1
- 7.E) Increase Marco Express base fare to \$3/reduced ME base fare to \$1.50
- 7.F) Increase 30 day pass fare to \$40/reduced 30 day pass to \$20

Table 1 compares the proposed changes to each fare type under each of the seven scenarios to the existing fare structure. Proposed changes to fares under each scenario are bolded.



Table 1: Summary of Existing and Proposed Fare Structure Change Scenarios

| Fare Category | | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 | Scenario 5 | Scenario 6 | Scenario 7 |
|-----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Public Workshop Scenario | AUL CHIK | Scenario A | N/A | | Scenario B | Scenario C | Scenario D | N/A |
| Full Fixed Route Fare | \$1.50 | \$1.50 | \$1.50 | \$2.00 | \$2.00 | \$2.00 | \$2.00 | \$2.00 |
| Reduced Fixed-Route Fare | \$0.75 | \$0.75 | \$0.75 | \$1.00 | \$1.00 | \$1.00 | \$1.00 | \$1.00 |
| Transfer | \$0.75 | N/A | N/A | N/A | N/A | N/A | Free 90 min | Free 90 min |
| Reduced Transfer | \$0.35 | N/A | N/A | N/A | N/A | N/A | Free 90 min | Free 90 min |
| Children | Age 5 & Under Free | Age 5 & Under Free | Age 5 & Under Free |
| Day Pass | \$4.00 | \$3.00 | \$4.00 | \$4.00 | \$3.00 | \$3.00 | \$3.00 | \$4.00 |
| Reduced Day Pass | \$2.00 | \$1.50 | \$2.00 | \$2.00 | \$1.50 | \$1.50 | \$1.50 | \$2.00 |
| 7 Day Pass | \$15.00 | N/A |
| Reduced 7 Day Pass | \$7.50 | N/A |
| 15 Day Pass (new) | N/A | \$18.00 | \$18.00 | \$18.00 | \$18.00 | \$20.00 | \$20.00 | \$20.00 |
| Reduced 15 Day Pass (new) | N/A | \$9.00 | \$9.00 | \$9.00 | \$9.00 | \$10.00 | \$10.00 | \$10.00 |
| 30 Day Pass | \$35.00 | \$35.00 | \$35.00 | \$35.00 | \$35.00 | \$40.00 | \$40.00 | \$40.00 |
| Reduced 30 Day Pass | \$17.50 | \$17.50 | \$17.50 | \$17.50 | \$17.50 | \$20.00 | \$20.00 | \$20.00 |
| Marco Express Single Fare | \$2.50 | \$2.50 | \$2.50 | \$3.00 | \$3.00 | \$3.00 | \$3.00 | \$3.00 |
| Reduced Marco Express Single Fare | \$1.20 | \$1.20 | \$1.20 | \$1.50 | \$1.50 | \$1.50 | \$1.50 | \$1.50 |
| Marco Express 30 Day Pass | \$70.00 | \$70.00 | \$70.00 | \$70.00 | \$70.00 | \$70.00 | \$70.00 | \$70.00 |
| Reduced Marco Express 30 Day Pass | \$35.00 | \$35.00 | \$35.00 | \$35.00 | \$35.00 | \$35.00 | \$35.00 | \$35.00 |



As mentioned during our last call, Dr. Kamp estimated an elasticity of -0.4, or for every \$0.10 of fare increase, the ridership is anticipated to initially decrease by 4%. Over time it has been observed that the initial decrease in ridership following a fare increase tends to subsequently trend upward over time as customers adjust to price changes. While the elasticity calculates the potential ridership loss or increase from a fare change, it does not account for the potential shift in riders to another fare category. To account for both possibilities, a range in potential ridership and revenue impacts have been calculated for each scenario listed above.

The low end of the range assumes that the full impact of measured elasticity is applied to the ridership and those riders will initially leave the system, resulting in greater impacts to annual ridership and revenue estimates. The high end of the range assumes that either the existing ridership will be maintained or only a portion of the riders will leave the system due to elasticity impacts, depending on the scenario/fare category, and the rest of the riders impacted will shift to other fare categories based on the existing/proposed fare changes. The high end assumptions produce less impacts to ridership and therefore higher annual revenue estimates. The actual ridership and revenue impacts are likely somewhere in the middle of the ranges presented, as assumptions must be made regarding ridership behavior for each scenario. Important in our assumptions is the recognition that mobility is largely an essential commodity for most riders, especially those on the low end of the income spectrum. Thus by providing a range of scenarios that attempt to counter increased costs in certain fare categories with reduced costs in alternative fare categories, we are attempting to provide attractive and reasonable options for riders other than to simply stop using the CAT services.

Tables 2 and 3 illustrate the ridership and revenue impacts for the low-end range (elasticity fully applied) and the high-end range of ridership and revenue estimates (elasticity partially applied), respectively. It should be noted that the ridership and revenue figures in the tables below only represent the fare types affected by each scenario and do not reflect system-wide ridership and revenue figures.

As shown below, Scenarios 1 and 2 are anticipated to produce less revenue than the base year (FY 2016), primarily due to minimal proposed changes to the fare structure. Scenarios 2, 4, and 5, which propose to eliminate transfers, are projected to generate additional revenue ranging from approximately \$41,000-\$166,000 in Scenario 3, \$21,000-\$141,000 in Scenario 4, and \$37,500-\$179,000 in Scenario 5. The higher revenue generated in Scenarios 3, 4 and 5 is primarily influenced by the increase in the base fare, which carries the highest percentage of riders (44% of ridership, including full and reduced fare customers in FY 16).



Table 2:Low-End Range of Fixed-Route Ridership and Revenue Estimates (Elasticity Fully Applied Resulting in Ridership Loss)

| | Base: F | / 2016 | Estimated Ridership and Revenue | | | | | | |
|------------|-----------|-----------|---------------------------------|-------------------------|-----------|-------------------------|--|--|--|
| Scenario | Ridership | Revenue | Ridership | Difference from Base | Revenue | Difference from Base | | | |
| Scenario 1 | 891,606 | \$873,694 | 869,679 | (21,927) | \$816,874 | (\$56,820) | | | |
| Scenario 2 | 891,606 | \$873,694 | 864,755 | (26,851) | \$846,616 | (\$27,078) | | | |
| Scenario 3 | 911,114 | \$912,120 | 820,470 | (90,644) | \$953,077 | \$40,957 | | | |
| Scenario 4 | 911,114 | \$912,120 | 830,880 | (80,234) | \$933,170 | \$21,050 | | | |
| Scenario 5 | 911,114 | \$912,120 | 816,194 | (94,920) | \$956,624 | \$44,504 | | | |
| Scenario 6 | 911,114 | \$912,120 | 845,489 | (65,625) | \$980,135 | \$68,015 | | | |
| Scenario 7 | 911,114 | \$912,120 | 840,109 | (71,005) | \$991,510 | \$79,390 | | | |

Table 3: High-End Range of Ridership and Revenue Estimates (Elasticity Applied with Estimate of Likely Shift of Riders to More Favorable Fare Options)

| | Base: F | Y 2016 | Estimated Ridership and Revenue | | | | | | |
|------------|-----------|-----------|---------------------------------|-------------------------|-------------|----------------------|--|--|--|
| Scenario | Ridership | Revenue | Ridership | Difference from Base | Revenue | Difference from Base | | | |
| Scenario 1 | 891,606 | \$873,694 | 872,052 | (19,554) | \$818,804 | (\$54,890) | | | |
| Scenario 2 | 891,606 | \$873,694 | 868,513 | (23,093) | \$850,979 | (\$22,715) | | | |
| Scenario 3 | 911,114 | \$912,120 | 914,652 | 3,538 | \$1,078,138 | \$166,018 | | | |
| Scenario 4 | 911,114 | \$912,120 | 925,853 | 14,739 | \$1,052,875 | \$140,754 | | | |
| Scenario 5 | 911,114 | \$912,120 | 932,816 | 21,702 | \$1,089,134 | \$177,013 | | | |
| Scenario 6 | 911,114 | \$912,120 | 964,792 | 53,678 | \$1,120,682 | \$208,562 | | | |
| Scenario 7 | 911,114 | \$912,120 | 959,842 | 48,728 | \$1,142,987 | \$230,867 | | | |

Scenarios 6 and 7, which propose providing a free 90-minute transfer to another route along with other proposed fare changes, generate the highest revenue of all the scenarios. In FY 16 approximately \$25,000 was generated by full and reduced transfer fares. If the current fare structure remains unchanged and a 90-minute free transfer is allowed, then it is assumed the \$25,000 annual transfer revenue would disappear as most (if not all) riders make a transfer to another route within a 90-minute window.

If a free 90-minute transfer is offered along with other fare changes, it is estimated that more revenue will be generated, as the free transfer encourages riders to remain in the highest cost-per trip base fare category rather than shifting to another fare options. Under Scenarios 6 and 7, while the transfer revenue disappears more riders remain in the base fare category, which has a higher average cost per trip than a day pass. This generates more revenue than if those riders shift to a pass option. Therefore, it is estimated that Scenario 6 could generate up to an additional 53,678 annual trips and \$68,000-\$209,000 annually in revenue over the base year (or \$23,000-\$31,000 more than Scenario 5). Scenario 7 could generate up to an additional 48,728 annual trips and \$79,000-\$231,000 annually over the base year (or \$35,000-\$54,000 more than Scenario 5, as the cost of a day pass is not reduced).



As noted in previous discussions, there are other potential issues associated with providing a transfer (either free or paid) that should be considered. These include longer boarding times, higher cash counting costs (for paid transfers), and higher probability of transfer/fare abuse.

ADA System

As the ADA fare cannot exceed twice the base fixed-route fare, there are limited options for changing the ADA fare structure. In the fixed-route scenarios previously presented, the base fixed-route fare is proposed to increase from \$1.50 to \$2.00 in Scenarios 3, 4, and 5. This would allow for an increase from the current ADA fare of \$3.00 to a maximum new fare of \$4.00. Collier County also offers a reduced ADA fare of \$1.00 ADA if certain household income guidelines are met.

Ridership and revenue impacts assume the regular ADA fare will increase to \$4.00 if the base fare increases to \$2.00, and the low-income qualifying ADA fare will increase from \$1.00 to \$1.25. While a low income fare of \$1.33 would equate to the same percentage increase as the regular ADA fare (33%), a fare of \$1.25 is assumed for ease of fare collection. The low-end of the range assumes that elasticity is fully applied and that 100% of the riders "lost" from elasticity (9,536) due to the increase in fare will no longer use the ADA system. The high-end of the range assumes the existing ridership will be maintained since there is no other fare category for riders to shift into, as there is in the fixed-route system.

Table 4 presents ridership and revenue impacts resulting from this fare change scenario. If elasticity is applied and the ridership decreases as estimated, there is projected to be 9,536 fewer ADA trips and an additional \$29,000 generated annually; if ridership is maintained, the additional annual revenue generated is estimated to increase by \$62,500.

Table 4:\$4.00 Regular ADA Fare/\$1.25 Low Income ADA Fare Ridership and Revenue Estimates

| | Base: F | Y 2016 | Estimated R | idership and R | evenue | |
|---------------------------------|-----------|-----------|-------------|-------------------------|-----------|----------------------|
| Scenario | Ridership | Revenue | Ridership | Difference from Base | Revenue | Difference from Base |
| Elasticity Applied to Ridership | 75,961 | \$192,470 | 66,425 | (9,536) | \$221,699 | \$29,229 |
| Maintain Existing Ridership | 75,961 | \$192,470 | 75,961 | 0 | \$254,952 | \$62,482 |

Note: No variance between the estimated revenue and actual revenue collected for FY 2016 was observed, so no adjustment to the estimated revenue is made.

TD System

Similar to the ADA fare, ridership and revenue impacts for the TD fares were estimated for two scenarios. The low-end of the range assumes that elasticity is fully applied and that 100% of the riders "lost" from elasticity due to the increase in fare will no longer use the TD system. The high-end of the range assumes the existing ridership will be maintained as the fare a TD user pays is strictly based on their household income and thus the rider cannot choose another TD fare category.



Table 5 presents ridership and revenue impacts if increasing the TD fare across all income categories by \$0.50. If elasticity is applied and the ridership decreases as estimated (by -3,010), there is projected to be an additional \$5,000 generated annually. If ridership is maintained, the additional annual revenue generated is estimated to increase by \$11,000.

Table 5: Ridership and Revenue Estimates for \$0.50 Increase to TD Fare

| | Base: F | Y 2016 | Esti | mated Ridership and Revenue | | | |
|---------------------------------|-----------|----------|-----------|-----------------------------|----------|-------------------------|--|
| TD Category/Scenario | Ridership | Revenue | Ridership | Difference from Base | Revenue | Difference from Base | |
| Elasticity Applied to Ridership | | | | | | | |
| At or Under Poverty Level | 11,361 | \$10,130 | 9,089 | (2,272) | \$12,156 | \$2,026 | |
| 101% to 150% of Poverty Level | 7,308 | \$19,549 | 6,821 | (487) | \$21,286 | \$1,738 | |
| 151% to 225% of Poverty Level | 2,962 | \$10,564 | 2,814 | (148) | \$11,291 | \$726 | |
| 226% to 337% of Poverty Level | 1,294 | \$5,769 | 1,242 | (52) | \$6,092 | \$323 | |
| +337% of Poverty Level | 1,761 | \$10,992 | 1,711 | (50) | \$11,440 | \$449 | |
| Total - with Elasticity Applied | 24,686 | \$57,004 | 21,676 | (3,010) | \$62,266 | \$5,262 | |
| Maintain Existing Ridership | | | | | | | |
| At or Under Poverty Level | 11,361 | \$10,130 | 11,361 | 0 | \$15,195 | \$5,065 | |
| 101% to 150% of Poverty Level | 7,308 | \$19,549 | 7,308 | 0 | \$22,807 | \$3,258 | |
| 151% to 225% of Poverty Level | 2,962 | \$10,564 | 2,962 | 0 | \$11,885 | \$1,321 | |
| 226% to 337% of Poverty Level | 1,294 | \$5,769 | 1,294 | 0 | \$6,346 | \$577 | |
| +337% of Poverty Level | 1,761 | \$10,992 | 1,761 | 0 | \$11,777 | \$785 | |
| Total - with Elasticity Applied | 24,686 | \$57,004 | 24,686 | 0 | \$68,010 | \$11,006 | |

Note: Variance between estimated revenue and actual revenue collected for FY 2016 (89%) applied to estimated revenue under the scenario to be conservative.

Table 6 presents ridership and revenue impacts assuming TD fares are increased across all income categories by \$1.00. If elasticity is applied and the ridership decreases as estimated (by -6,019), there is projected to be an additional \$8,000 generated annually. If ridership is maintained, the additional annual revenue generated is estimated to increase by \$22,000.



Table 6: Ridership and Revenue Estimates for \$1.00 Increase to TD Fare

| | Base: F | Y 2016 | Esti | mated Ridersh | ip and Reve | nue |
|---------------------------------|-------------------------------|----------|-----------|-------------------------|-------------|-------------------------|
| TD Category/Scenario | Ridership | Revenue | Ridership | Difference from Base | Revenue | Difference from Base |
| Elasticity Applied to Ridership | in Stipa to Islamina Angeliji | | | | | |
| At or Under Poverty Level | 11,361 | \$10,130 | 6,817 | (4,544) | \$12,156 | \$2,026 |
| 101% to 150% of Poverty Level | 7,308 | \$19,549 | 6,334 | (974) | \$22,590 | \$3,041 |
| 151% to 225% of Poverty Level | 2,962 | \$10,564 | 2,666 | (296) | \$11,885 | \$1,321 |
| 226% to 337% of Poverty Level | 1,294 | \$5,769 | 1,190 | (104) | \$6,369 | \$600 |
| +337% of Poverty Level | 1,761 | \$10,992 | 1,660 | (101) | \$11,844 | \$852 |
| Total - with Elasticity Applied | 24,686 | \$57,004 | 18,667 | (6,019) | \$64,844 | \$7,840 |
| Maintain Existing Ridership | | | | | | |
| At or Under Poverty Level | 11,361 | \$10,130 | 11,361 | 0 | \$20,260 | \$10,130 |
| 101% to 150% of Poverty Level | 7,308 | \$19,549 | 7,308 | 0 | \$26,065 | \$6,516 |
| 151% to 225% of Poverty Level | 2,962 | \$10,564 | 2,962 | 0 | \$13,206 | \$2,641 |
| 226% to 337% of Poverty Level | 1,294 | \$5,769 | 1,294 | 0 | \$6,923 | \$1,154 |
| +337% of Poverty Level | 1,761 | \$10,992 | 1,761 | 0 | \$12,562 | \$1,570 |
| Total - with Elasticity Applied | 24,686 | \$57,004 | 24,686 | 0 | \$79,016 | \$22,012 |

Note: Variance between estimated revenue and actual revenue collected for FY 2016 (89%) applied to estimated revenue under the scenario to be conservative.

Single Fare for TD and ADA Services

This section documents the potential ridership and revenue impacts if a single TD and ADA fare is implemented, replacing the income-based TD fare scale. For this analysis, two scenarios were completed. The first assumes a single TD/ADA fare of \$3, equivalent to the current ADA fare with qualifying low-income riders paying the existing reduced fare of \$1. Qualifying low-income riders include those who currently pay the reduced ADA fare of \$1 or who are at or under the poverty level and qualify for the current \$1 TD fare category. The second scenario assumes the single TD/ADA fare is increased to \$4 (or reduced fare of \$1.25), should the one-way fixed-route fare be increased to \$2.

Table 7 presents the TD ridership and revenue impacts assuming a flat ADA/TD fare of \$3 (or \$1 for qualified low income individuals). Since the TD program is qualification-based program, no assumption is made that a reduced fare for the higher income categories (currently paying \$4 or more) will increase ridership. Based on these estimates, there is projected to be a decrease of \$11,000 annually due to income loss from TD riders that would pay a lower fare than they currently pay. There are not anticipated to be any ADA ridership or revenue impacts as no changes to the current ADA fare are assumed in this scenario.



Table 7: Ridership and Revenue Estimates for \$3 ADA/TD Fare (\$1 Reduced Fare)

| Maintain Existing Ridership | | | | | | |
|---------------------------------|--------|----------|--------|---|----------|------------|
| At or Under Poverty Level | 11,361 | \$10,130 | 11,361 | 0 | \$10,130 | \$0 |
| 101% to 150% of Poverty Level | 7,308 | \$19,549 | 7,308 | 0 | \$19,549 | \$0 |
| 151% to 225% of Poverty Level | 2,962 | \$10,564 | 2,962 | 0 | \$7,923 | (\$2,641) |
| 226% to 337% of Poverty Level | 1,294 | \$5,769 | 1,294 | 0 | \$3,461 | (\$2,308) |
| +337% of Poverty Level | 1,761 | \$10,992 | 1,761 | 0 | \$4,711 | (\$6,281) |
| Total - with Elasticity Applied | 24,686 | \$57,004 | 24,686 | 0 | \$45,774 | (\$11,230) |

Table 8 presents the TD ridership and revenue impacts assuming a flat ADA/TD fare of \$4 (or \$1.25 for qualified low income individuals). Similar to the first scenario, no assumption is made that a reduced fare for the higher income categories (currently paying \$5 or more) will increase ridership. However, elasticity is applied in the instances where the fare increases as there could be an associated potential ridership decrease. Based on these estimates, if elasticity is applied to fare categories where riders currently pay a lower fare and the ridership decreases as estimated (by -2,111), there is projected to be a \$1,500 annual loss. If ridership is maintained, the additional annual revenue generated is estimated to increase by \$3,200.

Table 8: Ridership and Revenue Estimates for \$4 ADA/TD Fare (\$1.25 Reduced Fare)

| | Base: F | Y 2016 | Esti | mated Ridersh | ip and Reve | nue |
|---------------------------------|-----------|----------|-----------|-------------------------|-------------|-------------------------|
| TD Category/Scenario | Ridership | Revenue | Ridership | Difference from Base | Revenue | Difference from Base |
| Elasticity Applied to Ridership | | | | | | |
| At or Under Poverty Level | 11,361 | \$10,130 | 10,225 | (1,136) | \$11,396 | \$1,266 |
| 101% to 150% of Poverty Level | 7,308 | \$19,549 | 6,334 | (974) | \$22,590 | \$3,041 |
| 151% to 225% of Poverty Level | 2,962 | \$10,564 | 2,962 | 0 | \$10,564 | \$0 |
| 226% to 337% of Poverty Level | 1,294 | \$5,769 | 1,294 | 0 | \$4,615 | (\$1,154) |
| +337% of Poverty Level | 1,761 | \$10,992 | 1,761 | 0 | \$6,281 | (\$4,711) |
| Total - with Elasticity Applied | 24,686 | \$57,004 | 22,576 | (2,111) | \$55,447 | (\$1,557) |
| Maintain Existing Ridership | | | | | | * |
| At or Under Poverty Level | 11,361 | \$10,130 | 11,361 | 0 | \$12,663 | \$2,533 |
| 101% to 150% of Poverty Level | 7,308 | \$19,549 | 7,308 | 0 | \$26,065 | \$6,516 |
| 151% to 225% of Poverty Level | 2,962 | \$10,564 | 2,962 | 0 | \$10,564 | \$0 |
| 226% to 337% of Poverty Level | 1,294 | \$5,769 | 1,294 | 0 | \$4,615 | (\$1,154) |
| +337% of Poverty Level | 1,761 | \$10,992 | 1,761 | 0 | \$6,281 | (\$4,711) |
| Total - with Elasticity Applied | 24,686 | \$57,004 | 24,686 | 0 | \$60,188 | \$3,184 |

However, in this scenario the ADA fare is also proposed to increase. Taking into account the proposed ridership and revenue impacts of a \$4 ADA fare previously presented in Table 4, the overall net impact of a flat \$4 ADA/TD fare is estimated at \$31,500 generated annually if elasticity is applied. If ridership is maintained, the additional annual revenue generated is estimated to increase by \$65,700.



Definition of Household for Low Income Fare Qualification

Reduced ADA and TD fares are available for riders who qualify based on their household income and proof of income is required. Currently, acceptable types of proof of income are pension benefit statements, unemployment benefits, or current paystubs. However, these documents all tie to the individual's income rather than their household income. This may allow individuals to qualify for reduced fares based on their individual income when their household income is, in fact, high enough to support paying the full fare. At the same time, it should be recognized that individuals may live in a physical household with other family members, but still maintain separate finances. One example of this is an older parent living with their child, but still independent financially and supported by their own retirement/social security income.

As part of this fare study, it is recommended that CAT maintain the requirement that qualification for the reduced fare be tied to a person's household income (rather than individual income). However, the documentation used to demonstrate qualification should prove that the household income meets the required threshold. Therefore, it is recommended that the proof of income be tied to a person's federal income tax return from the prior year (or state filing if from outside Florida). This will ensure that the most current annual household income figure is used to determine eligibility of the person and will reduce potential abuse of eligibility if the documentation provided does not reflect the true household income. At the same time, this will ensure that a person physically living in a household, but is otherwise financially independent as may still qualify for a reduced fare so long as they have filed their own taxes reflecting their own "household" income. CAT should also adopt a policy to consider other proof of income types on a case-by-case basis for individuals who cannot provide a federal income tax form or to document that their employment status has changed since their last tax statement, now qualifying them for the reduced fare.

Recommendations

Based on the analysis completed herein and the public outreach conducted through intercept surveys and public workshops in January, the following recommendations are made for consideration by CAT and Collier MPO staff.

- Present Scenario 6 as the preferred scenario (this is Scenario D presented at the public workshop). This includes:
 - o Increase the fixed-route fare to \$2 (\$1 reduced), which has support if a 90-minute free transfer were implemented, and the cost of the day pass was reduced to \$3, and the additional revenue went to enhance the services provided. Therefore, it is recommended to increase the fixed route fare by \$0.50, provide a free 90-minute transfer, and reduce the day pass to \$3 as part of a consolidated package to optimize use of the day pass while reducing possible ridership reduction associated with increasing the one-way fare.



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- Eliminate the existing 7 day pass and replace with a 15 day pass at 50% of the cost of the 30 day pass. This had support from the public as the 30 day pass is too expensive for many riders and the 7 day pass cost per trip is considerably higher than the other passes and generates the lowest ridership and utilization of all pass types. In this case, the 15 day pass would be priced at \$20 (\$10 reduced) based on increasing the cost of the 30 day pass to \$40 as the next bullet describes.
- Increase the cost of the 30 day pass from \$35 to \$40 (\$20 reduced). Input from the public did not indicate that this would be a considerable hardship for existing riders and it will put the cost per trip for the monthly pass more in line with the cost per trip for the other passes offered, while still providing the lowest cost per trip for all of CAT's fare options.
- Increase the cost of the Marco Express single fare from \$2.50 to \$3 (\$1.50 reduced) to bring it more in line with the cost of the Marco Express monthly pass.
- Explore the potential for sale of passes at third party vendors (such as grocery and convenience stores) as this had considerable support by the public.
- Explore the potential to use a phone/computer app to purchase passes/fares; this concept was also desired by the public.
- Implement a policy to include college-age students and active/retired military personnel as eligible for reduced fare with valid ID.
- Provide a single ADA/TD fare of \$4 (\$1.25 reduced), consistent with the increase to the one-way fixed-route fare to \$2.00 (\$1.00 reduced). While this is estimated to result in less revenue than maintaining the existing TD fare hierarchy, it is expected to produce higher revenues than the existing fares and simplifies the requirements of fare collection and monitoring household income to verify the appropriate TD fare category. Public input indicated that an increase to the ADA/TD fare would produce hardships for some riders. However, additional revenues are needed to support maintaining existing service levels. The proposed increase allows for a modest increase for persons qualifying for the reduce rate and eliminates higher fares paid by TD customers in the existing top income brackets, reducing the number of riders impacted by the proposed fare change.