Corpus Christi Regional Transportation Authority
Quadrennial Performance Audit
FY 2013 – FY 2016
ADMINISTRATIVE DRAFT

February 2017
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1 Introduction

EXECUTIVE SUMMARY

Texas Transportation Code Section 451.454 requires each metropolitan rapid transit authority created under the chapter to conduct a performance audit at least once every four years. The audit is intended to be a review of the agency’s operations with specific performance measurements and test compliance with statutory requirements of Texas Transportation Code Chapter 451. The Corpus Christi Regional Transportation Authority (CCRTA) secured the services of Nelson\Nygaard Consulting Associates, Inc. to conduct the 2013-2016 Quadrennial Review. No audit findings arose from this review.

The audit team found CCRTA to be a very well run organization that is working within the statutes of the State of Texas to provide a quality public transportation service to the residents of Nueces and San Patricio Counties. In particular, when compared to peer agencies CCRTA operates an efficient and effective operation with one divergence related to fares. The average fare per passenger and fare recovery ratio are areas where CCRTA statistics are lower than peer organizations. However, given the longstanding nature of this trend it is apparent that the trend represents an intentional policy decision of the organization designed to ensure that higher fares do not create a barrier to mobility for the community, particularly for individuals in households that are economically challenged while they strive to work and attend school.

There are five recommendations made to generally improve on aspects of performance and statutory compliance. The recommendations are numbered sequentially based on where they occur in the text of the report and are made to assist CCRTA in improving their financial position and to further improve on a quality operation and administration.

Recommendation 1- The agency has intentionally maintained lower fares and, therefore, lower farebox recovery ratios, as a matter of policy. The intentional policy decision of the organization is designed to ensure that higher fares do not create an economic barrier to mobility for the community. At the same time CCRTA has, in this review period, taken on an obligation to repay bonds with fare revenues (see Statutory Review, Section 4) and the agency has moved to deploy financial reserves to improve accessibility and service and therefore, intentionally lowered reserve balances. These indicate a need to carefully re-consider fare policy. The agency should give attention to the policy and trend over the next two years and consider actions that will improve fare revenue and cost recovery while maintaining a balance to ensure that fares do not become a barrier to mobility.

Recommendation 2- CCRTA’s standard of on-time performance is 85%, which when compared to the on time performance standards of most transit agencies, is at the higher end of service quality. It is important to recognize that on-time performance is a direct indication of the usability of the system. Riders are highly dependent on CCRTA and maintenance of reliability necessary to transfer between routes in the system is of paramount importance to daily riders.
While on-time performance remains above the system standard, the recent declines in on-time performance warrant attention. The agency should first investigate and understand the root causes of the decline. It has been suggested that the multitude of area road construction projects have played a role in declining on-time performance. That is likely the case, however, the larger question is, what part of the decline is accounted for by road construction friction and other factors and are there any strategies that could be deployed to reduce those influences? The agency should investigate the potential to implement strategies that focus on improving fixed route on-time performance with the specific goals of first, stemming further erosion of service reliability and second, restoring reliability to levels to above 90%.

**Recommendation 3** - Coupled with **Recommendation 1** to consider fixed route fares and the recovery ratio, it is recommended that paratransit fares also be included in the fare review. It must be recognized that paratransit is a high value commodity and that pricing is one tool that can send important messages to consumers about that high value.

**Recommendation 4** - It is noteworthy that paratransit demand has been increasing while fixed route demand has been declining. This is a common circumstance and concern among transit agencies in Texas and throughout the US. As many other agencies have also done, the trend suggests a need for an overall examination of paratransit demand and policies intended to manage that demand. Paratransit ridership for CCRTA seems to be higher proportionally, when compared to the service area population of the peer group. Given the costs of providing paratransit, this trend should be explored in greater depth to ascertain if there are factors in CCRTA's service area which drive paratransit use higher or if there are policy differences with other areas that, if addressed, might assist CCRTA in managing paratransit demand.

**Recommendation 5** - To ensure future audits are conducted only on completed and accepted National Transit Database reports (NTD) and audited financial records, it is recommended that CCRTA’s next Performance Audit, to file in 2021, focus on Fiscal Years 2016, 2017, 2018 and 2019. While that will repeat the audit of 2016 activity, the action will ensure a review of accepted NTD reports and audited financial records for FY-2016 which were not available for this audit. The same reports for FY-2019 will available with the performance review conducted in the latter part of 2020 and filed in early 2021. This move is within the statutory requirements and will assist CCRTA in terms of timing of the performance audit and the required filing date.

Section 5 of this report contains the complete text of an Administrative Audit that was conducted in FY 2016 in response to internal security issues dealing with fraudulent invoices that resulted in the theft of CCRTA funds during FY-2015. The audit focused on internal controls and agency processes and makes recommendations to further secure CCRTA against further instances of fraud.
AGENCY OVERVIEW

Located in Corpus Christi, Texas, the Corpus Christi Regional Transportation Authority (CCRTA) provides transportation services within Nueces County and San Patricio County. CCRTA service covers an area of 838 square miles and includes the cities of Agua Dulce, Bishop, Corpus Christi, Driscoll, Port Aransas, Robstown, Gregory, and San Patricio as well as unincorporated areas of both Nueces County and San Patricio County. According to the 2010 census, the combined population of areas served by CCRTA is 342,412.

CCRTA was established by referendum on August 10, 1985 and commenced operations on January 1, 1986. Fixed route service operated by CCRTA in 2016 included 32 scheduled bus routes consisting of 24 local routes, 5 peak-hour express routes, 1 seasonal route, and 2 downtown shuttle routes. CCRTA also offers “B-Line” service, which provides demand response transportation to persons with disabilities. CCRTA contracts with MV Transportation, Inc. to operate a portion of both fixed route and demand response services.

CCRTA is governed by an eleven-member Board of Directors, and includes three members appointed by Nueces County Commissioner's Court, five members appointed by the City of Corpus Christi, two members appointed by the Small City Mayors’ Committee, and the eleventh member is the chairperson elected by the other ten appointed board members. CCRTA employs approximately 200 employees directly and an additional 100 employees through contracted services.
2 SYSTEM PERFORMANCE REVIEW

This section reviews and analyzes CCRTA performance for FY 2013-2016 (January 1, 2013-December 31, 2016) according to performance indicators as required under the Texas Transportation Code Chapter 451. The indicators and definitions are shown below in Figure 1. The primary data sources used for this review are NTD reports supplied by CCRTA as well as NTD datasets acquired directly from the iNTD database. These data sources are supplemented by reports distributed by the CCRTA for Administration, Finance, Operation and Development Committee meetings, which are available through the CCRTA website. It must be noted that CCRTA’s NTD reports for FY-2016 were not completed, audited, or accepted by the FTA at the time of this review. It is possible that subsequent review and audit will change some of data used to compile this report. However, the reports were balanced in total to CCRTA’s publically reported financial data for FY 2016, so subsequent modifications are highly unlikely to yield materially different results and/or conclusions and recommendations.

Figure 1 Performance Indicators and Definitions

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Indicator Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Cost per Passenger</td>
<td>The overall average cost of transporting each passenger is computed by dividing the authority's annual operating cost by the passenger trips for the same period.</td>
</tr>
<tr>
<td>Operating Cost per Vehicle Revenue Mile</td>
<td>The average cost of operating the system for each mile a bus travels in revenue service is computed by dividing the annual operating cost by the number of miles traveled by authority revenue vehicles while in revenue service for the same period.</td>
</tr>
<tr>
<td>Operating Cost per Vehicle Revenue Hour</td>
<td>The average cost of the system to operate a bus for one hour in revenue service is computed by dividing the annual operating cost by the total of scheduled hours that the authority revenue vehicles are in revenue service for the same period.</td>
</tr>
<tr>
<td>Sales and Use Tax Receipts per Passenger</td>
<td>The average annual sales tax revenues received for each passenger is computed by dividing the annual receipts from authority sales and use taxes by passenger trips for the same period.</td>
</tr>
<tr>
<td>Fare Recovery Rate</td>
<td>The percentage of operating costs covered by passenger fare revenues is computed by dividing the annual revenue, including fares, tokens, passes, tickets, and route guarantees, provided by passengers and sponsors of passengers of revenue vehicles, by the operating cost for the same period. Charter revenue, interest income, advertising income, and other operating income are excluded from revenue provided by passengers and sponsors of passengers.</td>
</tr>
</tbody>
</table>
Average Vehicle Occupancy

The average number of passengers on system buses at any one time is computed by dividing the annual passenger miles by the number of miles traveled by authority revenue vehicles while in revenue service for the same period. The annual passenger miles are computed by multiplying the annual passenger trips and the average distance ridden by passengers during the same period.

On-Time Performance

The percent of buses that arrive at assigned bus stops on schedule is computed by determining an annual percentage of revenue vehicle trips of revenue vehicles that depart from selected locations at a time not earlier than the published departure time and not later than five minutes after that published time.

Number of accidents per 100,000 miles

This reflects the system's average safety record and is computed by multiplying the annual number of accidents by 100,000 and dividing the product by the number of miles for all service, including charter and nonrevenue service, directly operated by the authority for the same period.

Number of Miles Between Mechanical Road Calls

This reflects the performance of the system's vehicle maintenance program and is computed by dividing the annual number of miles for all service directly operated by an authority, including charter and nonrevenue service, by the number of mechanical road calls for the same period.

When possible, fixed route and demand response service data for performance indicators are reviewed separately. This section first reviews fixed route service performance, followed by demand response service performance. On-time performance data is only available for fixed route service, and is therefore not included in the performance review for demand response service.

Data for sales and use tax receipts per passenger, number of accidents per 100,000 miles, and number of miles between mechanical road calls are not reported separately for fixed route and demand response service. These three indicators are, therefore, reviewed for combined fixed-route and demand response at the end of this chapter.
FIXED ROUTE PERFORMANCE REVIEW

This section reviews and analyzes CCRTA fixed-route service provision and efficiency performance for fiscal years 2013 through 2016 (January 1, 2013-December 31, 2016).

Operating Cost per Passenger

Operating cost per passenger data for fixed route service are shown in Figure 2. Operating cost per passenger for CCRTA fixed-route service increased each year from 2013 to 2016, reaching a four-year high of $4.45 per passenger in 2016. This trend of rising operating costs per passenger reflects both steadily increasing operating costs, decreasing ridership on fixed-route service over the period of observation, and in 2016 a reallocation of a small amount of agency overhead due to the cessation of the Harbor Ferry in FY 2016, as well as the addition of the operating costs of the Staples Street Customer Service Center. Taking the latter two factors into consideration the FY 2016 increase in operating cost per passenger is well within expected values.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$3.31</td>
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</tr>
<tr>
<td>2014</td>
<td>$3.77</td>
<td>13.9%</td>
</tr>
<tr>
<td>2015</td>
<td>$4.05</td>
<td>7.4%</td>
</tr>
<tr>
<td>2016</td>
<td>$4.45</td>
<td>9.7%</td>
</tr>
</tbody>
</table>


Operating Cost per Vehicle Revenue Mile

Operating cost per vehicle revenue mile data are shown in Figure 3. Operating cost per vehicle mile increased slightly each year, with a total increase of $0.31 per vehicle revenue mile from 2013 to 2016. This trend indicates that increases in operating costs have slightly outpaced increases in system revenue miles, indicating that service efficiency has remained relatively stable.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$6.28</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>$6.49</td>
<td>3.2%</td>
</tr>
<tr>
<td>2015</td>
<td>$6.50</td>
<td>0.1%</td>
</tr>
<tr>
<td>2016</td>
<td>$6.59</td>
<td>1.4%</td>
</tr>
</tbody>
</table>


Operating Cost per Vehicle Revenue Hour

Operating cost per vehicle revenue hour data are shown in Figure 4. After 1% decrease in from 2013 to 2014, operating cost per vehicle revenue hour increased slightly each year from 2014 to 2016. Compared to operating cost per vehicle revenue mile and operating cost per passenger,
operating cost per vehicle revenue hour was the most stable over the period of observation, with a net increase of only 2.4% from 2013 to 2016. This indicates close attention to management of unit costs and is one of the factors most associated with management cost control, a very good result.

**Figure 4 Operating Cost per Vehicle Revenue Hour**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$84.32</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>$83.49</td>
<td>-1.0%</td>
</tr>
<tr>
<td>2015</td>
<td>$85.53</td>
<td>2.4%</td>
</tr>
<tr>
<td>2016</td>
<td>$86.61</td>
<td>1.3%</td>
</tr>
</tbody>
</table>


**Fare Recovery Rate**

Fare recovery rate data are shown in Figure 5. The fare recovery rate indicates the percentage of operating costs that are covered by passenger fares for the review period. From 2013 to 2016, the rate of costs recovered by fares for fixed route service declined each year for a net decrease of 0.86 percentage points. This trend indicates that increases in operational costs that have outpaced passenger fare revenue growth for the same period. The rate of decline in the fare recovery rate over the period of observation has been modest. Fare levels were not adjusted over the course of this quadrennial review nor over the course of the prior quadrennial review, a period of at least eight years within no adjustment in passenger fares. However, the longstanding nature of this trend represents an intentional policy decision of CCRTA designed to ensure that higher fares do not create a barrier to mobility for the community, particularly for individuals in households that are economically challenged while they strive to work and attend school.

**Figure 5 Fare Recovery Rate**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>7.55%</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>7.22%</td>
<td>-0.34%</td>
</tr>
<tr>
<td>2015</td>
<td>6.97%</td>
<td>-0.24%</td>
</tr>
<tr>
<td>2016</td>
<td>6.69%</td>
<td>-0.28%</td>
</tr>
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</table>


**Average Vehicle Occupancy**

Average vehicle occupancy data for fixed route service are shown in Figure 6. This metric is a useful indicator of service productivity. After a large 26.5% decrease from 2013 and 2014, the average vehicle occupancy for fixed route service continued to decline slightly from 2014 to 2016. Declining average vehicle occupancy is reflected in increased operating costs per passenger and fare recovery rates over the same period.

It should be noted that data for annual passenger miles traveled is not available for CCRTA service in 2016. For 2016, an estimate of annual passenger miles is calculated as the average passenger miles per trip for years 2013 through 2015 multiplied by the number of 2016 passenger trips. Average vehicle occupancy for 2016 is calculated by dividing this estimate by the number of
2016 vehicle revenue miles. In transit systems where there have not been substantial changes in the types of services offered nor significant shifts in the transit market, the average passenger-miles per trip tends to be a stable number. Therefore, the methodology used to arrive at the FY 2016 performance indicator is well within the expected range of precision.

Figure 6  Average Vehicle Occupancy

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>8.10</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>5.95</td>
<td>-26.5%</td>
</tr>
<tr>
<td>2015</td>
<td>5.85</td>
<td>-1.7%</td>
</tr>
<tr>
<td>2016</td>
<td>5.62</td>
<td>-3.9%</td>
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</table>


On-Time Performance

On-time performance data for fixed-route service are shown in Figure 7. After remaining steady at 92.5% from 2013 to 2014, the percentage of trips that departed less than 5 minutes later than scheduled fell slightly from 2014 to 2015 and again from 2015 to 2016. Although the percentage of on-time trips remained higher than the 2016 agency target of 85% for all four years of the study period, the trend could indicates there are operational issues that are influencing on-time performance. Indeed, it has been suggested that the multitude of area road construction projects have played a role in declining on-time performance. That is likely the case, however, the larger question is, what part of the decline is accounted for by road construction friction and other factors and are there any strategies that could be deployed to reduce those influences?

Figure 7  On-Time Performance

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>92.5%</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>92.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2015</td>
<td>90.9%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>2016</td>
<td>88.9%</td>
<td>-2.0%</td>
</tr>
</tbody>
</table>

Fixed Route Performance Summary

Over the four-year period from 2013 to 2016, increasing trends in cost of service indicators reflect a moderate increase in total operating cost for fixed route service and a decrease in system ridership and vehicle occupancy. Fewer riders and increased costs have led to lower passenger fare revenues and less financially efficient fixed route service. At the same time the unit costs of providing service have increased only modestly indicating active management of agency operating costs.

Recommendation 1

The agency has intentionally maintained lower fares and, therefore, lower farebox recovery ratios, as a matter of policy. The intentional policy decision of the organization is designed to ensure that higher fares do not create an economic barrier to mobility for the community. At the same time CCRTA has, in this review period, taken on an obligation to repay bonds with fare revenues (see Statutory Review, Section 4) and the agency has moved to deploy financial reserves to improve accessibility and service and therefore, intentionally lowered reserve balances. These indicate a need to carefully re-consider fare policy. The agency should give attention to the policy and trend over the next two years and consider actions that will improve fare revenue and cost recovery while maintaining a balance to ensure that fares do not become a barrier to mobility.

Although on-time performance remained above agency goals for all four years of the period of study, a closer look at reasons for declining on-time performance would help prevent service from falling below the target performance rate in future years. Eroding on-time performance impacts reliability for riders.

Recommendation 2

CCRTA’s standard of on-time performance is 85%, which when compared to the on time performance standards of most other transit agencies, is at the higher end of service quality. It is important to recognize that on-time performance is a direct indication of the usability of the system. Riders are highly dependent on CCRTA and maintenance of reliability necessary to transfer between routes in the system is of paramount importance to daily riders. While on-time performance remains above the system standard, the recent declines in on-time performance warrant attention. The agency should first investigate and understand the root causes of the decline. It has been suggested that the multitude of area road construction projects have played a role in declining on-time performance. That is likely the case, however, the larger question is, what part of the decline is accounted for by road construction friction and other factors and are there any strategies that could be deployed to reduce those influences? The agency should investigate the potential to implement strategies that focus on improving fixed route on-time performance with the specific goals of first, stemming further erosion of service reliability and second, restoring reliability to levels to above 90%.
DEMAND RESPONSE PERFORMANCE REVIEW

This section analyzes CCRTA demand response performance for FY 2013-2016 (January 1, 2013-December 31, 2016) according to performance indicators as required under the Texas Transportation Code.

Operating Cost per Passenger

Operating cost per passenger data for demand response service are shown in Figure 8. After a very small increase from 2013 to 2014 and a moderate decrease from 2014 to 2015, the operating cost per passenger for demand response service rose by 10.7% to $30.39 in 2016. This relatively large increase in operating cost per passenger represents an increase of 13.4% from 2015 to 2016, which outpaced a 2.5% increase in ridership over the same period. In addition in FY-2016 a reallocation of a small amount of agency overhead due to the cessation of the Harbor Ferry in FY 2016, as well as the addition of the operating costs of the Staples Street Customer Service Center added an allocation of cost to demand response service. Taking the latter two factors into consideration the FY 2016 increase in operating cost per passenger is well within expected values. However, it must also be recognized that demand response service is costly and is a resource that must be managed carefully. Unlike fixed route service where added passengers will reduce the cost per boarding, in paratransit service added ridership increases total operating costs on nearly a one to one basis.

Figure 8 Operating Cost per Passenger

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$28.73</td>
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<tr>
<td>2014</td>
<td>$28.94</td>
<td>0.7%</td>
</tr>
<tr>
<td>2015</td>
<td>$27.46</td>
<td>-5.1%</td>
</tr>
<tr>
<td>2016</td>
<td>$30.39</td>
<td>10.7%</td>
</tr>
</tbody>
</table>


Operating Cost per Vehicle Revenue Mile

Operating costs per vehicle revenue mile data for demand response service are shown in Figure 9. Operating costs decreased by 2.2% from 2013 to 2014 and again by 7.7% from 2014 to 2015, reaching a four-year low of $4.12 in 2015. Despite a 7.7% increase from 2015 to 2016, the overall change in operating cost per vehicle revenue mile over the period of observation from 2013 to 2016 was a net decrease of 2.73%.

Figure 9 Operating Cost per Vehicle Revenue Mile

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$4.56</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>$4.46</td>
<td>-2.2%</td>
</tr>
<tr>
<td>2015</td>
<td>$4.12</td>
<td>-7.7%</td>
</tr>
<tr>
<td>2016</td>
<td>$4.43</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

Operating Cost per Vehicle Revenue Hour

Operating cost per vehicle revenue hour data for demand response service are shown in Figure 10. After decreasing by 6.2% from 2013 to 2014 and again by 5.5% from 2014 to 2015, reaching a four-year low of $70.44 in 2015. Despite a 9.4% increase from 2015 to 2016, the overall change in operating cost per vehicle revenue hour over the period of observation from 2013 to 2016 was a decrease of 3%. A result reflecting active management of operating costs.

Table 10 Operating Cost per Vehicle Revenue Hour

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$79.43</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>$74.53</td>
<td>-6.2%</td>
</tr>
<tr>
<td>2015</td>
<td>$70.44</td>
<td>-5.5%</td>
</tr>
<tr>
<td>2016</td>
<td>$77.05</td>
<td>9.4%</td>
</tr>
</tbody>
</table>


Fare Recovery Rate

Fare recovery rate data for demand response service are shown in Figure 11. After a moderate decline from 2013 to 2014, the fare recovery rate increased slightly from 2014 to 2015 before falling to a four-year low of 2.78% in 2016. The overall decrease in the fare recovery rate from 2013 to 2016 is indicative of steadily increasing operating costs and declining vehicle occupancy rates over the same period. The rate of decline in the fare recovery rate over the period of observation has been modest. The agency has intentionally maintained lower fares and, therefore, lower farebox recovery ratios, as a matter of policy. The intentional policy decision of the organization is designed to ensure that higher fares do not create an economic barrier to mobility for the community. At the same time CCRTA has, in this review period, taken on an obligation to repay bonds with fare revenues (see Statutory Review, Section 4) and the agency has moved to deploy financial reserves to improve accessibility and service and therefore, intentionally lowered reserve balances. Fare levels were not adjusted over the course of this quadrennial review nor over the course of the prior quadrennial review, a period of at least eight years within no adjustment in passenger fares. It must be recognized that paratransit is a high value commodity and that pricing is one tool that can send important messages to consumers about that high value.

Table 11 Fare Recovery Rate

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>3.23%</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>2.94%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>2015</td>
<td>3.04%</td>
<td>0.1%</td>
</tr>
<tr>
<td>2016</td>
<td>2.78%</td>
<td>-0.3%</td>
</tr>
</tbody>
</table>

Average Vehicle Occupancy

Average vehicle occupancy data for demand response service are shown in Figure 12. After decreasing slightly from 2013 to 2014 and increasing slightly from 2014 to 2015, average vehicle occupancy again declined by 6.2% from 2015 to 2016.

It should be noted that data for annual passenger miles traveled is not available for CCRTA service in 2016. For 2016, an estimate of annual passenger miles is calculated as the average passenger miles per trip for years 2013 through 2015 multiplied by the number of 2016 passenger trips. Average vehicle occupancy for 2016 is calculated by dividing this estimate by the number of 2016 vehicle revenue miles.

![Figure 12 Average Vehicle Occupancy](image)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>1.31</td>
<td>-3.0%</td>
</tr>
<tr>
<td>2015</td>
<td>1.35</td>
<td>2.9%</td>
</tr>
<tr>
<td>2016</td>
<td>1.27</td>
<td>-6.2%</td>
</tr>
</tbody>
</table>


Demand Response Performance Summary

As with Fixed Route service, fare recovery for demand response service is low and has continued to decline over the course of the review period. Given the high value of this service, a careful review of paratransit fares is warranted in concert with fixed route fares as pointed out in Recommendation 1.

**Recommendation 3**

Coupled with **Recommendation 1** to consider fixed route fares and the recovery ratio, it is recommended that paratransit fares also be included in the fare review. It must be recognized that paratransit is a high value commodity and that pricing is one tool that can send important messages to consumers about that high value.

While increases in the operating costs of demand response service were generally in line with increases in vehicle revenue hours and vehicle revenue miles, these cost and service increases outpaced productivity growth over the period of observation from 2013 to 2016. This imbalance between service expansion and ridership growth may indicate that riders are taking longer average trips, which would require CCRTA vehicles to travel farther and operate for more hours while servicing the same number of passengers.

The observed decline in average vehicle occupancy also suggests that there may be an opportunity to improve trip planning for demand response service. Combining more passenger trips would allow demand response vehicles to serve more passengers while traveling fewer miles and operating for fewer hours.

Measures of operating efficiency all showed decreasing costs relative to service provision for the first three years of the study followed by a moderate increase from 2015 to 2016. A downward trend is desirable for these indicators, because it represents lower costs relative to the amount of
service provided. Monitoring cost of service ratios in the coming years will help identify whether this spike represents as an isolated incident or whether it indicates a reversal of the downward observed through years 2013 to 2015. The change from 2015 to 2016 may also be partially reflective of the changes in the makeup of CCRTA costs with the retirement of the ferry service and addition of Staples Center.
COMBINED SERVICE PERFORMANCE INDICATORS

Sales and Use Tax Receipts per Passenger

Sales and use tax receipts per passenger data are shown in Figure 13. Allocations for the City Streets Program were subtracted from total sales and use tax funds before calculating sales and use tax receipts per passenger. After a moderate increase from $4.56 in 2013 to $5.02 in 2014 and a modest decrease to $4.68 in 2015, sales and use tax receipts per passenger rose to a four-year high of $5.15 in 2016. However, it should be noted this index is influenced by passenger counts, as passenger totals decline, the sales tax per passenger increases. The total net sales tax, after subtracting the revenues allocated to the City Streets Program, reached a high of $29.3 million in FY 2014. Even though sales tax per passenger is higher in FY 2016, the absolute value of net sales tax is $28.1 million, 4.1% below the FY 2014 high point for this review period.

![Figure 13 Sales and Use Tax Receipts per Passenger](image)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$4.56</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>$5.02</td>
<td>9.9%</td>
</tr>
<tr>
<td>2015</td>
<td>$4.68</td>
<td>-6.7%</td>
</tr>
<tr>
<td>2016</td>
<td>$5.15</td>
<td>10.0%</td>
</tr>
</tbody>
</table>


Number of Accidents per 100,000 Miles

Data for the number of accidents per 100,000 miles are shown in Figure 14. The number of accidents per 100,000 includes all service vehicle collisions, regardless of fault. The accident rate for CCRTA service fell to a four-year low in 2014 at 2.09 accidents per 100,000 miles, before rising to a four-year high in 2015 at 2.66 accidents per 100,000 miles. In 2016 the number of accidents fell by over 18%, for a net decrease from 2013 to 2016 of 6.3%. While this overall decline in accident rate indicates improved safety performance, the accident rate remained above the agency goal of 2 accidents per 100,000 miles for all four years of the study period.

![Figure 14 Number of Accidents per 100,000 Miles](image)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2.32</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>2.09</td>
<td>-9.6%</td>
</tr>
<tr>
<td>2015</td>
<td>2.66</td>
<td>27.1%</td>
</tr>
<tr>
<td>2016</td>
<td>2.17</td>
<td>-18.4%</td>
</tr>
</tbody>
</table>


Number of Miles Between Mechanical Road Calls

Data for the number of miles between mechanical road calls are shown in Figure 15. For this indicator, upward trends in miles between mechanical road calls represent improvements in the effectiveness of maintenance and service reliability. The number of miles between mechanical
road calls increased for each year of the study period from 2013 to 2016, with a net increase of over 28% for combined fixed route and demand response service.

In 2014, CCRTA increased the agency goal for miles between mechanical road calls, from 4,000 to 6,500 miles between road calls. Since this change, service has outperformed the agency goal for all three years from 2014 to 2016.

**Figure 15 Number of Miles Between Mechanical Road Calls**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Performance</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>6,351.8</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>6,765.7</td>
<td>6.5%</td>
</tr>
<tr>
<td>2015</td>
<td>7,440.2</td>
<td>10.0%</td>
</tr>
<tr>
<td>2016</td>
<td>8,166.5</td>
<td>9.8%</td>
</tr>
</tbody>
</table>


**Combined Service Performance Summary**

Trends in both accidents per 100,000 miles and number of miles between mechanical road calls represent improving performance for CCRTA service over the four-year period from 2013 to 2016. In particular, the steady increase in miles between mechanical road calls above and beyond agency targets represents strong service vehicle reliability, which will help reduce costs and improve on-time performance and reliability system-wide.
3 PEER SYSTEM REVIEW

Peer system reviews compare transit agencies with similar characteristics along various metrics in order to better understand strengths and opportunities.

This peer review compares characteristics of CCRTA with five other transit systems in Texas, Arkansas, and Florida: Central Arkansas Transit Authority (CATA or Rock Region Metro) in Little Rock; El Metro in Laredo; Escambia County Area Transit (ECAT) in Pensacola; Hillsborough Area Rapid Transit Authority (HART) in Tampa; and Sun Metro in El Paso. Figure 16 shows the location of each peer system, along with that of the CCRTA.

Peer systems were chosen based on similar characteristics, such as primary city population, ridership, geographic location, and system type. For reference, Figure 17 lists basic information about service areas and ridership for the CCRTA as well as the five peer agencies.
Figure 17  Peer Review Agencies

<table>
<thead>
<tr>
<th>System Name</th>
<th>Location</th>
<th>Service Area Population</th>
<th>Service Area Square Miles</th>
<th>Service Area Population Density (Persons per Sq. Mi.)</th>
<th>Fixed Route Annual Passenger Trips (Unlinked)</th>
<th>Fixed Route Annual Revenue Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCRTA</td>
<td>Corpus Christi, TX</td>
<td>348,892</td>
<td>841</td>
<td>415</td>
<td>5,472,836</td>
<td>259,377</td>
</tr>
<tr>
<td>CATA</td>
<td>Little Rock, AR</td>
<td>164,972</td>
<td>97</td>
<td>1,701</td>
<td>2,573,938</td>
<td>174,303</td>
</tr>
<tr>
<td>ECAT</td>
<td>Pensacola, FL</td>
<td>341,765</td>
<td>236</td>
<td>1,467</td>
<td>1,494,210</td>
<td>86,387</td>
</tr>
<tr>
<td>El Metro</td>
<td>Laredo, TX</td>
<td>236,091</td>
<td>89</td>
<td>4,002</td>
<td>3,097,759</td>
<td>149,464</td>
</tr>
<tr>
<td>HART</td>
<td>Tampa, FL</td>
<td>875,598</td>
<td>243</td>
<td>3,434</td>
<td>15,003,289</td>
<td>646,087</td>
</tr>
<tr>
<td>Sun Metro</td>
<td>El Paso, TX</td>
<td>803,086</td>
<td>251</td>
<td>3,200</td>
<td>13,148,051</td>
<td>578,396</td>
</tr>
</tbody>
</table>

Source: NTD 2015 Transit Agency Profiles

For the sake of clarity, the peer review will consider fixed route and demand responsive services separately. The peer review is broken down along those lines and will address cost and utilization metrics for each service. To provide historical context, the peer review uses a five-year span from FY 2011-2015. Data for FY 2016 is not yet available for peer agencies.

Because on time performance, accident rates, and mechanical road call data is not reported to the National Transit Database (NTD), the peer review does not consider these metrics.

Also, the operating cost statistics for HART, Sun Metro, and CATA include depreciation costs. In order to provide a better direct comparison between CCRTA and the peer group, the operating costs figures in this chapter for CCRTA also include depreciation costs. The operating costs presented in Chapter 2 do not include depreciation costs, so the operating statistics in Chapter 2 and Chapter 3 are not directly comparable. This difference affects Figures 24, 26, 29, 35, 37, 39, and 40.


**Fixed Route Peer Review**

Figure 18 provides an overview of FY 2015 CCRTA and peer performance in the five NTD categories: Revenue Hours per Year, Revenue Miles per Year, Peak Vehicles Available for Service, Total Annual Unlinked Trips, and Total Operating Expenses. The data in this section includes fixed-route bus information only.

**Figure 18 Fixed Route Snapshot (2015)**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Primary City/County Served</th>
<th>Revenue Hours</th>
<th>Revenue Miles</th>
<th>Vehicles Operated in Max Service</th>
<th>Annual Pax Trips</th>
<th>Total Operating Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corpus Christi Regional Transportation Authority</td>
<td>Corpus Christi</td>
<td>259,377</td>
<td>3,414,445</td>
<td>66</td>
<td>5,472,836</td>
<td>$ 22,183,902</td>
</tr>
<tr>
<td>Central Arkansas Transit Authority</td>
<td>North Little Rock</td>
<td>174,303</td>
<td>2,434,063</td>
<td>49</td>
<td>2,573,938</td>
<td>$ 14,002,229</td>
</tr>
<tr>
<td>Escambia County Area Transit</td>
<td>Pensacola</td>
<td>86,387</td>
<td>1,482,981</td>
<td>33</td>
<td>1,494,210</td>
<td>$ 6,762,013</td>
</tr>
<tr>
<td>Laredo Transit Management, Inc.</td>
<td>Laredo</td>
<td>149,464</td>
<td>1,684,067</td>
<td>35</td>
<td>3,097,759</td>
<td>$ 11,873,788</td>
</tr>
<tr>
<td>Hillsborough Area Regional Transit Authority</td>
<td>Tampa</td>
<td>646,087</td>
<td>8,078,544</td>
<td>162</td>
<td>15,003,289</td>
<td>$ 65,926,063</td>
</tr>
<tr>
<td>Mass Transit Department - City of El Paso</td>
<td>El Paso</td>
<td>578,396</td>
<td>7,399,703</td>
<td>124</td>
<td>13,148,051</td>
<td>$ 58,586,227</td>
</tr>
<tr>
<td><strong>Peer Group Average</strong></td>
<td></td>
<td>326,927</td>
<td>2,936,976</td>
<td>81</td>
<td>7,063,449</td>
<td>$ 31,430,064</td>
</tr>
<tr>
<td><strong>CCRTA % of Average</strong></td>
<td></td>
<td>79%</td>
<td>81%</td>
<td>82%</td>
<td>77%</td>
<td>71%</td>
</tr>
</tbody>
</table>

Source: NTD Transit Agency Profiles

As Figure 18 indicates, there is a great deal of variation within the peer group in terms of cost, amount of annual service, and annual boardings. However, CCRTA is comparable to the peer group average in terms of size and cost of service. CCRTA is below the peer group average for all other metrics. This indicates that it provides less service than its peers but does so in a cost-efficient manner.

**Comparison to Peer Service, Usage, and Total Cost Trends**

Transit agencies use key performance indicators such as Annual Revenue Hours, Annual Revenue Miles, Vehicles Available for Peak Service, Annual Passenger Boardings, and Total Modal Expenses to evaluate service performance and efficiency. The graphs below display the yearly averages for the peer group for these different indicators and compare them to the NTD yearly performance data for CCRTA.
Revenue Hours by Year

Figure 19 displays the data for average annual revenue hours. CCRTA consistently operates with fewer revenue hours than the peer average, but annual revenue hours have been increasing between FY 2011 and FY 2015. CCRTA’s revenue hours have increased at a faster rate than the peer group average for this metric.

Figure 19  Revenue Hours

Source: NTD Transit Agency Profiles

Revenue Miles by Year

Figure 20 shows the average annual revenue miles for the peer group and compares it to CCRTA’s annual revenue miles. CCRTA operates with consistently fewer revenue miles per year than its peers. However, the number of revenue miles has increased proportionally to the number of revenue hours operated in each fiscal year.
Figure 20  Revenue Miles

![Revenue Mile Chart]

Source: NTD Transit Agency Profiles

**Annual Peak Vehicles**

Figure 21 shows the number of vehicles operated in maximum service by year. Once again, CCRTA operates fewer vehicles than its peers, but the number of vehicles has increased slightly over the study period.

Figure 21  Vehicles Operated in Maximum Service

![Vehicles Operated Chart]

Source: NTD Transit Agency Profiles
Annual Passenger Boardings

Figure 22 shows the annual passenger boardings for the peer group and CCRTA. Ridership has remained relatively constant, although there was a slight dip in ridership between FY 2014 and FY 2015. Peer group ridership also fell between FY 2012 and FY 2013 while CCRTA ridership did not noticeably decline.

Figure 22  Annual Passenger Boardings

![Annual Passenger Boardings](image)

Source: NTD Transit Agency Profiles

Total Operating Expenses by Year

Figure 23 displays the total operating expenses for fixed route service by year. Although both the operating expenses for the peer group and CCRTA have been increasing steadily since FY 2011, the rate of increase is higher for the peer group than for CCRTA. This indicates that CCRTA has been successful in maintaining the cost-effectiveness of its service even as service expands over time. Operating expenses for CCRTA were well below the peer group average for all years in the study period.
Figure 23  Total Operating Expenses

Mean = $28,192,381

Source: NTD Transit Agency Profiles
Efficiency, Cost-Effectiveness, and Productivity

The following indicators use the annual data discussed previously and convert it to hourly data. This is a common industry practice that helps to evaluate the efficiency, cost-effectiveness, and productivity of fixed-route transit service.

Operating Cost per Revenue Hour

Operating cost per hour of revenue service is the single most widely used measure in the transit industry for efficient delivery of service. Figure 24 compares CCRTA’s operating cost per revenue hour to the peer group average for each year.

CCRTA consistently outperformed its peers and keeps operating costs per revenue hours at or below the peer group average for each fiscal year. Dramatic increases in operating costs for Sun Metro and HART in FY 2014 and FY 2015 skewed the operating cost per revenue hour upwards dramatically. CCRTA also experienced a slight increase in operating costs per revenue hours in FY 2015, but costs are still below the FY 2012 high of $85.81 per hour.

Figure 24  Operating Cost per Revenue Hour

Source: NTD Transit Agency Profiles

Passengers per Revenue Hour

When measuring productivity, passengers (or boardings) per revenue service hour is the single most widely used measure. Figure 25 compares CCRTA’s performance in this key area over time to its peers. In terms of productivity, CCRTA slightly outperformed its peers between FY 2011 and FY 2014. However, CCRTA’s passenger boardings per revenue hour have declined steadily over the study period. This led to a reversal of the trend in FY 2015, where the peer group outperformed CCRTA in boardings per revenue hour.
Operating Cost per Boarding

Operating cost per boarding is another widely used measure, combining elements of the previous two measures in order to assess cost-effectiveness, or cost-benefit ratio in terms of passengers served. Figure 26 compares CCRTA’s performance to its peers for this key metric.

Operating cost per passenger trended upwards for both the peer group and CCRTA in every year except FY 2013, where CCRTA’s operating cost per passenger declined and the peer group’s continued to increase. This trend was reversed in the following year, when CCRTA’s cost per boarding increased dramatically with a change of 14%.
Figure 26  Operating Cost per Passenger

Source: NTD Transit Agency Profiles

**Average Fare per Passenger**

Average fare per boarding—for all passengers, paying fares at all levels—is essentially a measure of policy, not performance. It is calculated by dividing the annual passenger trips by the annual passenger fare funds. It does not include other funding sources like sales tax or agreements with local universities or municipalities. Figure 27 compares CCRTA’s performance in this area to that of its peers.

Overall, the average fare for passenger has remained substantially lower than that of its peer agencies. However, the average fare for CCRTA has trended upwards over time, with a substantial jump in average fare from $0.24 to $0.48 from FY 2011 to FY 2012. While beyond the scope of this review this change is likely more reflective of a change in revenue accounting practices for CCRTA rather than a real change as there was no actual change in the fares charged to customers between those two years. That inconsistency aside, the average fare per passenger has remained substantially lower than the peer group average for each year in the study period.
Operating Subsidy per Passenger

Subsidy per passenger, the cost per boarding minus average fare, is another key measure of cost-effectiveness. It is calculated by subtracting fare revenues from operating costs and dividing that figure by the number of annual boardings. Figure 28 compares CCRTA’s performance in this area over time to its peers.

CCRTA has consistently operated with higher operating subsidies than the peer group. Although both groups trended upwards, the gap between the two remained constant. This figure is inversely proportional to the average fare per passenger.
Figure 28  Operating Subsidy per Passenger

![Operating Subsidy per Passenger Chart]

Source: NTD Transit Agency Profiles

**Farebox Recovery**

Figure 29 compares CCRTA farebox recovery to its peers over time. It is calculated by dividing annual operating expenses by farebox revenues. While farebox recovery is a simple metric, it is an outcome of numerous factors: efficiency of service delivery, productivity of service, and fare policy.

As can be seen in Figure 29, CCRTA has a much lower farebox recovery rate than its peers. Additionally, CCRTA’s farebox recovery has declined since FY 2011, dropping from 7% to 5%. In comparison, the peer group average was approximately 20% for the study period. Most transit agencies usually aim to collect between 15% and 30% of operating expenses through farebox revenue, so 5% farebox recovery is an important deviation from industry standard. However, the deviation indicates that CCRTA has intentionally chosen to keep fares lower for passengers by policy, understanding the economic profile for riders is such that higher fares become a barrier to access and mobility. At the same time CCRTA should continuously review the policy and direction to ensure the organization is financially sustainable while offering community members mobility without a significant financial barrier. See Recommendation 1.
Fixed Route Summary

In general, CCRTA performs well when compared to peer agencies. The system is smaller than the peer group average, but it operates with a high level of efficiency. Fares are low, so farebox recovery rates are below the peer group average. This results in high operating subsidies per passenger. However, the system remains productive, which creates a relatively efficient and cost-effective operation.

Notable performance trends included:

- **Service**: CCRTA operates fewer revenue hours and fewer revenue miles using fewer vehicles than the peer group average. However, service levels have been expanding slightly during the study period.

- **Ridership Productivity**: For most of the study period, CCRTA served more riders per hour than its peer group. However, CCRTA ridership per revenue hour declined throughout the study period. In FY 2015, the peer group outperformed CCRTA in terms of ridership productivity.

- **Operating Expenses**: CCRTA has lower operating expenses than the peer group. However, operating expense per passenger has increased steadily, but reasonably since FY 2011.
DEMAND RESPONSE PEER REVIEW

This section provides a peer comparison for CCRTA’s demand response services in key performance areas. For the sake of consistency, the same peers are used for the demand response peer review that were used in the fixed route peer review. Performance areas that are considered in this review include service efficiency, cost-effectiveness, and productivity. All indicators and metrics are based on data from the FY 2011-FY 2015 NTD reports. The peer agencies and basic operating statistics for FY 2015 are displayed in Figure 30.

The paratransit peer review features two subsections. In the first subsection (Service, Usage, and Total Cost), CCRTA is compared to its peers in five major NTD categories:

- Revenue hours (annual)
- Revenue miles (annual)
- Vehicles available for maximum service (referred to here as “peak vehicles”)
- Unlinked trips (annual)
- Operating expenses (annual)

In the second subsection (Efficiency, Cost-Effectiveness and Productivity), CCRTA is compared to its peers on the basis of widely used metrics that can be derived from NTD data:

- Operating cost per revenue hour
- Passengers per revenue hour (i.e., unlinked trips or boardings per revenue hour)
- Operating cost per passenger
- Average fare per passenger
- Operating subsidy per passenger
- Farebox recovery ratio (or fare revenues as a percentage of operating costs)

Service, Usage, and Total Cost

This section provides an overview of FY 2015 CCRTA and peer performance in the five NTD categories: Revenue Hours, Revenue Miles, Vehicles Available for Peak Service, Boarding Passengers, and Total Operating Expenses. CCRTA operates more demand response service than most of its peers with far fewer vehicles than comparably sized systems.
### Figure 30  Demand Response FY 2015 Snapshot

<table>
<thead>
<tr>
<th>Agency</th>
<th>Primary City/County Served</th>
<th>Revenue Hours</th>
<th>Revenue Miles</th>
<th>Vehicles Operated in Max Service</th>
<th>Annual Pax Trips</th>
<th>Total Operating Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corpus Christi Regional Transportation Authority</td>
<td>Corpus Christi</td>
<td>78,850</td>
<td>1,349,727</td>
<td>28</td>
<td>198,652</td>
<td>$5,480,777</td>
</tr>
<tr>
<td>Central Arkansas Transit Authority</td>
<td>North Little Rock</td>
<td>32,778</td>
<td>603,335</td>
<td>20</td>
<td>74,207</td>
<td>$1,854,266</td>
</tr>
<tr>
<td>Escambia County Area Transit</td>
<td>Pensacola</td>
<td>59,651</td>
<td>855,486</td>
<td>28</td>
<td>90,789</td>
<td>$2,563,882</td>
</tr>
<tr>
<td>Laredo Transit Management, Inc.</td>
<td>Laredo</td>
<td>26,878</td>
<td>252,583</td>
<td>17</td>
<td>45,819</td>
<td>$2,389,147</td>
</tr>
<tr>
<td>Hillsborough Area Regional Transit Authority</td>
<td>Tampa</td>
<td>93,469</td>
<td>1,387,827</td>
<td>36</td>
<td>158,088</td>
<td>$4,656,056</td>
</tr>
<tr>
<td>Mass Transit Department - City of El Paso</td>
<td>El Paso</td>
<td>137,976</td>
<td>2,419,708</td>
<td>63</td>
<td>301,649</td>
<td>$8,767,684</td>
</tr>
</tbody>
</table>

|                      | Average                     | 70,150        | 1,103,788     | 33                               | 134,110          | $4,046,207              |
|                      | CCRTA % of Average          | 112%          | 122%          | 85%                              | 148%             | 135%                    |

Source: NTD Transit Agency Profiles

### Annual Revenue Hours

Figure 31 shows the annual average revenue hours for the peer agencies and compares the yearly average to CCRTA. Peer group revenue hours trended upwards at a faster rate than CCRTA, leading to a narrowing of the gap between the two. However, CCRTA consistently provided more demand response revenue hours than the peer group average in each year of the study period.
Figure 31  Demand Response Revenue Hours

Source: NTD Transit Agency Profiles

Figure 32  Demand Response Revenue Miles

Annual Revenue Miles

Figure 32 shows annual demand response revenue miles for the peer agencies and compares the averages to CCRTA. While CCRTA’s revenue miles stayed higher than the peer group average, they also saw more fluctuation, with a steep decline between FY 2011 and FY 2012 and an increase between FY 2014 and FY 2015. CCRTA saw a net gain of approximately 47,000 miles over the study period.

Source: NTD Transit Agency Profiles
Source: NTD Transit Agency Profiles

**Annual Vehicles Available for Peak Service**

Figure 33 shows the number of vehicles operated in maximum service. CCRTA’s yearly numbers have increased slightly during the study period, but have not kept pace with the rate of increase in the peer group. It should be noted that the large jump in the peer group average in 2013 is due to the fact that Sun Metro used both directly operated and purchased transportation services during that year. In subsequent years, it only used purchased transportation, resulting in a normalization of the peer group average.

![Demand Response Vehicles Operated in Maximum Service](image)

Source: NTD Transit Agency Profiles

**Annual Passenger Boardings**

Figure 34 shows the annual average of boardings among peer agencies and CCRTA for demand response service. Annual boardings increased steadily for the peer group but held steady for CCRTA. However, CCRTA’s annual boardings are approximately double the peer group average.
Figure 34  Demand Response Annual Passenger Boardings

<table>
<thead>
<tr>
<th>Year</th>
<th>Peers</th>
<th>CCRTA</th>
<th>Peer Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean = 115,279

Source: NTD Transit Agency Profiles

Annual Total Modal Expenses

Figure 35 displays the yearly average operating expenses for demand response service. Total operating expenses for CCRTA remained higher than the peer average throughout the study period. Although expenses have fallen since reaching a FY 2013 high of $5,585,657, CCRTA’s FY 2015 expenses were still much higher than the peer group average for FY 2015.

Figure 35  Demand Response Total Operating Expense

<table>
<thead>
<tr>
<th>Year</th>
<th>Peers</th>
<th>CCRTA</th>
<th>Peer Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td></td>
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<td>2012</td>
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<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean = 3,667,678

Source: NTD Transit Agency Profiles
**Annual Fare Revenues**

Figure 36 compares annual demand response passenger fare funds for CCRTA and the peer group. During the study period, the peer group consistently outperformed CCRTA in this metric. Fare revenues for the peer group rose steadily during the study period, while CCRTA’s passenger revenues declined slightly.

**Figure 36  Demand Response Annual Fare Revenues**

![Graph showing annual fare revenues](Image)

Source: NTD Transit Agency Profiles

**Efficiency, Cost-Effectiveness, and Productivity**

**Operating Cost per Revenue Hour**

Figure 37 shows annual cost per revenue hour for CCRTA and the peer group. Operating cost per revenue hour decreased for both the peer group and for CCRTA through the study period. However, CCRTA’s FY 2015 operating cost per revenue hour figure remained above the peer group average for FY 2015.
Figure 37  Demand Response Operating Cost per Revenue Hour

Figure 38 shows annual passengers per revenue hour for CCRTA and the peer agencies. While the peer group averages for each year remained relatively constant, the number of passengers per revenue hour declined steadily for CCTA. However, even in FY 2015 where CCRTA’s passengers per revenue hour was at the lowest point in the study period, it was still well above the peer group average of 1.89 passengers per revenue hour. This indicates that the service is better utilized than similar services at peer agencies.

Figure 38  Demand Response Passengers per Revenue Hour
Operating Cost per Passenger

Figure 39 displays annual cost per passenger for CCRTA and peer agencies. Costs per passenger increased for CCRTA between FY 2011 and FY 2014 but decreased in FY 2015. Costs for peer agencies decreased during the study period but still remained higher than CCRTA’s cost per passenger. This is related to the fact that CCRTA had more demand response passengers during every year in the study period.

Farebox Recovery Ratio

Figure 40 shows the annual farebox recovery ratio for CCRTA and its peer agencies. Farebox recovery ratios are calculated by dividing passenger fares by operating expenses to determine the amount of operating expenses covered by fare revenues. While farebox recovery ratios increased slightly for the peer group from 6.6% in FY 2011 to 7.3% in FY 2015, farebox recovery ratios declined at CCRTA from 3.6% in FY 2011 to 3% in FY 2015.
Figure 40  Demand Response Farebox Recovery

Source: NTD Transit Agency Profiles

Average Fare per Passenger

Figure 41 depicts the annual average fare for paratransit service at peer agencies and at CCRTA. Average fare per passenger for CCRTA held relatively steady between FY 2011 – FY 2013 but declined slightly between FY 2013 and FY 2015. CCRTA’s average passenger fare was well below the peer group average for all years in the study period.

Figure 41  Demand Response Average Passenger Fare

Source: NTD Transit Agency Profiles
Operating Subsidy per Passenger

Figure 42 shows the annual operating subsidy per passenger at peer transit agencies and at CCRTA. Operating subsidies are calculated by subtracting average passenger fare from operating cost per passenger. During the study period, CCRTA’s operating subsidies were lower than or equal to the peer group average for the year. This is closely linked to higher utilization rates of CCRTA’s demand response service. As utilization increases, cost per passenger decreases, resulting in a lower operating subsidy per passenger. However, it should be noted that CCRTA’s operating subsidy did increase between FY 2011 and FY 2015 while the peer group’s average operating subsidy decreased during the study period.

![Demand Response Operating Subsidy per Passenger](image)

Source: NTD Transit Agency Profiles

Demand Response Summary

Between FY 2011 and FY 2015, CCRTA’s demand response service saw increases in annual revenue hours and annual revenue miles. Operating costs, passenger boardings, and vehicles operating in maximum service remained relatively constant. During this time period, annual fare revenues and average fare per passenger decreased, leading to a decrease in the farebox recovery ratio and an increase in the average passenger operating subsidy.

Recommendation 4

It is noteworthy that paratransit demand has been increasing while fixed route demand has been declining. This is a common circumstance and concern among transit agencies in Texas and throughout the US. As many other agencies have also done, the trend suggests a need for an overall examination of paratransit demand and policies intended to manage that demand. Paratransit ridership for CCRTA seems to be higher proportionally, when compared to the service area population of the peer group. Given the costs of providing paratransit, this trend should be
explored in greater depth to ascertain if there are factors in CCRTA’s service area which drive paratransit use higher or if there are policy differences with other areas that, if addressed, might assist CCRTA in managing paratransit demand.

Efficient service operation over the period of observation has helped keep requisite operating subsidies relatively low. Particularly between FY 2011 and FY 2013, CCRTA saw more favorable trends in operating costs per revenue hour and passengers per revenue hour than peer transit agencies. Eventually, increased operational efficiency will not be able to compensate for total overall cost increases from growing ridership, and it will be important to align these performance measures in the coming years.

Other notable performance trends included:

**Fares and Fare Revenues:** Passenger fare revenues and farebox recovery rates for CCRTA remained significantly lower than peer agencies during the study period. Over the same period, average passenger fares for CCRTA have decreased while average fares for peer agencies increased. The average fare for riders on CCRTA in 2015 ($0.84) was less than half that of the peer average ($2.23). See Recommendation 3

**Operating Subsidy:** Operating subsidies per passenger for CCRTA were lower than peer agencies during the study period. This is indicative of strong performance in other efficiency measures, including riders per revenue hour. However, it should be noted that operating subsidies rose substantially from $24.05 per passenger trip in FY 2011 to $26.75 per passenger trip in FY 2015.
4 STATUTORY REVIEW

The following review is conducted to satisfy the requirements of Texas Transportation Code Section 451. Subchapter J, section 451.454 which is included at the end of this section. The review began with a full review of Chapter 451 to identify statutory requirement that currently apply or would have applied to the Corpus Christi Regional Transportation Authority (CCRTA) over the time of this performance audit, January 1, 2013 through December 21, 2016. Those sections are identified below with a brief description of the procedure used to audit the section of code and notes in findings related to the audit.

Texas Transportation Code Chapter 451 was assessed as of February 7, 2017. It should be noted that only portions of the code that pertain to an authority with population less than 850,000 people and confirmed after July 1, 1985 are applicable to CCRTA.

Recommendation 5 - To ensure future audits are conducted only on completed and accepted National Transit Database reports (NTD) and audited financial records, it is recommended that CCRTA’s next Performance Audit, to be filed in 2021, focus on Fiscal Years 2016, 2017, 2018 and 2019. While that will repeat the audit of 2016 activity, the action will ensure a review of accepted NTD reports and audited financial records for FY-2016 which were not available for this audit. The same reports for FY-2019 will available with the performance review conducted in the latter part of 2020 and filed in early 2021. This move is within the statutory requirements and will assist CCRTA in terms of timing of the audit and the required filing date.

Sec. 451.061.

FARES AND OTHER CHARGES.

(a) An authority shall impose reasonable and nondiscriminatory fares, tolls, charges, rents, and other compensation for the use of the transit authority system sufficient to produce revenue, together with tax revenue received by the authority, in an amount adequate to:

   (1) pay all the expenses necessary to operate and maintain the transit authority system;

   (2) pay when due the principal of and interest on, and sinking fund and reserve fund payments agreed to be made with respect to, all bonds that are issued by the authority and payable in whole or part from the revenue; and

   (3) fulfill the terms of any other agreement with the holders of bonds described by Subdivision (2) or with a person acting on behalf of the bondholders.

(b) It is intended by this chapter that the compensation imposed under Subsection (a) and taxes imposed by the authority not exceed the amounts necessary to produce revenue sufficient to meet the obligations of the authority under this chapter.
(c) Fares for passenger transportation may be set according to a zone system or other classification that the authority determines to be reasonable.

(d) Except as provided by Subsection (d-1), the fares, tolls, charges, rents, and other compensation established by an authority in which the principal municipality has a population of less than 1.9 million may not take effect until approved by a majority vote of a committee composed of:

1. five members of the governing body of the principal municipality, selected by that governing body;
2. three members of the commissioners court of the county having the largest portion of the incorporated territory of the principal municipality, selected by that commissioners court; and
3. three mayors of municipalities, other than the principal municipality, located in the authority, selected by:
   - A) the mayors of all the municipalities, except the principal municipality, located in the authority; or
   - B) the mayor of the most populous municipality, other than the principal municipality, in the case of an authority in which the principal municipality has a population of less than 320,000.

(d-1) The establishment of or a change to fares, tolls, charges, rents, and other compensation by an authority confirmed before July 1, 1985, in which the principal municipality has a population of less than 850,000, takes effect immediately on approval by a majority vote of the board, except that the establishment of or a change to a single-ride base fare takes effect on the 60th day after the date the board approves the fare or change to the fare, unless the policy board of the metropolitan planning organization that serves the area of the authority disapproves the fare or change to the fare by a majority vote.

(e) This section does not limit the state’s power to regulate taxes imposed by an authority or other compensation authorized under this section. The state agrees with holders of bonds issued under this chapter, however, not to alter the power given to an authority under this section to impose taxes, fares, tolls, charges, rents, and other compensation in amounts sufficient to comply with Subsection (a), or to impair the rights and remedies of an authority bondholder, or a person acting on behalf of a bondholder, until the bonds, interest on the bonds, interest on unpaid installments of interest, costs and expenses in connection with an action or proceeding by or on behalf of a bondholder, and other obligations of the authority in connection with the bonds are discharged.

(f) Personal identifying information collected by an authority is confidential and not subject to disclosure under Chapter 552, Government Code, including a person’s:

1. name, address, e-mail address, and phone number;
2. account number, password, payment transaction activity, toll or charge record, or credit, debit, or other payment card number; and
3. other personal financial information.

Amended by:
Acts 2009, 81st Leg., R.S., Ch. 1221 (S.B. 1263), Sec. 4, eff. September 1, 2009.
Acts 2011, 82nd Leg., R.S., Ch. 1163 (H.B. 2702), Sec. 136, eff. September 1, 2011.
Acts 2015, 84th Leg., R.S., Ch. 1129 (S.B. 57), Sec. 6, eff. June 19, 2015.

Audit Procedures:
- Review CCRTA financial reports and budgets to determine if total fare and local tax revenues are sufficient to meet the operating cost, bond retirement, and capital needs of the organization.
- Review fare changes made during the review period for consistency with the adoption requirements.

Audit Notes:
There were no fare changes made during the review period.
These notes apply equally to the issue of bonds (see Section 451.352 to 358 below) and fare revenues as the bond redemption is pledged based on the directly generated revenues, the majority of which are fares, of the agency. On November 20, 2013, the Authority issued revenue bonds in the amount of $22,025,000, a little over half as tax exempt the remaining taxable bonds with proceeds from the sale to be used for (1) renovation of the existing Staples Street bus transfer station; (2) construct and equip a portion of a new multiuse building adjacent to the Staples Street bus transfer station; (3) construct a new parking lot to serve the Staples Street bus transfer station and the multi-use building, and (4) pay the costs of issuing the bonds. These bonds are first lien revenue bonds, and will be repaid from the pledged revenues of the Authority. Pledged revenues, as defined by the bond resolution, include the net operating revenues, plus any additional revenues, income, receipts, or other revenues which are pledged by the Issuer. Unspent proceeds for the bonds at December 31, 2015 were $9,404,308.
The total bond payments principle and interest are $1,604,246 in FY-2015. Required reserves to ensure one year of bond payments are available are $1,611,302 which are reflected in restricted cash assets. As planned in FY 2014, 2015 and 2016 the agency has been decisively reducing unrestricted cash reserves to fund important capital projects such as improving system accessibility, converting the bus fleet to run on natural gas, as well as improvements in service to better serve the community. As planned, FY-2015 unrestricted cash reserves decreased by $1,407,289 (audited) and by the end of FY-2016 had decreased an additional $7,901,475 (unaudited). At the end of FY-2016 unrestricted assets totaled $11,033,164. What is notable is that this is the first two consecutive year decrease in unrestricted cash assets in ten years and a substantial decrease during the review period in which the agency issued debt, also believed to be a first for CCRTA. Equally as important, this is a disciplined, planned draw down on agency unrestricted cash reserves to benefit the community and not based on unplanned or unforeseen expenses or revenue shortfalls.
Given that these are planned drawdowns based on careful application of the agency’s 20 year financial model there is virtually no risk of long term financial issues. Nevertheless, the fact is that about 70% of the agency’s available operating revenue (fares and other directly generated revenue) is pledged to bond retirement. This change in the agency’s financial situation means there is less financial room for unforeseen events or trends that are outside the agency’s control that could have a negative impact on agency finances and fund balances. This is a substantial
issue that needs the attention of the board given the modest growth rate in transit system
generated revenues (fares, advertising, and miscellaneous revenues) of just over an average of 7% per year during the review period with the actual rate of 6% between FY 2015 and FY 2016. That is a good trend given that bond redemption costs remain relatively flat and the percentage of directly generated revenue used for bond payments will continue to decline over time if agency directly generated revenue continues to grow at that rate. Highly desirable from a financial perspective would be to set a goal of not more than 50% of agency directly generated revenue dedicated to bond redemption.

The point is to reinforce the importance of **Recommendations 1 and 3** in this Performance Review. Passenger fares and system generated revenues need to increase to ensure continued long term ability to meet the financial obligations of bond retirement and ensure the community is provided the needed services. Texas Transportation Code 451.358 (see below) requires that agency operations be in first position for distribution of agency revenues.

**Sec. 451.070.**

ELECTIONS.

(a) In an election ordered by a board:

   (1) the board shall give notice of the election by publication in a newspaper of general circulation in the authority at least once each week for three consecutive weeks, with the first publication occurring at least 21 days before the date of the election; and

   (2) a resolution ordering the election and the election notice must show, in addition to the requirements of the Election Code, the hours of the election and polling places in election precincts.

(b) Subsection (a) does not apply to an election under Subchapter N.

(c) An election contest may not be heard unless the comptroller is timely notified as required by Section 451.413.

**Audit Procedures:**

- Review CCRTA Board order elections in the audit period.

**Audit Notes:**

There were no CCRTA ordered elections during the audit period.

**Sec. 451.102.**

BUDGET.

(a) A board shall adopt an annual operating budget of all major expenditures by type and amount. The board shall adopt the budget before the beginning of the fiscal year to which the budget applies and before the authority may conduct any business in the fiscal year.

(b) The board shall hold a public hearing on a proposed annual operating budget before adopting the budget and shall, at least 14 days before the date of the hearing, make the proposed budget available to the public.
(c) The board after public notice and a hearing may by order amend an annual operating budget.

Acts 1995, 74th Leg., Ch. 165, Sec. 1, eff. Sept. 1, 1995.

Audit Procedures:

- Review CCRTA Board agendas to confirm date of adoption, notice of public hearing and public hearing held relative to adoption of the fiscal year budget.
- Review adopted FY 2016 annual operating budget for sufficiency in meeting statutory requirements.

Audit Notes:

CCTA Board minutes were examined for adoption of Fiscal Year 2014, 2015, and 2016 budgets. All adoption procedures included the required public hearing as well as extensive interaction with the board of directors through several meetings and workshops. All requirements of the Texas Transportation Code were met and/or exceeded.

The FY 2016 budget was examined in detail to ascertain compliance with Texas Transportation Code in terms of the detail and completeness of the budget. The FY 2016 budget was found to meet or exceed all statutory requirements. It is the auditor's opinion that CCRTA's process and available public information could be showcased as a best practice in terms of clarity and transparency for budget and financial reporting for governmental agencies.

Sec. 451.103.

OPERATING EXPENDITURES. An authority may not spend for operations money in excess of the total amount specified for operating expenses in the annual operating budget.

Acts 1995, 74th Leg., Ch. 165, Sec. 1, eff. Sept. 1, 1995.

Audit Procedures:

- Review CCRTA financial statements to confirm overall annual spending is within the adopted and or amended budget for each fiscal year in the review period.

Audit Notes:

Each fiscal year budget and operating expense statement was reviewed. In no case did CCRTA exceed the adopted budget.

Sec. 451.106.

GENERAL MANAGER; MANAGEMENT POLICIES: CERTAIN AUTHORITIES.

(a) The board of an authority in which the principal municipality has a population of less than 850,000 or more than 1.9 million shall employ a general manager to administer the daily operation of the authority. The general manager may, subject to the annual operating budget and to the personnel policies adopted by the board, employ persons to conduct the affairs of the authority and prescribe their duties and compensation.
(b) Only the general manager may remove an employee. A removal is subject to board personnel policies.

(c) With the approval of the board, the general manager may contract with others for the performance of work or provision of materials for the authority.

(d) The board shall adopt policies clearly defining the respective duties of the board and the authority's staff.

(e) This section applies only to an authority described by Subsection (a).

Amended by:
Acts 2011, 82nd Leg., R.S., Ch. 1163 (H.B. 2702), Sec. 147, eff. September 1, 2011.

Audit Procedures:
- Review Board adopted policies to ensure only the general manager has authority to remove employees
- Review Board adopted polices for clear definition of the respective duties of the board and authority staff.

Audit Notes:
Reviewed Board adopted policies on Personnel Policies and Procedures. These outline the roles of the Board, the General Manager, and staff in conformance with Section 451.106. The document was last modified and adopted in 2002. It would be a good idea given the legal standing of this document to include a forward with document history and Board resolution numbers and dates of modification. This will ensure those using this document are using the latest version of the document.

Sec. 451.1075.
PROHIBITION OF CONSUMPTION OF ALCOHOLIC BEVERAGE.

(a) A board by resolution may prohibit the consumption of an alcoholic beverage on property an authority possesses or controls. The resolution must describe with particularity each place where consumption of an alcoholic beverage is prohibited.

(b) The authority shall post a sign in each place where consumption of an alcoholic beverage is prohibited under this section. The sign must indicate that a person may not consume an alcoholic beverage in that place.

(c) A person commits an offense if the person consumes an alcoholic beverage in a place where the consumption of an alcoholic beverage is prohibited under this section.

(d) An offense under this section is a Class C misdemeanor.

(e) In this section, "alcoholic beverage" has the meaning assigned by Section 1.04, Alcoholic Beverage Code.
Audit Procedures:

- Review Board adopted policies with respect to consumption of alcoholic beverages on authority property.

Audit Notes:

CCRTA Board has not adopted a policy with respect to consumption of alcoholic beverages on authority property. However, the jurisdictions within CCRTA service area have adopted policies with respect to consumption of alcoholic beverages on public property. CCRTA’s properties are public places so the authority is covered by partners jurisdictions’ ordinances.


ADVISORY COMMITTEE.

(a) A board may establish one or more advisory committees to make recommendations to the board or the general manager on the operation of the authority. A committee has the purposes, powers, and duties, including the manner of reporting its work, prescribed by the board. A committee and each committee member serves at the will of the board.

(b) The board shall appoint persons to the advisory committee who:

(1) are selected from a list provided by the general manager; and

(2) have knowledge about and interests in, and represent a broad range of viewpoints about, the work of the committee.

(c) A member of an advisory committee may not be compensated by the authority for committee service but is entitled to reimbursement for actual and necessary expenses incurred in the performance of committee service.

(d) This section does not apply to an authority in which the principal municipality has a population of 850,000 or more but not more than 1.9 million.


Amended by:

Acts 2011, 82nd Leg., R.S., Ch. 1163 (H.B. 2702), Sec. 149, eff. September 1, 2011.

Audit Procedures:

- Review Board appointments to the advisory committee.

- Review advisory board compensation policies to ensure advisory committee members are only reimbursed for actual and necessary expenses incurred in performance of committee responsibilities.

- Review a sample (five transactions) of reimbursements made to advisory committee members.
Audit Notes:

Board appointments to the RTA Committee on Accessible Transportation (RCAT) were made regularly throughout the review period. In the last statutory review there was a note regarding how appointments were made directly from the committee to the Board. In this review period that procedure has been modified and all appointments and re-appointments are presented to the Board based on a review and recommendation from the Chief Executive Officer (general manager in the Texas Code). Current appointment procedures are fully compliant with statute.

The auditor was unable to verify transactions for reimbursements to RCAT members. There were no mentions of such reimbursements in any official documents reviewed for this performance audit. If such reimbursements are being accomplished, the process is not publicly visible. However, given the 2016 Administrative Audit set forth in Section 5 of this report and the completeness of that audit with respect to submission of invoices and payments, it is highly unlikely that there are any irregularities in payments, if there are any payments to reimburse expenses, to RCAT members.

Sec. 451.110.

PURCHASES: COMPETITIVE BIDDING.

(a) Except as provided by Subsection (c) and by Subchapter Q, a board may not contract for the construction of an improvement or the purchase of any property, except through competitive bidding after notice of the contract proposal. The notice must be published in a newspaper of general circulation in the area in which the authority is located at least once each week for two consecutive weeks before the date set for receiving the bids. The first notice must be published at least 15 days before the date set for receiving bids.

(b) The board may adopt rules on:

1. the taking of bids;
2. the awarding of contracts; and
3. the waiver of the competitive bidding requirement:

   (A) if there is an emergency;
   (B) if there is only one source for the purchase; or
   (C) except for a contract for construction of an improvement on real property, if:

   (i) competitive bidding is inappropriate because the procurement requires design by the supplier and if competitive negotiation, with proposals solicited from an adequate number of qualified sources, will permit reasonable competition consistent with the procurement; or
   (ii) it is ascertained after solicitation that there will be only one bidder.

(c) Subsection (a) does not apply to a contract for:

1. $50,000 or less;
2. the purchase of real property;
3. personal or professional services; or
Audit Procedures:

- Review three major procurements with at least one involving improvement on real property to ensure competitive bidding was utilized.
- Review notice of availability of Requests for Proposals was published in a newspaper of general circulation at least once a week for two consecutive weeks before receiving proposals.
- Review CCRTA procurement policies regarding thresholds for waiver of competitive bidding notification and receiving of bids, and awarding of contracts.

Audit Notes:

Several major procurements and construction projects on real property were conducted over the course of the review period. Procurement policies and procedures are in place for all CCRTA procurements and are rigorously adhered to. In the procurements reviewed all notice requirements and competitive bidding requirements of the statute were maintained. CCRTA is in full compliance with these statutory requirements and continues to display due care in the bidding and award in procurements of goods and services.

Sec. 451.111.
PURCHASES: NOTICE OF NONCOMPETITIVE BID PROPOSALS.

(a) Except as provided by Subchapter Q, unless the posting requirement in Subsection (b) is satisfied, a board may not let a contract that is:

1. for more than $50,000; and
2. for:
   A. the purchase of real property; or
   B. consulting or professional services.

(b) An announcement that a contract to which this section applies is being considered must be posted in a prominent place in the principal office of the authority for at least two weeks before the date the contract is awarded.

(c) This section does not apply to a contract that must be awarded through competitive bidding or for the purchase of an existing transit system.

Amended by:
Acts 2005, 79th Leg., Ch. 1277 (H.B. 2300), Sec. 3, eff. September 1, 2005.
Acts 2011, 82nd Leg., R.S., Ch. 801 (H.B. 2325), Sec. 2, eff. September 1, 2011.

Audit Procedures:

- Review two procurements where competitive bidding was not used to ensure bidding thresholds were not violated and that an announcement of non-competitive bidding was posted two weeks prior to award of the bid.

Audit Notes:

There were no instances of non-competitive bidding during the review period.

Sec. 451.251.

CONTRACT GOALS FOR DISADVANTAGED BUSINESSES.

An authority that does not have an up-to-date disadvantaged business enterprise program, as defined by 49 C.F.R. Part 23, to assist minorities and women in participating in authority contracts should establish goals for that participation. The recommended contract goals are:

1. 17 percent for construction, 11 percent for purchasing, and 24 percent for professional services; or
2. the weighted average equivalent of the categories in Subdivision (1).


Audit Procedures:


Audit Notes:

CCRTA has an extensive DBE program that is administered through a cooperative agreement with several other Texas jurisdictions. CCRTA is a party to the Texas Unified Certification Program memorandum of understanding that was most recently updated and adopted by the CCRTA Board in an authorization for the CEO to enter into the agreement in July, 2016. In addition the CCRTA Board adopted three year DBE goals for the agency in July 2016 for fiscal years 2017 through 2019. The authority has an up to date program that meets all federal requirements and is fully compliant with state statute.
Sec. 451.255.
TRANSPORTATION FOR JOBS PROGRAM PARTICIPANTS.

(a) An authority shall contract with the Texas Department of Human Services to provide, in accordance with federal law, transportation services to a person who:

(1) resides in the area served by the authority;

(2) is receiving financial assistance under Chapter 31, Human Resources Code; and

(3) is registered in the jobs opportunities and basic skills training program under Part F, Subchapter IV, Social Security Act (42 U.S.C. Section 682).

(b) The contract must include provisions to ensure that:

(1) the authority is required to provide transportation services only to a location:

   (A) to which the person travels in connection with participation in the jobs opportunities and basic skills training program; and

   (B) that the authority serves under the authority's authorized rate structure and existing services;

(2) the authority provides directly to the Texas Department of Human Services trip vouchers for distribution by the department to a person who is eligible under this section to receive transportation services;

(3) the Texas Department of Human Services reimburses the authority for allowable costs, at the applicable federal matching rate; and

(4) the Texas Department of Human Services may return undistributed trip vouchers to the authority.

(c) An authority shall certify the amount of public funds spent by the authority under this section for the purpose of obtaining federal funds under the jobs opportunities and basic skills training program.


Sec. 451.256.
WAIVER OF FEDERAL REQUIREMENTS.

If, before implementing Section 451.255, the Texas Department of Human Services determines that a waiver or authorization from a federal agency is necessary for implementation, the Texas Department of Human Services shall request the waiver or authorization, and the department and an authority may delay implementing Section 451.255 until the waiver or authorization is granted.


Audit Procedures:

- Review contract with Texas Department of Human Services to provide transportation services for eligible jobs and basic skill training programs, or

- If no contract exists, the burden is on Texas DHS to obtain a waiver or permission from Federal Health and Human Services Administration and CCRTA is relieved of the responsibility.
• If a contract exists - review procedures for issue of vouchers to Texas Department of Human Services
• If a contract exists - review certifications of the amount of public funds spent by the authority in accordance with this section.

Audit Notes:
There is not presently a contract between CCRTA and Texas DHS and Texas DHS clients are routinely transported to job skills services with private contractors using a voucher system. It is, therefore, assumed that DHS has been unable to secure the appropriate waiver or authorization referred to in section 451.256 and section 451.255 has not been implemented as a result.

Sec. 451.352.
POWER TO ISSUE BONDS.
(a) An authority may issue bonds at any time and for any amounts it considers necessary or appropriate for the acquisition, construction, repair, equipping, improvement, or extension of its transit authority system.
(b) The board, by resolution, may authorize the issuance of bonds payable solely from revenue.
(c) Bonds, any portion of which is payable from taxes, may not be issued until authorized by a majority of the votes received in an election ordered and held for that purpose.

Sec. 451.355.
APPROVAL; REGISTRATION.
(a) An authority’s bonds and the records relating to their issuance shall be submitted to the attorney general for examination before the bonds may be delivered.
(b) If the attorney general finds that the bonds have been issued in conformity with the constitution and this chapter and that the bonds will be a binding obligation of the issuing authority, the attorney general shall approve the bonds.
(c) After the bonds are approved by the attorney general, the comptroller shall register the bonds.

Sec. 451.357.
SECURITY PLEDGED.
(a) To secure the payment of an authority's bonds, the authority may:
   (1) pledge all or part of revenue realized from any tax that the authority may impose;
   (2) pledge all or part of the revenue of the transit authority system; and
   (3) mortgage all or part of the transit authority system, including any part of the system subsequently acquired.
(b) Under Subsection (a)(3) an authority may, subject to the terms of the bond indenture or the resolution authorizing the issuance of the bonds, encumber a separate item of the transit authority system and acquire, use, hold, or contract for the property by lease, chattel mortgage, or other conditional sale including an equipment trust transaction.

(c) An authority may not issue bonds secured by ad valorem tax revenue.

(d) An authority is not prohibited by this subchapter from encumbering one or more transit authority systems to purchase, construct, extend, or repair one or more other transit authority systems.


Sec. 451.358.
PLEDGE OF REVENUE LIMITED.

The expenses of operation and maintenance of a transit authority system, including salaries, labor, materials, and repairs necessary to provide efficient service and every other proper item of expense, are a first lien and charge against any revenue of a transit authority system that is encumbered under this chapter.

Audit Procedure

Section 451.352 through Section 451.358

• Review CCRTA bond issue of November 2013
• Review agency revenue and budgets to ensure system operation is first lien against revenues

Audit Notes:

See notes under review of Section 451.061 FARES AND OTHER CHARGES. Bond issue and sale was conducted in conformance with the provisions of the above sections of Texas Code.

Adopted agency budgets for FY 2014, 2015, 2016 all provide for maintaining, even growing, system services ahead of the financial obligations to redeem the bonds in full compliance with Section 451.358. It should also be noted that in addition to construction of the Staples Street Center (for which the bonds were issued), CCRTA was able to acquire rolling stock to continue to work toward conversion of the bus fleet to compressed natural gas throughout the review period and expend substantial funds to improve the pedestrian environment in a way that enhances access to the fixed route system. The latter strategy is highly beneficial both in terms of ease of access as well as a contributing factor to managing paratransit demand, see Recommendation 4. The agency’s financial position remains strong, the issue is the recommended careful examination of directly generated system revenues.
Sec. 451.501.
BOARD MEMBERSHIP.
(a) Except as provided by Subsection (b), a board is composed of:
   (1) five members; plus
   (2) the number of additional members determined under Subsection (c), (d), or (e).
(b) The board of an authority created by an alternate municipality is composed of five members.
(c) If less than 50 percent of the population of the principal county, excluding the population of the principal municipality, reside in the authority, the board has two additional members.
(d) If 50 percent or more but less than 75 percent of the population of the principal county, excluding the population of the principal municipality, reside in the authority, the board has four additional members.
(e) If 75 percent or more of the population of the principal county, excluding the population of the principal municipality, reside in the authority, the board has six additional members.
(f) In this section and Section 451.502, "principal county" means the county in which not less than 51 percent of the territory of the principal municipality is located.
(g) This section does not apply to the board of an authority described by Section 451.5021(a).


Audit Procedures:
• Review number of Board members at three different times during the review period.

Audit Notes:
• Reviewed board membership and board meeting role calls for August 2013, December 2014, and May 2016. No findings.

APPOINTMENT OF MEMBERS. (a) The five board members under Section 451.501(a)(1) are appointed by the governing body of the principal municipality, except in an authority having a principal municipality with a population of more than 1.9 million, the five board members are appointed by the mayor of the principal municipality and are subject to confirmation by the governing body of the principal municipality.
(b) In an authority created by an alternate municipality, the board members are appointed by the mayor of the alternate municipality and are subject to confirmation by the governing body of the alternate municipality.
(c) In an authority having two additional members, the additional members are appointed as follows:
   (1) one member appointed by a panel composed of:
(A) the mayors of the municipalities in the authority, excluding the mayor of the principal municipality; and

(B) the county judges of the counties having unincorporated area in the authority, excluding the county judge of the principal county; and

(2) one member appointed by the commissioners court of the principal county.

(d) In an authority having four additional members, the additional members are appointed as follows:

(1) two members appointed by a panel composed of:

(A) the mayors of the municipalities in the authority, excluding the mayor of the principal municipality; and

(B) the county judges of the counties having unincorporated area in the authority, excluding the county judge of the principal county; and

(2) two members appointed by the commissioners court of the principal county.

(e) In an authority having six additional members, the additional members are appointed as follows:

(1) two members appointed by a panel composed of:

(A) the mayors of the municipalities in the authority, excluding the mayor of the principal municipality; and

(B) the county judges of the counties having unincorporated area in the authority, excluding the county judge of the principal county;

(2) three members appointed by the commissioners court of the principal county; and

(3) one member, who serves as presiding officer of the board, appointed by a majority of the board.

(f) This section does not apply to the board of an authority described by Section 451.5021(a).

(g) The principal municipality shall make its appointments to the board so that at least one of the appointees is designated to represent the interests of the transportation disadvantaged.


Amended by:

Acts 2011, 82nd Leg., R.S., Ch. 1163 (H.B. 2702), Sec. 162, eff. September 1, 2011.

**Audit Procedures:**

- Review appointments of all Board members who took office during the review period.
Audit Notes:
- Reviewed appointments of all Board members who took office between January 2013 and December 2016. All appointments and Board membership compositions met Texas statutory requirements. No findings.

Sec. 451.503.
APPOINTMENTS PANEL.  (a)  The mayor of the most populous municipality represented on a panel under Section 451.502 serves as the presiding officer of the panel.

(b) The presiding officer shall, by giving written notice to each member, call a meeting of the panel as necessary to make an appointment. An appointment shall be made not later than the 60th day after the date a position becomes vacant, including the initial vacancy on the creation of the position.


Audit Procedures:
- Review cases where an appointment panel was utilized to appoint board members. Note this only applies to two board positions who are appoint by a selection panel made up of the mayors of all but the most populous city and the county judges.

Audit Notes:
- Reviewed appointment proceedings for Small Cities Mayor’s appointees Michael Reeves and Glenn Martin. Appointments met Texas statutory requirements. No findings.

Sec. 451.5035.
DESIGNATION OF ALTERNATE BY MAYOR.  (a)  This section applies only to an authority in which the principal municipality has a population of less than 320,000.

(b) The mayor of a municipality who is unable to attend a meeting of an appointments panel may designate a person to:

(1) represent the municipality at the meeting; and

(2) vote at the meeting.

(c) To be eligible to be designated under Subsection (b), a person must be a council member, alderman, commissioner, or other officer of the municipality.

(d) A designation under Subsection (b) must:

(1) be in writing;

(2) be signed by the mayor; and

(3) be filed with the minutes of the appointments panel kept by the authority.
Added by Acts 1997, 75th Leg., ch. 165, Sec. 30.27(a), eff. Sept. 1, 1997.
Amended by:
Acts 2011, 82nd Leg., R.S., Ch. 1163 (H.B. 2702), Sec. 164, eff. September 1, 2011.

Audit Procedures:

- Review cases where an appointment panel was utilized to appoint board members and the mayor of the most populous city is unable to attend the appointments meeting. Note this only applies to two board positions who are appointed by a selection panel made up of the mayors of all but the most populous city and the county judges.

Audit Notes:

- No findings.

Sec. 451.505.

BOARD TERMS.  (a) The term of board membership is two years.
(b) The terms of members of a board are staggered if the authority was created before 1980 and has a principal municipality with a population of less than 1.9 million.

Amended by:
Acts 2009, 81st Leg., R.S., Ch. 1221 (S.B. 1263), Sec. 8, eff. September 1, 2009.
Acts 2011, 82nd Leg., R.S., Ch. 1163 (H.B. 2702), Sec. 165, eff. September 1, 2011.

Audit Procedures:

- Review Board make up to monitor re-appointments or replacements on no less than a two year cycle.

Audit Notes:

- No findings.

Sec. 451.514.

BOARD MEETINGS: WHEN HELD.  (a) A board shall hold at least one regular meeting each month to transact the business of the authority. The board by resolution recorded in the minutes of the board's meetings shall set the place, date, and time for each regular meeting.
(b) The presiding officer of the board or the general manager of the authority may by written notice call a special meeting of the board.

Audit Procedures:

- Review Board meeting cycle, check official documents to ensure board meetings are set by resolution.

Audit Notes:
Reviewed board meeting cycle and confirmed that board meetings that occurred during the study period between January 2013 and December 2016 were set by resolution and that at least one general meeting was held for each month of the same period. No findings.

Sec. 451.515.
BOARD MEETINGS: VOTING. (a) An action of a board requires a vote of a majority of the members of the board present at a board meeting unless the bylaws of the board require a larger number for a particular action.

(b) This section does not permit a board action in the absence of a quorum.


Audit Procedures:

- Review Board meeting minutes to ensure a board quorum was present for each vote.

Audit Notes:

- Reviewed a sample of 12 board meeting minutes and confirmed that a quorum was present for each vote. No findings.

Sec. 451.517.
BOARD MEETINGS: RULES AND BYLAWS. A board by resolution may adopt rules and bylaws for the conduct of board meetings. These rules and bylaws shall be recorded in the minutes of board meetings.


Audit Procedures:

- Review Board adopted rules and bylaws.

Audit Notes:

- No findings.
**Sec. 451.518.**

BOARD MEETINGS: NOTICE. In addition to notice required by Chapter 551, Government Code, a board shall post a board meeting notice in the authority's administrative offices and at the courthouse of the most populous county in which the principal municipality of the authority is located, each on a bulletin board at a place convenient to the public.


**Audit Procedures:**

- Review notice of Board meetings. Review locations of notice postings.

**Audit Notes:**

Reviewed a sample of 12 board meeting minutes and confirmed that notice of meetings were posted in locations meeting the Texas statutory requirements. No findings.

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**Sec. 451.520.**

BOARD OFFICERS AND SECRETARIES. (a) The board shall elect from among its membership a presiding officer, an assistant presiding officer, and a secretary. This subsection does not apply to the selection of a presiding officer who is appointed under Section 451.502(e)(3).

(b) The board may appoint one or more assistant secretaries, who are not required to be members.

(c) The secretary and assistant secretaries shall keep a permanent record of the proceedings and transactions of the board and perform other duties required by the board.


**Audit Procedures:**

- Review Board action to elect a Board Secretary.

**Audit Notes:**

Reviewed board actions pertaining to electing a board secretary during the study period from January 2013 to December 2016. No findings.
Statutory Basis for Performance Audit

Sec. 451.454.

PERFORMANCE AUDITS: CERTAIN AUTHORITIES.

(a) The board of an authority in which the principal municipality has a population of more than 1.9 million or less than 850,000 shall contract at least once every four years for a performance audit of the authority to be conducted by a firm that has experience in reviewing the performance of transit agencies.

(b) The purposes of the audit are to provide:

(1) evaluative information necessary for the performance of oversight functions by state and local officers; and

(2) information to the authority to assist in making changes for the improvement of the efficiency and effectiveness of authority operations.

(c) Each audit must include an examination of:

(1) one or more of the following:

   (A) the administration and management of the authority;
   (B) transit operations; or
   (C) transit authority system maintenance;

(2) the authority’s compliance with applicable state law, including this chapter; and

(3) the following performance indicators:

   (A) operating cost per passenger, per revenue mile, and per revenue hour;
   (B) sales and use tax receipts per passenger;
   (C) fare recovery rate;
   (D) average vehicle occupancy;
   (E) on-time performance;
   (F) number of accidents per 100,000 miles; and
   (G) number of miles between mechanical road calls.

(d) A subject described under Subsection (c)(1) must be examined at least once in every third audit.


Amended by:
Acts 2011, 82nd Leg., R.S., Ch. 1163 (H.B. 2702), Sec. 158, eff. September 1, 2011.

Sec. 451.455.

COMPUTATION OF PERFORMANCE INDICATORS.

(a) An authority's operating cost per passenger is computed by dividing the authority's annual
operating cost by the passenger trips for the same period.

(b) The sales and use tax receipts per passenger are computed by dividing the annual receipts from authority sales and use taxes by passenger trips for the same period.

c) The operating cost per revenue hour is computed by dividing the annual operating cost by the total of scheduled hours that authority revenue vehicles are in revenue service for the same period.

d) The operating cost per revenue mile is computed by dividing the annual operating cost by the number of miles traveled by authority revenue vehicles while in revenue service for the same period.

e) The fare recovery rate is computed by dividing the annual revenue, including fares, tokens, passes, tickets, and route guarantees, provided by passengers and sponsors of passengers of revenue vehicles, by the operating cost for the same period. Charter revenue, interest income, advertising income, and other operating income are excluded from revenue provided by passengers and sponsors of passengers.

(f) The average vehicle occupancy is computed by dividing the annual passenger miles by the number of miles traveled by authority revenue vehicles while in revenue service for the same period. The annual passenger miles are computed by multiplying the annual passenger trips and the average distance ridden by passengers during the same period.

g) On-time performance is computed by determining an annual percentage of revenue vehicle trips of revenue vehicles that depart from selected locations at a time not earlier than the published departure time and not later than five minutes after that published time.

(h) The number of accidents per 100,000 miles is computed by multiplying the annual number of accidents by 100,000 and dividing the product by the number of miles for all service, including charter and nonrevenue service, directly operated by the authority for the same period. In this subsection, "accident" includes:

1. a collision that involves an authority's revenue vehicle, other than a lawfully parked revenue vehicle, and that results in property damage, injury, or death; and
2. an incident that results in the injury or death of a person on board or boarding or alighting from an authority's revenue vehicle.

(i) The number of miles between mechanical road calls is computed by dividing the annual number of miles for all service directly operated by an authority, including charter and nonrevenue service, by the number of mechanical road calls for the same period. In this subsection, "mechanical road call" means an interruption in revenue service that is caused by revenue vehicle equipment failure that requires assistance from a person other than the vehicle operator before the vehicle can be operated normally.

(j) In this section:

1. "Operating cost" means an authority's costs of providing public transit service, including purchased transit service not performed by the authority, but excluding the costs of:

   A. depreciation, amortization, and capitalized charges;

   B. charter bus operations; and
(C) coordination of carpool and vanpool activities.

(2) "Passenger trips" means the number of all passenger boardings, including transfers, but excluding charter passengers and carpool and vanpool passengers whose trips are only coordinated by an authority.

(3) "Revenue service" means the time an authority revenue vehicle is in service to carry passengers, other than charter passengers.

(4) "Revenue vehicle" means a vehicle that is:

   (A) used to carry paying passengers; and
   
   (B) operated by an authority or as a purchased service.

Acts 1995, 74th Leg., Ch. 165, Sec. 1, eff. Sept. 1, 1995.

Sec. 451.456.

PERFORMANCE AUDIT RESPONSE; HEARING.

(a) An authority for which a performance audit is conducted under Section 451.454 shall prepare a written response to the audit report. The response must include each proposal for action relating to recommendations included in the report, whether the proposal for action is pending, adopted, or rejected.

(b) The authority shall make copies of the report and the response available for public inspection at the offices of the authority during normal business hours.

(c) The authority shall conduct a public hearing on each performance audit report and the authority's response under Subsection (a). The authority shall give notice of the hearing by publication of the notice in a newspaper of general circulation in the area included in the authority at least 14 days before the date of the hearing.

5 ADMINISTRATIVE AUDIT

The following section is inserted to document the administrative audit conducted by CCTRA in June 2016. The audit speaks for itself and needs no further explanation.
June 15, 2016

City Council for the City of Corpus Christi,
Commissioners Court of Nueces County, and the
Board of Directors
Corpus Christi Regional
Transportation Authority
Corpus Christi, Texas 78401

Dear Council, Commissioners and Board Members:

As directed, we were engaged to perform the following services for the Corpus Christi Regional Transportation Authority (CCRTA):

- Conduct a general review of CCRTA internal controls to identify any systemic weaknesses that may present an opportunity for theft and fraud.
- Review the procurement process of the CCRTA to determine weaknesses in compliance with standard operating procedures and state and federal laws.
- Explore issues associated with recent theft of funds.

These services were guided by the “Statement on Standards for Consulting Services” issued by the American Institute of Certified Public Accountants. Our responsibilities and those of the CCRTA are summarized in our engagement letter dated March 11, 2016.

Jerry Van Beveren provided most of the services with the assistance of other members in the firm. He is a Certified Public Accountant, Certified Fraud Examiner, and also holds the designation of Chartered Global Management Accountant. He was provided access to personnel and records of the CCRTA, and the staff of the CCRTA met all of his requests.

PROCEDURES PERFORMED

Meetings and Interviews

Meetings and interviews were held separately with each of ten people. These individuals included board members, senior management, auditors of the CCRTA, police detectives, and individuals with direct knowledge of the theft of funds detected in 2015. From these meetings we developed an understanding of: the cause of the theft in 2015; individuals involved in the theft; how the theft was detected; internal controls within the purchasing department of the CCRTA; general operating procedures of the CCRTA; the response of the CCRTA to the theft. Nothing in these meetings and interviews suggested any further unknown thefts from the CCRTA or the involvement of other individuals not already identified.
The fraud was started with the establishment of a new vendor. The vendor was owned and controlled by one or two individuals in the maintenance department of the CCRTA. Invoices for parts and services were prepared by one of the individuals, approved by another, and submitted to the CCRTA purchasing department for payment processing. Fraudulent invoices were approved for payment by a supervisor and processed through the purchasing department of the CCRTA. Other established vendors were subsequently involved indirectly by submitting bogus invoices and then splitting payments with the two individuals. The parts and the services invoiced to the CCRTA and subsequently paid by the CCRTA were not actually received by the CCRTA. Anomalies in the invoices and payments were eventually detected by CCRTA personnel and an internal investigation was initiated. Additionally, the use of purchase cards (i.e., debit cards) was reviewed internally and other misuses by the same individuals were detected. An employee benefit bank account also indicated the misuse of funds.

The internal controls at the CCRTA could have detected the frauds sooner. The establishment of a new vendor generally required documentation of the name, address, and identification number and a general search of databases was typical. Due to an apparent urgency, the usual vendor vetting was not thoroughly performed.

Following confirmation by outside auditors, the information was turned over to the Corpus Christi Police Department for further investigation.

Information Requests

We requested and were provided the following information:

- Copies of purchase orders, invoices, checks and bank statements prepared by the CCRTA and provided to police evidencing the vendor fraud in 2015.
- Copy of information and testing performed by Collier, Johnson & Woods, P.C., the auditors for the CCRTA, regarding the recent thefts.
- Information exported from the computer system of the CCRTA providing:
  - Names, addresses and federal identification numbers for any vendors during the years 2013 through 2015.
  - Names, addresses and federal identification numbers for all employees during the years 2013 through 2015.
  - All disbursements made by the CCRTA from 2013 through 2015.

This information was received principally through the chief financial officer of the CCRTA and from Collier, Johnson & Woods, P.C.

Information Testing

The information developed by the management of the CCRTA regarding the theft in 2015 was reviewed and examined. This information had also been provided to auditors of the CCRTA for
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their testing and review, and to the Corpus Christi Police Department. No additional testing was performed by us on this body of information since it appeared complete, had been developed and reviewed by others, and confirmed the theft.

Vendor information was provided to us in a Microsoft Excel format and we utilized Excel and Active Data software to further analyze the data. Vendor information, including active and inactive vendors, for the years 2013 through 2015 was sorted by tax identification numbers and addresses. Duplications were removed and vendors without numbers identified. This information was provided to the CCRTA for further review and resolution.

Employee information was provided to us in a Microsoft Excel format and we utilized Excel and Active Data software to further analyze the data. Employee information, including current and former employees, for the years 2013 through 2015 was combined and duplications eliminated. Duplications were the result of each year’s listing being added together; consequently, current employees could have been listed three times within the data.

Vendor and employee information were merged together and tested for common names, addresses and federal identification numbers. Vendors and employees with similar names, addresses or federal identification numbers were provided to the CCRTA for further testing and resolution.

Disbursement information was provided to us in a Microsoft Excel format and we utilized Excel and Active Data software to further analyze the data. Disbursements made by the CCRTA were tested for each year for 2013 through 2015. Using the information provided by the CCRTA, disbursement data was summarized to remove voided transactions and multiple parts of the same posted transaction. Digital analysis of transactions was compared to expected results based on Benford’s Law. Results suggested some anomalies relating to the digits 1 and 6, although the indications were deemed minor and inconclusive.

Detailed information and testing results are not included in this report because of vendor and employee names, addresses and federal identification numbers.

CONCLUSIONS

Detection and Response
Upon detection of a potential vendor fraud in 2015, the senior management of the CCRTA immediately responded with an internal investigation. The results were subsequently reviewed by independent auditors and also by police investigators, both confirming the theft. The Corpus Christi Police Department developed other information confirming and expanding on the theft. Our testing indicated no further undetected vendor fraud.
Internal Controls
The CCRTA has a detailed system of internal controls to manage risks associated with financial transactions. While the system did not detect the vendor fraud when the fraud was first initiated, the internal controls eventually identified the potential fraud confirmed by the internal investigation of the CCRTA. The failure to initially identify the fraud indicated a lapse of internal controls. We noted the occurrence of periodic failures in internal controls, not uncommon in organizations but indicative of the need for improvement. As a result of the theft, the CCRTA revisited and improved internal controls relating to the establishment of new vendors in its accounts payable system.

RECOMMENDATIONS

General matters:
- Every organization has a “tone” towards ethical behavior, originating with its board of directors, trustees or owners. This tone sets the pattern and expected results for acceptable behaviors within the organization. Ethics training should be periodically considered for all board members and a Code of Ethics established.
- Ethics training should occur periodically at all employee levels of the CCRTA. While this training does not assure the elimination of fraud or thefts, it reminds employees of the need for ethics in their behaviors at the CCRTA.
- Board members should receive periodic training on financial reporting, interpreting financial results and other financial issues affecting the CCRTA. This would include assessments of the functioning of internal controls reported by auditors and consultants.
- Related party and conflict of interest disclosures are used in many organizations to assist boards and others to identify potential areas where individuals should not participate in decisions. Currently, only the Board is required to make these disclosures. Senior management should also do this annually for Board review, identifying business interests or other employment that could conflict with arms-length transactions.
- A fraud “hotline” or other anonymous reporting method should be established for the CCRTA. Most frauds are detected because someone, typically an employee or former employee, reports a suspicious activity or event. The recent fraud could not be reported through a supervisor due to the involvement of the supervisor. Another method needs to be established that is open and not threatening to the person reporting an unusual event.

“Internal controls” is the term used by accountants for the checks and balances within a financial system to reasonably protect the assets of the entity from misappropriations and to ensure accurate reporting. Internal controls are developed by each entity for that entity. The CCRTA has its own system of internal controls developed and improved during the years and these controls are detailed and extensive throughout the organization.
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Corpus Christi Regional Transportation Authority
June 15, 2016
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- The CCRTA should evaluate a portion of its internal controls each year. This would include documenting the controls, and then testing the effectiveness of the controls through the use of outside professionals. All internal controls would not be tested at once, but rotated during a series of years to provide continuous improvement and effectiveness.

- While internal controls associated with establishing vendors have been strengthened as a result of the recent fraud, immediate and additional consideration should be given to correcting all vendor information, including complete names, addresses and federal identification numbers. Current duplications and incomplete information should be corrected within the purchasing system. Exceptions need to be identified and resolved.

This report was prepared for the members of the City Council of Corpus Christi, the members of the Commissioners Court of Nueces County, and the Board of Directors of the Corpus Christi Regional Transportation Authority. The work performed and this report do not constitute an audit or any other form of assurance on the financial reports or internal controls of the Corpus Christi Regional Transportation Authority.

[Signature]

Nelson\Nygaard Consulting Associates, Inc. | 5-6