



Transit System Performance Review

June 12, 2013

New Castle Area Transit Authority (NCATA) Performance Review Report

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AGENCY PROFILE

Agency Name	New Castle Area Transit Authority ¹ (DBA NCATA)	
Year Founded	1959 (1965 Inc.)	
Fiscal Reporting Year	2011-2012	
Service Area (square miles)*	177.5	
Service Area Population *	74,880	
Type of Service Provided	Fixed-Route Bus	ADA Demand Response
Vehicles Operated in Maximum Service**	27	Subcontracted
Annual Revenue Miles of Service**	1,093,900	18,900
Annual Revenue Hours of Service**	56,800	1,550
Annual Total Passenger Trips**	682,100	4,300
Annual Total Senior Lottery Trips**	105,500	0
Employees (full-time/part-time)	58/2	Subcontracted
Total Annual Operating Cost**	\$6,974,949	\$51,770
Total Annual Operating Revenues**	\$984,533	\$7,555
Total Annual Operating Revenue / Total Annual Operating Cost	14.1%	14.6%
Administrative Cost / Total Operating Cost²	15.0%	0.0%
Operating Cost / Revenue Mile	\$6.38	\$2.74
Operating Cost / Revenue Hour	\$122.84	\$33.38
Passengers / Revenue Hour	12.01	2.77
Total Annual Operating Revenue / Revenue Hour	\$17.34	\$4.87
Operating Cost / Passenger	\$10.23	\$12.04

Source:

* Telephone Interview with Vicki Antonio, Assistant Manager 2/19/2013

**PennDOT dotGrants Legacy Reporting Year 2012 as Revised 2/25/2013.

¹ FTA Sub-recipient ID 3R04-005

² Per FYE 2012 Audit Report, Administrative =\$1,047,080/\$6,974,949

EXECUTIVE SUMMARY

In July 2007 the Pennsylvania Legislature passed Act 44, establishing a framework for a PennDOT driven transit agency performance review process. The purpose of a review is to assess efficiency and effectiveness of service, financial stability, and general management/business practices. The assessment makes transit agencies aware of improvement opportunities and identifies best practices that can be shared with other transit agencies.

The Act 44 transit performance review of the New Castle Area Transit Authority (doing business as NCATA) was conducted in January 2013. The performance review focused on fixed-route rural bus. This report addresses Act 44 established performance criteria specifically related to fixed-route bus services – NCATA trends and a comparison of NCATA to peers, targets for future performance (performance reviews are conducted on a five-year cycle), and opportunities for improvement which should assist NCATA in meeting the future targets. This report also addresses the management and general efficiency and effectiveness of services.

After receipt of this performance review report, NCATA will develop an action plan which identifies the steps NCATA will take to meet the agreed to Act 44 performance criteria targets by FY 2017-18. The general goals are to maximize efficiency and promote cost savings, improved service quality, and increased ridership and revenue. The action plan should focus on the most critical areas for the agency, as prioritized by NCATA management and its governing board.

A draft action plan is due to the Department within 60 days of receipt of this report. PennDOT will work with NCATA to agree on a plan which requires NCATA Board approval to be submitted as the final action plan. NCATA must report at least quarterly to the governing body and PennDOT on the progress of the action plan, identifying actions taken to date, and actions to be implemented. NCATA's success will be measured in part on meeting five-year performance targets established through this review (see p. viii).

ACT 44 PERFORMANCE DETERMINATION

Act 44 performance factors were analyzed to quantify NCATA's fixed-route bus performance in comparison to its peer agencies in FY 2010-11 and over a five year trend period from FY 2005-06 to FY 2010-11 (the most recent NTD data available at the time of the peer selection). Peers were selected through an analytical process and were agreed to in advance by NCATA.

A transit agency's performance can fall into two categories: "In Compliance" or "At Risk." The following criteria are used to make the determination:

- In Compliance if less than one standard deviation **above** the peer group average in –
 - Single-year and five-year trend for Operating Cost / Revenue Vehicle Hour
 - Single-year and five-year trend for Operating Cost / Passenger

- In Compliance if greater than one standard deviation **below** the peer group average in –
 - Single-year and five-year trend for Passengers / Revenue Vehicle Hour
 - Single-year and five-year trend for Operating Revenue / Revenue Vehicle Hour

If the agency falls outside of these boundaries, it is considered "At Risk" for that factor and must improve as agreed upon between PennDOT and the agency.

An analysis of the eight key criteria mandated by Act 44 was conducted and **it was determined that NCATA is “In Compliance” for five of the eight criteria and “AT RISK” for three.** The peer comparison process as applied to Act 44 criteria (below, in bold typeface) revealed:

In Compliance

1. The **five-year trend of passengers³ per revenue vehicle hour** ranks tenth out of 11 and is worse than the peer group average.
2. The **five-year trend for operating cost per revenue vehicle hour** is the fifth highest rate of cost increase in the peer group and is slightly better than the peer group average.
3. **2011 operating revenue per revenue vehicle hour** ranks sixth out of 11 and is slightly worse than the peer group average.
4. The **five-year trend for operating revenue per revenue vehicle hour** ranks fourth best out of 11 and is approximately twice that of the peer group average.
5. The **five-year trend for operating cost per passenger** is among the worse of the peer group, ranking 10 out of 11, and is approximately twice that of the peer group average.

At Risk

1. **2011 passengers per revenue vehicle hour** ranks tenth out of the 11 transit agencies in the peer group and the agency has been determined **“AT RISK”** based on this variable.
2. **2011 operating cost per revenue vehicle hour** is the highest of the peer group and the agency has been determined **“AT RISK”** based on this variable.
3. **2011 operating cost per passenger** is the highest of the peer group and the agency has been determined **“AT RISK”** based on this variable.

A summary of the specific Act 44 measures and their values are presented in the following table.

Performance Criteria		Determination	Rank (of 11)	Comparison to Peer Avg.	Value	Peer Average
Passengers / Revenue Hour	2011	AT RISK	10	Worse	11.78	18.29
	Trend	In Compliance	10	Worse	-1.95%	1.49%
Operating Cost / Revenue Hour	2011	AT RISK	11	Worse	\$115.14	\$89.99
	Trend	In Compliance	5	Better	4.19%	4.34%
Operating Revenue / Revenue Hour	2011	In Compliance	6	Worse	\$15.09	\$17.11
	Trend	In Compliance	4	Better	8.85%	4.90%
Operating Cost / Passenger	2011	AT RISK	11	Worse	\$9.78	\$5.19
	Trend	In Compliance	10	Worse	6.26%	2.95%

³ NCATA’s reported ridership (passengers) for the last 5 years is an unreliable variable that could not be used to accurately assess trends. Analysis of the auditable components of ridership suggests little change in actual ridership has occurred in the last several years. Therefore a static estimate of 682,076 passengers is used for all previous year calculations in this report. Refer to **Appendix C: NCATA Reported Ridership Review Findings** for a discussion of the reporting issues observed and how the updated ridership estimate was derived.

GENERAL FINDINGS

In accordance with Act 44, findings are indicated as “opportunities for improvement” or “best practices.” Improvement opportunities identify tasks that may be undertaken to increase the efficiency, effectiveness, and/or quality of service of the agency. Best practices are current practices that enhance the efficiency, effectiveness, and/or quality of service of NCATA and may be shared with other agencies as techniques for improvement. Major themes are indicated below; detailed recommendations on how these and more detailed issues identified should be addressed are found in the body of the report.

BEST PRACTICES

1. **Measuring and Adjusting Preventative Maintenance (PM) Cycles:** NCATA’s maintenance department runs periodic checks on vehicle fluids by sending them out to a lab for testing. Then, PM cycles are adjusted based on lab results. This results both in better vehicle maintenance and lower costs of both fluids and repairs by “fine tuning” PM cycles to the observed behavior of individual vehicles and manufacturers. This type of practice demonstrates the benefits of measuring performance, fine-tuning actions based on results and maximizing return on investment in a tangible way and can serve as a “model approach” that should be applied in each of NCATA’s departments.

OPPORTUNITIES FOR IMPROVEMENT TO ADDRESS IN PART 1 OF THE ACTION PLAN (SEE P. 37)

1. **Contain Overall Operating Cost Increases-** Over the last several years NCATA has had significant operating cost / revenue hour of service increases and is currently **“AT RISK”** based on two Act 44 performance criteria for the same. Management expects similar high increases in operating cost / revenue hour to continue in coming years⁴.

Going forward, NCATA should **develop, implement and monitor** the effectiveness of a broad range of strategies to contain its operating cost / revenue hour. There is a critical need to contain or even reduce the operating cost / revenue hour increase to avoid future financial difficulties by exploring the cost saving potential of items in the operating budget that contribute significantly to the “bottom line.” Refer to **“Opportunities to Control Operating Costs”** (p. 23) for some potential areas that could help NCATA contain cost increases.

2. **Build an Agency-wide Culture of Performance-** The management team should develop a formal monitoring and performance enhancement strategy for all key agency functions⁵ and staff roles. Metrics should evolve from a strategic business plan crafted with significant input from the Board, management and staff. This recommendation is consistent with MAP-21 and general trends in the transit industry where performance-based evaluation is rapidly becoming the norm. At its core, a performance culture should encourage everyone from Board members to every employee to be informed by what is important, how well they accomplish what is important and how each player or department can contribute to improve performance.

⁴

[ftp://ftp.dot.state.pa.us/public/Bureaus/PublicTransportation/Five%20Year%20Presentations/Rural%20Systems/NewCastle\(NCATA\).pptx](ftp://ftp.dot.state.pa.us/public/Bureaus/PublicTransportation/Five%20Year%20Presentations/Rural%20Systems/NewCastle(NCATA).pptx), slide 22

⁵ See Page 19 for a list of key functional areas.

3. **Maximize Return on Capital Investments-** NCATA has made substantial investments in technology ranging from farebox systems (GFI), reporting systems (Avail Datapoint), video and GPS on vehicles, etc. However, management staff members are not fully versed in how to use these systems in such a way as to maximize return on investment. For example, GPS technology can be used to measure and report on-time performance. GFI and Datapoint can be used to perform quality control on reported ridership statistics. AVL technology can be used to monitor on-time performance. Management should be trained on the potential uses of their current systems and how to collect and compile accurate data that can be used to measure performance in “real time” to make adjustments. Inaccurate, incomplete or untimely data misinforms decision-makers including NCATA’s management, Board and planning partners who rely on these data to inform investment and cost-saving strategies.
4. **Implement Additional Formal Quality Control Protocols -** NCATA has structural issues that make it difficult to assure appropriate oversight and quality control. For example, NCATA has demonstrated issues with respect to reporting ridership accurately. At the directive of PennDOT, management recently implemented a policy to collect transfer tickets and then reconcile those against farebox data. Since this policy was put into place on 1/13/2013, reported transfers have dropped substantially. Furthermore, road supervision is not conducted by staff members who have that as part of their job description and no employee receives periodic job evaluations. NCATA’s management must develop procedures and quality control measures to insure that reported ridership is accurate, routine road supervision occurs and that employees are performing their jobs in a manner consistent with clearly defined job descriptions. NCATA’s investment in video technology could be leveraged to perform periodic review of on-board video logs to insure that reported ridership is accurate and that busses are showing up on time consistent with published schedules. Regular employee performance reviews should be implemented to allow managers and employees to share performance expectations, to discuss performance findings and to find solutions to “day-to-day” challenges that arise during normal operations.
5. **Improve Passenger Productivity –** NCATA’s ridership per revenue hour is amongst the lowest in its peer group. This results in one of NCATA’s “**AT RISK**” findings. Low ridership contributes to NCATA’s low farebox recovery ratio (11%) compounding the agency’s challenges associated with high operating costs / revenue hour. When the management team is confident in reported ridership and ridership trend data it should evaluate the productivity of bus routes and runs to minimize unproductive service and expand upon productive service. Expanding the effective use of marketing and establishing service agreements with large employers and institutions also have proven effective means to improve productivity for similar systems in the Commonwealth.

FINANCIAL REVIEW

For the FY 07/08 to FY 11/12 period, local governments have contributed between \$136,000 and \$165,000 to help cover NCATA’s operational cost. NCATA has used all of that in any given year to balance its budget and comply with state requirements. NCATA has built its cash and investment reserves largely due to state subsidy increases resulting from Act 44. However, available current year and carryover local match funds combined are anticipated by NCATA’s management to be insufficient to meet the agency’s local match requirements in this coming fiscal year due to local

government financial hardships. This is a cause of great concern as NCATA will not be eligible for the full state grant amount in FY 13/14 if this is not resolved.

NCATA management should monitor NCATA's end-of-year cash position and carryover funds and take actions to change the current downward trajectory. Management should take appropriate actions such as **obtaining additional local match, controlling costs and improving farebox recovery to improve NCATA's long-term financial health.**

FIVE-YEAR PERFORMANCE TARGETS

This transit agency performance report outlines areas where improvements may be made to enhance the overall quality, effectiveness, and efficiency of the transit system. As a result of the performance review, a set of "performance targets" has been established and detailed on page 16. These performance targets are required to comply with Act 44 and represent minimum performance levels that NCATA should work to achieve for each Act 44 performance criteria during the next review cycle (i.e. five years from the date of this report). These performance targets were created using historical data analyzed during the five-year trend analysis as well as the most current audited "dotGrants" information available (FY 2011/2012). Standards were extrapolated to FY 2017/2018 and are designed to be aggressive, yet achievable. They are summarized as follows:

Performance Criteria	Fiscal Year				Target Annual Increase/Decrease
	2009 / 2010	2010 / 2011	2011 / 2012	2017/2018 Target	
Passengers ⁶ / Revenue Hour	12.25	11.78	12.01	13.53	2.0%
Operating Cost / Revenue Hour	\$107.75	\$115.14	\$122.84	\$138.33	2.0%
Operating Revenue / Revenue Hour	\$12.95	\$15.09	\$17.34	\$19.53	2.0%
Operating Cost / Passenger ⁷	\$8.80	\$9.78	\$10.23	\$10.23	0.0%

NEXT STEPS

Upon final transmission of the performance review report, Act 44 regulations stipulate that NCATA "...shall develop and submit to the Department within 90 days...a strategic action plan that focuses on continually improving the system to achieve the established minimum performance targets." The action plan should outline corrective action that will be taken to address "Opportunities for Improvement" – as prioritized by the NCATA Board and management.

Functional area "opportunities for improvement" are areas in which improvement may result in cost savings, improved service quality, and ridership and/or revenue increases. Improvements in these areas will assist in the achievement of the performance targets by directly addressing areas that affect Act 44 performance criteria. It should be noted that many functional areas are interrelated, and the action plan should establish a comprehensive program that focuses on actions that address the larger issues within NCATA.

The template for the Action Plan has been provided as an Appendix to this report (pp. 37-41). This template includes three parts:

⁶ Ibid. 3, p. v.

⁷ Ibid.

- **Part 1- Executive Summary Findings Template** (p. 37) is where NCATA should address its proposed actions to address the “*Opportunities for Improvement*” findings in the Executive Summary (pp. vi-vii).
- **Part 2- Act 44 Performance Metric Findings Templates** (pp. 38-40) is where NCATA should address its proposed actions to address the “*Opportunities for Improvement*” findings that directly affect the Act 44 performance metrics (pp.19-25).
- **Part 3- Other Actions to Improve Overall Performance Template** (p. 41) should be used to address the “*Other Findings that Impact Overall Agency Performance*” identified starting on page 26. Management should use the format provided in Appendix A to develop its proposed draft Action Plan.

Specific actions identified in the Action Plan templates may address the broadly noted opportunities for improvement found in the “**General Findings**” (pp. vi-vii). Some actions will be quickly implementable while others may take several discrete steps to achieve over a longer period of time. The template provides a simple-to-follow order of key findings. NCATA must select, prioritize and schedule its intended actions using the template.

NCATA must submit the proposed draft Action Plan using the format provided in **Appendix A: Action Plan Improvement Strategies** to the Department for comment. The proposed draft Action Plan may then be revised based on consultation between NCATA management, NCATA’s Board and the Department. The finalized Action Plan then must be approved formally by the NCATA Board and submitted to PennDOT. Subsequently, NCATA management must report at least quarterly to the governing body and the Department on progress towards accomplishing the Action Plan including actions taken in the previous quarter and actions planned for coming quarter(s).

INTRODUCTION

PURPOSE

In July 2007 the Pennsylvania Legislature passed Act 44, establishing a framework for a performance review process for all public transportation agencies receiving state financial assistance. This report documents the findings and observations of the public transportation agency performance review for the New Castle Area Transit Authority (doing business as NCATA).

Performance reviews are conducted to emphasize the importance of good management, proactive planning, and efficient service, which maximize the effectiveness of federal, state, and local funding. In addition, other important goals of the review process and this document are to:

- Find, document, and publicize best practices that contribute to efficient, high-quality public transit service delivery, encouraging other Pennsylvania transit agencies to apply them as appropriate.
- Provide guidance to transit agencies on cost-effective ways to improve efficiency, effectiveness, and quality of service.
- Identify and document legal, institutional, or other barriers beyond the control of the transit agency that may impede efficiency in service delivery and management.

PERFORMANCE REVIEW PROCESS

In late 2012, an Act 44 mandated performance review was initiated for NCATA. PennDOT, with consultant assistance, conducted the review according to the steps outlined below:

1. Initial notification of performance review selection and transmission of document request
 - Review of available data and requests for what should be “off-the-shelf” information that may not be publicly available.
2. Peer selection
 - A set of peers used for comparative analysis was jointly agreed upon by NCATA and PennDOT.
3. Act 44 performance criteria analysis
 - Performance criteria mandated by Act 44 were analyzed for the peer group.
 - Additional performance criteria were calculated for informative purposes to help guide the on-site review.
4. On-site review
 - On-site review was conducted on January 28 and January 29, 2013.
 - An interview guide customized for NCATA’s service was used for the review.
 - Topics covered during the interview process included:
 - Governance
 - Contracted Service
 - Management
 - Human/Labor Relations
 - Finance
 - Procurement
 - Operations and Scheduling
 - Maintenance
 - Safety and Security
 - Customer Service
 - Information Technology
 - Capital Programming
 - Marketing and Public Relations
 - Planning

AGENCY DESCRIPTION

Public transportation began in New Castle in the mid 1800's when the "Electric Streetcar Company" initiated service in the city and surrounding areas (Pittsburgh, Butler, Youngstown, etc.). In the 1930's the first bus was introduced to New Castle and by 1941, trolley cars had disappeared and the tracks and overhead wires were taken out.

At that time the franchise was taken over by the "Shenango Valley Transportation Company". Buses operated in New Castle under the SVT until 1958 when a labor dispute halted operations. Buses did not run in New Castle for one year. That is when the "New Castle Area Transit Authority" was formed with buses beginning operations in 1959.

The NCATA was incorporated on September 1, 1965 as a mass transportation project financed by the Federal Housing and Home Finance Agency, the City of New Castle, Shenango Township, Union Township, Neshannock Township and the Commonwealth of Pennsylvania. The project was completed in 1968.

NCATA's fixed-route system consists of a total of 35 busses serving twenty-five (25) bus routes serving the Borough of New Castle and surrounding areas including commuter service to Pittsburgh. **Exhibit 1** and **Exhibit 2** present fixed-route bus statistics for NCATA derived from PennDOT Legacy Reports (dotGrants). NCATA subcontracts ADA complimentary transit service to Lawrence County Social Services.

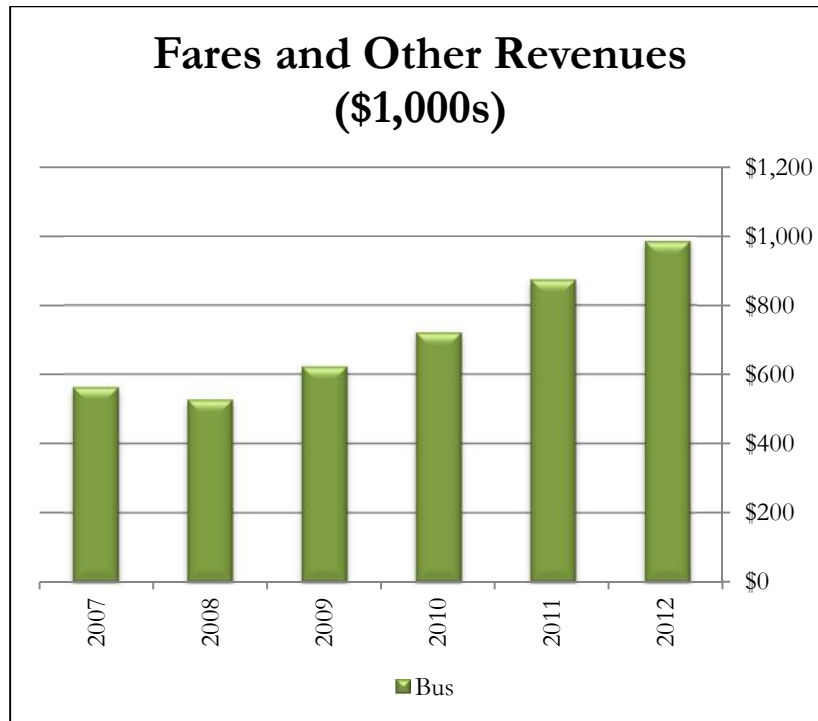
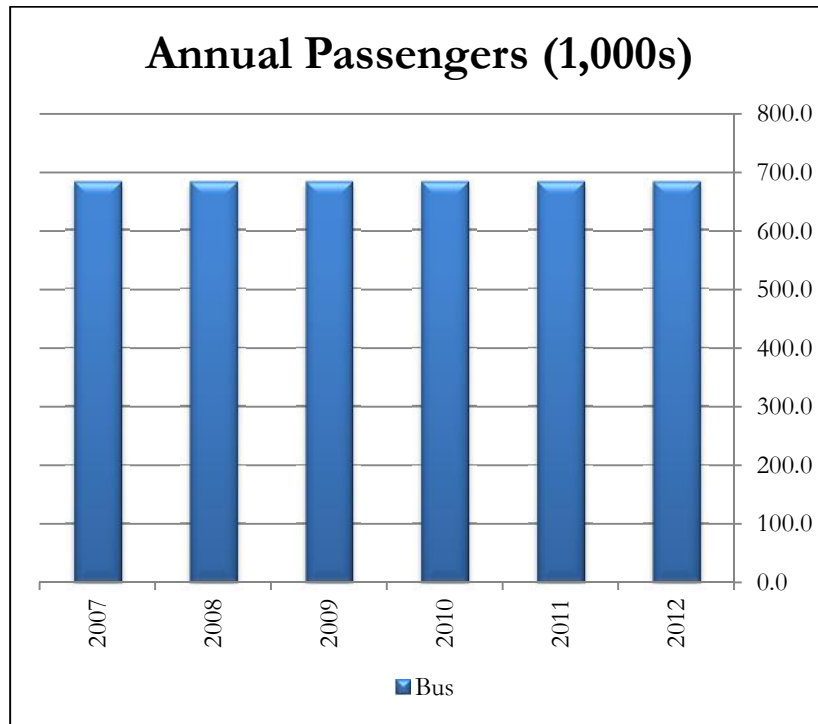
Consistent with the analysis requirements of Act 44, findings are presented for Fiscal Year 2007-2012 data. In developing the performance targets with a 2018 horizon, Fiscal Year 2012 data from dotGrants was used (comparable information is unavailable for the peer group).

Important observations evident from the trends in demand, revenues, and operating characteristics for the Legacy reporting period of 2007 through 2012 are:

1. NCATA's fixed-route ridership shows a decrease in dotGrants reporting. However, previously reported values have been determined to be unreliable. Subsequent analyses⁸ indicate that NCATA senior and transfer ridership components were overstated dotGrants reports and that the auditable components of total ridership have remained relatively static in recent years.
2. NCATA's current total operating revenue is about average for an agency of this size and has been increasing substantially recent years. A recent fare increase (April 2012), a greater percentage of Pittsburgh-bound passengers who pay the highest average fares, continuing insurance rebates, and fees charged for parking lots should sustain (non-subsidy) revenues in coming years.
3. Revenue hours of service have increased between 2007 and 2012. Service changes that increased the number of Pittsburgh commuter trips may result in changes in revenue hours of service in coming years.
4. Operating costs have been increasing at a rate since 2009 that exceeds the average rate of inflation which has remained fairly flat during that same timeframe.

⁸ Ibid. 3, p. v.

Exhibit 1: NCATA Fixed-Route Passengers and Revenues 2007-2012



Source: PennDOT Legacy Reporting System (dotGrants)⁹

⁹ Ibid. 3, p. v.

Exhibit 2: NCATA Fixed-Route Revenue Hours of Service and Operating Costs 2007-2012



Source: PennDOT Legacy Reporting System (dotGrants)

ACT 44 PERFORMANCE ASSESSMENT

Act 44 establishes the framework for a performance review process as follows:

“The Department may conduct performance reviews of an award recipient under this section to determine the effectiveness of the financial assistance. Reviews shall be conducted at regular intervals as established by the Department in consultation with the management of the award recipient. After completion of a review, the Department shall issue a report that: highlights exceptional performance and identifies any problems that need to be resolved; assesses performance, efficiency, and effectiveness of the use of the financial assistance; makes recommendations on follow-up actions required to remedy any problem identified...”¹⁰

The law sets forth performance criteria to be used to satisfy its objectives¹¹:

- Passengers per revenue vehicle hour,
- Operating cost per revenue vehicle hour,
- Operating revenue per revenue vehicle hour,
- Operating cost per passenger, and
- Other items as the Department may establish.

Performance criteria are to be compared for both the system being reviewed and for a group of five or more peers by mode, determined by considering:¹²

- Revenue vehicle hours (car hours for rail and fixed guideway)
- Revenue vehicle miles (car miles for rail and fixed guideway)
- Number of peak vehicles
- Service area population

The law further instructs PennDOT to prepare a five-year trend analysis for the local transportation organization under review and the peer systems by performance criteria and by mode, and make a determination of “In Compliance” or “At Risk” status based on findings.

PEER SYSTEM SELECTION

The list of 11 peer agencies was suggested to NCATA management. Of those, 10 peer systems, in addition to NCATA, were included in subsequent analyses for peer comparison purposes:

1. Greater Portland Transit District (Portland, ME)
2. Cedar Rapids Transit (Cedar Rapids, IA)
3. Yakima Transit (Yakima, WA)
4. Santa Maria Area Transit (Santa Maria, CA)
5. Williamsport Bureau of Transportation (Williamsport, PA)
6. Lakeland Area Mass Transit District (Lakeland, FL)
7. Davenport Public Transit (Davenport, IA)
8. Butte County Association of Governments (Chico, CA)

¹⁰ Title 74 Pa. C.S.A. §1513 (e)

¹¹ Title 74 Pa. C.S.A. §1513 (f)

¹² 67 Pa Code Chapter 427, Annex A . §427.12(d)(1)(i), Jan 2011.

9. Coast Transit Authority (Gulfport, MS)
10. Housatonic Area Regional Transit (Danbury, CT)

ACT 44 FIXED-ROUTE COMPARISONS AND FINDINGS

Comparison of NCATA with the selected peer systems was completed using NTD-reported data and dotGrants Legacy statistics¹³. Due to its consistency and availability¹⁴ for comparable systems, the NTD 2011 Reporting Year database was selected as the primary data source used in the calculation of the five-year trend Act 44 metrics:

- Passengers per revenue vehicle hour
- Operating cost per revenue vehicle hour
- Operating revenue per revenue vehicle hour
- Operating cost per passenger

The definition of the variables used in the calculations is as follows:

- *Passengers*: Annual unlinked passenger boardings by fixed-route mode for both directly-operated and purchased transportation.
- *Operating Costs*: Annual operating cost of services provided (excluding capital costs) by mode for both directly-operated and purchased transportation.
- *Operating Revenue*: Total annual operating revenue generated from farebox and other non-state, non-federal sources by mode for both directly-operated and purchased transportation.
- *Revenue Vehicle Hours*: The total annual number of “in-service” hours of service provided by mode for both directly-operated and purchased transportation.
- *Average*: Unweighted linear average of all values being measured across all peer transit agencies, including NCATA.
- *Standard Deviation*: Standard deviation of all values being measured across all peer transit agencies, including NCATA.

Act 44 stipulates that metrics fall into two categories: “In Compliance” and “At Risk.” The following criteria are used to make the determination:

- In Compliance if greater than one standard deviation **above** the peer average in:
 - The single-year or five-year trend for Operating Cost / Revenue Vehicle Hour
 - The single-year or five-year trend for Operating Cost / Passenger
- In Compliance if **below** one standard deviation from the peer group average in:
 - The single-year or five-year trend for Passengers / Revenue Vehicle Hour
 - The single-year or five-year trend for Operating Revenue / Revenue Vehicle Hour

If the agency falls outside of any of the boundaries, it is considered “At Risk” for that criteria and must create an action plan to bring the criteria into compliance prior to the next performance review.

¹³ **The estimated value of 682,076 unlinked passenger trips / year is used for all analyses in this report.** Refer to *Appendix C: NCATA Reported Ridership Review* (p. 46) for details on how this value was derived.

¹⁴ NTD data is available for almost every urbanized area transit system in the United States. The latest data available at the time of the Peer Selection was for Fiscal Year End (FYE) 2011.

Detailed results of the NCATA and peer analysis are presented in the **Fixed-Route Bus Performance Comparisons** section below and can be summarized as follows:

Exhibit 3: Act 44 Compliance Summary

Metric	2010 Single Year	Five-Year Trend
Passengers / Revenue Hour	AT RISK	In Compliance
Operating Cost / Revenue Hour	AT RISK	In Compliance
Operating Revenue / Revenue Hour	In Compliance	In Compliance
Operating Cost / Passenger Boarding	AT RISK	In Compliance

FIXED-ROUTE BUS PERFORMANCE COMPARISONS

For the 10 peer systems plus NCATA, NTD data were extracted and summarized for each of the required Act 44 metrics. Measures were put into histograms and tables for visual inspection, statistical analyses, and ordinal ranking purposes. The single-year results of these analyses are presented in **Exhibit 4**, **Exhibit 5**, **Exhibit 6**, and **Exhibit 7**. Five-year trend analyses are presented in **Exhibit 8**, **Exhibit 9**, **Exhibit 10**, and **Exhibit 11**.

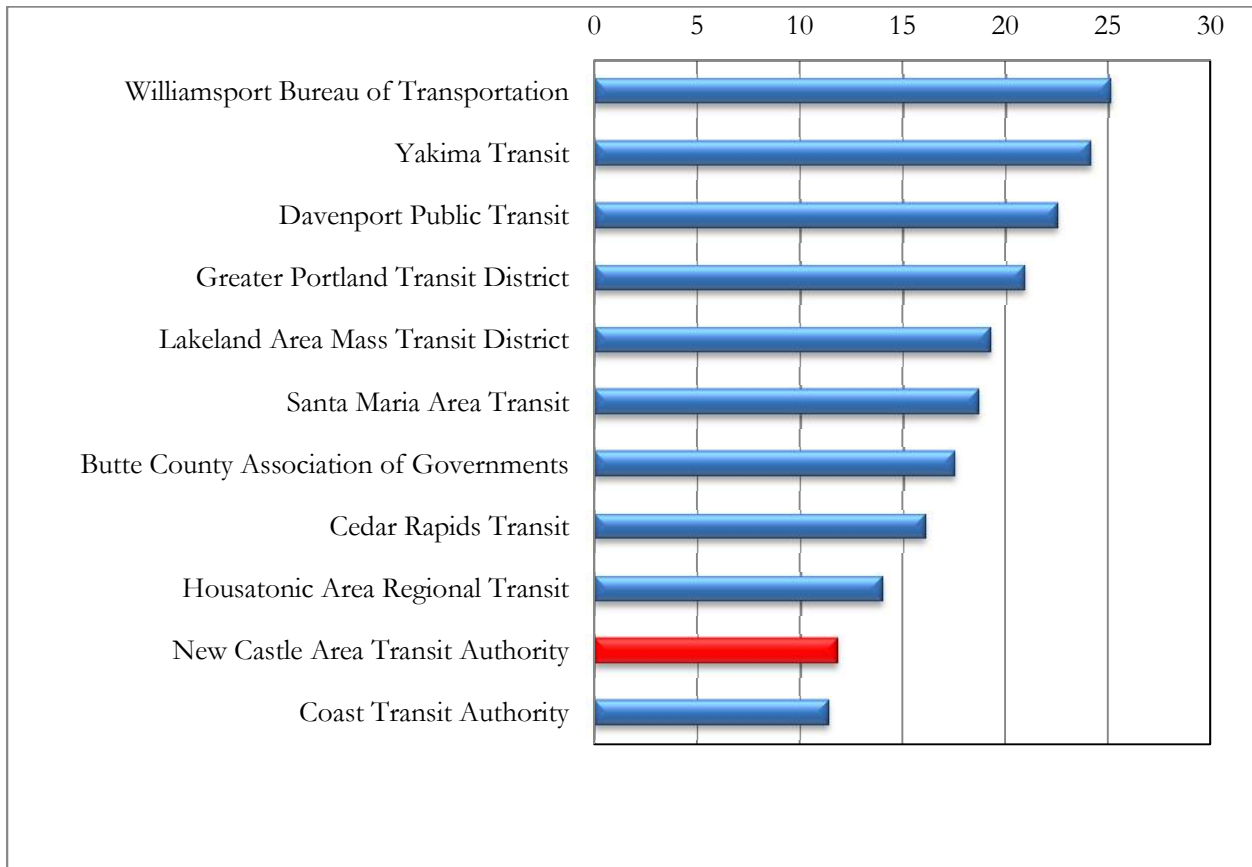
For measures relating to passengers or operating revenue, ordinal rankings are based on a highest-to-lowest system. For measures relating to operating cost, ordinal rankings are based on a lowest-to-highest system. Thus a ranking of “1st” consistently indicates that the agency scores best amongst its peers and a ranking of “11th” indicates that it performs the poorest on any given metric.

The findings presented in the exhibits can be summarized as follows:

1. NCATA’s 2011 passengers per revenue hour figure ranks 10th out of the 11 transit agencies in the peer group. **This is the basis of the first “AT RISK” finding.** Passengers per revenue hour have been declining while the peer group’s average has been increasing. However, uncertainty in reported historic passenger counts limits trend interpretation.
2. NCATA’s 2011 operating cost per revenue vehicle hour is significantly above the peer group average, ranking 11th (the most costly of the peers). **This is the basis of the second “AT RISK” finding.** Cost per revenue hour has increased at a rate greater than inflation between 2006 and 2011 giving it the 5th highest rate of increase amongst the peers. A high starting point with rates of overall cost increase greater than inflation suggests that findings that relate to cost should be a focus of management’s efforts in coming years.
3. NCATA’s 2011 operating revenue per revenue vehicle hour ranks 6th out of 11 and is better than the peer group average. The trend between 2006 and 2011 indicates that operating revenue per revenue vehicle hour increased at almost twice the rate of its peers. This is largely due to fees collected for new parking facilities and recent insurance rebates.
4. NCATA performs the worst of the 11 peers (i.e. the most expensive) based on 2011 operating cost per passenger. **This is the basis of the third “AT RISK” finding.** The trend of cost per passenger increase is about twice that of the peer group average.

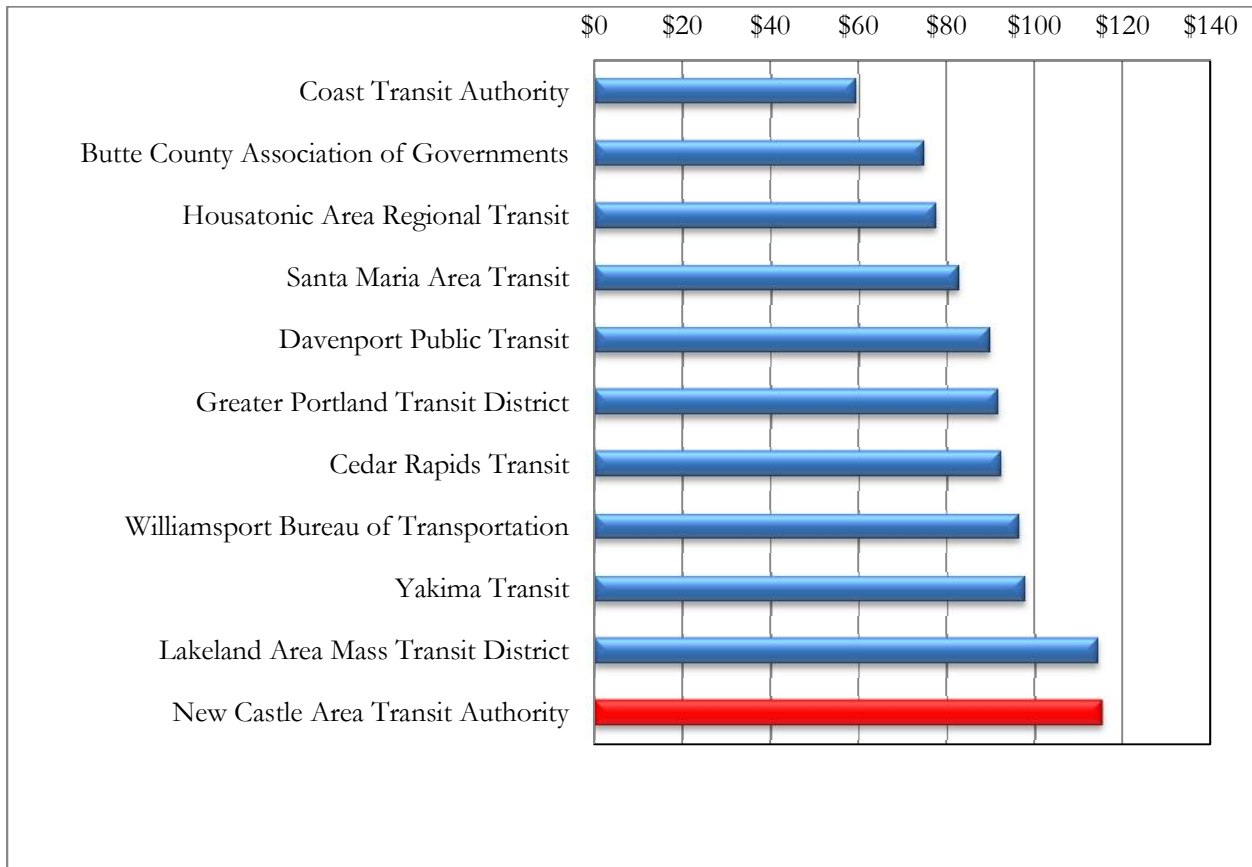
These findings provided a basis for further investigation during the on-site interviews and functional area reviews. Those findings are presented in the next section of the report.

Exhibit 4: Fixed-Route Passengers per Revenue Vehicle Hour 2011



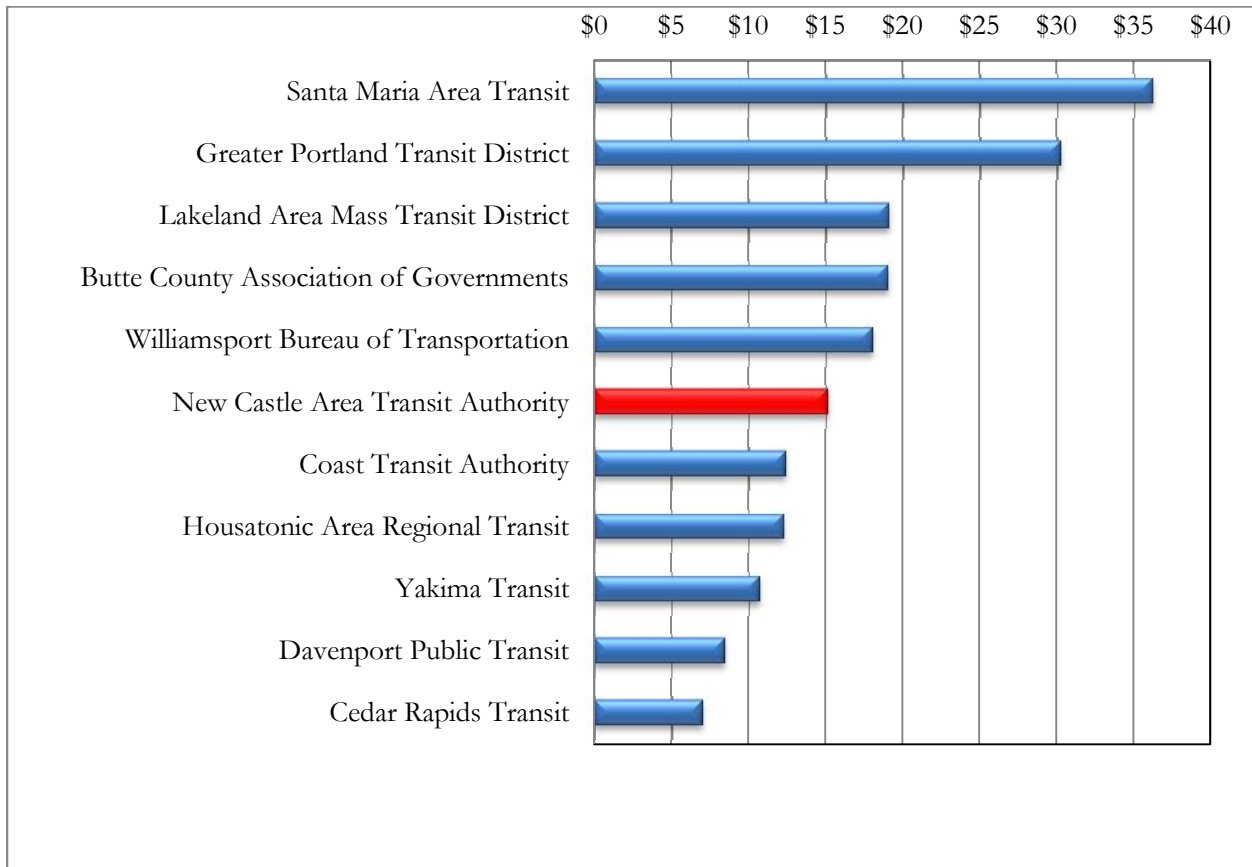
Passengers / Revenue Vehicle Hour (RVH)		
System	Value	Rank
Williamsport Bureau of Transportation	25.10	1
Yakima Transit	24.12	2
Davenport Public Transit	22.53	3
Greater Portland Transit District	20.90	4
Lakeland Area Mass Transit District	19.24	5
Santa Maria Area Transit	18.65	6
Butte County Association of Governments	17.49	7
Cedar Rapids Transit	16.08	8
Housatonic Area Regional Transit	13.98	9
New Castle Area Transit Authority	11.78	10
Coast Transit Authority	11.38	11
<i>Average</i>	18.29	
<i>Standard Deviation</i>	4.70	
<i>Average – 1 Standard Deviation</i>	13.60	
<i>Average + 1 Standard Deviation</i>	22.99	
In Compliance with Act 44 Standard Deviation Requirements	No	
Better or Worse Than Peer Group Average	Worse	

Exhibit 5: Fixed-Route Operating Cost per Revenue Vehicle Hour 2011



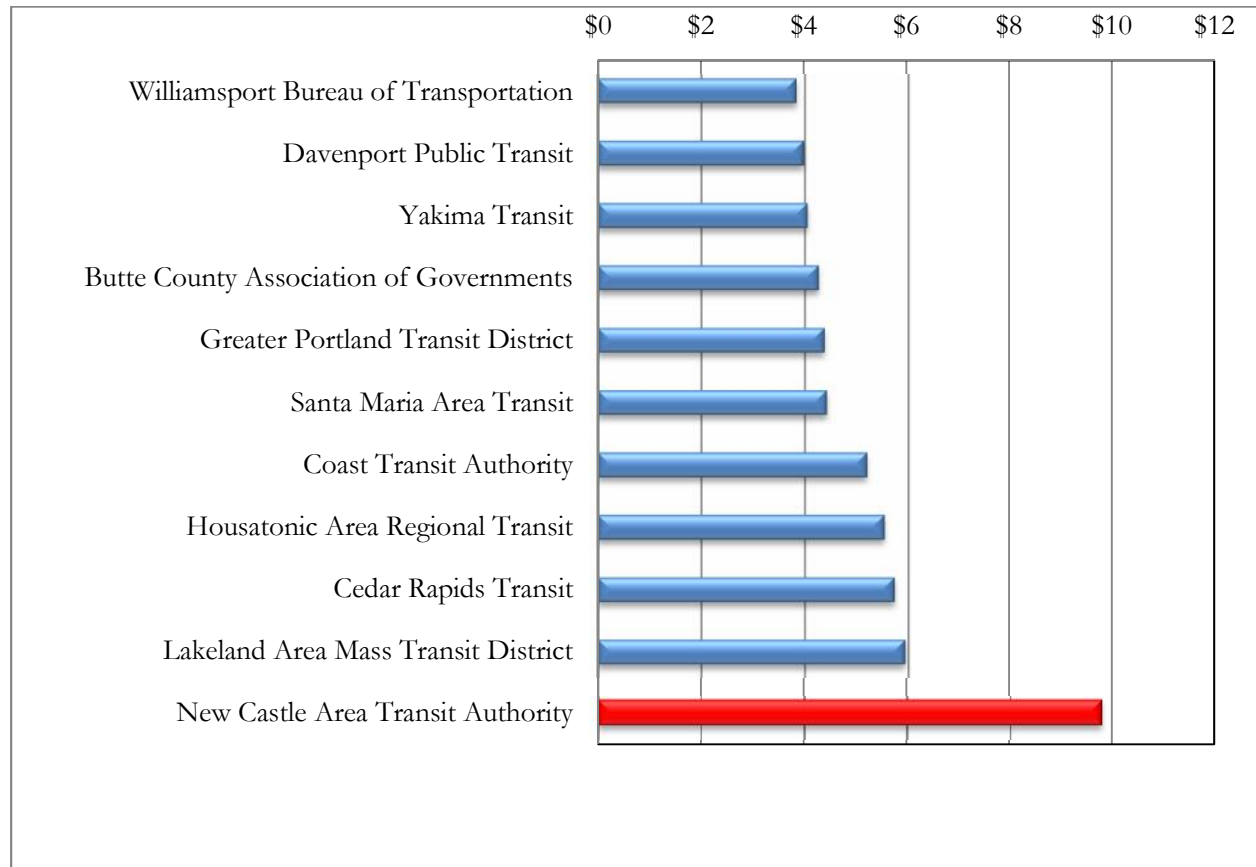
Operating Cost / Revenue Vehicle Hour (RVH)		
System	Value	Rank
Coast Transit Authority	\$59.15	1
Butte County Association of Governments	\$74.58	2
Housatonic Area Regional Transit	\$77.33	3
Santa Maria Area Transit	\$82.45	4
Davenport Public Transit	\$89.58	5
Greater Portland Transit District	\$91.43	6
Cedar Rapids Transit	\$92.17	7
Williamsport Bureau of Transportation	\$96.30	8
Yakima Transit	\$97.54	9
Lakeland Area Mass Transit District	\$114.17	10
New Castle Area Transit Authority	\$115.14	11
<i>Average</i>	<i>\$89.99</i>	
<i>Standard Deviation</i>	<i>\$16.51</i>	
<i>Average – 1 Standard Deviation</i>	<i>\$73.47</i>	
<i>Average + 1 Standard Deviation</i>	<i>\$106.50</i>	
In Compliance with Act 44 Standard Deviation Requirements	No	
Better or Worse Than Peer Group Average	Worse	

Exhibit 6: Fixed-Route Operating Revenue per Revenue Vehicle Hour 2011



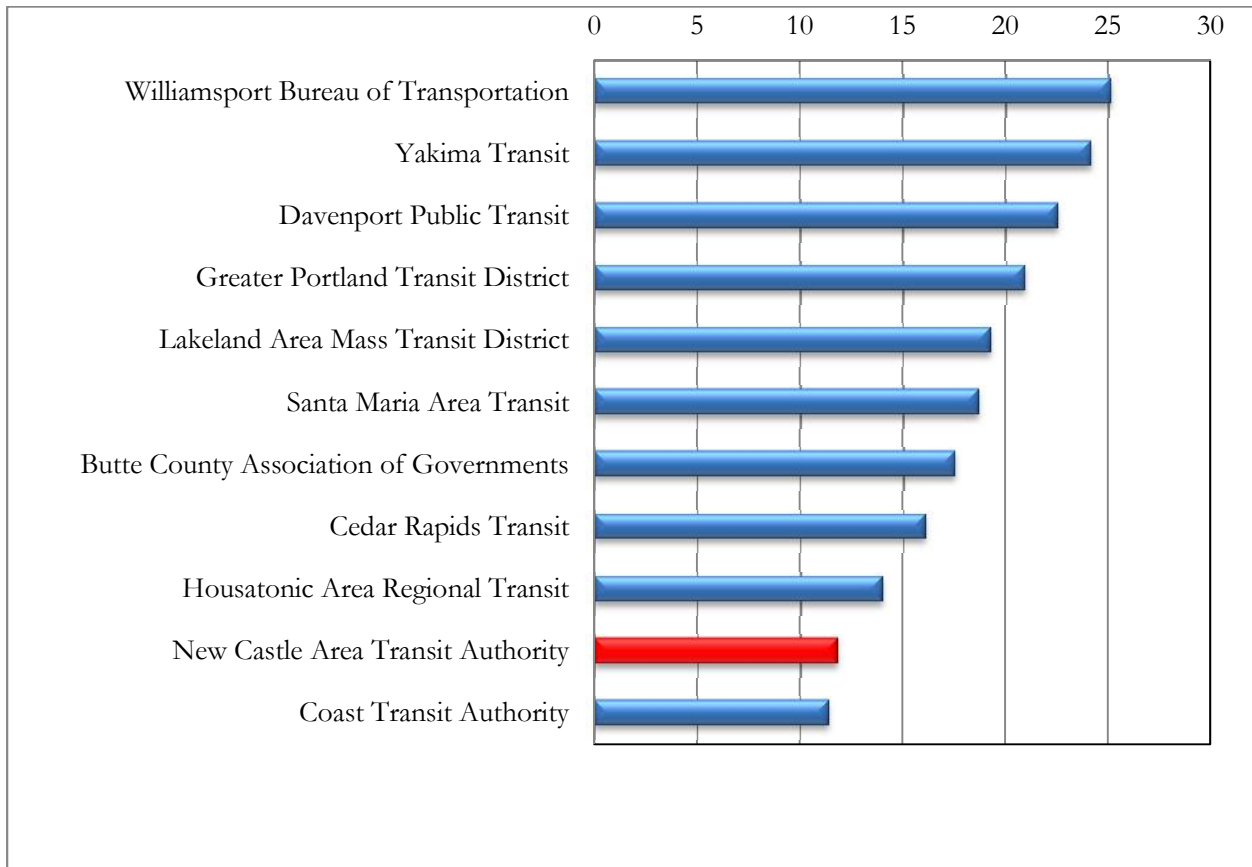
Operating Revenue / Revenue Vehicle Hour (RVH)		
System	Value	Rank
Santa Maria Area Transit	\$36.18	1
Greater Portland Transit District	\$30.20	2
Lakeland Area Mass Transit District	\$19.04	3
Butte County Association of Governments	\$19.00	4
Williamsport Bureau of Transportation	\$17.99	5
New Castle Area Transit Authority	\$15.09	6
Coast Transit Authority	\$12.39	7
Housatonic Area Regional Transit	\$12.24	8
Yakima Transit	\$10.68	9
Davenport Public Transit	\$8.42	10
Cedar Rapids Transit	\$6.98	11
<i>Average</i>	<i>\$17.11</i>	
<i>Standard Deviation</i>	<i>\$9.01</i>	
<i>Average – 1 Standard Deviation</i>	<i>\$8.10</i>	
<i>Average + 1 Standard Deviation</i>	<i>\$26.12</i>	
In Compliance with Act 44 Standard Deviation Requirements	Yes	
Better or Worse Than Peer Group Average	Worse	

Exhibit 7: Fixed-Route Operating Cost per Passenger 2011



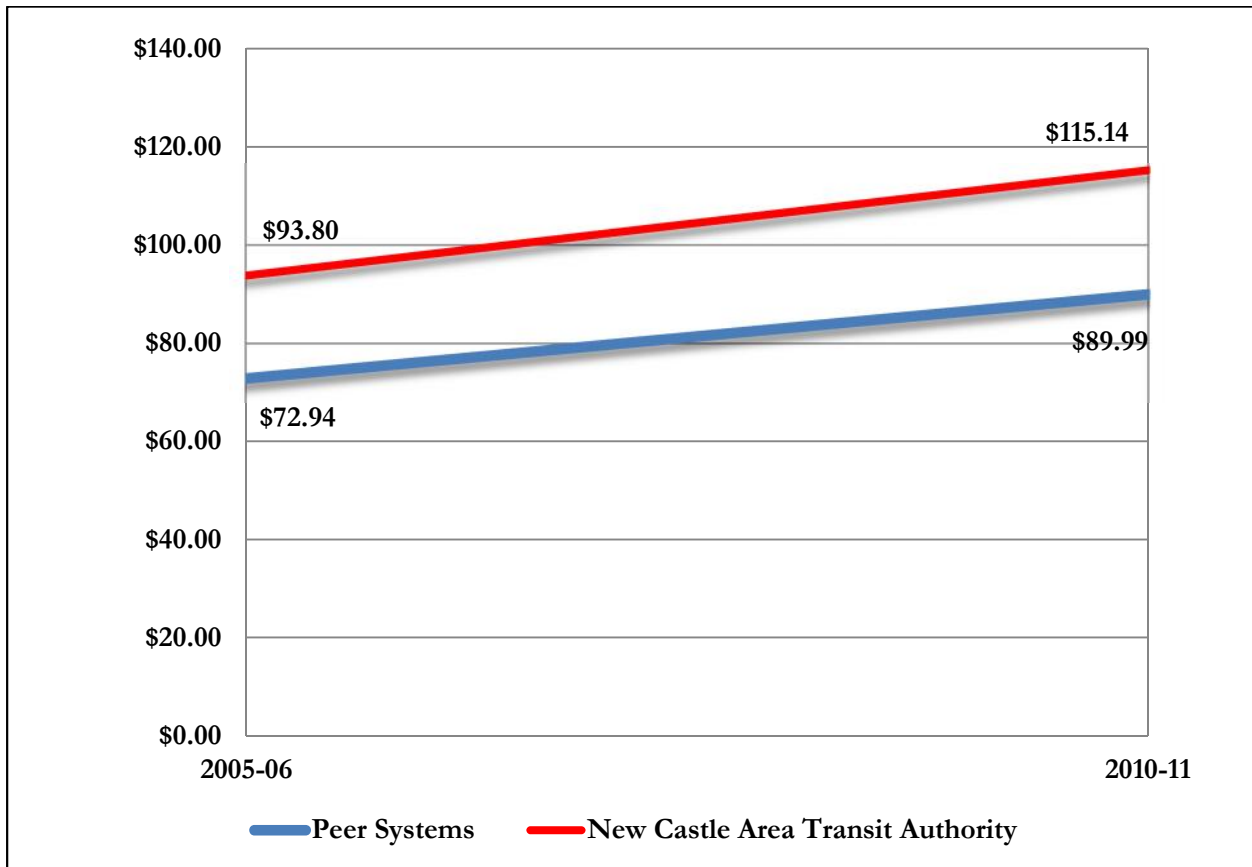
Operating Cost / Passenger		
System	Value	Rank
Williamsport Bureau of Transportation	\$3.84	1
Davenport Public Transit	\$3.98	2
Yakima Transit	\$4.04	3
Butte County Association of Governments	\$4.26	4
Greater Portland Transit District	\$4.38	5
Santa Maria Area Transit	\$4.42	6
Coast Transit Authority	\$5.20	7
Housatonic Area Regional Transit	\$5.53	8
Cedar Rapids Transit	\$5.73	9
Lakeland Area Mass Transit District	\$5.93	10
New Castle Area Transit Authority	\$9.78	11
<i>Average</i>	<i>\$5.19</i>	
<i>Standard Deviation</i>	<i>\$1.70</i>	
<i>Average – 1 Standard Deviation</i>	<i>\$3.49</i>	
<i>Average + 1 Standard Deviation</i>	<i>\$6.88</i>	
In Compliance with Act 44 Standard Deviation Requirements	No	
Better or Worse Than Peer Group Average	Worse	

Exhibit 8: Fixed-Route Passengers per Revenue Vehicle Hour Trend 2006-2011



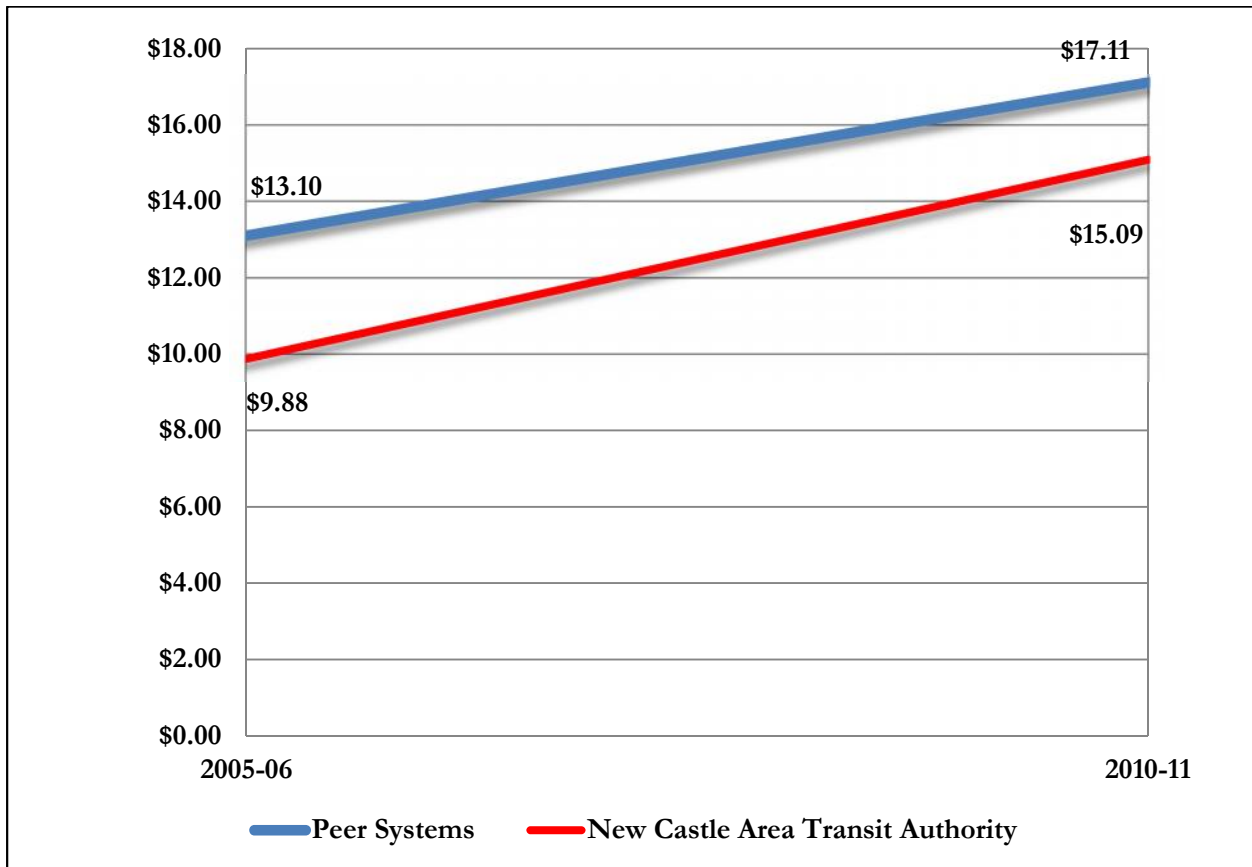
Passengers / Revenue Vehicle Hour (RVH)		
System	Value	Rank
Coast Transit Authority	9.92%	1
Davenport Public Transit	4.97%	2
Butte County Association of Governments	2.88%	3
Lakeland Area Mass Transit District	2.37%	4
Cedar Rapids Transit	2.11%	5
Yakima Transit	1.40%	6
Greater Portland Transit District	0.82%	7
Williamsport Bureau of Transportation	-0.10%	8
Housatonic Area Regional Transit	-1.18%	9
New Castle Area Transit Authority	-1.95%	10
Santa Maria Area Transit	-4.81%	11
<i>Average</i>	<i>1.49%</i>	
<i>Standard Deviation</i>	<i>3.85%</i>	
<i>Average – 1 Standard Deviation</i>	<i>-2.35%</i>	
<i>Average + 1 Standard Deviation</i>	<i>5.34%</i>	
In Compliance with Act 44 Standard Deviation Requirements	Yes	
Better or Worse Than Peer Group Average	Worse	

Exhibit 9: Fixed-Route Operating Cost per Revenue Vehicle Hour Trend 2006-2011



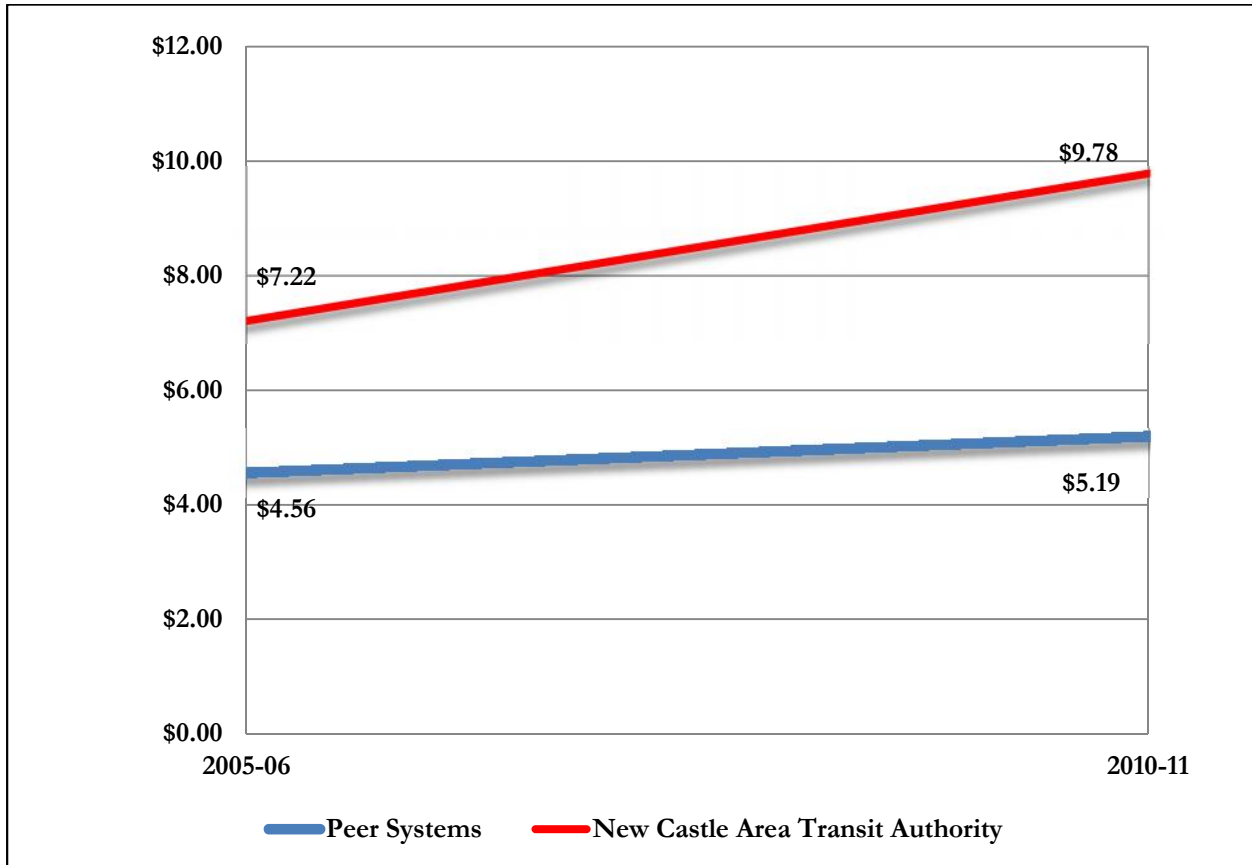
Operating Cost / Revenue Vehicle Hour (RVH)		
System	Value	Rank
Yakima Transit	0.56%	1
Cedar Rapids Transit	2.02%	2
Coast Transit Authority	3.68%	3
Housatonic Area Regional Transit	4.13%	4
New Castle Area Transit Authority	4.19%	5
Davenport Public Transit	4.31%	6
Greater Portland Transit District	4.45%	7
Butte County Association of Governments	4.61%	8
Williamsport Bureau of Transportation	5.78%	9
Santa Maria Area Transit	6.22%	10
Lakeland Area Mass Transit District	7.78%	11
<i>Average</i>	<i>4.34%</i>	
<i>Standard Deviation</i>	<i>1.94%</i>	
<i>Average – 1 Standard Deviation</i>	<i>2.40%</i>	
<i>Average + 1 Standard Deviation</i>	<i>6.28%</i>	
In Compliance with Act 44 Standard Deviation Requirements	Yes	
Better or Worse Than Peer Group Average	Better	

Exhibit 10: Fixed-Route Operating Revenue per Revenue Vehicle Hour Trend 2006-2011



Operating Revenue / Revenue Vehicle Hour (RVH)		
System	Value	Rank
Santa Maria Area Transit	17.45%	1
Coast Transit Authority	15.37%	2
Butte County Association of Governments	9.37%	3
New Castle Area Transit Authority	8.85%	4
Yakima Transit	6.20%	5
Greater Portland Transit District	5.54%	6
Lakeland Area Mass Transit District	5.22%	7
Williamsport Bureau of Transportation	2.57%	8
Davenport Public Transit	2.33%	9
Housatonic Area Regional Transit	-4.09%	10
Cedar Rapids Transit	-14.97%	11
<i>Average</i>	<i>4.90%</i>	
<i>Standard Deviation</i>	<i>8.90%</i>	
<i>Average - 1 Standard Deviation</i>	<i>-4.01%</i>	
<i>Average + 1 Standard Deviation</i>	<i>13.80%</i>	
In Compliance with Act 44 Standard Deviation Requirements	Yes	
Better or Worse Than Peer Group Average	Better	

Exhibit 11: Fixed-Route Operating Costs per Passenger Trend 2006-2011



Operating Cost / Passenger		
System	Value	Rank
Coast Transit Authority	-5.68%	1
Yakima Transit	-0.83%	2
Davenport Public Transit	-0.62%	3
Cedar Rapids Transit	-0.08%	4
Butte County Association of Governments	1.67%	5
Greater Portland Transit District	3.61%	6
Lakeland Area Mass Transit District	5.29%	7
Housatonic Area Regional Transit	5.37%	8
Williamsport Bureau of Transportation	5.88%	9
New Castle Area Transit Authority	6.26%	10
Santa Maria Area Transit	11.59%	11
<i>Average</i>	2.95%	
<i>Standard Deviation</i>	4.67%	
<i>Average – 1 Standard Deviation</i>	-1.72%	
<i>Average + 1 Standard Deviation</i>	7.62%	
In Compliance with Act 44 Standard Deviation Requirements	Yes	
Better or Worse Than Peer Group Average	Worse	

FIVE-YEAR FIXED-ROUTE PERFORMANCE TARGETS

Act 44 requires that PennDOT and all local transit agencies establish five (5) year performance targets for each of the four core metrics defined by the law:

- Passengers / Revenue Hour
- Operating Cost / Revenue Hour
- Operating Revenue / Revenue Hour
- Operating Cost / Passenger

These metrics are intended to improve both the effectiveness and efficiency of service delivery. PennDOT uses the most recent audited and agency-verified values for passengers, operating costs and operating revenues by mode as the “baseline” from which to develop the targets. Five year targets are then developed based on realistic and achievable expectations of improvement.

Passengers / Revenue Hour is a measure of effectiveness of transit service. All else equal, passengers may increase due to successful marketing, customer service, improved route planning and natural growth. Declines in passengers per revenue hour can occur in spite of overall ridership increases due to the introduction of relatively inefficient service. Substantial improvements in this metric can be realized through the reduction of relatively inefficient services.

Typically PennDOT suggests a minimum targeted increase of 2% per year in passengers / revenue hour of service. This target is recommended because: it is consistent with statewide historic trends; it is achievable; and, it encourages agencies to better match service delivery with customer needs.

Operating Cost / Revenue Hour quantifies the efficiency of service delivery. To some extent, costs are managed through good governance, proactive management and effective cost containment. PennDOT suggests a target of no more than 3% per year increase in operating cost / revenue hour of service so that the rate of cost increase does not exceed the average rate of inflation and expected annual increases in overall Act 44 operating subsidy funds. Because of NCATA’s relatively high starting point, this target has been set to a lower rate of 2.0% per year so that NCATA’s cost / revenue hour moves closer to that of its peer systems over the next five years.

Operating Revenue / Revenue Hour, like operating cost / revenue hour, tries to insure an agency remains financially solvent in the long run. Operating revenue is composed of fares and other non-subsidy revenues. The target is set to be the same as passengers / revenue hour (2%) to make sure that revenues from fareboxes and non-subsidy sources keep pace with or exceed cost increases.

The maximum **Operating Cost / Passenger** target is established as the difference between maximum operating cost / revenue increase (2%) less the minimum passengers / revenue hour goal (2%), or no net change (0.0%).

These performance targets represent the minimum performance level that NCATA should achieve for each Act 44 criteria during the next performance review cycle, five years from the date of this report. The performance targets were created using historical data analyzed during the five-year trend analysis as well as the most current certified audit information available. Standards were extrapolated to FY 2018 and are designed to be aggressive, yet achievable. Performance targets will be agreed to by PennDOT and NCATA before they are finalized so that expected anomalies are reflected in the standards. The suggested performance targets for NCATA’s Act 44 metrics are presented in **Exhibit 12, Exhibit 13, Exhibit 14, and Exhibit 15.**

Exhibit 12: Fixed-Route Passengers per Revenue Hour Performance Targets

Year 2018 Target..... **13.53**
 Interim Year Targets **Annual increase of at least 2.0%**

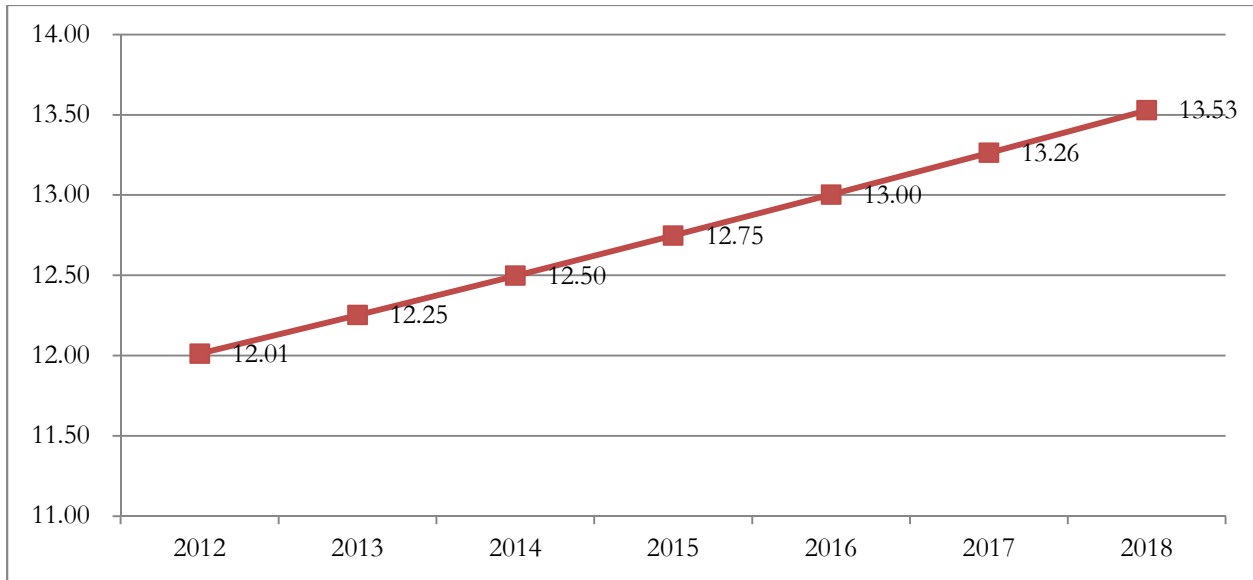


Exhibit 13: Fixed-Route Operating Cost per Revenue Vehicle Hour Performance Targets

Year 2018 Target..... **\$138.33**
 Interim Year Targets **Annual increase of no more than 2.0%**

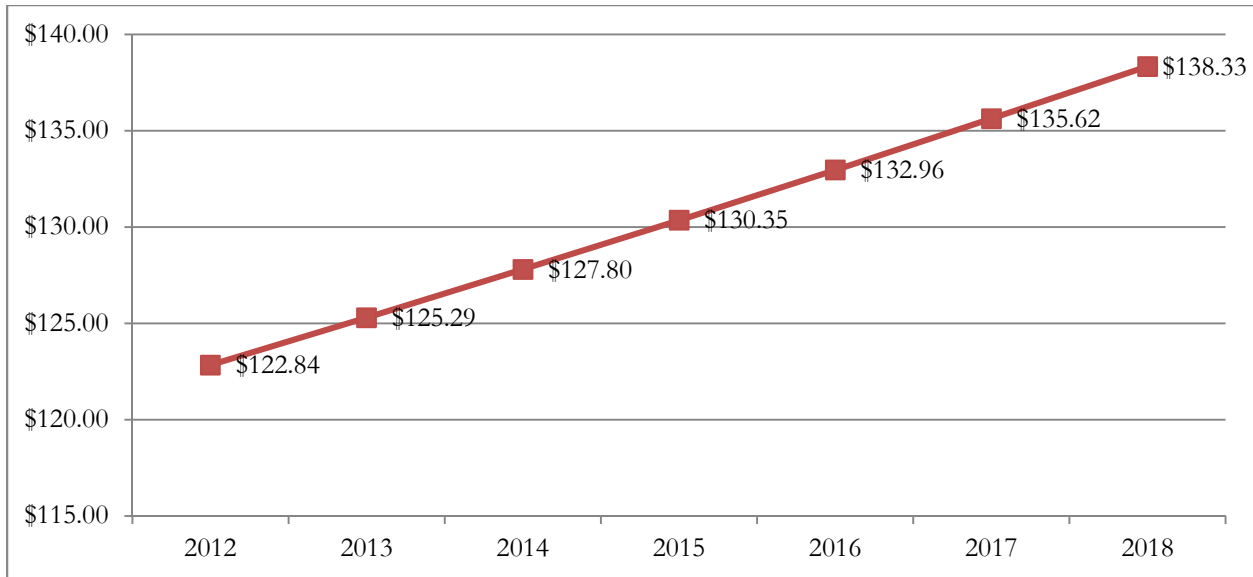


Exhibit 14: Fixed-Route Operating Revenue per Revenue Vehicle Hour Performance Targets

Year 2018 Target.....**\$19.53**
 Interim Year Targets **Annual increase of at least 2.0%**

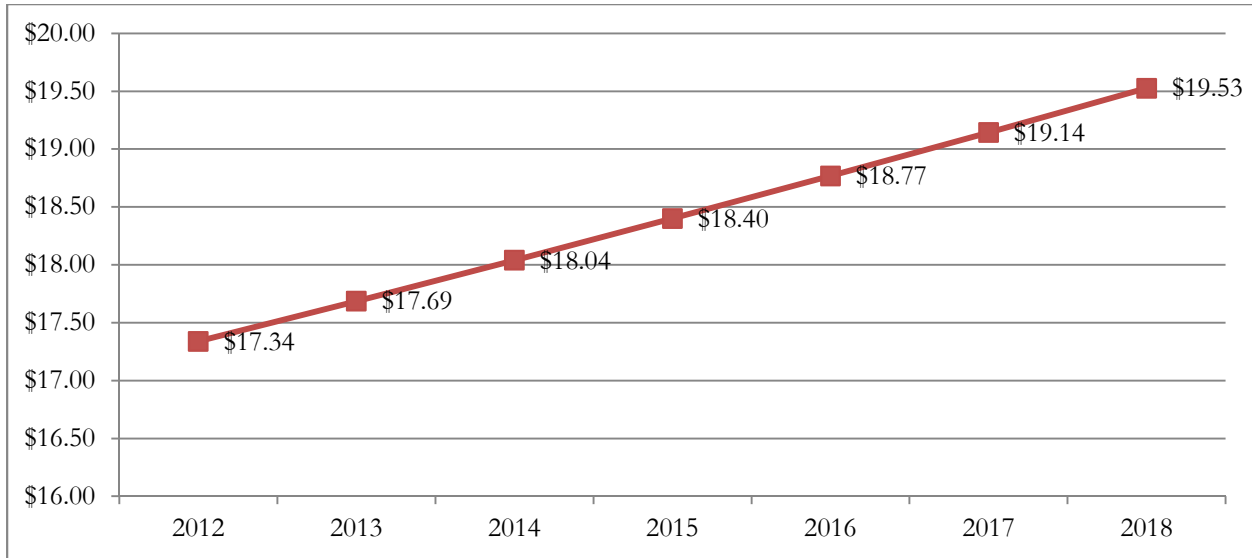
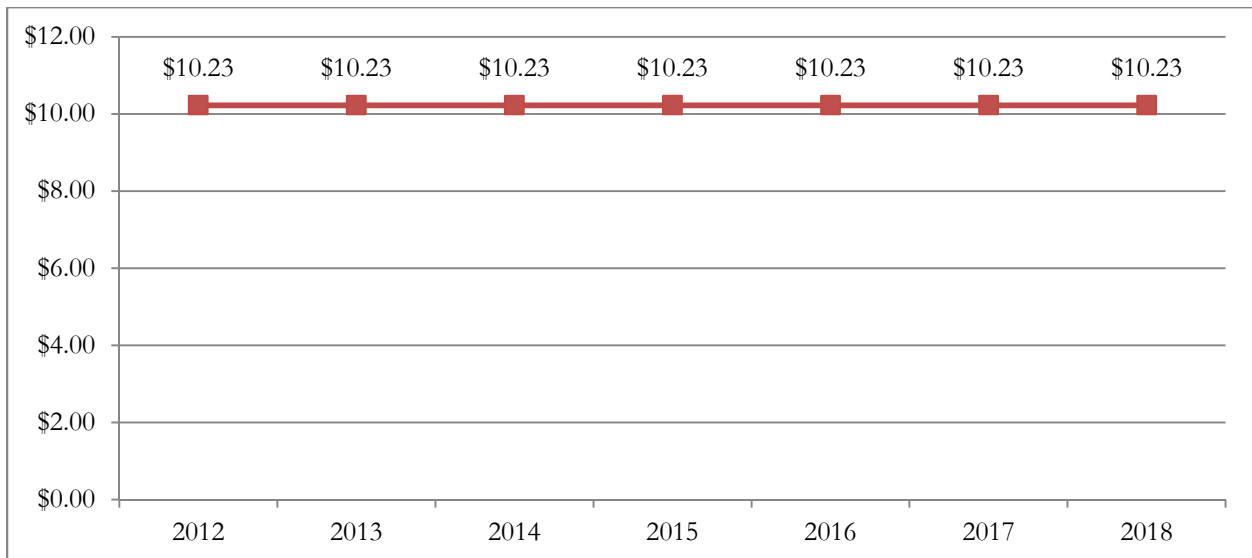


Exhibit 15: Fixed-Route Operating Cost per Passenger Performance Targets

Year 2018 Target.....**\$10.23**
 Interim Year Targets **0.0% (No Annual Change)**



FUNCTIONAL REVIEW

Functional reviews are used to determine the reasons behind performance results found in the Act 44 comparisons, to find “best practices” to share with other transit agencies, and to identify opportunities for improvement that should be addressed in the Action Plan (see **Appendix A: Action Plan Improvement Strategies**). A total of 14 functional areas were reviewed through documents received from the agency (see **Appendix B: Documentation Request to General Manager**) and interviews conducted on-site. The functional areas are:

1. **Governing Body** – Responsibilities include setting vision, mission, goals, and objectives; management oversight; recruiting and retaining top management personnel; and advocacy for the agency’s needs and positions.
2. **General Management** – Responsible for the day-to-day operations of the agency. Manage, monitor, analyze, direct, and plan for the future with regard to all functional areas. Inform and report to the Governing Body, and implement governing body direction.
3. **Human Resources** – Responsible for employee retention, recruitment, training, performance reviews, grievance procedures, employee benefits, and labor relations.
4. **Finance** – Includes budgeting, accounting, cash flow management, revenue handling, and insurance.
5. **Procurement** – Includes acquisition of rolling stock, vehicle parts, non-revenue capital items (i.e., office equipment) and other operations-related items.
6. **Operations** – Includes management of daily service operations, on-street supervision and control, dispatching, and general route management.
7. **Maintenance** – Includes vehicle and non-vehicle maintenance management, procedures, and performance.
8. **Scheduling** – Includes route and driver scheduling and decision-making, pay premium considerations, general management, procedures, and performance.
9. **Safety and Security** – Includes vehicle and passenger safety, facility security, and emergency preparedness.
10. **Customer Service** – Includes management, procedures, and performance related to current and future customers of the fixed-route system and other topics such as service information and complaint handling processes.
11. **Information Technology** – Includes automated mechanisms for in-house and customer service communication including future plans for new technology.
12. **Capital Programming** – Includes assessing and programming current and future capital needs reflecting both funded and unfunded projects. Includes the Transportation Improvement Plan (TIP), 12-Year Plan, and Long-Range Transit Plan.
13. **Marketing and Public Relations** – Includes maximizing current markets and expanding into new markets. Includes managing the perception of the agency by the public at-large to encourage current and future ridership.
14. **Planning** – Includes analysis of information to effectively plan for changes to the system in the short-, medium-, and long-term horizons, to help ensure continued success.

The functional review findings are organized by a brief description of the Act 44 variables guiding the performance review: passengers, fare and other non-subsidy revenues, and operating costs.

These 14 areas work together to effectively meet the needs of passengers, to deliver high-quality service in a cost-effective manner and to provide resources that will adapt to changing needs.

The following sections summarize the ways which service can be delivered more efficiently and effectively in ways that are sensitive and responsive to the community's needs, maximize productivity, direct service hours effectively, control operating costs, and achieve optimum revenue hours. The observations garnered during the review process are categorized as *Best Practices* or *Items to Address in the Action Plan*. Best Practices are those exceptional current practices that are beneficial and should be continued or expanded.

Items to Address in the Action Plan are recommendations which have the potential to maximize productivity, to direct service hours effectively, to control operating costs, and to achieve optimum revenue levels which will enhance the system's future performance overall for one or more of the Act 44 fixed-route performance factors. Action Plan templates have been included in this document (pp. 37-41). It should be noted that specific actions may partially address the broadly noted opportunities for improvement found in the "**General Findings**" (pp. vi-vii). Some actions will be quickly implementable while others may take several discrete steps to achieve over a longer period of time. The template does however provide a simple-to-follow order of key findings of this report that should be addressed in the Action Plan.

OPPORTUNITIES TO INCREASE FIXED-ROUTE RIDERSHIP

"Passengers," as defined by Act 44, are unlinked passenger trips or passenger boardings across all routes in the fixed-route transit system. Increases in ridership directly represent how effectively management has matched service levels to current demand for service.

BEST PRACTICES

1. NCATA periodically hires an outside firm to conduct reviews of driver "on the road" performance. The most recent survey performed eight (8) anonymous on-board evaluations and reported to management driver behaviors that could increase claims as well as observed driver courtesy, on-time performance and ADA compliance. **Random quality control surveys are an important tool** NCATA has used to help target driver training efforts to insure NCATA is performing safely and efficiently.
2. NCATA has **security cameras on all vehicles and at all facilities** and uses them regularly for customer service, insurance claims and law enforcement needs. This provides management with a tool that is used to evaluate, in a first-hand way, specific complaints.
3. **All of NCATA's vehicles have bicycle racks.** "Bikes on busses" is a program that has been identified by many transit systems as a cost-effective means to extend the service area of the transit system and expand ridership potential without adding new service.
4. NCATA recently constructed a joint park and ride / timed transfer center in downtown New Castle and a suburban park and ride lot. The facilities appear to be well-maintained and well-secured. **Clean and safe transfer facilities build customer confidence and promote a positive image of NCATA in the community.**

ELEMENTS TO ADDRESS IN PART 2-A OF THE ACTION PLAN (SEE P. 38)

1. NCATA does not conduct **routine customer satisfaction surveys**. Periodic customer and **non-customer surveys** should be built into NCATA's budget with results used to direct service and operational changes. These surveys could be "piggybacked" on similar efforts by the Port Authority of Allegheny County (PAAC) and the Southwest Pennsylvania Commission (SPC). Such surveys can help to identify trends and produce corrective action plans earlier than customer complaints alone.
2. NCATA currently lacks formal, routine, and proactive ways to incorporate customer feedback into the fixed-route service delivery decision-making process. Such feedback can better inform both the community and NCATA so that passenger needs and service are optimized with respect to one another. **NCATA's management and the Board should introduce formal mechanisms** that provide regular feedback on topics that are of concern to customers via a **standing citizens' advisory committee**. The committee should advise NCATA from a passenger's perspective on a variety of topics including service changes, fare changes, branding, community outreach, outreach to employers, and customer satisfaction.
3. NCATA has a \$42,700 marketing budget (FYE 2012) documented as two separate line items¹⁵ in its statement of income and expenses that is largely used for radio spots. No information on the effectiveness of these marketing efforts is collected. It is recommended that NCATA management **document a range of marketing strategies** and **establish appropriate performance metrics** so that management can best target limited marketing resources as well as provide documented insight and guidance to new staff. As part of this strategy, management should identify how local media and public service announcements can be used to increase visibility and attract new riders at little to no cost.
4. NCATA provides commuter service to Pittsburgh. This appears to be one of NCATA's growing markets. However, potential passengers would have no easy way to plan a trip that uses both NCATA and PAAC busses as NCATA does not participate in PAAC's trip planner or Google Transit services. Furthermore, neither NCATA nor PAAC show each other's routes on one another's route or system maps and NCATA is not planning to participate in the regional *smart card* initiative at this time card due to reported issues with card readers. NCATA should **explore ways to remove these barriers to passenger transfers with PAAC including coordinating schedules and perhaps encouraging PAAC to show NCATA routes and times on their system map**. Additionally, NCATA should plan to periodically reevaluate its participation in the regional *smart card* initiative and examine ways to promote joint services with other neighboring transit systems.
5. NCATA has made substantial investments in on-vehicle technology including GPS with on-vehicle diagnostics, fully-registering fareboxes, live video, etc. However, none of the benefits of these investments are available to potential passengers. Other similar transit systems have leveraged these investments to provide trip planning on their websites. **NCATA management should examine the customer service potential of technology investments already made and develop a technology deployment plan** that focuses on issues important to customers such as real-time information and trip planning.

¹⁵ Per FYE 2012 Certified Audit Report NCATA spent \$15,724 in Wages for Advertising & Promotion + \$26,931 Promotion and Advertising Expense = \$42,655

6. NCATA's website is dated and lacks key information important to the community. Similar sized transit systems provide information on delays, cancellations, public meetings, ridership, budgeting, real-time trip planning, RSS feeds, links to social media, a mobile version suitable for use with smart phones, Board meeting packets including agendas and minutes, a current system map, media and public service announcements, etc. **Management should develop and implement a plan to provide cost-effective ongoing updates to their website that maximize the amount of real-time information available to their current and potential customers.** Measuring the effectiveness of these enhancements should be monitored monthly by tracking the number of "hits" on the website.
7. Except at park and ride facilities, NCATA's bus stops are not well designated. **NCATA management should inventory their current bus stop sign locations and install, repair and update the signs such that every bus stop location is clearly designated.**
8. NCATA lacks training or training materials for riders with disabilities on how to use lifts. These materials provide riders with an increased sense of safety and comfort using NCATA vehicles as well as potentially reduce injuries and associated liability. **NCATA management should provide training for riders with disabilities** by contacting similar systems in the Commonwealth to adopt and adapt materials and practices already in place elsewhere.
9. Management should **evaluate the productivity of bus routes and runs** with a goal to minimize unproductive service and expand upon productive service once they are confident that reported ridership and reported ridership trends on each route are accurate.
10. NCATA should **evaluate the potential of service agreements with large employers and institutions** (route guarantees) as a means to improve ridership / revenue hour of service. This approach has proven successful for similar systems in the Commonwealth. The opportunities for partnerships with those organizations that most benefit from public transportation would create the environment to increase cost recovery, while reducing reliance on taxpayer subsidy.

OPPORTUNITIES TO INCREASE FIXED-ROUTE REVENUES

"Revenues," as defined by Act 44, encompasses all non-subsidy revenues generated to help fund the operation of a transit system. The largest contributors to this are typically farebox revenues, route guarantees, interest on accounts, and advertising revenues.

ELEMENTS TO ADDRESS IN PART 2-B OF THE ACTION PLAN (SEE P. 39)

1. Given that NCATA is only achieving a 4.9% local match to state subsidy in the current fiscal year, the local contribution will need to steadily increase until it meets Act 44's 15% local match requirement. This poses a serious problem as the current local match requirement is already proving a challenge for NCATA. Even by augmenting current year local subsidy payments with local subsidy reserves, NCATA may have insufficient local match in FY 2012/2013. **If NCATA falls short in local matching funds it will be ineligible for the full amount of state contribution to the operating cost of the system in coming years. NCATA's Board and management should aggressively explore the possibility of having local jurisdictions, such as Lawrence County, provide a greater contribution to the required match.**

2. NCATA has an 11.4%¹⁶ passenger farebox recovery ratio on fixed-route service. This is lower than observed in kindred agencies. However, NCATA recently increased fares which should improve the recovery ratio. It is recommended that NCATA **establish system-wide and route-level farebox recovery goals and integrate those goals into a comprehensive multi-year fare policy.**
3. Currently, NCATA generates about \$24,000 / year in advertising revenues. Advertising, while not a large revenue generator for small transit systems, can help off-set the maintenance cost of shelters and other incidental costs. **NCATA management should investigate the potential benefits and costs of more aggressively marketing advertising contracts for covered shelters and for on-vehicle advertising** as much of the potential space inside of vehicles appears underutilized. If management determines there is a lack of demand for such advertising, NCATA should consider more fully utilizing those spaces for self-promotional materials or as value added space to current exterior advertisers.
4. NCATA does not provide monthly or other discount passes. Such passes promote customer loyalty and can provide a new revenue source. **NCATA should investigate such discount passes as means of accommodating and attracting large employer, local academic institutions and the public who are attracted to such fare arrangements.**

OPPORTUNITIES TO CONTROL OPERATING COSTS

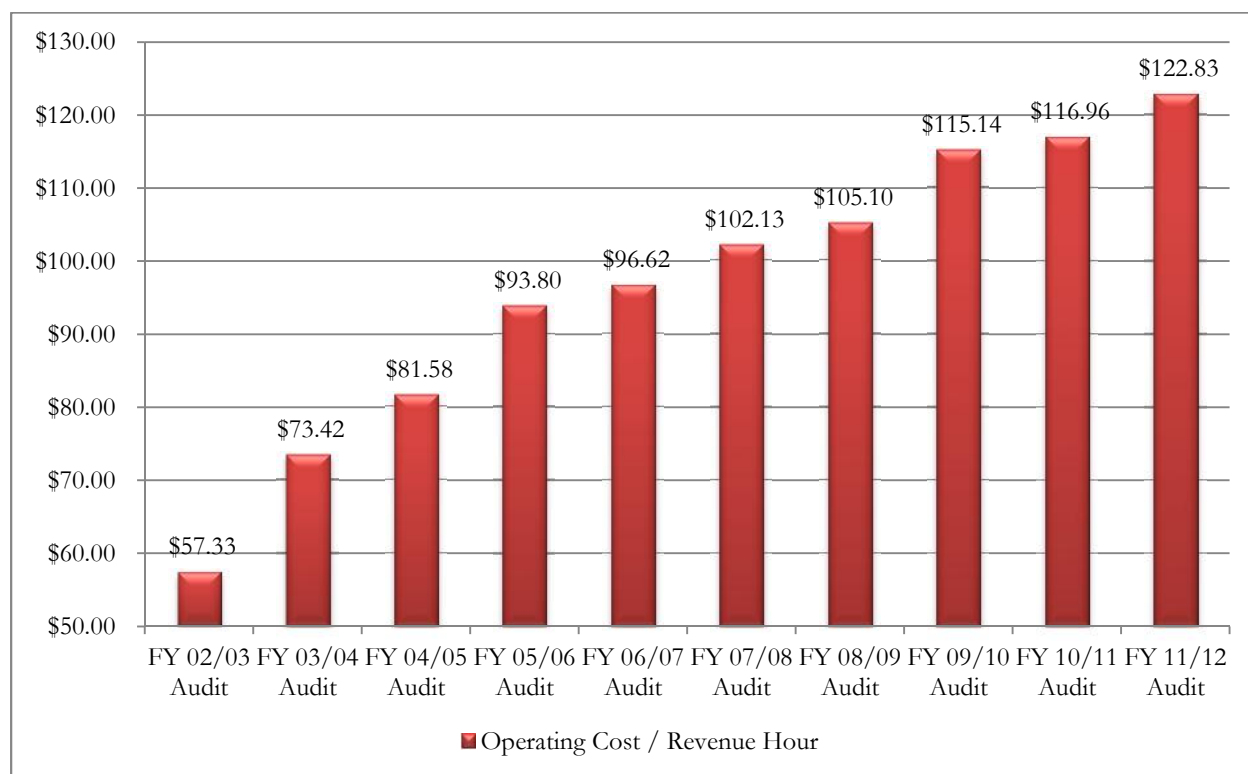
“Operating costs” capture the non-capital costs incurred in the day-to-day operations of a transit system. Labor, maintenance, and operating costs such as fuel, tires, and lubricants contribute to this measure in significant ways. Many transit agencies have noted cost increases much higher than the general rate of inflation. Compounding this is the reality that operating subsidies are not likely to increase at a comparable rate. Controlling operating cost increases is a key to maintaining current service levels.

ELEMENTS TO ADDRESS IN PART 2-C OF THE ACTION PLAN (SEE P. 40)

1. As noted in Act 44 Performance Determination (p. iv), NCATA is **“AT RISK”** for its FY 2010/2011 Total Operating Cost / Revenue Hour and Total Operating Cost / Passenger. Since then, operating cost / revenue hour cost of service delivery has continued to increase (**Exhibit 16**) by 1.6% and 5.0% in Fiscal Year End (FYE) 2011, and 2012, respectively.

As a way to understand the relative contributions to NCATA’s high operating cost / revenue hour, an analysis of line items reported in the FYE 2012 Audit Report were assigned to PennDOT Legacy Budget line items based on the reported cost in each audit. As shown in **Exhibit 17**, fringe benefits costs are much higher than other systems. Operator wages are somewhat higher as well. Other wages (typically administrative costs) are also somewhat lower than the other systems. In recognition of escalating benefits costs, management recently implemented a program of “self-insurance” for health care benefits. That approach may realize a cost savings in the long-run.

¹⁶ FY 2011/2012, Fixed-Route Fare Revenue=\$793,443, Fixed-Route Operating Cost=\$6,974,939. Recovery Ratio (\$793,443/\$6,974,939)=11.4%

Exhibit 16: NCATA Fixed-Route Operating Cost / Revenue Hour (FY 2005-2012)**Exhibit 17 Comparison of FYE 2012 Operating Cost / Revenue Hour with Other Pennsylvania Transit Systems**

Fixed-Route Operating Expense Item	Fixed-Route Operating Cost / Revenue Hour					NCATA
	BCTA Urban	AMTRAN	LCTA	RRTA	COLTS (DO)	
1 Operator Wages	\$22.10	\$23.90	\$25.85	\$23.25	\$19.78	\$27.67
2 Other Wages	\$17.56	\$17.51	\$16.59	\$11.71	\$15.25	\$12.38
3 Fringe	\$16.40	\$26.45	\$34.61	\$24.16	\$29.11	\$47.17
4 Service	\$8.10	\$3.93	\$1.52	\$1.29	\$3.82	\$7.38
5 Fuel & Lubricants	\$16.68	\$11.91	\$11.18	\$11.88	\$10.75	\$15.35
6 Tires	\$1.08	\$0.42	\$0.60	\$0.62	\$0.67	\$0.76
7 Other Materials	\$6.39	\$5.07	\$4.37	\$6.65	\$2.40	\$7.40
8 Utilities	\$3.43	\$1.42	\$1.10	\$0.76	\$1.29	\$1.46
9 Casualty & Liability	\$1.90	\$1.43	\$3.69	\$2.46	\$4.05	\$2.66
10 Taxes	\$0.04	\$0.29	\$0.00	\$0.00	\$0.00	\$0.00
11 Purchased Transportation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12 Miscellaneous Expenses	\$1.36	\$2.44	\$0.31	\$0.79	\$2.79	\$0.59
13 Expense Transfers	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Fixed-Route Operating Expense / RVH	\$95.03	\$94.76	\$99.81	\$83.56	\$89.89	\$122.83

Source: dotGrants Legacy Reports FY 2011/2012

Going forward, NCATA **should establish budgets for individual line items that reflect the amount of service delivered** (e.g. revenue hours, revenue miles, etc.) and work with neighboring agencies of similar size to identify additional ways to contain fringe benefit costs.

2. NCATA's fleet appears old as the agency is still running busses built in the 1980s. Rather than retire busses as they reach 12 years of age, management has used new vehicles to expand service. Old vehicles typically have much higher maintenance costs than newer ones. This approach to service expansion likely increases the average operating and maintenance cost / mile. **Management should discontinue the practice of not retiring vehicles as a way of expanding service.** Should service expansion be necessary, **the acquisition of new vehicles should be part of a capital plan and budgeting process rather than keeping retired vehicles in service.**
3. NCATA's collective bargaining agreement (CBA) has many terms that increase the cost and quality of service delivery. For example, drivers can call in up to one minute before their report time without implications. This can result in missed runs. Employees pay no contribution towards the cost of health care benefits. This increases NCATA's costs. Free rides are provided both to employees and their spouses. There is a limit that no less than 70% of all driver runs are straight runs. NCATA has no part-time drivers that can be used to fill unexpected absences resulting in overtime pay when the extraboard is completely used. Shop employees receive overtime pay based on an 8 hour work day vs. a 40 hour work week. Drivers are entitled to cash payment on top of vacation time which is paid based on a 42.5 hour work week. There is no provision for progressive discipline. Such terms are very atypical for a rural agency of NCATA's size.

While management reports that there has been difficulty negotiating more favorable terms in the CBA, other similar agencies in the Commonwealth have been much more successful. NCATA management **should start well before the next CBA negotiations to identify items that increase the cost of service delivery, particularly in the area of fringe benefits, and discuss with peer systems such as BCTA, approaches that can be used to achieve more favorable terms.** At the time of renegotiation, Board members should not be present at the negotiations but rather act as oversight to management's efforts.

4. NCATA has a practice of weekly driver schedule picks even though the collective bargaining agreement allows for 60 day picks. While management reports this is for morale purposes, the practice adds unnecessary administrative costs and can result in newer drivers being assigned to routes with which they are unfamiliar resulting in poor on-time performance and reduced service quality. **Management should reevaluate the practice of weekly schedule picks to determine if the morale benefits associated with the practice justify the costs and service quality impacts.**

OTHER FINDINGS THAT IMPACT OVERALL AGENCY PERFORMANCE

“Other Findings” is a collection of findings from the functional review that may, if addressed, improve the current or future operations of NCATA. While not directly tied to Act 44 measures, actions to address these findings will result in a more seamless operation and greater operational efficiencies.

BEST PRACTICES

1. NCATA provides monthly driver meetings and conducts training on an ongoing basis. This likely improves safety and reduces liability claims. As NCATA receives approximately \$100,000 in insurance rebates each year, it appears that NCATA's training practices are having a direct impact on the agency's bottom line costs.
2. NCATA has and actively monitors live video feeds from all vehicles and all property locations. This allows for real-time review of issues, concerns and complaints.

ELEMENTS TO ADDRESS IN PART 3 OF THE ACTION PLAN (SEE P. 41)

1. NCATA has major issues with respect to reporting ridership accurately. For example, management recently implemented a policy (at the directive of PennDOT) to collect transfer coupons and then reconcile those against farebox data. Since this policy was put into place on 1/13/2013, reported transfers have dropped substantially. However, there are other areas where likely misreporting could impact ridership estimates. Most categories of ridership that do not have a clear audit trail have the potential to have been misreported for a prolonged period. **Management implement procedures and quality control measures to insure that reported ridership is accurate.** For example, NCATA's investment in video technology can be leveraged to perform period review of on-board video logs to insure that the ridership reported on a bus or route is accurate.
2. NCATA's Board and management would benefit from formal training. **All Board members and management should attend PennTrain Board training at the first opportunity** and at least once every few years. **Management and administrative staff members should also have periodic formal training in the use of common software systems** such as GFI, Avail, Microsoft Office, etc. In this way, the Board and administrative staff will develop a clear sense of their roles and a better understanding of the tools at their disposal to effectively oversee and manage NCATA.
3. NCATA management has not developed nor monitored performance targets and trends for key agency functions¹⁷. With input from the Board, the management team should **develop and routinely report performance data and trends for all key agency functions.** This recommendation is consistent with MAP-21 and Act 44 and will help inform Board members and management who expressed a desire for more information with respect to agency performance during the on-site interview process.

Examples of such metrics management and the Board should find useful include items such as:

- Act 44 performance metrics
 - Operating cost / revenue hour
 - Passengers/revenue hour
 - Operating revenues / revenue hour
 - Operating cost / passenger
- Mechanical breakdowns per 1,000 vehicle miles (maintenance)
- Complaints per 1,000 passenger trips (customer service measure)

¹⁷ See Page 19 for a list of key agency functions.

- Employee turnover rate (human resources)
- On-time performance ratio (operations and scheduling)
- Dollar value of payments due greater than 90 days (finance)
- Pay to platform hours (scheduling)
- Farebox recovery (finance) by route

By instilling a practice of identifying key agency functions, selecting and measuring important measures of effectiveness, then striving for constant quality improvement of those measures over time, NCATA's management and Board will be able to proactively identify issues and affirmative strategies well before they negatively impact public perception, operating efficiency and costs.

4. NCATA's Board does not have any formal committees. Formal committees that meet regularly (e.g. quarterly) proactively provide oversight to major functional areas including finance, personnel, operations and customer service. **NCATA's Board should establish formal committees** that can provide goals and regular oversight of NCATA's major functional areas.
5. It is recommended that **NCATA develop a formal succession plan** as NCATA's senior management is approaching retirement age. An abrupt change in management could have a negative impact on NCATA's day-to-day operations. Cross training of important functions should be one element of the succession plan so that unexpected or long-term absences do not cause disruptions in key agency functions.
6. Based on observations during the onsite review, it appeared that some NCATA administrative staff positions do not have clear job descriptions. **NCATA should develop a clear organizational structure with concisely described job descriptions / responsibilities** to insure that all agency functions are being accomplished satisfactorily and to provide new hires a clear understanding of performance expectations.
7. None of NCATA's employees receive employee performance reviews. Employee performance reviews are typically tied to job descriptions and provide an effective means to facilitate communication between employees and their managers regarding expectations and challenges. **NCATA should implement periodic (at least annual) employee performance reviews of all positions** at the first opportunity after concise job descriptions are developed.
8. NCATA lacks a formal anti-nepotism policy. Such policies help avoid the perception or implications of potential conflicts-of-interest. **NCATA management should develop and the Board should adopt a formal anti-nepotism policy.**
9. NCATA lacks a formally designated road supervisor. Road supervision is randomly conducted by the Executive Director. This is an atypical arrangement. **Other, more regular means of road supervision should be identified and implemented.**
10. Driver safety training is conducted by a full-time driver with extensive training and experience. However, due to the unionized nature of this position, it creates a conflict with remedial training and oversight that should be conducted by this position. Management and the trainer agree this is an issue yet due to salary differentials, can't seem to move the

position to a non-unionized (front office) position. Given the benefits packages are the same for all NCATA employees **management should identify a way to competitively fund this position and move it from an active driver to a management role.** This position could possibly be combined with a road supervisor position resulting in some cost savings.

11. NCATA currently works with local first responders to coordinate evacuations. However, local fire and police departments should be fully versed in how to disable and enter all NCATA vehicles in the event of an incident. This will become even more important with the delivery of hybrid busses. **NCATA should schedule periodic training with first responders so that they know how to enter and disable all NCATA revenue vehicles.**
12. All of NCATA's information technology (IT) systems are backed up by "Data Vault/Iron Mountain". There is a 5 day rotation and 5 day backup of all systems. This is a very short period of backup. **NCATA's IT consultant should identify cost-effective tools that provide at least 3 years of backup and implement those tools as soon as practical. Management should integrate the selected backup strategy as part of a larger IT investment plan that should be developed** to describe the substantial technology investments already made, additional investments necessary, and how to maximize the "return on investment" of such capital expenditures.
13. NCATA's asset management is a manual process apart from the parts department which is computerized. This is atypical for an agency of this size that has assets at several different locations including the transfer facility and park-and-ride lots. **NCATA should implement computerized asset management and inventory control systems for all assets** similar to that used in the parts department.
14. NCATA lacks a Business Plan, Strategic Plan, Transit Development Plan (TDP), unfunded needs plan or similar planning documents that could provide guidance to decision makers. One effect of lacking such documents is that NCATA's fleet has expanded without the ability to store all vehicles indoors. **NCATA should develop a Business Plan, TDP and Strategic Plan that identifies unfunded needs** that can be used to help management prioritize competing needs and strategically consider investments beyond a 12 year fiscally constrained capital plan. All of these documents should support the agency's vision of how it fits into the community and its goals.
15. NCATA lacks routine service planning as well as necessary formal analyses and consideration of Title VI when implementing service changes. **NCATA should find ways to formally integrate Title VI considerations into routinely scheduled service planning.** There may be an opportunity to leverage the technical capacity of SPC or PAAC in this area.
16. NCATA has two trolleys that are not used except for special events. Given their limited use it is recommended that **NCATA consider selling the trolleys** to reduce maintenance costs and to provide additional storage for more heavily used vehicles.
17. During the on-site review it was noted that snow removal at NCATA's main facility was incomplete and that the sidewalk, some walkways on the property, handicapped parking and areas near the fueling station were ice-covered and unsafe to traverse. **Management**

should institute a comprehensive protocol and means of clearing the property of ice, snow and other hazards daily, especially during and after inclement weather.

FINANCIAL REVIEW

In an era of increasing costs and limited funding opportunities, many transit agencies are entering a difficult period. Many are pressed to reduce service while increasing fares just to make ends meet. It is in the interest of the Commonwealth to monitor the financial health of transit agencies before manageable financial problems become much larger challenges. With more than 40 transit agencies in the Commonwealth funded by Act 44, PennDOT needs information to assess where financial difficulties can be predicted so that a corrective course of action can be taken before financial challenges seriously impede the ability of local transit agencies to deliver service.

The challenge in assessing the “financial health” and trajectory of transit agencies without first-hand knowledge of day-to-day operations is that much of the information regarding financial indicators is often dated and relies on “end of year” indicators. Furthermore, costs, such as fuel, can vary widely year-to-year or even week-to-week. Funding sources, while more predictable, can change depending on the availability of federal funds, tax collections or funding formulae.

This financial review focuses on “high-level” snapshot and trend indicators to determine if additional scrutiny is warranted by reviewing audited information where available, other financial reports and budgets. The review assesses:

- High-Level Indicators of Financial Health
- Total Agency-wide Operational Expenditures and Funding
- Fixed-Route Funding
- Paratransit Funding
- Balance Sheet Findings

HIGH-LEVEL INDICATORS OF FINANCIAL HEALTH

Several high-level indicators of financial health and stability have been examined to determine NCATA’s current state. As shown in **Exhibit 18**, NCATA is in line with industry goals and targets for most high-level financial indicators as of the end of FY 2011/2012 with the exception of credit available. However, due to NCATA’s large cash and investment reserves, this does not represent an area of concern.

Local reserves are an area of concern. Historically NCATA received local contributions that amounted up to 2.7% of operating costs equating to a 5.7% match of local funds to state funds (FY 2007/2008). As of FY 2011/2012, that value has dropped to an amount that equals the required local match of state funds (4.9%) only by drawing on available reserves. In coming years, due to Act 44 requirements, local contribution amounts will steadily increase. In FY 2012/2013, NCATA management reports issues receiving the full amount of local match in a timely manner as required by PennDOT regulations. Even after exhausting all available local match reserves, NCATA may not be able to fully match state operating funding. This would result in NCATA having to “turn down” state funding. **NCATA’s Board and Management should immediately work to address the local match shortfall before it causes both short and long-term financial difficulties for the agency.**

Exhibit 18: High-level Financial Indicators

Indicator	NCATA Value	Assessment Criteria / Rationale	Source
Cash Reserves / Annual Operating Cost	32.0%	The combined target should be 25%+. This provides flexibility to account for unexpected cost increases or service changes.	FY 2011/2012 Audit
State Carryover Subsidies / Annual Operating Cost	24.0%		
Current Year Local Match / Required ¹⁸	85.6%	The combined target should be 100%+. Current year local match that exceeds required minimums gives an agency the flexibility to change service, match available capital funding opportunities and build a reserve to accommodate unexpected onetime costs.	FY 2011/2012 Audit
Reserve Local Match / Current Year Required ¹⁹	31.3%		FY 2011/2012 Audit
Accounts Payable (AP) 90+ days	0.0%	Target should be 0% over 90 days. Larger values indicate cash flow concerns.	Aged Trial Balance 12/31/12
Accounts Receivable (AR) 90+ days	0.0%	Target should be 0% over 90 days. Larger values can cause cash flow problems.	Aged Trial Balance 12/31/12
Operating Debt / Annual Operating Cost	0.0%	Target should be 0%. Low debt amounts reduce borrowing costs.	FY 2011/2012 Audit
Credit Available/ Annual Payroll	0.0%	Target should be 15%+. This gives the ability to cover payroll due to unexpected delays in accounts receivable.	FY 2011/2012 Audit

¹⁸ City of New Castle=\$125,875, Neshannock Township=\$1,100, Lawrence County=\$22,166 for a total of \$143,115 / required amount of \$165,281=85.6%

¹⁹ \$51,725 available / \$165,281 required=31.3%

TOTAL AGENCY-WIDE OPERATIONAL EXPENDITURES AND FUNDING

As shown in **Exhibit 19**, NCATA has grown from a \$4.5 million per year operation in FY 06/07 to a \$7.0 million per year operation in FY 11/12. Approximately 99.3% of NCATA's operational expenses are for fixed-route service. The remaining is for ADA paratransit service (**Exhibit 20**).

NCATA's operational funding comes from a variety of sources including: federal, state and local subsidies; lottery funds; parking fees; insurance rebates; and, passenger fares. Federal funds used to finance operations have ranged from a low of around 26.4% (FY 10/11) to a high of 44.8% (FY 06/07) (**Exhibit 21**). Increases in operating costs have largely been compensated for by increases in state funding such as Act 44. Local funding has shrunk since FY 07/08 and is now in line with Act 44 requirements. Passenger fares have increased as a share of expenses and that trend should continue based on recent fare increases. State funding remains the largest single funding source for NCATA (**Exhibit 22**).

Exhibit 19: NCATA Total Operating Expense by Service Type (FY 06/07 - FY 11/12)

Expense by Service Type	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12
Fixed Route	\$4.5	\$5.1	\$5.6	\$6.0	\$6.6	\$7.0
ADA Paratransit	\$0.0	\$0.0	\$0.1	\$0.1	\$0.0	\$0.1
Total (\$ millions)	\$4.5	\$5.1	\$5.6	\$6.1	\$6.7	\$7.0

Exhibit 20: NCATA Share of Agency-wide Operating Expenses by Mode

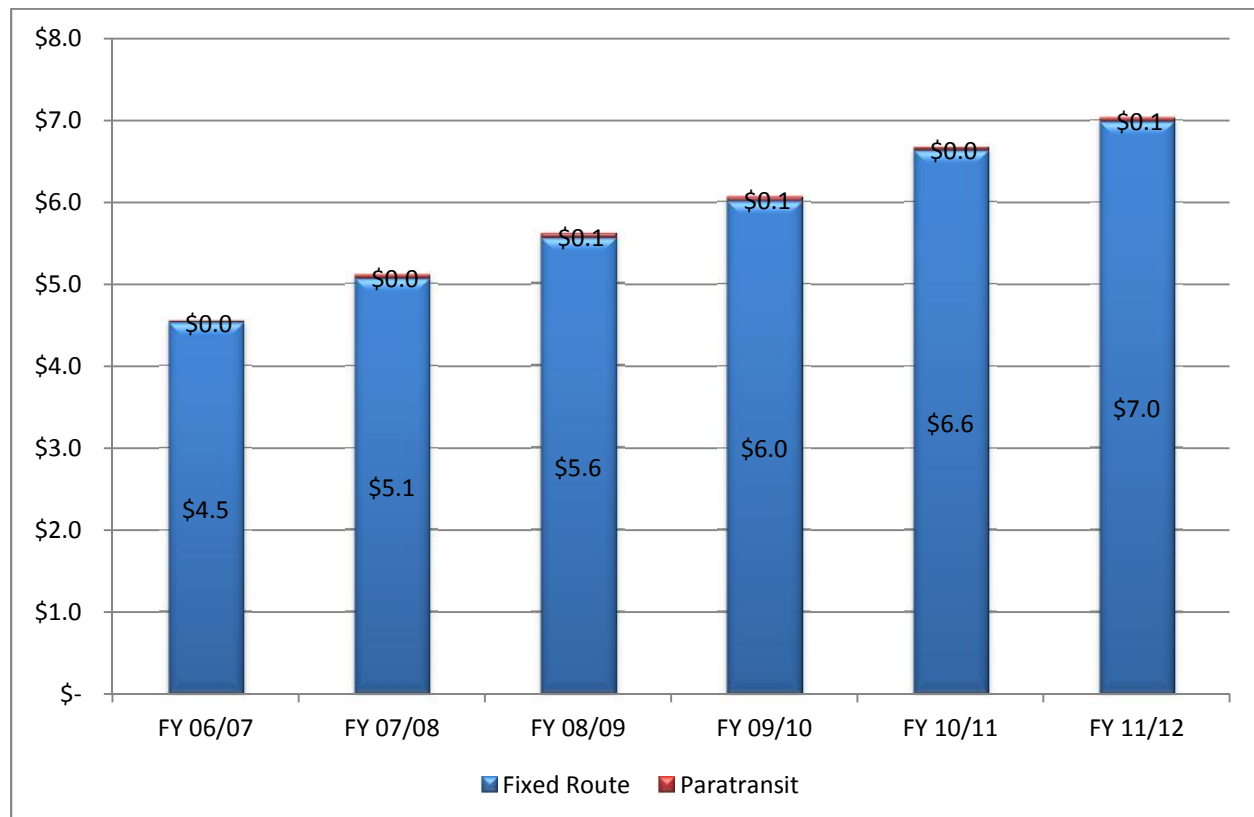
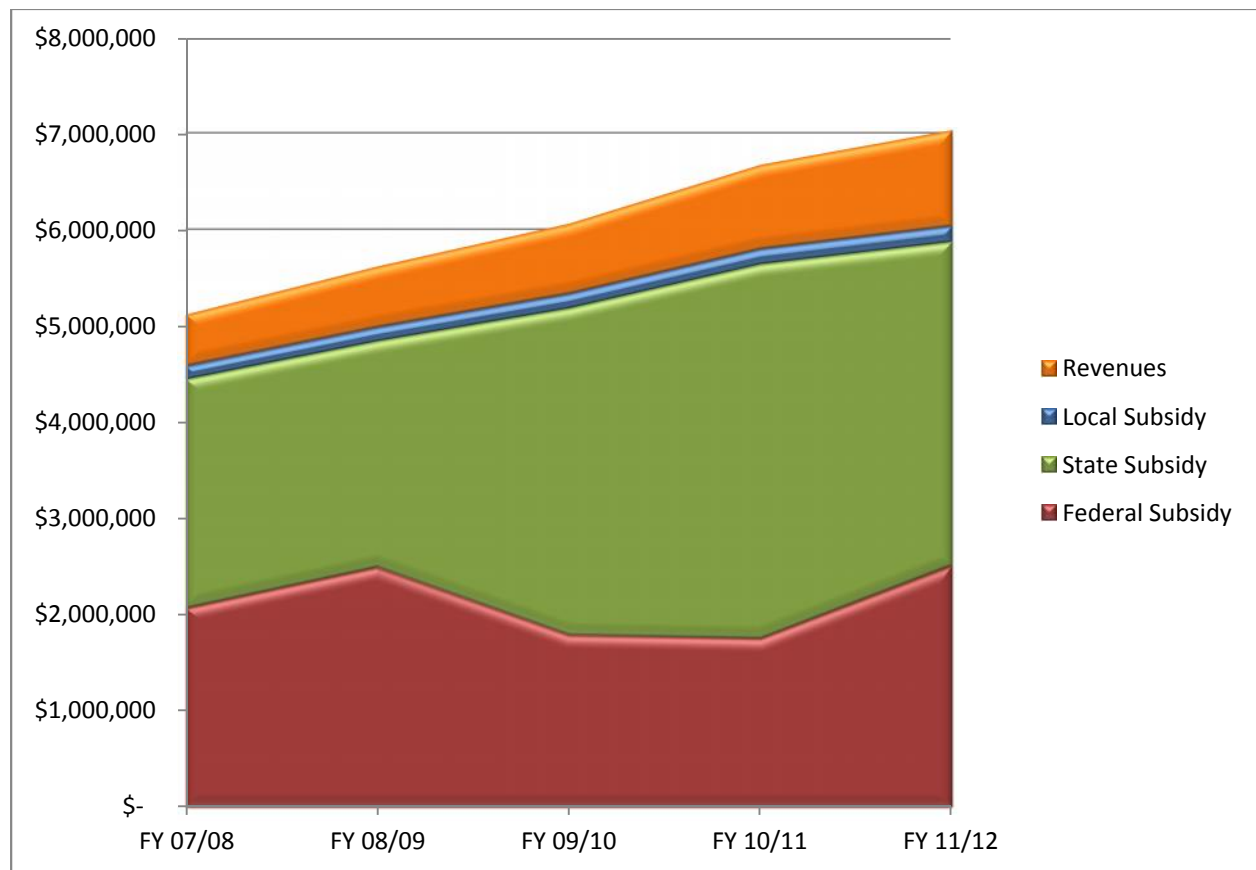


Exhibit 21: Agency-wide Operational Funding by Source (FY 06/07 - FY 10/11)

Share of Funding	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12
Federal Subsidy	44.8%	40.4%	44.4%	29.5%	26.3%	35.8%
State Subsidy	41.9%	46.5%	41.8%	56.0%	58.3%	47.8%
Local Subsidy	0.6%	2.7%	2.5%	2.5%	2.4%	2.4%
Other Subsidy (Misc.)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Revenues (Non-Subsidy)	12.8%	10.5%	11.2%	12.0%	13.1%	14.1%
Local Subsidy / State Subsidy	1.3%	5.7%	6.1%	4.4%	4.1%	4.9%

Exhibit 22: NCATA Reported Agency-wide Operational Funding since Act 44's Passage



FIXED-ROUTE FUNDING

NCATA's historic and proposed fixed-route funding is largely derived from general revenues and government subsidies. Direct Passenger fares account for between 10.1% and 11.4% of total operating costs (**Exhibit 23**). Based on the FY 09/10 to FY 11/12 dotGrants reporting, NCATA operated using current year state funding with excess state funding being "carried over." NCATA does not show any excess local contribution. The total local match available at the end of FY 09/10 was \$137,656. By FY 11/12 it decreased to \$51,725. State Section 1513 carryover has decreased from \$2,035,082 in FY 09/10 to \$1,681,902 in FY 11/12. In short, NCATA's costs are rising faster than the rate at which subsidies and farebox revenues are increasing. If this trend continues, NCATA will encounter financial difficulties in coming years.

Exhibit 23: Fixed-Route Funding

Funding Category	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12
Revenues						
Passenger Fares	\$472,899	\$508,530	\$602,435	\$602,536	\$689,574	\$793,443
Advertising	\$24,250	\$0	\$0	\$24,000	\$24,250	\$24,610
Charter	\$0	\$0	\$0	\$0	\$0	\$0
Route Guarantee	\$0	\$0	\$0	\$0	\$0	\$0
Other (rebates, etc.)	\$66,185	\$18,582	\$20,625	\$94,843	\$98,438	\$99,166
Other Misc. (parking, ATM, etc.)	\$0	\$0	\$0	\$0	\$55,932	\$67,314
Subtotal	\$563,334	\$527,112	\$623,060	\$721,379	\$868,194	\$984,533
Subsidies						
Federal Operating Grant	\$1,989,507	\$2,066,302	\$2,491,631	\$1,787,455	\$1,750,881	\$2,512,155
Act44 (1513) State Prior	\$-	\$-	\$-	\$-	\$494,484	\$-
Act44 (1513) Current	\$-	\$2,328,350	\$2,296,745	\$3,341,949	\$3,355,168	\$3,314,633
Municipal Prior	\$-	\$-	\$-	\$-	\$-	\$-
Municipal Current	\$-	\$134,480	\$141,237	\$149,413	\$157,079	\$163,628
Act3 BSG Grant (State)	\$707,595	\$-	\$-	\$-	\$-	\$-
Act3 BSG Grant (Local)	\$24,399	\$-	\$-	\$-	\$-	\$-
Special-(Federal)	\$0	\$-	\$-	\$-	\$-	\$-
Special-(State)	\$1,133,534	\$-	\$-	\$-	\$-	\$-
Special (Local)	\$104,836	\$-	\$-	\$-	\$-	\$-
Subtotal	\$3,959,871	\$4,529,132	\$4,929,613	\$5,278,817	\$5,757,612	\$5,990,416
Total Funding	\$4,523,205	\$5,056,244	\$5,552,673	\$6,000,196	\$6,625,806	\$6,974,949
Passenger Fares/ Total Fixed-Route Funding/Costs	10.5%	10.1%	10.8%	10.0%	10.4%	11.4%

Source: PennDOT dotGrants Reporting System

PARATRANSIT FUNDING

NCATA's paratransit funding is very small and limited to ADA service which is subcontracted to Lawrence County Social Services. Since the passage of Act 44, state subsidies represent the largest contribution towards paratransit operating costs (**Exhibit 24**) growing to cover about 80% of expenses. The total ADA paratransit program has grown from \$22,688 in FY 06/07 to \$51,770 in FY 11/12.

Exhibit 24: Non-Fixed Route (ADA Paratransit) Funding

Category	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12
Revenues						
Passenger Fares	\$3,545	\$7,587	\$8,191	\$7,754	\$5,827	\$7,555
Subtotal	\$3,545	\$7,587	\$8,191	\$7,754	\$5,827	\$7,555
Subsidies						
Federal Operating Grant	\$-	\$-	\$-	\$-	\$-	\$-
Act 44 Current (State)	\$-	\$49,012	\$52,110	\$49,625	\$36,406	\$42,562
Municipal Current	\$-	\$1,496	\$1,538	\$501	\$331	\$1,653
Special (State)	\$18,637	\$-	\$-	\$-	\$-	\$-
Special (Local)	\$506	\$-	\$-	\$-	\$-	\$-
Subtotal	\$19,143	\$50,508	\$53,648	\$50,126	\$36,737	\$44,215
Total Funding	\$22,688	\$58,095	\$61,839	\$57,880	\$42,564	\$51,770

Source: PennDOT dotGrants Reporting System

BALANCE SHEET FINDINGS

Review of balance sheets from NCATA shows that the agency maintains very large cash reserves (**Exhibit 25** and **Exhibit 26**). This allows the agency to comfortably cover day-to-day operations. The large accounts receivable amount represents expected grants that were yet to be paid at the time of the audit while the relatively large accounts payable represents, for the most part, commitments made for the construction of a new Park and Ride facility that opened in late 2012.

CONCLUSIONS

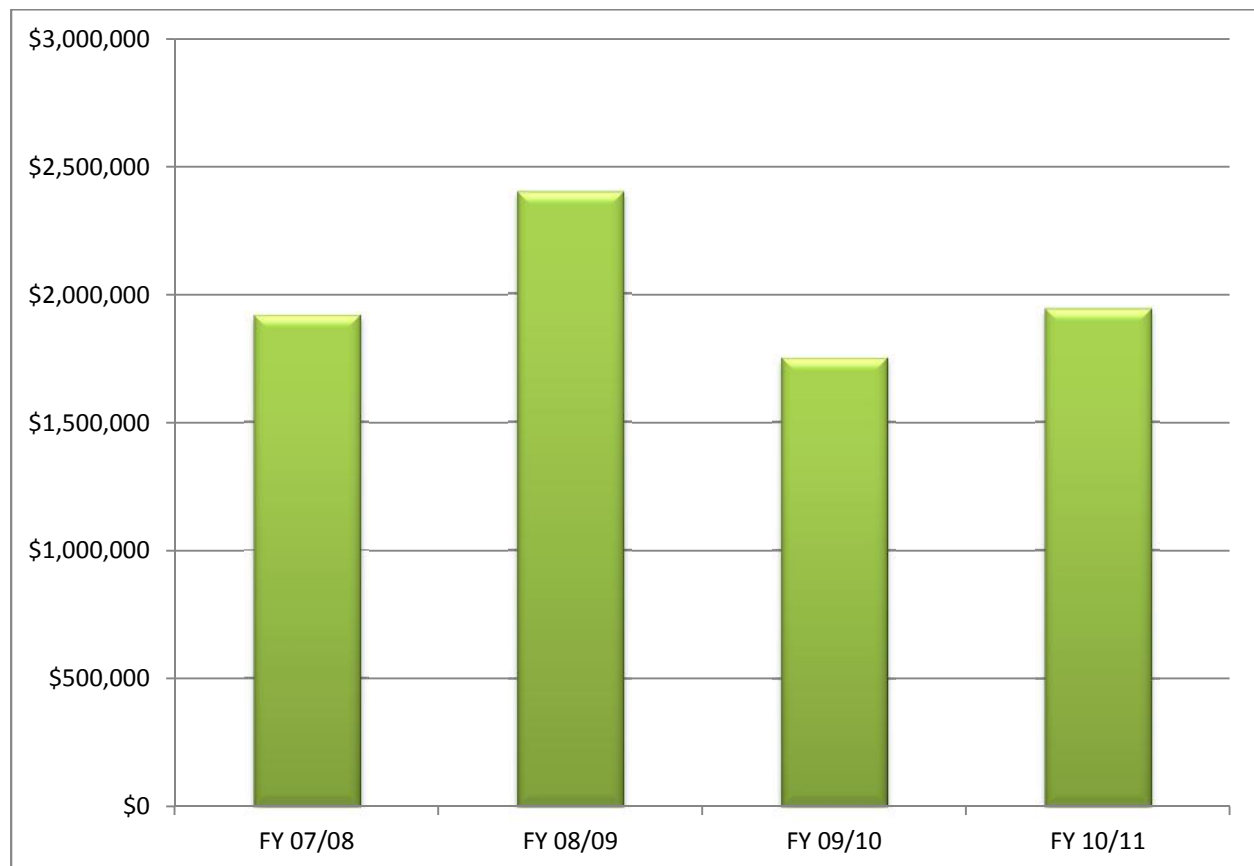
For the FY 07/08 to FY 11/12 period, local governments have contributed between \$136,000 and \$165,000 to help cover NCATA's operational cost. NCATA has used all of that in any given year to balance its budget and comply with state requirements. NCATA has built its cash and investment reserves largely due to state subsidy increases resulting from Act 44. **However, available current year and carryover local match funds combined are anticipated by NCATA's management to be insufficient to meet the agency's local match requirements in this coming fiscal year** due to local government financial hardships. This is a cause of great concern as NCATA will not be eligible for the full state grant amount in FY 13/14 if this is not resolved.

NCATA management should monitor NCATA's end-of-year cash position and carryover funds and take actions to change the current downward trajectory. **Management should take appropriate actions such as obtaining additional local match, controlling costs and improving farebox recovery to improve NCATA's long-term financial health.**

Exhibit 25: NCATA Balance Sheet Summary (FY 08/09 - FY 11/12)

Balance Sheet Report	FY 08/09	FY 09/10	FY 10/11	FY 11/12
Cash Equivalent Balance	\$2,398,270	\$1,751,474	\$1,943,051	\$2,247,378
Investments	\$547,325	\$1,828,186	\$1,828,460	\$2,064,571
Other Accounts Receivable	\$693,834	\$3,106,775	\$863,311	\$1,106,590
Inventory Value	\$113,892	\$141,065	\$153,557	\$143,206
Pre-paid Expenses	\$69,341	\$163,610	\$131,211	\$135,972
Accounts Payable	\$239,638	\$2,289,899	\$234,982	\$660,098
Accumulated Absences	\$84,554	\$69,263	\$155,191	\$154,787
Line of Credit	\$-	\$-	\$-	\$-
Credit Used	\$-	\$-	\$-	\$-
Total Operating Expense	\$5,614,512	\$6,058,076	\$6,668,370	\$7,026,709
Cash Eqv. Bal / Total Operating Exp.	42.7%	28.9%	29.1%	32.0%
Line of Credit / Total Operating Exp.	0.0%	0.0%	0.0%	0.0%

Source: Annual Audit Reports

Exhibit 26: NCATA End-of-Year Cash Equivalent Balance (FY 08/09 - FY 11/12)

APPENDIX A: ACTION PLAN IMPROVEMENT STRATEGIES

PART 1- EXECUTIVE SUMMARY FINDINGS TEMPLATE

IMPROVEMENT OPPORTUNITY	NCATA Action(s)	Estimated Initiation Date	Estimated Completion Date
1. Contain overall operating cost increases (p. vi)			
2. Build an agency-wide culture of performance (p. vi)			
3. Implement formal training plans and programs (p. vii)			
4. Institutionalize formal quality control measures (p. vii)			
5. Improve passenger productivity (p. vii)			

Note: Include additional pages as necessary.

PART 2- ACT 44 PERFORMANCE METRIC FINDINGS TEMPLATES

A. ACTIONS TO INCREASE PASSENGERS / REVENUE HOUR TEMPLATE

Recommendation (page)	NCATA Action	Estimated Initiation Date	Estimated Completion Date
1. Conduct routine customer service surveys (p. 21)			
2. Introduce a formal Citizens’ Advisory Committee (p. 21)			
3. Formally document NCATA’s marketing strategies (p. 21)			
4. Coordinate schedules with PAAC for Pittsburgh services (p. 21)			
5. Develop formal technology deployment plan (p. 21)			
6. Update website (p. 22)			
7. Update bus stop signage (p. 22)			
8. Provide disabled rider informational materials and training (p. 22)			
9. Evaluate route productivity and implement service changes to maximize ridership / revenue hour (p. 22)			
10. Evaluate the route guarantee funding market potential (p. 22)			

B. ACTIONS TO INCREASE OPERATING REVENUE / REVENUE HOUR TEMPLATE

Recommendation (page)	NCATA Action	Estimated Initiation Date	Estimated Completion Date
1. Aggressively pursue additional sources of local funding (p. 22)			
2. Establish farebox recovery goals and policy (p. 23)			
3. Make greater use of available advertising space (p. 23)			
4. Investigate potential of offering discount bus passes (p. 23)			

C. ACTIONS TO REDUCE OR CONTAIN OPERATING COST / REVENUE HOUR TEMPLATE

Recommendation (page)	NCATA Action	Estimated Initiation Date	Estimated Completion Date
1. Establish budgets based on line items and the amount of service delivered (p. 23)			
2. Retire old busses as part of larger capital plan that incorporates funded and unfunded needs (p. 25)			
3. Identify the cost of various terms of the CBA and engage peer systems to find more favorable terms/options (p. 25)			
4. Reevaluate the practice of weekly driver runs (p. 25)			

PART 3- OTHER ACTIONS TO IMPROVE OVERALL PERFORMANCE TEMPLATE

Recommendation (page)	NCATA Action	Estimated Initiation Date	Estimated Completion Date
1. Develop and implement quality control procedures for ridership reporting (p.26)			
2. Conduct Board, management and administrative staff training (p. 26)			
3. Develop and report monthly on performance criteria for all major agency functions (p. 26)			
4. Establish formal Board committees to oversee key agency functions (p. 27)			
5. Develop a formal succession plan (p. 27)			
6. Develop formal and clear job descriptions for all agency staff positions (p. 27)			
7. Conduct employee performance reviews (p. 27)			
8. Develop and adopt a formal anti-nepotism policy (p. 27)			
9. Identify a formal road supervisor position (p. 27)			
10. Establish a formal non-unionized driver training position that is also responsible for road supervision (p. 27)			
11. Conduct periodic training of first responders (p. 28)			
12. Implement a long-term backup strategy as part of a larger IT plan (p. 28)			
13. Implement computerized asset management system (p. 28)			
14. Develop a Business plan with supporting transit development and strategic plans (p. 28)			
15. Formally integrate Title VI considerations into routine service plan updates (p. 28)			
16. Consider sale of underutilized trolleys (p. 28)			
17. Implement a protocol to check and clear property of hazards (p. 28)			

APPENDIX B: DOCUMENTATION REQUEST TO GENERAL MANAGER

Requested Item	Mark Form in which Data to Be Provided			
	Electronic	Paper Mail	Not Available	Not Applicable
BACKGROUND				
1	Articles of incorporation	√		
2	History/Description with 2 attachments	√		
3	Mission Statement on our Web-site	√		
4	Unique Circumstances	√		
GOVERNANCE/GENERAL MANAGEMENT				
5	List of Board of Directors	√		
6	Minutes 12 months	√		
7	GM Contract	√		
8	Organizational Chart	√		
9	If the GM would retire or fall ill, his seat would temporarily be filled by the AM and the BOD would make the discisson of susuccession.		√	
10	The Pennsylvania Transit Board Manual(Board of Directors roles and responsibilities/Job description or contract for Asstant Mgr. / Maintenance Mgr. attached. All employees have a job description on file.	√		
OVERSITE AND REVIEWS				
11	Monthly reports are given at every BOD Meetings	Attached under #6		
12	Audits on file from SAFTI (Insurance) and our Auditor. I also had a review from Federal AERS BR on a capital project that NCATA directly received federal funds. This has not been finalized as of yet. Hopefully by the time you get here, I will have a final letter on this project. I have attached alll correspondence and documentation between us.	√		
HUMAN RESOURCES				
13	Employment Agreement 2011-2014/Rules and Instructions/Substance Abuse Policy	√		
14	NONE			√
15	NONE			√
16	Due to our increasing health care costs as shown in our attached spread sheet, NCATA has hired Gallagher Benefit Services, Inc. to manage a self-insurance Health Care Program for us. This will begin November 1, 2012. SAFTI'S Pennsylvania Transportation Healthcare proposes that this will lead to financial control, savings opportunity, cost stability, benefit design and total cost transparency. Also attached the 2005-2010 Employment Agreement which has all benefits and pensions for past years. Please refer to the 2011-14 Employment Agreement under question 13 for upcoming years.	√		
17	NONE		√	
18	Hiring and Performance Attached	√		
FINANCE				
19				
20	NONE			√
21	2011 Financial Statement	√		

Requested Item	Mark Form in which Data to Be Provided			
	Electronic	Paper Mail	Not Available	Not Applicable
22 Income/Expense Statement 2010-2012	✓			
23 Last two Fiscal Year Audits	✓			
24 Income/Expense Statement 2010-2012	✓			
25 Accounts Receivable/Accounts Payable/General Ledger Accounts for one month	✓			
PROCUREMENT				
26 Manual is kept on file for your review plus web-site of PENNDOT	✓			
CONTRACTING				
27 NCATA has a verbal agreement with Lawrence County Social Services, Inc. They do all of our ADA Paratransit trips. NCATA does not deny any applicant once application is completed. They can only have service within the 3/4 mile service area of each of our fixed routes. LCSS monitors the call line and faxes all trips to us for our files. Billing is monthly.			✓	
28 NONE				✓
29 Purchase tires from Summerel Tire Company using the State Contract	✓			
30 NONE			✓	
OPERATIONS				
31 NONE			✓	
32 All drivers hand books for each vehicle available for review				
33 General Manager makes the emergency calls on service and dispatch uses our call out procedures attached as #34.			✓	
34 Dispatch Procedures	✓			
35 Cameras are on all our vehicles. If complaints are received, the procedure is to send a letter to the Union informing them that the camera will be reviewed. If there is a finding, GM disciplines. Yearly Anonymous On-Board Evaluations are done through SAFTI by Daecher Consulting.	✓			
36				
37 During the school year, Route 11 reverses it trip at 7:15am and 2:45pm to accommodate the senior high school strudents and Route 82 to accommodate Kennedy Catholic High School in Hermitage.	Check our website for these routes			
38				
FARES AND FARE SECURITY				
39 Listing of fares by type	✓			
40 NONE				✓
41 GFI / Avail print outs	✓			
42 Procedure attached	✓			
43 NONE				✓
MAINTENANCE				
44 Maintenance plan, programs and procedures manual	✓			
45 Daily Roster	✓			
46 Inventory value	✓			
47 NONE			✓	

Requested Item	Mark Form in which Data to Be Provided			
	Electronic	Paper Mail	Not Available	Not Applicable
48 All equipment and maintenance schedule attached	✓			
OPERATIONAL SCHEDULING/PLANNING				
49 Refer to #34 Dispatch Procedures	✓			
50 Visit our web site at	http://newcastletransit.org/			
51 NCATA does not do Charter Service of any kind				✓
52				
53				
SAFETY AND SECURITY				
54 WC Claims	✓			
55 Accident Policy (also look at safety training and meetings with Q64	✓			
56 2009 to Present (prior years in file)	✓			
57 Accident Losses to Date	✓			
58 No Criminal Losses (Highlight only incident recorded)	✓			
59 NONE				
60 Refer to #64	✓			
61 Although this resolution has been passed in 1992 the NCATA still follows this agreement. NCATA has assisted our firefighters by providing vehicles with air/heat when needed. We are also available to the City of New Castle, County of Lawrence (Woman's Shelter, Senior Citizens' complex's, etc.) for any type of evacuation.	✓			
62				
63 4 Monitoring Cameras on every vehicle/Security Cameras located on all NCATA properties	✓			
64 Safety meetings for past 2 years (files on each class available)	✓			
CUSTOMER SERVICE				
65 NCATA has a verbal agreement with Lawrence County Social Services, Inc. They do all of our ADA Paratransit trips. NCATA does not deny any applicant once application is completed. They can only have service within the 3/4 mile service area of each of our fixed routes. LCSS monitors the call line and faxes all trips to us for our files. Billing is monthly. i have attached a copy of our ADA application and acceptance letters. I have also attached a copy of one months bill.	✓			
66 NONE			✓	
67 NONE			✓	
68				
INFORMATION TECHNOLOGY				
69 All of our computers are backed up nightly off site.	✓			
70 Attached	✓			
71 Attached	✓			
CAPITAL PROGRAMMING				
72				
73				
74				

Requested Item	Mark Form in which Data to Be Provided			
	Electronic	Paper Mail	Not Available	Not Applicable
75				
MARKETING AND PUBLIC RELATIONS				
76				
77 NONE			v	
78 Went out for quotes and received Presentations at BOD Meetings	v			
79				
80				

APPENDIX C: NCATA REPORTED RIDERSHIP REVIEW FINDINGS

EXECUTIVE SUMMARY

Prior to conducting the on-site review of NCATA during January 2013, it was noted that NCATA had a history of reporting unexpectedly high levels of senior ridership. As a result of that finding, the consultant worked directly with NCATA staff for two on site half-day sessions to review their GFI database, reporting and quality control/oversight practices.

During the review it was noted that NCATA had no protocols to periodically review ridership reporting. Furthermore, transfer ridership reporting appeared outside of industry standards. This led to follow up by PennDOT and NCATA staff to implement simple protocols that would verify transfers and set the stage for more thorough oversight of reporting by NCATA's management.

After the first day of implementation (January 30, 2013), reported ridership declined for both transfer and senior trips. This decline continues to the present day. As a result, a "clean" benchmark was established to assess the likely impacts of misreporting on PennDOT dotGrants Legacy reports. These Legacy reports are used to allocate a portion of Act 44 funding. As a result of the analysis findings, NCATA management agreed to revise FY 2011/12 ridership down from 947,346 passenger trips to 682,076. They also agreed to revise senior and transfer reported trips from 275,600 and 227,829 down to 105,500 and 101,500 trips, respectively.

AVAILABLE DATASETS

NCATA maintains a GFI farebox and reporting system. However, NCATA relies on an Avail Datapoint "add on" software package to generate ridership and revenue reports directly from the GFI database. Management then reviews the Avail reports to reconcile farebox revenues and prepare management reports. Because management has suspected that senior ridership was over-reported by drivers, they manually reduced reported ridership from the Avail reports prior to entering it into the PennDOT dotGrants Legacy system. As a result, there were three sources of data regarding NCATA's ridership estimates:

- GFI Internal Reports
- Avail Datapoint
- PennDOT Legacy Reports

Ordinarily, there can be some differences in the Legacy, GFI and Avail reports due to probing dates, driver data entry errors, farebox malfunctions and the sort. However, the databases should typically match within 1%. NCATA had one additional cause of mismatch in that a new GFI software system went "live" in early August 2011. The current GFI system does not have any data prior to early August 2011 resulting in less than a complete GFI dataset for Fiscal Year 2011/2012. Fortunately, NCATA's IT support was able to "de-archive" the older GFI computer and print off reports that could be used to build a complete picture of the various total ridership estimates for FYE 2012 and FYE 2013 to date as shown in **Exhibit C1** and **Exhibit C2**. Similar comparisons for senior (Free) ridership reporting are presented in **Exhibit C3** and **Exhibit C4**. Transfer ridership report comparisons are presented in **Exhibit C5** and **Exhibit C6**.

Exhibit C1 NCATA FYE 2012 Total Ridership Report Comparison

Total Ridership	Report Values		
	GFI	Avail	dotGrants
July 2011	104,822	104,831	97,049
August 2011	107,277	112,845	97,049
September 2011	98,086	98,302	97,049
October 2011	101,878	101,926	80,604
November 2011	85,912	86,022	80,604
December 2011	73,649	73,517	80,604
January 2012	73,944	73,883	72,581
February 2012	78,948	79,028	72,581
March 2012	82,611	82,697	72,581
April 2012	72,534	72,722	65,548
May 2012	74,987	74,697	65,548
June 2012	80,182	80,220	65,548
Subtotal Q1	310,185	315,978	291,148
Subtotal Q2	261,439	261,465	241,812
Subtotal Q3	235,503	235,608	217,743
Subtotal Q4	227,703	227,639	196,643
Total	1,034,830	1,040,690	947,346

Exhibit C2 NCATA FYE 2013 Total Ridership Report Comparison

Total Ridership	Report Values		
	GFI	Avail	dotGrants
July 2012	82,602	82,805	64,013
August 2012	79,329	79,125	64,013
September 2012	68,334	68,209	64,013
October 2012	85,743	85,754	60,493
November 2012	65,004	64,991	60,493
December 2012	59,452	60,862	60,493
January 2013	67,339	65,885	**
February 2013*	50,624	50,624	**
Subtotal Q1	230,265	230,139	192,040
Subtotal Q2	210,199	211,607	181,478
Total	440,464	441,746	373,518

*Estimate (month to date * 2.0) ** Not Reported As of 2/20/13

Exhibit C3 FYE 2012 Senior Ridership Report Comparison

Senior Ridership	Report Values		
	GFI	Avail	dotGrants
July 2011	37,325	38,272	33,914
August 2011	38,352	40,843	38,419
September 2011	32,557	32,955	31,812
October 2011	33,934	34,594	29,831
November 2011	25,594	26,281	23,871
December 2011	17,578	17,905	17,830
January 2012	16,784	17,264	16,957
February 2012	18,877	19,377	18,250
March 2012	18,750	19,983	18,401
April 2012	15,943	16,016	15,477
May 2012	16,036	16,003	15,238
June 2012	18,760	18,818	15,600
Subtotal Q1	108,234	112,070	104,145
Subtotal Q2	77,106	78,780	71,532
Subtotal Q3	54,411	56,624	53,608
Subtotal Q4	50,739	50,837	46,315
Total	290,490	298,311	275,600

Exhibit C4 FYE 2013 Senior Ridership Report Comparison

Senior Ridership	Report Values		
	GFI	Avail	dotGrants
July 2012	20,200	20,388	14,993
August 2012	16,987	17,304	14,993
September 2012	15,377	15,599	14,993
October 2012	19,998	20,283	13,280
November 2012	13,268	13,358	13,280
December 2012	11,988	12,508	13,280
January 2013	13,234	13,180	**
February 2013*	5,210	5,210	**
Subtotal Q1	52,564	53,291	44,979
Subtotal Q2	45,254	46,149	39,839
Total	97,818	99,440	84,818

*Estimate (month to date * 2.0) ** Not Reported As of 2/20/13

Exhibit C5 FYE 2012 Transfer Ridership Report Comparison

Transfer Ridership	Report Values		
	GFI	Avail	dotGrants
July 2011	25,802	24,855	23,681
August 2011	25,644	26,436	23,681
September 2011	24,013	23,688	23,681
October 2011	26,217	25,557	20,001
November 2011	21,197	20,515	20,001
December 2011	18,448	18,058	20,001
January 2012	19,182	18,620	17,078
February 2012	19,833	19,337	17,078
March 2012	19,556	18,316	17,078
April 2012	17,117	17,011	15,183
May 2012	17,138	17,027	15,183
June 2012	20,906	20,848	15,183
Subtotal Q1	75,459	74,979	71,043
Subtotal Q2	65,862	64,130	60,003
Subtotal Q3	58,571	56,273	51,234
Subtotal Q4	55,161	54,886	45,549
Quarterly Total	255,053	250,268	227,829

Exhibit C6 FYE 2013 Transfer Ridership Report Comparison

Transfer Ridership	Report Values		
	GFI	Avail	dotGrants
July 2012	23,375	23,271	14,203
August 2012	20,038	19,623	14,203
September 2012	17,640	17,416	14,203
October 2012	24,672	24,387	13,579
November 2012	16,754	16,655	13,579
December 2012	15,352	15,753	13,579
January 2013	17,036	16,169	**
February 2013*	7,996	7,996	**
Subtotal Q1	61,053	60,310	42,609
Subtotal Q2	56,778	56,795	40,736
Total	117,831	117,105	83,345

*Estimate (month to date * 2.0) ** Not Reported As of 2/20/13

ISSUES ADDRESSED

Two initial issues were identified prior to starting the data review: reported declines in total ridership and declines in senior ridership. Experience elsewhere in the Commonwealth suggested that observed declines may in fact not be real but that reporting was becoming more accurate. Since a portion of Act 44 operating subsidies is allocated based on ridership reporting, having accurate historic baselines is critical to accurately allocating funds. Over-reporting by one recipient would result in under-allocation of state funding to all other recipients since available funds are apportioned based on reported ridership.

Another issue that came to light during the review was apparently high rates of reported transfer ridership. Since transfer riders are counted in the formula allocation and also serve (as part of total ridership) as one variable in the Act 44 “Risk” determination, review of transfers and all other sources of ridership was questioned and evaluated during the data review.

ANALYSIS APPROACH AND PRELIMINARY FINDINGS

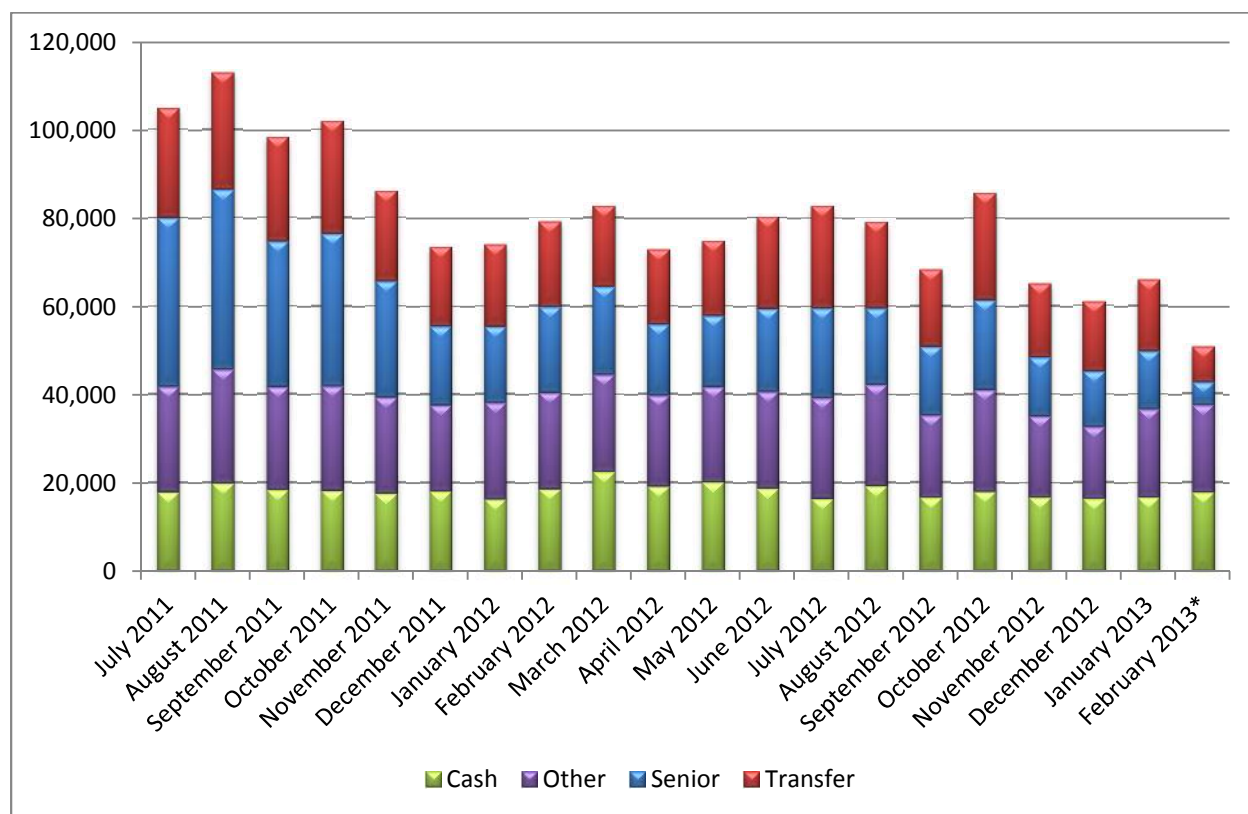
The analysis approach attempted to understand the various components of ridership and how they change over time and in response to stimuli. The goal was to end up with an accurate estimate of FY 11/12 ridership (total and senior) that could be used in the Act 44 funding allocation formula.

The Avail Datapoint reporting system maintains a complete picture of all months of ridership by fare category for all months of the analysis. Since this was compatible with GFI reporting with the exception of when the computer systems were changed, it was determined to be the most complete source of information and served as the “benchmark” for comparison. Each fare category and type was inspected and it was determined that ridership could best be understood by breaking it down into four (4) different types:

- **Cash Paying Riders-** Cash riders represent the clearest auditable type of rider as cash is deposited into the farebox and reconciled against GFI probe data. Discrepancies in reported cash ridership and actual revenues are easily identified by management.
- **Senior (Free) Riders-** Senior (free) riders represent senior citizens over the age of 65 who have appropriate ID. Since nothing “changes hands” there is no clear audit trail for this ridership.
- **Transfer Riders-** Transfer riders represent passengers who provide a transfer pass to a driver when boarding from an eligible route/time. Normally, this would have a paper “audit trail.” However, NCATA has not had a practice of requiring a reconciliation of transfers reported vs. transfers actually collected.
- **Other Riders-** Other riders include those riders with passes as well as children. Since children represent a small number in the reported ridership, they could be combined with pass-holders and examined as a single category for the sake of understanding change.

As shown in **Exhibit C7**, NCATA’s cash and other ridership categories have remained stable over the twenty (20) months of the analysis at about 20,000 riders in each category in each month. The variation in total ridership is explained by changes in reported seniors and transfers.

Exhibit C7 NCATA Reported Ridership by Category from Avail Datapoint



Since senior and transfer ridership did not have a clear audit trail over time and that changes in those ridership categories did not mimic changes in those categories with audit trails, their respective values were viewed as unreliable as changes in transfers would necessarily follow changes in cash and pass ridership patterns. Observed drops in senior riders are coincident with news reports and additional oversight efforts by NCATA management further discounting any credibility in historic values. In fact, NCATA's management recognized the likely over-reporting of senior trips and manually discounted reported farebox values before entering them into dotGrants. However, the discounting of reported senior ridership was not based on empirical findings but rather "instinct." That instinct was correct.

Since NCATA management put the policy in place to reconcile transfer tickets collected against transfers reported (**Supplement C1: NCATA Driver Transfer Handling Directive Memorandum**), there has been a marked drop in reported transfers *and* reported seniors. Drivers are now aware that management is reviewing heretofore un-reviewed elements of reported ridership. While the duration of this policy is short, the impacts are direct and measurable. Since the reported ridership change is the direct result of a clear policy on a known date, the resulting change can be "back-cast" to estimate NCATA's FYE 2012 total and senior ridership.

To arrive at an accurate estimate of FYE 2012 ridership, the components of ridership that were auditable, namely cash paying and other passes scanned by the farebox, were assumed accurate from GFI. Observed relationships from the non-auditable categories of reported ridership to the auditable categories were taken from the period after the new more rigorous oversight policies were put in place. The initial "senior" category was multiplied by 1.1 to account for a potential unwillingness of seniors to travel in the winter time (though this was not observed in February 2012 vs. other months of the year).

CONCLUSIONS AND RECOMMENDATIONS

NCATA's management did recognize that senior ridership was likely over-reported by drivers. However, they underestimated the magnitude. Management did not recognize that other categories of non-auditable trips were also over-reported at the time ridership was reported and certified to PennDOT. The policy directive regarding transfer passes had a direct impact on the ability to audit transfers and the side effect of making drivers aware that management would be verifying reported ridership. This seems to have resulted in much more accurate senior ridership reporting.

The resulting relationships in the data are sufficient to re-estimate NCATA's FY 2011/2012 ridership by category and in total. As shown in **Exhibit C8**, management previously had reduced farebox reported total and senior ridership by about 10% before entering it into the dotGrants reporting system. However, the actual estimates should have been reduced by a greater degree due to gross misreporting of both senior and transfer passenger trips. The revised estimates shown in Exhibit C8 should be used as the baseline to assess trends and change in the Act 44 Performance Review determination as well as for the FY 2013/2014 Act 44 funding allocation formulae.

Exhibit C8 Final NCATA Revised Estimate of FYE 2012 Ridership by Category

Ridership Category	Revised Estimate	Legacy Report	Avail Farebox Report
Cash Paying	224,245	443,917	224,245
Passes/Other	250,831		267,866
Seniors	105,500	275,600	298,311
Transfers	101,500	227,829	250,268
Total Riders	682,076	947,346	1,040,690

SUPPLEMENT C1: NCATA DRIVER TRANSFER HANDLING DIRECTIVE
MEMORANDUM



NEW CASTLE TRANSIT AUTHORITY

DATE: January 30, 2013
TO: All Drivers
FROM: Leonard L. Lastoria, General Manager
New Castle Area Transit Authority

New Castle Area Transit Authority has implemented a new policy on Transfers effective immediately (1/30/2013). All drivers **MUST** turn in collected transfers at the end of each work day. Your name, route number and count of transfers collected should be included. These will be reconciled daily with the GFI data counts. Any discrepancy on the transfer counts will be addressed with each individual driver.

LLL:via
Memos: # 988
CC: File, ATU Local # 89

311 Mahoning Avenue • New Castle, PA 16102 • Phone 724-654-3130 • Fax 724-656-1195
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