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IMPACTS OF CUTS AND REDUCTIONS IN
PUBLIC TRANSPORTATION FUNDING

FINAL REPORT

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Disclaimer

The opinions and conclusions expressed or implied are those of the research agency that performed the research and are not necessarily those of the Transportation Research Board or its sponsoring agencies. This report has not been reviewed or accepted by the Transportation Research Board Executive Committee or the Governing Board of the National Research Council.

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Executive Summary

In the last few years, the American Public Transportation Association (APTA) has conducted several studies and surveys to examine the impact that the recent economic downturn has had on transit agencies and the services they provide. These APTA resources compiled and analyzed data to determine the magnitude of transit agencies' budget cuts related to the recession, the types of cost-cutting strategies that transit agencies have consequently implemented or considered, and the extent to which these strategies have been implemented over consecutive years. This research was a natural follow-up to these APTA studies to determine how communities have been impacted by the cost-cutting actions that transit agencies have had to implement or consider implementing in the wake of the economic recession.

The objective of this research was to determine the community impacts of significant reductions in public transportation service related to the recent economic downturn. These impacts included the destinations and activities that became more difficult for riders to access, the development of new alternatives, the expansion of other transportation services to fill service gaps, and the rise in public awareness about transit among other issues. The research found that drastic transit service cuts have negatively impacted individuals, businesses, community organizations, schools, local and regional economies, and the overall quality of life in communities.

Several themes emerged after reviewing five American communities that have experienced or anticipate drastic transit service cuts. Varying in size, geographic location, and types of transit service available, the five case studies were Clayton County, Georgia (C-TRAN); Hammond, Indiana (Regional Bus Authority (RBA)); Pittsburgh, Pennsylvania (Port Authority of Allegheny County); St. Louis, Missouri (Metro Transit); and Tacoma, Washington (Pierce Transit). The primary research identified similarities across the case studies in transit funding issues and the transit agencies' approaches to making hard decisions on transit service cuts, described in the Case Studies chapter of this report.¹ However, the main findings were themes regarding the community impacts of major transit service cuts related to the recession.

¹ Secondary research, mainly the community impacts reported in local, online news sources, supplemented the primary data collected through interviews conducted during the case studies.

The common actions that communities have taken in response to transit service cuts and the cost and social implications are summarized below,² with specific examples from the case studies captured in the text boxes. For more details on the community impacts including the quantitative data available and the qualitative input collected, see the Case Studies chapter in this report.

While transit professionals may have anticipated the types of impacts that would occur as a result of severe transit cuts, this research collected data directly from community sources including transportation providers, governmental entities, business associations, economic development organizations, non-profit organizations, human service agencies, medical facilities, schools, and advocacy groups. The numbers and qualitative insights collected during the case studies may serve as useful examples for communities that face similar transit funding cuts, where advocates are presenting the case to continue and maintain public transportation services. The findings described below were reported in the case studies, and do not represent an exhaustive list of community impacts that have occurred as a result of drastic, recession-related transit service cuts.

MOBILITY AND ACCESS IMPACTS

- When transit service cuts have been required, transit agencies have generally focused on preserving core services and cut less productive suburban and commuter services, resulting in a smaller transit footprint. This strategy preserves ridership, but results in hardships for transit-dependent suburban riders. These cuts also affected those who reverse commute to the suburbs.
- Transit agencies that previously provided Americans with Disabilities Act (ADA) complementary paratransit service beyond the three-quarter-mile area around fixed routes have cut back their ADA services to the minimum requirement. Combined with the shrinking footprint of the fixed-route network, large areas have lost access to ADA paratransit services.

ACCESS, the paratransit provider in Pittsburgh and Allegheny County, expected a decrease of 250,000 annual trips with the proposed FY13 transit service cuts. One thousand three hundred passengers were projected to lose service on weekdays and 1,800 on weekends.

²The community impacts have been categorized based on the transit benefits and disbenefits – or impacts – discussed in public transportation literature. Congestion impacts were categorized under “Mobility and Access,” and no other environmental or energy impacts were reported in the case studies. Source: Cambridge Systematics, Inc. and Apogee Research, Inc. (1996). *Measuring and Valuing Transit Benefits and Disbenefits* (TCRP Report 20). Washington, DC: National Academy Press. Retrieved from http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_20.pdf.

- Significant cuts to local transit services undermined the effectiveness of regional transit systems. Where local buses previously connected to commuter services and trains, riders now face difficulties making connections to the regional transit network.

C-TRAN was the largest local carrier of riders for the Metropolitan Atlantic Rapid Transit Authority (MARTA). MARTA reported 15.4% fewer station entries at its Airport Station, which was fed directly by C-TRAN.

- Human service transportation providers usually established eligibility requirements that specify the people who can use their services and the types of trips provided. Human service organizations had limited transportation resources that could only be stretched so far to accommodate additional needs. These community organizations have also experienced budget cuts as a result of the recession themselves, and hardships for transit-dependent riders were even more pronounced when multiple community transportation resources were cut simultaneously.

Heritage Community Initiatives, a local non-profit, changed the routing of their work-related transportation for low-income residents. However they could only serve 400 of the 1,300 daily trips on previous Port Authority routes.

- Where riders have been able to continue using the remaining transit services after significant cuts, the convenience of transit services has decreased due to geographic changes, route restructuring, and decreases in frequency.

- Private transportation alternatives generally provided lower quality service (lower frequencies, fewer trips) and charged riders significantly higher fares. When private operators have not achieved ridership expectations, they ended the service and some even went out of business. Taxis provide convenient service, but were too expensive for most riders to use as everyday transportation.

A taxi ride within the service area of the Regional Bus Authority's (RBA) former local fixed routes in Hammond, Indiana costs up to \$30 per one-way trip – 20 times more than RBA's adult fares and 40 times more than the reduced fare.

- The increased number of cars on the road (whether from ridesharing or single occupancy vehicles whose occupants previously used transit) contributed to traffic and congestion problems particularly in urban areas.

ECONOMIC AND FINANCIAL IMPACTS

- Residents have lost access to jobs because public transportation service is no longer available, and they have no other affordable and reliable form of transportation.

Metro Transit reported that public transit access to jobs in St. Louis County decreased from 98% to 71% following the 2009 transit service cuts.

- Businesses that employ transit-dependent workers have lost employees, and in more severe cases, have shut down entirely because they were unable to find employees with dependable transportation.
- Significant numbers of transit agency employees have lost their jobs. Transit agencies also have fewer employment opportunities, as positions have been eliminated.
- Transit-dependent and choice riders alike chose to move to a different community that provides public transportation. This population loss had economic impacts: a decreased tax base and the loss of workers and patrons upon which local businesses depend.
- Human service organizations have had to increase their spending and staff resources on transportation, which translates to less time spent on the primary programs that carry out their actual mission.
- Cost shifting has occurred in various forms. Within a transit agency, costs have shifted to providing demand-response service for riders who previously used fixed-route service. With transit service cuts, the overall cost of providing community transportation may increase (as trips by other alternatives are often more expensive than transit trips) regardless of costs to individual providers and agencies.
- In school districts that use public transportation, school budgets were impacted by fare increases when bus passes became too expensive to purchase for students, and by the additional costs incurred in providing new school bus service.
- Residents no longer had the option to save commuting costs by taking public transportation when gas prices were high. Some previous transit riders formed carpools or vanpools when their transit service was cut, particularly for commuting trips, but the cost per person was likely still higher than transit fares due to the relatively high costs of driving.
- Choice transit riders went back to driving, which increased their personal expenses (fuel, parking, and maintenance costs) and could add stress to their commutes, particularly in congested traffic conditions.

Transit agency layoffs among the case studies included 39 at RBA, 70 at C-TRAN, 180 at Port Authority (possibly 400-500 more), 194 at Pierce Transit, and 600 at Metro Transit.

Shift workers who reside in Northwest Indiana and work in Illinois would pay 40% more to carpool than taking the bus, or a \$360 increase in commuting costs per person annually.

- The increase in cars on the road raised congestion costs, including time delays and fuel use, and contributed to pollution and health concerns. Congestion costs affected individuals (both drivers that used to take transit and those who have always commuted by car), businesses and employers, and the local and regional economy.

Port Authority's proposed FY13 transit service cuts would have put 7,250 more cars on the roads daily in downtown Pittsburgh, where parking is at 90% capacity, and Oakland.

- Public transportation was one factor that businesses and institutions such as schools considered when planning expansions or new branches. The lack of transit service may not have been a major reason to forego development, but could still negatively impact the decision-making process.
- When transit-dependent riders and transit agency employees lost their jobs, the local economy suffered a "ripple effect" from decreased spending as salaries, wages, and benefits associated with the jobs were lost.
- Communities lost state and federal money that has been invested in public transportation. Diverted elsewhere, those dollars could be very difficult to get back if the community is later prepared to provide the local match.

Northwest Indiana lost \$2 million in state and federal spending with the end of RBA transit services.

SAFETY AND SECURITY IMPACTS

- Transit users who must now bicycle or walk several miles to the nearest transit stop, often in automobile-oriented environments that lack bicycle or pedestrian amenities, were exposed to dangers to their safety and health. ADA paratransit users have taken creative approaches to access remaining transit services including waiting in the driveway of a stranger whose home is within the ADA service area. This posed a safety risk to ADA paratransit riders who may be vulnerable to begin with.

SOCIAL EQUITY IMPACTS

- The most vulnerable populations in a community including the elderly, people with disabilities, and low-income residents were left with few transportation alternatives. Without public transportation, these transit-dependent people lost their independence including access to jobs and medical services.

Two-thirds of C-TRAN riders had household incomes less than \$25,000 and 65% did not have a car available.

INTANGIBLE IMPACTS AND FACTORS

- Some clients of human service organizations that do not provide transportation have found alternatives, such as switching from fixed routes to using demand-response service or riding with family or friends. However, these clients often ended up making fewer trips to access the services they need.

Paraquad, a Center for Independent Living in St. Louis, estimated that 10% to 15% of their clients were impacted by Metro Transit's service cuts.

- The threat of transit service cuts and the cuts themselves have put transit in the spotlight, increasing community awareness of public transportation. A positive result was community coalition building across many sectors including businesses, unions, human services, medical facilities, schools, religious groups, and advocacy groups. These coalitions were often instrumental in generating community support for transit and passing ballot measures to provide transit funding. However, anti-transit community members also expressed their views advocating for the end of taxpayer support of transit services.

- Students who previously received bus passes to cover their school transportation were put onto yellow school buses. While they could still get to school, they lost access to other opportunities including jobs, training, and social activities.

The Tacoma Public School District previously purchased bus passes for 50% of high school students. This dropped to 39% due to fare increases.

- In addition to difficulties transporting clients, human service agencies and non-profit organizations had employees and volunteers who faced hardships in getting to work. While employees typically made the effort to identify transportation alternatives, transit cuts hurt community organizations' ability to recruit volunteers, which diminished the extent and quality of the services they could provide.

Chapter 1

Introduction

According to the National Bureau of Economic Research, the United States experienced its longest recession since World War II from December 2007 through June 2009. However, this end date did not signal the return of a healthy economy, but rather the beginning of a recovery period that has felt slow, near stagnant, to most Americans.¹ Public transportation agencies have faced significant budget challenges related to the recession in the last few years, resulting in drastic transit service cuts, fare increases, and other cost-cutting actions. The objective of this research was to determine the community impacts of such cost-cutting actions with a focus on the impacts of significant reductions in public transportation service.

RECENT APTA REPORTS AND SURVEYS

In the last few years, the American Public Transportation Association (APTA) has conducted several studies and surveys to examine the impact that the recession has had on transit agencies and the services they provide. This research was a natural follow-up to these APTA studies to determine how communities have been impacted by the cost-cutting actions that transit agencies have had to implement or consider implementing in the wake of the economic recession. Four APTA resources provided the primary background for this research:

- The 2008 report, *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases*;
- The 2009 survey, *Challenge of State and Local Funding Constraints on Transit Systems: Effects on Service, Fares, Employment, and Ridership*; and
- The 2010 survey, *Impacts of the Recession on Public Transportation Agencies*, and its 2011 update.

¹Bartash, Jeffrey and Mantell, Ruth, "U.S. Recession Ended June 2009, NBER Finds", MarketWatch, September 20, 2010, from <http://www.marketwatch.com/story/us-recession-ended-june-2009-nber-says-2010-09-20>.

Initial Impacts of the Economic Recession and Higher Fuel Prices on Transit Agencies

The APTA report, *How Transit Agencies Are Addressing the Impact of Fuel Price and Ridership Increases*, focused on the strategies that transit agencies implemented during the summer of 2008, when transit agencies felt the impacts of the recession through historically high fuel prices and decreased revenues from state and local taxes. High fuel prices drove an increase in demand for transit services, as drivers forsook their cars to use transit. In an APTA survey of transit agencies conducted in July 2008, 86% of respondents reported ridership gains in the past year.² Record fuel prices and demand for transit service represented an opportunity for transit agencies to boost their role in providing community transportation.

Transit agencies simultaneously faced funding difficulties as their fuel and utility costs increased, state and local tax revenues decreased with the weakening economy, and other state and local financial assistance declined.³ The additional fare revenue generated through ridership increases was insufficient to counter the budget gaps confronting many transit agencies. Transit agencies struggled to resolve capacity constraints while addressing these budget problems. Many transit agencies utilized multi-faceted approaches, including fare increases, transit service cuts, deferment of planned projects and improvements, and other cost saving actions related to staffing, fuel, and utilities.⁴

The Recession's Compounding Impacts on Transit Agencies

In subsequent years, transit agencies faced increasing budgetary pressures as revenue from local, regional, and state sources continued to decline as a result of the recession. APTA conducted three surveys of transit agencies, from 2008 to 2011, to determine the magnitude of these budgetary impacts as well as the consequent strategies that transit agencies were implementing or considering.

Transit Industry Survey: 2008 – 2009

The first APTA survey, *Challenge of State and Local Funding Constraints on Transit Systems: Effects on Service, Fares, Employment and Ridership*, indicated that more than 80% of surveyed transit agencies reported flat or decreased local, regional, and state funding for the time period of June 2008 to May 2009. Financial support at the state level was

² American Public Transportation Association (APTA), *Rising Fuel Costs: Impacts on Transit Ridership and Agency Operations*, September 2008.

³ KFH Group, Inc., *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases*, Final Report, submitted to APTA September 2008.

⁴ Ibid.

especially dismal, with the average decrease in state funding at more than 20% and some transit agencies losing state funding all together.⁵ Local and/or regional transit funding decreased by 12.8% on average, and about one-quarter of transit agencies reported that local and/or regional funding remained flat over the past year.

Transit Industry Survey: 2009 - 2010

APTA conducted a second survey, *Impacts of the Recession on Transit Agencies*, in March 2010 to better isolate the impacts of the economic recession, outside of the fuel price hikes in 2008, on transit agencies. Capturing data from January 2009 through March 2010, the survey results demonstrated worsening financial conditions for transit agencies; about 90% of transit agency respondents reported flat or declining local, regional, and state revenues. Nearly half the transit agencies had experienced decreased fare revenue and for 23% of respondents fare revenue had remained flat. Job losses due to the economic recession and consequently fewer commuters, typically a major portion of regular transit ridership, likely contributed to the loss in fare revenue in some communities. The March 2010 survey results also included 70% of transit agencies reporting budget shortfalls, forecasted at a total of \$2 billion for all survey respondents together, for the coming year. More than half the transit agencies projected a shortfall of 10% or less, a third estimated a larger shortfall up to 20%, and about 13% of respondents predicted a shortfall greater than 20%.

Transit Industry Survey: 2010 - 2011

APTA provided a 2011 update to the survey, *Impacts of the Recession on Transit Agencies*, collecting data on budgets and the recession-related actions that transit agencies had taken between January 2010 and March 2011. The 2011 survey demonstrated a continuation of budget difficulties for transit agencies, but a gain in the percentage of agencies receiving an increase in funding from the previous year. While the data indicated that more than seven out of ten transit agencies faced flat or decreased local, regional funding, or state funding, nearly three in ten transit agencies received an increase in local and/or regional funding, and two in ten transit agencies received additional state funding. Fewer transit agencies (28%) experienced decreases in fare revenue, while more transit agencies (46%) saw increases in fare revenue. However, the majority of increases in farebox revenue were attributed to higher fares rather than increases in ridership. The portion of transit agencies expecting budget shortfalls in the coming year had also decreased to 35%, a substantial improvement from the previous survey. Of the transit agencies projecting shortfalls, 83% forecasted the shortfall to be 10% or less, while 8% projected a shortfall greater than 20%.

⁵ APTA, *Challenge of State and Local Funding Constraints on Transit Systems: Effects on Service, Fares, Employment and Ridership*, June 2009.

Transit Industry Strategies to Respond to the Economic Recession

The three APTA surveys also outlined numerous strategies that transit agencies implemented or proposed to cut costs in the midst of budget difficulties associated with the economic recession. Different categories of cost-cutting actions and the strategies themselves are listed in Table 1-1. The strategies marked with an asterisk (*) were identified in the APTA study, *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases*, which provided an in-depth review of the simultaneous impacts of record fuel prices in 2008 and the start of the economic recession. The findings regarding the extent, to which transit agencies implemented or considered various cost-cutting strategies, as reported in the three APTA surveys, are described below.

Initial Service Cuts and Fare Increases: 2008 - 2009

The results of the first APTA survey, covering June 2008 to May 2009, identified the initial strategies that transit agencies adopted in response to the economic downturn. Three out of four transit agencies had implemented fare increases or transit service cuts. Sixty-three percent of transit agencies had implemented fare increases, with the average fare hike at more than 20%, and about half the transit agencies had cut transit services. Approximately one-third of transit agencies had implemented both measures.

Transit agencies carried out various types of transit service cuts, the most common of which was eliminating or reducing off-peak service. The strategies to eliminate or reduce weekend service and peak period service were utilized by more than half the transit agencies. Forty-eight percent of transit agencies had reduced the geographic coverage of their transit service to cut costs. The first APTA survey also found that four out of ten transit agencies had transferred funds from capital use to operations. Half of the survey respondents also eliminated staff positions, some as many as 400 operations. Half of the survey respondents also eliminated staff positions, some as many as 400 or more employees, to try to decrease operating costs.⁶

⁶ APTA, *Challenge of State and Local Funding Constraints on Transit Systems: Effects on Service, Fares, Employment and Ridership*, June 2009.

Table 1-1: Categorization of Cost-Cutting Strategies

Service-Related Strategies

- Transit service cuts (applied to peak, off-peak, and/or weekend service)
 - Reduce geographic coverage
 - Reduce service hours
 - Reduce frequency
 - Eliminate service entirely
- Close transit station/center
- Postpone planned service improvements*
- Contain paratransit costs* (i.e., charge maximum fare allowed, provide minimum service required)
- Transition directly operated services to contracted service
- Cut contracted services*¹

Fee-Related Strategies

- Fare increase
 - Single
 - Multiple
 - Incremental fare indexing* (scheduled fare increases over a specific time period at a previously determined rate, makes budgeting easier for transit agencies and adds predictability for riders)²
 - Changes to passes* (could have a negative effect on ridership if fares are increased such that passes are no longer practical or convenient³, or a positive effect if pass programs are expanded to attract new riders)⁴
- Temporary Surcharge*
- Parking fee increase

¹ Also discussed in an online news article: Scherer, R. (2011, May 26.) Two years after end of Great Recession, how are we doing? Retrieved from <http://www.csmonitor.com/Business/2011/0526/Two-years-after-end-of-Great-Recession-how-are-we-doing>

² KFH Group, Inc., prepared for APTA. (2008, September 22.) *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases.*

³ Comment by University of Cincinnati student on Transportation for America Website, [http://action.smartgrowthamerica.org/t/3224/petition.jsp?petition_KEY=475.](http://action.smartgrowthamerica.org/t/3224/petition.jsp?petition_KEY=475)

⁴ KFH Group, Inc., prepared for APTA. (2008, September 22.) *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases.*

Table 1-1 (continued)

Administrative Strategies (implemented for union or non-union employees)

- Reduce staff positions (sometimes through attrition)
- Layoffs
- Salary freeze or reduction
- Hiring freeze
- Cut employee benefits (i.e., health benefits, overtime)
- Mandate furloughs (for union and non-union workers)

Funding-Related Strategies

- Transfer funds from capital use to operations/deferring maintenance and capital replacement (A negative outcome associated with this strategy is that a system's condition and reliability can deteriorate in the long-term.)
- Use reserves
- Seek new (dedicated) funding sources
- Defer budgeted items that are not critical to free up resources*

Other Strategies

- Save utility costs through lower energy use*
- Save fuel costs by using alternative fuel vehicles*
- Pre-purchase fuel*
- Decrease advertising/marketing*
- Cut travel and training*

Note: The strategies marked with an asterisk (*) were identified in the APTA study, *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases*.

Sources: APTA survey, *Challenge of State and Local Funding Constraints on Transit Systems: Effects on Service, Fares, Employment and Ridership*, June 2009; APTA survey, *Impacts of the Recession on Public Transportation Agencies*, March 2010; and KFH Group, Inc. report prepared for APTA, *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases*, September 22, 2008.

Implementing Strategies Multiple Times and the Recession's Impact on Larger Transit Agencies: 2009 - 2010

APTA's March 2010 survey indicated that cost-cutting strategies associated with the recession had become more widespread, with 84% of transit agencies reporting service cuts or fare increases between January 2009 and March 2010, or considering these actions for the future. This second APTA survey provided more detail regarding cost-cutting actions that could be implemented multiple times.⁷ Nearly one-quarter of survey participants had already implemented transit service cuts and were considering further cuts. About 15% of transit agencies had previously reduced staff positions or transferred capital funds to operations, and proposed to implement these strategies again. Among the common cost-cutting actions that transit agencies adopted regarding personnel were freezing or reducing salaries for non-union employees and implementing hiring freezes.

Another trend demonstrated in the second survey's results was the economic recession's more severe impact on larger transit agencies, those that provide 25 million trips or more each year. A higher proportion of large transit agencies experienced declining revenues, from various funding sources (local and/or regional funding, state funding, fare revenue), when compared to smaller transit agencies. Accordingly, the larger transit agencies implemented cost-cutting strategies to a greater extent. More than six in ten large transit agencies had already implemented or approved service cuts or the transfer of capital funding to operations. More than one-half of large transit agencies had already reduced peak period service, raised fares, or used funding reserves, or had approved implementation of these strategies. About one-third of large transit agencies had also reduced geographic coverage of their transit service, compared to just one-tenth of smaller agencies.⁸

Continued Budgetary Challenges and Additional Cost-Cutting Actions: 2010 - 2011

The 2011 APTA survey followed up on the actions that transit agencies took, or anticipated taking in the near future, in response to budgetary challenges between January 2010 and March 2011. Seventy-one percent of transit agencies had implemented or considered transit service cuts over this time period. Nearly half of the transit agencies had implemented service cuts, and more than one-quarter were considering transit service cuts in the near future. Nearly six out of ten transit agencies had either increased fares since the beginning of 2010 or were considering this action in

⁷ Because the reporting periods of the 2009 and 2010 APTA surveys overlapped by five months, from January through May 2009, the survey results could not be compared to confirm whether respondents had indeed implemented strategies multiple times.

⁸ APTA, *Impacts of the Recession on Public Transportation Agencies*, March 2010.

the future. Four out of ten survey respondents had recently implemented both fare increases and transit service cuts, or were considering both actions in the future.

Beyond raising fares and cutting transit services, about half of the transit agencies indicated that they had sacrificed capital and/or reserve funds, or were considering these strategies, to address their operating budget constraints. New for the 2011 survey, transit agencies were asked about their capital funding constraints. As a result of flat or declining capital budgets, 31% of transit agencies reported delaying vehicle acquisition. About one in five transit agencies delayed construction or delayed capital maintenance due to capital budget shortages.

Transit agencies also reported similar personnel related strategies to the previous year in addition to implementing furlough days for non-union employees and reducing benefits to both non-union and union employees. The 2011 APTA survey also found similar results regarding the size of the transit agencies' operations and the magnitude at which the transit agencies implemented cost-cutting strategies. Again, a greater percentage of large transit agencies faced funding decreases compared to smaller transit agencies, translating to the large transit agencies also implementing more cost-cutting actions including reductions in peak-period service and in geographic coverage area.⁹

Summary of the APTA Studies

The results of the APTA reports and surveys described above reaffirmed the budget pressures that transit agencies have faced as a result of the economic downturn. Transit service cuts and fare increases, among other cost-cutting actions, became commonplace in communities throughout the country. A more detailed account of the recession-related budget cuts that transit agencies have experienced and the consequent strategies that have been implemented or proposed is included in Appendix A.

RESEARCH OBJECTIVE

Transit service cuts and fare increases by transit agencies can have a significant impact on the communities they serve. The objective of this research was to explore and qualify (where possible) the impacts that significant reductions in public transportation service have had on the community. These impacts included the destinations and activities that became more difficult for riders to access, the development of new alternatives, the expansion of other transportation services to fill service gaps, and the rise in public awareness about transit among other issues. In fact, the research found that drastic transit service cuts related to the recession have

⁹APTA, *Impacts of the Recession on Public Transportation Agencies: 2011 Update*, August 2011.

negatively impacted individuals, businesses, community organizations, schools, local and regional economies, and the overall quality of life in communities.

ORGANIZATION OF THIS REPORT

The next section of the report presents an overview of the community impacts of transit services, which informed the research approach and set a framework for interpreting the findings from the case studies. Chapter 3 presents the case studies, and Chapter 4 presents the cross-cutting findings that were derived from the case studies. Appendix A presents further details on the industry data analysis and review of APTA resources, summarized in this chapter. The research methodology and work plan, including the identification of potential case study candidates, are described in Appendix B.

Chapter 2

Overview of Community Impacts of Transit

The literature review identified previous research and other resources that describe the impacts that public transportation has on the community. The results were used to develop the research plan and helped formulate a framework within which the community impacts reported in the case studies were analyzed. The literature reviewed involved studies by national organizations on the value of transit services and the real community impacts of strategies used by transit agencies to address budget cuts, as reported through online news articles and user postings.

Note that the literature was broad and examined the community impacts of transit in general; limited studies broach the specific topic of how transit service cuts and other strategies implemented in response to the recent economic downturn have affected communities. The main source of information available on actual community responses to transit service cuts was local news articles and online user postings, describing individual experiences that occurred or were anticipated after the implementation of transit service cuts and other strategies.

The first part of the literature review summarizes the general community impacts of transit documented through research, while the latter part details the impacts of transit service cuts, fare increases, and staff reductions on communities as reported through local news and online postings. Both types of sources were helpful for this research in providing background information on the various community impacts that could potentially be reported during the case studies.

THE VALUE OF TRANSIT SERVICES IN GENERAL

From a national scale to the local level, numerous studies have researched and documented the benefits of transit services. APTA identifies numerous benefits of public transportation, which include:

- Builds a strong economy,
- Reduces dependence on foreign oil,

- Cuts air pollution and carbon emissions,
- Relieves traffic congestion,
- Provides critical support during emergencies,
- Offers mobility for people in small urban and rural areas,
- Provides access for people of all ages,
- Increases real estate values and development, and
- Delivers essential health and human services.¹

Descriptions of these benefits recur in various studies and publications, as well as in everyday advocacy efforts on behalf of the transit industry, riders, and communities that have or want transit service.

The primary study available regarding the impact of the recent economic downturn on transit was a report from Transportation for America and the Transportation Equity Network called, *Stranded at the Station: The Impact of the Financial Crisis in Public Transportation*, completed in August 2009. The report called for federal policymakers to provide further funding and support to meet the growing demand for public transportation, especially during this difficult economic time when Americans need transit as an affordable and reliable option to access job opportunities and essential services. *Stranded at the Station* outlined four groups of benefits that demonstrate the value of public transit to communities:

- **Mobility Benefits** – Transit provides basic mobility to transportation disadvantaged populations, including seniors and persons with disabilities, and benefits car-owners by providing an alternative when gas prices are high and by reducing congestion on the roads.
 - The aging of the Baby Boom generation translates into significant future increases in potential transit demand by seniors. It is estimated that one in five Americans will be 65 or older by 2025, and 20% of these seniors will not be able to drive. Public transit will be an important transportation alternative for this population.
 - Record high gasoline prices in 2008 encouraged many drivers to try using transit to save money. 2008 had the highest transit ridership levels – 10.7 billion trips – the country has seen in over 50 years, and ridership remained high even after gas prices decreased.
 - The Texas Transportation Institute estimates that residents in urban areas across the country lose 4.2 billion hours to traffic delays annually. Transit reduces these delays by 15% and “saves” Americans \$13.7 billion in time

¹ APTA, *Public Transportation: Moving America Forward*, January 2010.

and fuel costs that would otherwise occur in the absence of public transportation.

- **Economic and Equity Benefits** – Transit provides economic impacts by saving households and businesses money; by generating profit, jobs, and tax revenues; and by spurring development and enhancing property values. Equity benefits occur in the savings, particularly for low-income households, which can accrue from using transit as an affordable alternative to car ownership.
 - Businesses experience savings when goods are moved more efficiently on roads that are less congested due to transit. Businesses also benefit from the larger labor pool available to them through a reliable transit network, and employees may view businesses in transit-accessible locations more favorably than those that can only be reached by car.
 - In a global economy where outsourcing is common, the transit industry offers blue-collar jobs in operations and maintenance for Americans. Construction jobs building transit facilities and vehicles can be created quickly, which is especially important to a job-hungry labor pool, through investment in transit capital.

- **Health and Safety Benefits** – Transit removes cars from the roads and accordingly reduces automobile accidents, promotes individual fitness, and reduces air pollution that causes health problems.
 - Transit produces notably less pollution per passenger mile than driving, and thereby helps decrease the medical costs of health problems associated with transportation pollution, estimated between \$40 billion and \$64 billion annually in the United States.
 - Studies demonstrate that transit users walk more on a daily basis than their counterparts who drive. This additional walking could help achieve the additional calories that Americans need to burn daily such that 90% of the population would be less at risk for obesity, and obesity-related medical costs would decrease.
 - With vehicle crashes as a leading cause of death among young people and claiming tens of thousands of American lives annually, transit improves public safety by taking cars off the road. The National Safety Council has determined that riding a bus is 25 times safer than being in a car.

- **Environmental and Energy Security Benefits** – Transit’s environmental benefits include reducing greenhouse gas emissions from transportation, helping to preserve land including farm land from development, and

preventing a decrease in water quality. Transit helps achieve energy security by reducing Americans' reliance on foreign oil.

- Transit achieves environmental benefits by reducing the vehicle miles traveled, therefore saving the gas that would have been used for each individual trip by car and avoiding the associated harmful emissions.
- More than 30 State-developed climate action plans include significant increases in transit as a strategy to reduce greenhouse gas emissions.
- Transit supports denser development patterns as an alternative to urban sprawl. Rather than continuing to build outward from existing developments, which consumes land and diminishes natural resources, communities can promote transit among other environmentally friendly transportation options that are practical with higher density, compact development patterns.

QUALITY OF LIFE: A DIFFERENT FRAMEWORK FOR ASSESSING TRANSIT IMPACTS

The benefits described above are generally intuitive to transit supporters, and have traditionally been assessed through the lens of access and mobility for users. TCRP Report 20, *Measuring and Valuing Transit Benefits and Disbenefits*, outlined an updated framework for analyzing transit's impacts to account for benefits that are more difficult to quantify, benefits associated with quality of life. Past analytical frameworks for measuring transit benefits and disbenefits have been far from consistent, but have generally utilized six major categories of community impacts, which are very similar to those described in the *Stranded at the Station* report. The six categories of community impacts are shown in Table 2-1 along with the subcategories often associated with each major heading.

Many of these major categories and subcategories are monitored by transit agencies as part of ongoing performance measurement processes. Some subcategories directly affect users' experiences, such as travel time, affordability, and rider safety and health. Other subcategories including highway system impacts, development and land use, and neighborhood integrity are more applicable to the broader community. The major category of intangible impacts and factors is particularly relevant to this research project, which seeks to determine the value of transit services to individuals and communities during difficult economic times, when transit agencies are forced to cut transit services and otherwise decrease the quality of transit.

Table 2-1: Categorization of Transit's Major Impacts on the Community

- Mobility and Access Impacts
 - Transit use
 - Travel time
 - Availability of transit services
 - Transit service reliability
 - Transit service quality
 - Highway system impacts
- Economic and Financial Impacts
 - Public finance
 - Cost-effectiveness of transit service
 - Cost avoidance
 - Affordability
 - Economic growth
 - Development and land use
- Environmental and Energy Impacts
 - Energy consumption
 - Emissions
 - Noise
 - Ecology
 - Land consumption/conservation
- Safety and Security Impacts
 - Rider safety and health
 - Transit employee safety
 - Non-rider safety and health
 - Rider security
 - Neighborhood integrity
 - Barrier effects
- Social Equity Impacts
 - Levels of transit service
 - Utilization
 - Cost incidence
 - Transit service availability
 - Access to opportunities/destinations
- Intangible Impacts and Factors
 - Value to the community
 - Value to the individual
 - Other mechanisms and methodologies

Source: Cambridge Systematics, Inc. and Apogee Research, Inc. (1996). *Measuring and Valuing Transit Benefits and Disbenefits* (TCRP Report 20). Washington, DC: National Academy Press. Retrieved June, 2011, from http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_20.pdf

TCRP Report 20 aimed to provide a more comprehensive approach for analyzing transit impacts by adding a higher level focus to impact assessments. The report proposed the “principle organizing concept” of improving quality of life, around which the six major categories of transit impacts were reoriented. This principle organizing concept also broadened the view of community impacts to consider transit as one of several competing systems and services that contribute to quality of life. The new framework clarified that economic, safety and security, and environmental impacts constitute “fundamental” transit benefits, since financial stability, good health, and safe surroundings are necessary for individuals to have and for communities to provide a good quality of life.

Access and mobility, previously focal points for transit impact assessments, were designated as “intermediate” benefits – those that contribute to the fundamental benefits. Access reflects the value of transit services in allowing individuals to reach major destinations, which impact their financial and physical health. Mobility, or the ease with which individuals move about, depends on good access to contribute to the fundamental benefits. Several measures in the previous framework, shown in Table 2-1, were also determined to be “summary measures.” Cost-effectiveness and social equity exemplify summary measures, which contribute to the analysis of fundamental and intermediate impacts. For example, when a transit agency proposes to add or cut transit services, they must analyze the proposal to determine if this action is cost-effective and if the benefits or disbenefits are distributed in a “fair” way among population segments.

This updated framework for measuring transit benefits and disbenefits provided an important perspective on the impacts that transit services have on communities: ultimately, transit is one of many elements that contributes to improving people’s quality of life and helping society thrive. Accessibility and mobility are intermediate benefits that facilitate the fundamental benefits that transit provides for the economy, safety and security, and the environment.

LIVABILITY

TCRP Report 22 referenced some of the categorized benefits described in Table 1 and placed them under the umbrella of “livability” in its examination of *The Role of Transit in Creating Livable Metropolitan Communities*. Livability has been a popular planning issue in recent years, and transportation plays a prominent role as one of the Six Principles of Livability: “Provide more transportation choices to decrease household transportation costs, reduce our dependence on oil, improve air quality, and

promote public health.”² Transportation also impacts other livability principles such as expanding location- and energy-efficient housing choices and improving the economic competitiveness of neighborhoods. Note that these hallmark characteristics of livable communities are very similar to the major categories of transit impacts and the values that communities hold with regard to transit, described above.

This report demonstrated the interconnectedness of various transit impacts by describing the roles that transit has in creating livable communities, which include:

- Creating places for community life,
- Transit as a catalyst for downtown and neighborhood renewal,
- Creating opportunities for entrepreneurship and economic development,
- Improving safety and amenity,
- Making communities accessible and convenient, and
- Shaping community growth.

These roles emphasize transit’s contribution to making places convenient, safe, attractive, and unique, which in turn impacts a community’s economic viability and quality of life. The case studies examined in TCRP Report 22 also identified various stakeholders that are interested in the role of transit in their communities: property owners, developers, employers, retail merchants, chambers of commerce, downtown business organizations, police, and parents and community groups concerned with safety and security. These examples of community stakeholders were included in developing this study’s research plan to collect community input on the impact of transit service cuts and other strategies in response to the economic downturn.

LAND USE AND ECONOMIC ACTIVITY

TCRP Report 49, *Using Public Transportation to Reduce the Economic, Social, and Human Costs of Personal Immobility*, echoed the concept of mobility, or a lack thereof, as indicative of other social issues as TCRP Report 20 discussed. The study introduced development patterns as a potential factor in the community impacts of transit service cuts. The 1999 report discussed the trend of suburbanization, both for residences and jobs, over the last several decades and described a subsequent transit service gap, where transit no longer meets the needs of inner-city residents, especially those that do not have a personal vehicle, to access job opportunities and services in the suburbs. Within the broader goal of researching personal immobility, the report examined the economic

² U.S. Department of Transportation Livability 101 Website, <http://www.dot.gov/livability/101.html> (accessed July 22, 2011).

impacts that transit service reductions have on both riders and society. One case study determined that the dollar amount for the costs to riders in lost income and additional travel time and expenses, as a result of transit service reductions and lost access to jobs, was ten times more than the dollars the transit agency saved through transit service cuts.

The report also outlined several ways that transit saves society money, though these measures are more difficult to quantify and usually are not included in assessments of transit's value to society:

- Avoid medical institutionalization of the indigent;
- Prevent crime by providing job training for employment and food for the hungry;
- Reduce the demand on more expensive and oversubscribed paratransit service;
- Provide an option to a costly ambulance ride for medical care;
- Increase the purchasing power enjoyed by transit riders with access to jobs or to broader market choices; and
- Relieve other agencies funded by tax dollars of transportation responsibilities and, thereby, increase their productivity.

The benefits listed above could easily become disbenefits to communities where transit services are drastically reduced. Other case studies in the report provided specific examples of these social benefits, including a transit agency that saved \$10 million in paratransit service costs annually by providing an unlimited monthly pass to riders to use fixed-route services in exchange for relinquishing their paratransit eligibility; this measure also saved Medicare more than \$500,000 per month.

Another land use-related transit impact described in this report reflected the findings from two case studies where transit hubs helped generate long-term economic development by attracting services and local businesses. This phenomenon was also highlighted in TCRP Report 22 on transit and livability, described above. As places that generate a lot of foot traffic and are easily accessible to employees and patrons alike, rail stations and bus transfer centers can contribute to neighborhood renewal and provide opportunities to establish small businesses. This research project considered whether

communities have experienced any negative impacts where transit hubs were closed or the hours of operations decreased as a result of transit agencies' budget shortfalls.

Other studies have provided more details on the range of economic activities, including dollar amounts for local economic benefits, generated through investment in transit. KFH Group partnered with Jack Faucett Associates, Inc. on two studies that demonstrated the local economic benefits to the community with each dollar invested in transit service. The more recent study for the Greater Lynchburg Transit Company (GLTC) in Lynchburg, VA determined that the community receives \$7.60 in economic benefits for every dollar in funding provided by the City of Lynchburg and Amherst County.³ The annual economic benefits to the region incorporated the jobs directly provided and indirectly supported by GLTC; the money saved in transport costs for local residents; the costs saved with regard to automobile accidents, pollution, and congestion avoided as a result of less car travel; and economic activity across various sectors generated through GLTC's purchasing and the purchasing opportunities available to transit riders as a result of GLTC's transit services. A similar study was completed previously for Housatonic Area Regional Transit in Connecticut and found that each dollar that local governments invested into transit services yielded a benefit of more than nine dollars to the region.⁴

IMPACTS RELATED TO COORDINATION

In many communities, transit service is coordinated with other transportation services, including those provided and utilized by human service agencies and private transportation operators. The budget issues that transit agencies have faced as a result of the economic downturn could impact transit agencies' abilities to participate in coordination, often as the provider of transit service. The benefits of transportation coordination that could be lost are described below.

TCRP Report 49 also described numerous partnerships between transit providers, social service organizations, local government, and businesses to provide transit services. Often these community stakeholders contribute funding to the transit agency to operate transit services that serve the general public as well as the clients and patrons of the partnering entities. Then the community organizations, particularly

³ Jack Faucett Associates, Inc. and KFH Group, Inc. *The Economic Impact of the Greater Lynchburg Transit Company on the Lynchburg, Virginia Region*, prepared for The Greater Lynchburg Transit Company in February 2010.

⁴ Jack Faucett Associates, Inc. and KFH Group, Inc. *The Economic Impact of HART to the Housatonic Valley Region*, submitted to Housatonic Area Regional Transit District in February 1997.

social service agencies and employers, can focus on their primary, non-transportation-related missions and increase productivity, while leaving the relevant transportation provision to the “experts.” Cuts to transit agencies’ budgets could affect their abilities to provide transit services for these community partners and result in additional costs, duplicative transit services, and losses in efficiency if individual organizations need to start providing their own transportation services for clients, patrons, and employees.

TCRP Report 91, *Economic Benefits of Coordinating Human Service Transportation and Transit Services*, outlined similar impacts that coordinated transportation has on communities with a focus on the economic benefits. The study further explained the benefits related to efficiency and effectiveness in that coordination can reduce the costs associated with providing transportation and increase transit service levels so that more riders are served. Coordination helps decrease the major expenses of providing transportation by minimizing the duplication of resources allocated toward labor, administration, and capital. Transit agencies and their coordination partners can also achieve economies of scale by combining their transportation purchases and receiving reduced unit prices, which otherwise would not be available to the individual transportation providers. Additional riders can obtain needed transportation services when providers use existing resources more effectively to carry more riders and different types of riders, such as clients of human service agencies and persons qualified for Americans with Disabilities Act paratransit services, on the same vehicles. Again, coordination diminishes duplicative and overlapping efforts, and the money saved can then be used toward expanding transportation to serve yet additional riders.

The other economic benefits of coordinated transportation include economic activities generated by increased mobility and additional funding provided to transit agencies through contracts to provide transit services to partners’ clientele. The latter impact is less applicable to this study, where transit agencies may have had such coordination arrangements, but the revenues generated were insufficient to counter the large deficits caused by losses of other funding sources during the recession. The economic benefits of increased mobility resulting from coordinated transportation are similar to the impacts discussed above in the Land Use and Economic Activity section. Again, mobility serves as an intermediate benefit to the community by allowing riders access to employment, health care, and other necessary services. Individuals benefit from having an affordable transportation option and the ability to seek lower cost options for services and goods, where coordination has expanded the reach of community transportation services. Local businesses experience additional economic activity when riders can spend their money locally, and communities thrive when their residents can fulfill their fundamental needs and more due to the availability of good transportation options.

TRANSIT-CAPTIVE POPULATIONS

The literature review also included TCRP Report 95, *Traveler Response to Transportation System Changes*, to determine the potential impacts of transit service cuts at the individual level. The report examined data collected by transit agencies on the response of ridership to changes in transit service. The characteristics of existing ridership were helpful in describing the population segments that would most likely feel the effects of transit service reductions. The ridership was differentiated into transit “captives,” those with no automobile available for the trip, and “choice” riders, who did have an automobile available but chose to use transit. Other than the lack of vehicle availability, transit captivity was often associated with lower income households. Given their limited options other than transit, transit captives are likely to be more impacted by cuts in transit service than choice riders.

The study also outlined the demographic characteristics of riders by transit mode. With regard to income, riders who used commuter rail tended to have higher incomes, while riders on bus, trolley, and streetcar services tended to have lower incomes; income was less of a differentiating factor for riders who used subway and elevated rail systems for their commutes. Research focusing on bus ridership found that those with lower incomes were notably more likely to use transit. Controlling for income, several groups were represented more frequently among transit commuters: women, minorities, immigrants, persons without a car, persons with disabilities, workers under 30 and those between 65 and 70, persons with less than a high school degree, and college graduates and persons with graduate school education. These groups may have been more likely to use bus services because they tended to live or work in center cities, where transit services are more comprehensive and serve as a practical alternative to driving. Groups that tended to use transit for non-work purposes, again controlling for income, included women, minorities, persons without a car, young persons between 12 and 30, and persons with less than a high school degree.⁵

The report did not have data on the transportation alternatives that former transit riders would use if bus services were decreased or altogether canceled, but surveys did capture the alternatives that riders self-reported in the event that transit was unavailable. These responses would not necessarily coincide with riders’ actions in the event that transit service was actually reduced or eliminated, but the results were still indicative of the consequences that could occur with significant transit service cuts. The most drastic result was one out of five bus riders reporting that they would not

⁵ Pratt, Richard et al. Chapter 10 – Bus Routing and Coverage in *TCRP Report 95, Traveler Response to Transportation System Changes*. Washington, D.C. 2004.

make their trip if transit service was unavailable. These riders are most likely transit-dependent and do not have access to a personal vehicle, whether due to financial reasons or an inability to drive. Of those bus riders who would still make their trips, about half reported that they would drive or carpool.

TCRP Report 95 also included data on the transportation alternatives that transit riders used in the event of transit strikes. Though these strikes were temporary, similar consequences could reasonably be anticipated in the aftermath of drastic transit service cuts during the economic downturn as well. A large portion of trips were suppressed during the major transit strikes reviewed in the study. A significantly higher proportion of non-work trips, about 40% to 60%, were suppressed, while up to 20% of work trips did not occur. The results showed that transportation disadvantaged populations were significantly impacted by the strikes. The elderly suppressed 55% to 60% of their trips and the young about half of theirs. Increased congestion was another documented consequence of the transit strikes. Though average vehicle occupancies were higher during the strike, the vehicle counts still increased up to 16% and on one principle bridge the length of peak congestion in the morning increased four-fold.

OTHER CONSIDERATIONS REGARDING THE COMMUNITY IMPACTS OF TRANSIT

Community Values Related to Transit

TCRP Report 122, *Understanding How to Motivate Communities to Support and Ride Public Transportation*, discussed the relationship between transit and communities in terms of values, including “safety; economics; emotions about stress, adventure, and locus of control, and status; mobility; and lastly environmental issues.” Notable in their overlap with the aforementioned categories of transit benefits and disbenefits, these values influence the community’s perception of transit, both negative and positive. On one hand, some perceive transit as a positive contribution to society in providing affordable and convenient transportation options, especially to serve disadvantaged individuals, and reducing pollution and congestion. On the other hand, some perceive that there is no need for transit services outside urban areas, and that government funding of transit is a waste, especially given ridership that appears low.

The community’s perception of transit is pertinent to this research in that it may influence decisions by local government officials and transit agency staff on whether to implement certain cost-cutting strategies, as well as the magnitudes of budget and transit service cuts that are implemented. Community perceptions may also change in the aftermath of deep reductions in transit service and other service quality changes.

The community impacts that have occurred or are anticipated to occur as a result of budget cuts may be reported differently, in positive or negative lights, depending on community perceptions of transit.

Traveler Response Time Lag

Another applicable phenomenon discussed in TCRP Report 95, *Traveler Response to Transportation System Changes*, was the time it takes for transit riders to learn about transit service changes and adjust their travel decisions. This response time lag, which includes planning and carrying out different patterns of transportation usage, affects both existing and potential riders. While the report discussed this phenomenon in terms of ridership development for new bus routes, it also applies to this research project in that the team will need to identify case studies where communities have had sufficient time to react to drastic transit service cuts and other strategies that transit agencies employed. In fact, the case studies may help determine the amounts of time that individuals and communities have taken to adjust to drastic transit service cuts during the economic downturn.

USER-REPORTED IMPACTS OF DRASTIC CUTS TO TRANSIT BUDGETS IN THE ECONOMIC DOWNTURN

Numerous local news articles and online postings by community members have described the impacts on individuals and communities in the wake of cost-cutting strategies implemented during and after the economic recession. Local online sources discussed both the consequences that actually occurred and impacts that were anticipated as a result of actions that transit agencies were taking to close budget gaps. Such anecdotes are summarized in Table 2-2 by their association with different cost-cutting strategies. The anecdotal evidence falls into similar categories of community impacts as those discussed in the literature review.

RESEARCH APPROACH

The results of the literature review were used to develop the research plan and the findings from the case studies were anticipated to mirror the transit benefits discussed in the literature review. The literature review found that past research and field work have focused on the benefits of transit services, and far fewer studies have documented the community impacts resulting from deep cuts in transit services.

Table 2-2: User-Reported Impacts of Transit Cost-Cutting Strategies

Strategy Taken by Transit Agency to Meet Budget Gaps	Reported or Anticipated Impacts on Individuals and Communities
<p>Transit service cuts (including decrease in service hours, cutting weekend service, reducing geographic coverage of service, etc.)</p>	<ul style="list-style-type: none"> • Cause “choice” riders, especially suburban commuters, to shift back to driving;¹ one former transit rider experienced a four-fold increase in expenses for parking and gasoline, in comparison to her previous cost for a bus pass² • Person looking for work has had to turn down job interviews because the bus does not travel to those employment sites; one particular job was transit accessible until a recent transit service cut; rider cannot afford a car right now³ • When transit services are cut, more cars are on the street putting stress on bicyclists; those that used both transit and bicycles no longer have that option⁴ • Increased community support to pass a second ballot for additional tax support of the transit system, when a similar measure had failed two years prior; transit agency attributed the boost in support to the community realizing the value of transit when transit services were not available⁵ • Riders will not be able to go to recreational events or see family on holidays⁶ • Riders that can no longer rely on transit services are “buying beaters and driving instead”⁷ • Diminish workers’ abilities to get to jobs; in one community, more than 40,500 jobs are inaccessible to transit-dependent persons as a result of bus service cuts⁸ • Worker that earns \$10 an hour as a dishwasher has to pay for a cab when he needs to work at night, about three times a month; cabs cost up to \$35, a significant dent in his earnings⁹

¹ <http://thecityfix.com/blog/moving-through-the-recession-part-2-service-cuts-continue/>

² <http://ulocal.wisn.com/Tribulations-of-transit-cuts/blog/2248822/63262.html>

³ http://action.smartgrowthamerica.org/t/3224/petition.jsp?petition_KEY=475&t=&limit=25 (Cleveland – June 1, 2010)

⁴ Ibid. (Eugene, OR – May 10, 2010)

⁵ American Public Transportation Association, “St. Louis Sales Tax Earns Strong Support”, from the April 12, 2010 issue of *Passenger Transport*.

⁶ <http://www.king5.com/news/local/Riders-upset-about-proposed-cuts-at-Snohomish-Co-transit-82113982.html>

⁷ <http://www.healthycal.org/transit-cuts-hit-hard-in-san-diego.html>

⁸ http://www.huffingtonpost.com/2011/04/05/milwaukee-budget-cuts_n_844551.html?page=2

⁹ Ibid.

Strategy Taken by Transit Agency to Meet Budget Gaps	Reported or Anticipated Impacts on Individuals and Communities
Transit service cuts (continued)	<ul style="list-style-type: none"> • Part-time worker relies on transit to access job, shopping, and social activities; cannot work late shift or weekends because transit does not run then; could not attend Veteran’s Day activities; cannot go out during the weekend for shopping or recreational events; notes other riders who cannot go to church; anticipates difficulties in colder weather, especially for elderly and persons with disabilities, since headways are hourly¹⁰ • Young professionals who had chosen a community for its extensive transit would consider moving out of the region if transit service cuts continue; these communities would lose their appeal to young workers, causing negative impacts on the regional economy¹¹ • Cuts to paratransit service threaten the ability of a 68-year old woman with Parkinson’s disease to continue participating in physical fitness programs; the cuts would also impede the ability of other older adults and persons with disabilities to lead “normal” lives¹² • College students would need to find alternatives to get to volunteering locations, their part-time jobs, and the movies¹³ • Transit service cuts will lead to more car emissions and curtail people’s visits to parks and exploration of the outdoors; one community estimates that a transit service cut of 25% will put 18,000 more cars on the road and increase ozone and carbon dioxide levels in the air¹⁴
Transfer capital funds to cover operational costs	Condition of transit capital and infrastructure may deteriorate without timely replacement and maintenance; potentially impacts future transit users and makes future maintenance and upgrades to the system more difficult ¹⁵
Decrease transit service frequencies	<ul style="list-style-type: none"> • Caused “choice” rider to shift back to driving, as well as bicycling and walking whenever possible¹⁶ • Caused a one-car household, where one person previously took the bus to work and the other had to drive because no transit was available in their work area, to buy a new car; planning to move to another city where they can rely less on vehicles¹⁷

¹⁰ http://action.smartgrowthamerica.org/t/3224/petition.jsp?petition_KEY=475&t=&limit=25 (Lake County, OH – November 11, 2010)

¹¹ <http://wlocal.wisn.com/ Tribulations-of-transit-cuts/blog/2248822/63262.html>

¹² http://www.huffingtonpost.com/alan-singer/people-with-disabilities- b_856791.html

¹³ <http://pittnews.com/newsstory/students-feel-sundays-transit-cuts/>

¹⁴ <http://www.alleghefront.org/transcript.html?storyid=201007141115060.711355>

¹⁵ <http://thecityfix.com/blog/moving-through-the-recession-part-2-service-cuts-continue/>

¹⁶ http://action.smartgrowthamerica.org/t/3224/petition.jsp?petition_KEY=475 (Los Angeles – June 28, 2011)

¹⁷ Ibid. (Richmond – June 14, 2011)

Strategy Taken by Transit Agency to Meet Budget Gaps	Reported or Anticipated Impacts on Individuals and Communities
Use smaller vehicles on bus routes	Smaller vehicles are less accessible to persons with disabilities, and rider with a disability can no longer use the fixed route due to the smaller vehicle; rider is in danger of losing their job ¹⁸
Defer maintenance or replacement of old vehicles	<ul style="list-style-type: none"> • Bus driver reported that the vehicles they drive continually break down due to lack of funding¹⁹ • Metro rider who commutes two hours a day is concerned about their safety, with breaking handrails, settling floors, and long escalators that do not work²⁰
Lay off transit agency staff	Former bus operator reported losing their job due to cuts in State transit funding; though the funding was restored, too much time had lapsed to keep their job ²¹
Increase fares	Student user previously purchased a pass for unlimited rides per school quarter; with fare increase, student had to pay additional amount on top of pass, which was less convenient and less affordable; student no longer buys pass, but bikes for most trips and stays closer to home than before ²²
Decrease marketing and communication efforts	Transit agency stopped publishing and distributing schedules, maintaining schedules posted at stops and transit centers, and decreased meeting notifications; transit user feels the transit service is more difficult to use and less safe ²³
Eliminate transit system	Rider that has autism and epilepsy could not drive and used to ride the bus often for various activities; they do not want to stay home all day; rider wants to go to school for business, but wants to take classes on campus, not online; they have no transportation that allows them to travel independently (and go to school), and cannot always depend on family to drive them ²⁴

¹⁸ Ibid. (Ramona, CA – May 1, 2011)

¹⁹ Ibid. (Portland, ME – April 19, 2011)

²⁰ Ibid. (September 8, 2010)

²¹ Ibid. (Orange, CA – February 6, 2011)

²² Ibid. (Cincinnati – February 2, 2011)

²³ Ibid. (Austin – January 26, 2011)

²⁴ Ibid. (Clayton County, GA – July 21, 2010)

This project collected data on such community impacts through a case study approach, which is appropriate for research in which:

- A “how” question is being posed,
- The investigator has little or no control over events, and
- The research topic is a contemporary event within real-life context.⁶

This study’s objective was to determine how communities are dealing with transit service cutbacks and other changes due to financial pressures during the current economic downturn. While drastic cuts in transit service and other actions have been widespread in the last several years, and transit agencies will likely continue to face financial pressures in the foreseeable future, little has been documented on how communities have responded to these changes in transit services. This research examined an ongoing event within the real context of a weak American economy.

The research methodology and work plan, including the identification of potential case study candidates, are described in Appendix B. The next section of the report presents the case studies.

⁶ Yin, Robert K. *Case Study Research: Design and Methods*. Thousand Oaks: SAGE Publications, Inc., 2009.

Chapter 3

Case Studies

This research examined five transit agencies and their service areas as case studies to determine the impacts that transit cuts, due to the recent economic downturn, have had on communities. The research team tried to capture communities that varied in size and geographic location, as well as transit systems that operated different modes. However, the leading criteria were communities where transit agencies had experienced significant funding reductions and had consequently implemented, or planned to implement, cost-cutting strategies including significant transit service reductions.

The five case studies selected for this research were:

- Clayton County, Georgia (C-TRAN)
- Hammond, Indiana (Regional Bus Authority)
- Pittsburgh, Pennsylvania (Port Authority of Allegheny County)
- St. Louis, Missouri (Metro Transit)
- Tacoma, Washington (Pierce Transit)

Clayton County and Hammond were significant case studies in that their public transportation services completely closed down due to a lack of local funding. The Pittsburgh area's transit services were already cut by 15%, and another 35% reduction was planned for September, 2012 if additional funding was not identified.¹ St. Louis experienced significant cuts to all modes and suspended service to one in four bus stops. Voters later passed a referendum for new transit funding, and services have since been restored. Tacoma's transit agency has cut nearly half its transit services as a result of the recession.

This chapter describes the details behind these communities' transit funding issues and the impacts of the major transit service cuts, or complete elimination of transit service. First, an overview of case study characteristics including the funding problems, decision-making processes regarding transit service cuts, and impacts on the transit agencies is provided. Then each case study is presented including a community

¹ In August, 2012, Port Authority's Board of Directors voted to defer the 35% transit service cut for at least one year, following the ratification of a new labor contract with its largest employee union.

profile, summarizing the transit services and recession related issues, followed by a detailed narrative of the various community impacts reported.

CASE STUDY CHARACTERISTICS

While this research primarily focused on the community impacts of drastic transit service cuts, the case studies also identified similarities in funding problems, the decision-making process for transit service cuts, and impacts on the transit agencies. These issues are summarized below.

Transit Funding Issues

The transit agencies in the case studies described funding issues that demonstrate the complexity of public transportation funding including how funding structures can vary widely between localities, regions, and states. Individual transit agencies typically depend on multiple funding sources, and must navigate changes in all of them particularly during an economic downturn. Some funding mechanisms worked well historically, but faced serious problems due to the recession (for example, Pierce Transit's structure is highly dependent on sales tax revenues). Other funding mechanisms were already problematic, and the recession both exacerbated budget shortfalls and raised awareness about transit funding mechanisms, or a lack thereof (Port Authority, Metro Transit). The funding issue that resonated in all the case studies was the challenge of *sustainable* funding sources particularly as costs continue to rise.

Some case studies identified a lack of local funding, which the recession impacted through unemployment (fewer trips and fares collected), decreased spending (lower sales tax collections), and decreased property values (lower property tax collections). Jurisdictions that highly depend on sales or property taxes to generate revenues experienced significant budget shortfalls. Tacoma provided an example where the transit agency is funded about 70% through local sales tax revenues.² In Clayton County and Hammond, transit services competed with other public services for general fund dollars. Faced with budget shortfalls, local governments had to make difficult decisions about the publicly funded services to cut. Though public transportation was a lower priority service in some communities, it was also one of several public services cut due to budget shortfalls.

In Clayton County and Hammond, the transit agencies had also started out using funds that were available for a limited time, and had troubles later justifying the increased funding burden on local government (C-TRAN) or garnering dedicated local funding at all (Regional Bus Authority in Hammond). The decisions to end transit service completely were complicated by other factors, such as the classism perceived in

²Excluding the Sound Transit services that Pierce Transit operates.

Clayton County and state policies to consolidate local services and cap property taxes (a primary funding source for local governments) in Indiana. Another factor that impacted local funding in the case studies was the loss of population, including the shift from cities to suburbs (St. Louis and Pittsburgh) and the deployment of soldiers (Tacoma), which translated to lower sales tax revenues and decreased demand for transit service.

The decrease or absence of state funding support for public transportation was another financial challenge identified in the case studies. Port Authority experienced significant operating budget cuts due to the collapse of Pennsylvania's statewide funding mechanism for transportation. Both Missouri and Georgia provided minimal funding support for public transportation. The operating assistance that Metro Transit received from the State of Illinois was 23 times higher than that from the State of Missouri in FY09. Pierce Transit received minimal state funding since Washington State, which has no income tax, experienced similar impacts on its sales tax revenues due to the economic recession. Pennsylvania also exemplified a state where no enabling mechanism is available for localities to enact a local option tax to support public transportation.

The above funding issues were problematic in two ways: 1) the recession and other factors led to decreasing revenues available for transit operations, and 2) transit operating costs such as fuel, utilities, medical costs, and pension contributions have increased. Either one of these problems alone could have endangered a transit agency's financial health, but the two combined have resulted in significant operating budget gaps, at a time when most sources of funding face budget hardships of their own. Thus, some communities have put forth ballot measures to give residents the opportunity to decide whether public transportation should receive new revenue sources.

The case studies identified some common issues related to public sentiment around transit ballot measures and community perceptions of transit overall. In Tacoma and St. Louis, the public including unions did not believe the severity of the transit agencies' financial problems or that the transit agencies would actually implement major service cuts. In Pittsburgh and Hammond, the public perceived that the transit agencies were mismanaging public funds and that leadership was corrupt. Some transit agencies had to rework their public images during outreach processes to educate the community about transit service cuts and to garner support for transit funding.

Transit Agencies' Approaches to Transit Service Cuts

When transit service cuts have been required, transit agencies have generally focused on preserving core services, cutting less productive suburban and commuter

services, resulting in a smaller transit footprint. This strategy preserves ridership, but results in hardships for transit-dependent suburban riders. Transit agencies have also tended to cut the span of service, specifically trimming late night service, making it difficult for people to access evening employment. Transit agencies have been strategic and methodical when cutting service, looking to retain as many riders as possible. Many transit agencies also engaged in significant outreach processes to gather public input on transit service cuts that had to be implemented.

Impacts on Transit Agencies

The transit agencies in the case studies reported various impacts on their systems from cost-cutting actions. Transit agencies have achieved higher productivity on their remaining transit services, having increased the efficiency of the route network to concentrate on a high ridership core. The losses in ridership have generally been small in comparison to the percentage of transit services cut, though the stranded riders are often the most transit-dependent. Where transit agencies transferred federal vehicle maintenance dollars to fill gaps in their operating budgets, they have foregone replacing vehicles and face the maintenance and operations issues associated with an aging fleet. One transit agency reported difficulties in hiring back maintenance employees who had been laid off during transit service cuts; the mechanics had found better paying jobs.

In performing extensive outreach processes regarding transit service cuts and fare increases, several case study transit agencies discovered the benefits of transit supportive community coalitions including new stakeholders such as major businesses. These coalitions along with campaigns for transit ballot measures have broadened awareness of the role of public transportation in a community, city, and economy. While some members of the public still do not perceive transit as a top priority, the implementation of significant transit service cuts forced the community to experience life without transit options and highlighted the importance of public transportation for countless others.

CASE STUDY FINDINGS

The five case studies are profiled in the following pages. For each case study, an overview of the transit agency's services, funding issues, and cost-cutting strategies is followed by a detailed narrative describing both quantitative and qualitative data collected through interviews and supplemental research. The cross-cutting findings from all the case studies are described in the next chapter.

TCRP Project J-11/Task 15
Impacts of Cuts and Reductions in Public Transportation Funding

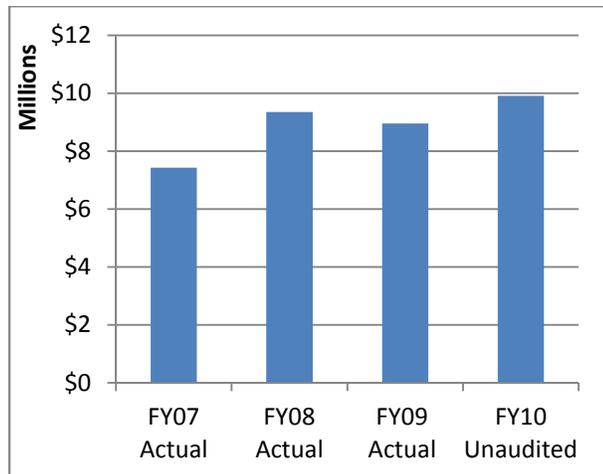
Clayton County, GA

Conducted during the first half of 2012, this case study involved interviewing the Metropolitan Atlanta Rapid Transit Authority (MARTA, including Bus Services, Planning, Research and Analysis, Title VI, External Affairs staff) as the transit service contractor, Atlanta Regional Commission, Clayton State University, the City of Riverdale, and the Georgia Department of Human Services – Region 4 Transportation. Clayton County declined to be interviewed.

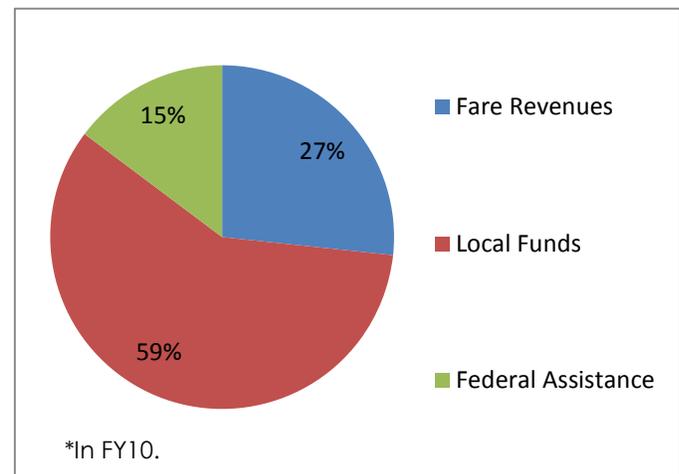
Transit Agency Characteristics¹

Service Area	68 square miles in Clayton County, GA and population of 263,900
Annual Unlinked Trips	2.5 million
Vehicles Operated in Maximum Service	19 buses, 8 demand response
Organizational Structure	County department, Five-member County Board of Commissioners, contracted service
Number of Employees	3 (County employees only; drivers contracted through MARTA)

Annual Operating Expense Budget



Sources of Operating Funds*



Budget Issues

- Increases in transit costs and other expenses during FY09, coupled with the recessionary impacts of declining revenues, resulted in a gap in the County's FY10 transit budget.
- The County faced a \$1.3 million shortfall in paying its \$8.1 million contract with MARTA, in addition to \$2 million spent on fuel, insurance, and other costs.² The County only collected \$2.5 million in fare revenues.

¹ Sources for the information below include Clayton County's FY 2011 and FY 2010 Budgets, C-TRAN's 2008 NTD profile, and Clayton County Board of Commissioners meeting minutes.

- When C-TRAN started, it was funded entirely through federal grants (Congestion Mitigation and Air Quality Improvement), but the County has had to contribute more funds to continue the transit service. Transit had to compete with other public services for County funding.

Cost-Cutting Actions

- The County's FY10 budget originally proposed to cut its transit operations funding by \$2 million.³
- In October 2009, the County Board of Commissioners voted on a list of cost-cutting measures for C-TRAN, including a fare increase, eliminating weekend service, and eliminating all service completely as of July 1, 2010. The County Commissioners voted to eliminate all service, ending its contract with MARTA and closing the transit fund.
- A transportation referendum in the ten-county Atlanta region proposed a regional 1% sales tax to fund transportation projects including local bus service in Clayton County. The Transportation Investment Act referendum failed in July, 2012.⁴

Community Impacts⁵

Employment

- *2,990 workers had to find an alternate way to get to work.
- *3 out of 4 C-TRAN riders feared the loss of their jobs.
- *70 C-TRAN employees lost their jobs.
- *Two of the County's largest employers (university & hospital) became inaccessible by transit.

Social Equity

- *92% of C-TRAN riders were African American and two-thirds had household incomes less than \$25,000.
- *65% of C-TRAN riders had no car available.
- *At least 10 major community facilities providing medical, social & governmental services became inaccessible to transit-dependent people.

Mobility/Ridership Lost

- *Loss of 8,200 fixed-route trips per weekday including route with 9th highest ridership among all MARTA-operated services.
- *232 people with disabilities lost access to public transportation.
- *15.4% fewer station entries at MARTA Airport Station, which was fed directly by C-TRAN.

Students

- *More than 50% of students using C-TRAN reported they may quit school when the system shuts down.
- *15% of Clayton State University students previously used C-TRAN to get to school with most riding at least 3 times per week.

Private Alternatives

- *Small van operators served previous C-TRAN routes, a cheaper option than taxis.
- *Fares were \$2-\$5 per one-way trip, a 33% to 233% increase from C-TRAN fares; some charged up to \$10 due to high needs.
- *Some operators were not registered, which required proof of insurance, criminal investigations & safety inspections.

Increased Driving

- *12.3% of former C-TRAN riders planned to drive their own cars, adding more than 500 cars daily to local roads.
- *33% of C-TRAN riders indicated they would have to buy a car, increasing their transportation costs as much as \$18 per day.

² Hart, A. (2009, October 8.) Clayton transit cuts on table. *The Atlanta Journal-Constitution*. Retrieved from <http://www.ajc.com/news/clayton/clayton-transit-cuts-on-158146.html>.

³ (2010, April 1.) C-Tran: How we got here. *Clayton News Daily*. Retrieved from <http://www.news-daily.com/news/2010/apr/01/c-tran-how-we-got-here/>.

⁴ Atlanta BeltLine. (2012.) Key Facts on the July 31 Transportation Referendum. Retrieved from <http://beltline.org/progress/planning/transit-planning/regional-transportation-referendum-transportation-investment-act/>.

⁵ Most impacts reported in interviews, including C-TRAN data from MARTA. Information on private van services reported in local online news (*The Atlanta Journal-Constitution*).

Community Impacts - Clayton County, Georgia

Clayton County, Georgia, is a suburban Atlanta County that eliminated local public transportation service on April 1, 2010. The public transportation program, C-TRAN, was operated by MARTA through a contractual arrangement. C-TRAN provided public transportation linkages from residential and commercial areas of Clayton County to a MARTA hub at Hartsfield-Jackson Atlanta International Airport. The Airport, located partially within Clayton County, serves not only as a transportation hub, but is also the region's largest employer.¹ During its last year of operation, C-TRAN provided about 2.5 million annual passenger trips. Five fixed routes and ADA complementary paratransit were offered, using a fleet of 19 peak hour buses, operating 90,669 annual service hours. The annual operating budget was approximately \$9 million.² The service was originally operated through the Georgia Regional Transportation Authority (GRTA), using a private contractor, but had transitioned to County oversight with MARTA as the contractor.

C-TRAN began service in 2001, funded with a grant from the CMAQ program. As the CMAQ grant phased out, Clayton County had to contribute more funds each year to keep the transit services in place. The recession of 2008-2009 caused financial problems for the County, which ultimately led the County to discontinue service. Political factors may also have contributed to the decision to completely discontinue transit service, rather than to reduce service. Some County leaders were reported to be of the opinion that the people using the bus service were originally low-income Atlanta residents who had been displaced by a dispersal of public housing residents.³ MARTA had devised several transit service reduction scenarios for the County to consider, rather than complete service elimination.

While local public transportation service has been eliminated, Clayton County is still served by GRTA commuter bus service. The three routes travel to downtown and midtown Atlanta and do not serve the Airport. GRTA recently constructed a new park and ride facility in the County.

¹ Hartsfield-Jackson Atlanta International Airport website.

² MARTA Planning Office.

³ Several people interviewed for this case study indicated this may have been a factor. Anecdotally, many low-income people who previously lived in public housing in Atlanta moved to Clayton County, once the public housing was closed, because it was more affordable. The stakeholders interviewed perceived that County leaders did not want to serve these displaced residents instead of "real" Clayton County residents. However, MARTA also reported that the County initially considered operating reduced service levels if the budget was available; but the County still faced budget shortfalls with some of the service reduction options. With a multi-million dollar budget shortfall countywide, transit was viewed as a lower priority than other public services.

The C-TRAN case study is significant for two major reasons: 1) high productivity transit service was eliminated (some routes operated with productivity of more than 30 passengers per revenue hour⁴), and 2) local public transit service was completely eliminated. The Clayton County story may also be viewed in the context of a larger transportation funding problem in the metropolitan Atlanta region. MARTA and other local transit providers have also cut transit services and raised fares as a result of operating budget shortfalls. The recession has contributed to funding problems for many transit agencies in the Atlanta region.⁵

The following community impacts have been reported as a result of the elimination of local public transportation service in Clayton County:

Mobility and Access Impacts

- Loss of 8,200 fixed-route trips per weekday.⁶ One of the C-TRAN routes had the 9th highest ridership among all MARTA-operated services, and two other C-TRAN routes were in the top 50%.⁷
- 232 people with disabilities (registered C-TRAN paratransit riders) lost access to local public transportation service. Seven out of ten paratransit riders used the service for medical appointments. The vast majority of paratransit riders (80%) had a total household income under \$20,000; six out of ten riders had a household income under \$10,000.⁸
- As the largest transit agency in the region for transfers to MARTA, C-TRAN's shut down impacted ridership on MARTA. Significantly fewer people entered the MARTA rail system at the Airport Station (about 15.4% fewer station entries).⁹ The Airport Station was fed directly by C-TRAN, with 5,800 transfers between the systems per weekday and 5,300 transfers during the weekend.¹⁰

⁴ C-TRAN Comprehensive Operational Analysis, AECOM/JJG Joint Venture, May, 2010.

⁵ C. Williamson, Atlanta Regional Commission, personal communication, March 7, 2012.

⁶ MARTA Office of Research and Analysis, Weekday Ridership by Route, March 2010.

⁷ MARTA Office of Research and Analysis, C-TRAN Customer Satisfaction Survey PowerPoint, June 2008.

⁸ MARTA Office of Diversity and Equal Opportunity, Title VI Assessment of Proposed C-TRAN System Shutdown, October 2009.

⁹ MARTA Office of Research and Analysis, Historical Average Weekday Station Entries.

¹⁰ MARTA Office of Research and Analysis, March 2010 Reciprocal Ridership Analysis at Airport Station.

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- The Department of Human Services (DHS) reported that they receive more requests for transportation service, though they only offer this service for specific human service programs.
 - The DHS reported that a lot of Division of Aging clients previously used C-TRAN service including seniors going to dialysis, many of whom used wheelchairs. A recent needs assessment performed by Aging identified needs for 3,400 more ambulatory trips and 40 more wheelchair trips, above the transportation that Aging already provides.¹¹
 - The DHS has been working with their contractor to increase fleet size, but has limited ability to expand services having experienced its own funding cuts and cost increases. The DHS also has a limited number of wheelchair accessible vehicles available to help fill service gaps.
 - More than half the students using C-TRAN reported that they may quit school if the transit system shuts down.¹²
 - About 15% of Clayton State University students previously used C-TRAN to get to school. Five hundred thirty eight students (11%) indicated that they would be negatively impacted by the loss of transit service. Most students used C-TRAN to travel between the MARTA Airport Station and the school, indicating that students were traveling from outside of Clayton County to get to Clayton State University. The majority of students that used C-TRAN were full-time students and rode to school three to four days a week, though more than one-quarter traveled to school five to seven days of the week.¹³
 - The University did not specifically track how these student riders handled the loss of transit service, but estimated that individual students faced difficulties getting to class and in the worst cases were unable to graduate.
 - Clayton State did encourage ride-sharing for these students, and reached out to faculty encouraging them to assist students with options such as online classes. The nearest commuter bus stop was two exits south of the University, and students would have needed to find local transportation to reach the school. The University reported that their enrollment has increased since the C-TRAN shutdown, most likely due to the poor economy and students returning for further education.¹⁴

¹¹ C. Perry, Department of Human Services, personal communication, April 10, 2012.

¹² MARTA Office of Research and Analysis, C-TRAN General Rider Shutdown Impact Study, March 2010.

¹³ B. Haynes, Clayton State University, interview, April 3, 2012.

¹⁴ Clayton State Survey, 2010.

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- Additional car trips were added to local roadways. 12.3% of riders indicated that they would drive their own cars to get to their destinations when C-TRAN stopped operating.¹⁵ This equates to about 516 additional cars each weekday (assuming about 4,200 weekday round trips based on 2009 Comprehensive Operations Analysis passenger counts, multiplied by 12.3%).
 - C-TRAN riders may have moved to be closer to transit. The results of the C-TRAN General Rider Shutdown Impact Study indicated that 21.9% of the respondents said they were likely to move closer to transit.
 - Parolees that need to report daily or weekly to the Harold R. Banks Justice Center and courthouse were impacted by the end of C-TRAN.
 - Former C-TRAN riders could no longer access critical medical services.¹⁶

Economic and Financial Impacts

- 70 C-TRAN employees lost their jobs.¹⁷ MARTA reported that most of these employees have since been re-hired.
- An estimated 2,990 people needed to find an alternate way to get to work or change jobs. This estimate is based on annual C-TRAN ridership of 2.5 million passenger trips, combined with survey data that indicated 61% of the trips were work trips.¹⁸
- Three out of four C-TRAN users reported that they may lose their jobs upon the discontinuation of service. This represents about 2,200 people (applying the 75% to the estimated 2,990 people who use C-TRAN for work).
 - Unfortunately no specific follow-up data is available to substantiate the number of people who actually did lose their jobs due to C-TRAN's shut down. Clayton County unemployment rose significantly in 2009, to 12.5%, prior to the shutdown and has stayed higher than the statewide average (though County unemployment is down to 11.4% as of February).

¹⁵ MARTA Office of Research and Analysis, C-TRAN General Rider Shutdown Impact Study, March 2010.

¹⁶ Mayor E. Wynn-Dixon, City of Riverdale, personal communication, April, 2012.

¹⁷ Clayton News Daily, February 25, 2010.

¹⁸ The annual ridership was multiplied by 0.61 to determine the total number of work trips. This figure was then divided by two, assuming two trips per work day for each rider, and further divided by 255 work days. Data source: MARTA Office of Research and Analysis, C-TRAN General Rider Shutdown Impact Study, March 2010.

2012).¹⁹ There does not appear to be a correlation between the unemployment rate and the discontinuation of C-TRAN service.

- Late night shift workers, especially airport employees, were impacted by the discontinuation of C-TRAN. Clayton County has been a bedroom community for airport employees.²⁰ Peak loads on C-TRAN service were very high, and buses sometimes had to pass up riders especially on the late night service.²¹
- Two of the top ten largest employers in Clayton County, Clayton State University and Southern Regional Medical Center, became inaccessible to workers who depend on public transportation.²²
- The DHS reported that they have a difficult time helping Clayton County Temporary Assistance for Needy Families Program (TANF) clients find jobs without a public transportation system in place.
- One-third of C-TRAN riders indicated they would buy a car. Based on the average for Metro Atlanta commuters, the riders would spend \$21 per day if they drove alone to work.²³ This represents an increase of \$18 per day, or six times the round-trip fare for C-TRAN.
- An apartment management company with six properties in Clayton County reported that vacancy rates increased to 17% six months after C-TRAN closed. In contrast, properties served by MARTA have vacancy rates less than 10%.²⁴
- An analysis examining the impacts of accessibility to C-TRAN service on property values in Clayton County found that C-TRAN service had a positive economic impact on properties sold after the year 2000. Properties less than one-quarter mile from a bus stop were valued \$2,200 more than properties a

¹⁹ Georgia Department of Labor.

²⁰ MARTA Office of Transit System Planning.

²¹ MARTA Office of Research and Analysis.

²² Georgia Department of Labor. (2012, June.) Georgia Area Labor Profile: Clayton County. Retrieved from <http://explorer.dol.state.ga.us/mis/profiles.htm>.

²³ The Clean Air Campaign. Commuting and Traffic Congestion Fast Facts. Retrieved from <http://www.cleanaircampaign.org/For-the-Press/Press-Kit/Commuting-and-Traffic-Congestion-Fast-Facts>.

²⁴ Joyner, T. (2011, March 28.) Clayton County (GA) Staggering from C-Tran's Last Stop. *The Atlanta Journal-Constitution*. Retrieved from <http://www.masstransitmag.com/news/10247810/clayton-county-ga-staggering-from-c-trans-last-stop>.

half-mile away.²⁵ This finding implied a decrease in property values after C-TRAN shut down.

- Employees at a Jonesboro restaurant began to carpool after C-TRAN closed. The manager had to rearrange work schedules to accommodate employees' transportation issues. Other stores report employees moving to other branches that are closer to their homes, due to transportation challenges.²⁶
- The Walmart in Riverdale was concerned the both employees and customers would face difficulties reaching the store.²⁷
- The C-TRAN operating garage in Clayton County closed, which impacted the owner of the property and adjacent businesses.

Social Equity Impacts

- The level of transit dependency for C-TRAN riders was higher than the average for MARTA riders.²⁸ 65% of C-TRAN riders had no car available.²⁹
 - 56% of C-TRAN riders said they would use MARTA after C-TRAN was closed, getting to MARTA service by riding with someone or driving. Nearly one in four C-TRAN riders indicated they would ride MARTA more often.³⁰
- C-TRAN riders were generally low income minorities. An overwhelming majority (92%) of C-TRAN riders was African American and nearly two-thirds reported a total household income less than \$25,000; 23% had a household income less than \$10,000.³¹

²⁵ Martinez, L. (2011, April 29.) The Impacts of Transit on Property Values: A Case Study of the Elimination of C-Tran in Clayton County, Georgia. Georgia Institute of Technology, School of City and Regional Planning. Retrieved from <http://smartech.gatech.edu/handle/1853/40795>.

²⁶ Joyner, T. (2011, March 28.) Clayton County (GA) Staggering from C-Tran's Last Stop. *The Atlanta Journal-Constitution*. Retrieved from <http://www.masstransitmag.com/news/10247810/clayton-county-ga-staggering-from-c-trans-last-stop>.

²⁷ Mayor E. Wynn-Dixon, City of Riverdale, personal communication, April, 2012.

²⁸ MARTA Office of Research and Analysis.

²⁹ MARTA Office of Research and Analysis, C-TRAN Customer Satisfaction Survey PowerPoint, June 2008.

³⁰ MARTA Office of Research and Analysis, C-TRAN General Rider Shutdown Impact Study, March 2010.

³¹ Ibid.

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- Several significant community facilities, which provide medical, social, or governmental services, became inaccessible for people who rely on public transportation. These included:
 - Adolescent Health Center
 - Clayton State University
 - Clayton County Department of Family and Children’s Services
 - Clayton County Health Department
 - Shelnutt Intergenerational Center and Kinship Care Resource Center
 - Clayton County Juvenile and Probate Courts
 - Clayton County Career Center
 - Southern Regional Medical Center
 - Frank Bailey Senior Center
 - Harold R. Banks Justice Center (Superior/State/Magistrate Courts)³²

Community Actions

- During the general election in November, 2010, Clayton County residents passed a non-binding referendum, by a 67% vote, to pay an additional one cent sales tax to join MARTA. While voters indicated that they are willing to fund public transportation, the Clayton County Board of Commissioners must approve a binding resolution before voters can take a binding vote.³³
 - A strong community coalition including state representatives, city officials, churches, schools, and employers formed to pass the non-binding referendum.
 - As of August, 2012, transit advocates were still asking the Clayton County Board of Commissioners to hold a binding referendum to join MARTA.³⁴
- The DHS is diligently trying to find grant funding, including New Freedom and Job Access and Reverse Commute (JARC) grants, to provide additional transportation alternatives for residents eligible for their programs (including previous C-TRAN riders). These transportation alternatives include:
 - Local fixed-route shuttles that stop at the grocery store, pharmacy, post office, etc. The pilot project would be geared toward seniors (using New

³² MARTA Office of Diversity and Equal Opportunity, Title VI Assessment of Proposed C-TRAN System Shutdown, October 2009.

³³ M. Cardinale. (2011, January 16.) Clayton County Votes in Favor of Joining MARTA, What Next? *Atlanta Progressive News*. Retrieved from <http://www.atlantaprogressivenews.com/interspire/news/2011/01/16/clayton-county-votes-in-favor-of-joining-marta-what-next.html>.

³⁴ Yeomans, C. (2012, August 14.) Transit advocates call for MARTA referendum. *Clayton News Daily*. Retrieved from <http://www.news-daily.com/news/2012/aug/14/transit-advocates-call-marta-referendum/>.

Freedom grant), but the shuttle could later be expanded for work trips (using JARC grant).

- A Volunteer Driver Voucher program, which provides a \$15 reimbursement to volunteer drivers to take seniors on trips that DHS transportation cannot provide.
- Several private van operators tried to provide an alternative to C-TRAN riders after the transit system closed, though not all the van companies registered with the state Public Service Commission as required. Some private providers focused on service in specific corridors, while others provided service along previous C-TRAN routes.³⁵ The van services charged \$2 to \$5 per one-way trip, a 33% to 233% increase above C-TRAN fares.
 - Southside Transportation, formed by a provider of transportation to visit correctional facilities, utilized two 15-passenger vans to operate two of C-TRAN's busiest routes. The service charged \$2 to \$3 per one-way trip based on the distance. Customers had to call at least 20 minutes ahead of time for one of the vans to attempt to pick them up.³⁶
 - Quick Transit, formed by a Clayton County resident who was previously a stay-at-home mom, purchased five 40-seat buses and six 22-seat paratransit vans to operate two of C-TRAN's busiest routes. The services operated at hourly frequencies, with 17-hour service spans on weekdays and limited services available during the weekend. The company employed 20 drivers and one mechanic. The fare was \$3.50 for a one-way trip and \$2.50 for a discounted fare, available to seniors, persons with disabilities, and students. The owner cited businesses closing, the loss of jobs, and expensive taxis among reasons to provide this alternative.³⁷ The Mayor of Riverdale and MARTA assisted Quick Transit in starting service, and some former C-TRAN drivers worked for Quick Transit.³⁸
 - Both private operators appear to have discontinued service.
 - Some jitney services are charging expensive rates, up to \$8 or \$10 for a one-way trip, due to high needs. Some churches provide transportation and may charge \$3.

³⁵ Hart, A. (2010, April 7.) Another private van service gets OK to operate in Clayton. *The Atlanta Journal-Constitution*. Retrieved from <http://www.ajc.com/news/clayton/another-private-van-service-442509.html>.

³⁶ Hall, J. (2010, April 7.) Limited C-TRAN alternatives begin to emerge. *Clayton News Daily*. Retrieved from <http://www.news-daily.com/news/2010/apr/07/limited-c-tran-alternatives-begin-to-emerge/>.

³⁷ Hall, J. (2010, August 2.) Quick Transit offers hope to bus riders. *Clayton News Daily*. Retrieved from <http://www.news-daily.com/news/2010/aug/02/quick-transit-offers-hope-to-bus-riders/>.

³⁸ R. Briggins-Ridley, MARTA Senior Director of External Affairs, personal communication, April 24, 2012.

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- The Chair of the Clayton County Board of Commissioners continues to work toward reinstating public transportation in the County through his participation in the Atlanta Regional Commission and its Regional Transit Committee.³⁹
 - Public transportation service in Clayton County, including fixed-route and complementary paratransit service, was among the projects to be funded if a transportation referendum in the ten-county Atlanta region passed in July, 2012. Passage of the Transportation Investment Act referendum, which called for a regional 1% sales tax, would have provide \$100 million in funding over ten years for local bus service in Clayton County. New services would be planned through a transit development plan, and services would be implemented two to four years thereafter.⁴⁰ On July 31, 2012, Atlanta region voters rejected the transportation referendum.⁴¹

³⁹ Atlanta Regional Commission, interview, April 4, 2012.

⁴⁰ Atlanta Regional Commission. (2011, October 15.) Transportation Investment Act Final Report – Approved Investment List Atlanta Roundtable Region. Retrieved from http://www.atlantaregionalroundtable.com/documents/final_report.pdf.

⁴¹ Atlanta BeltLine. (2012.) Key Facts on the July 31 Transportation Referendum. Retrieved from <http://beltline.org/progress/planning/transit-planning/regional-transportation-referendum-transportation-investment-act/>.

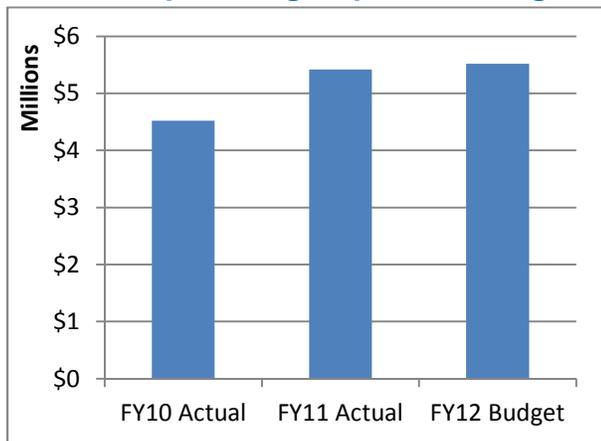
TCRP Project J-11/Task 15
Impacts of Cuts and Reductions in Public Transportation Funding
Hammond, IN

Conducted during the first half of 2012, this case study involved interviewing the City of Hammond, the Regional Bus Authority (RBA), Franciscan St. Margaret Health – Hammond, Northern Indiana Commuter Transportation District (South Shore Line), Opportunity Enterprises (organization that works with persons with developmental disabilities), and Pace Suburban Bus.

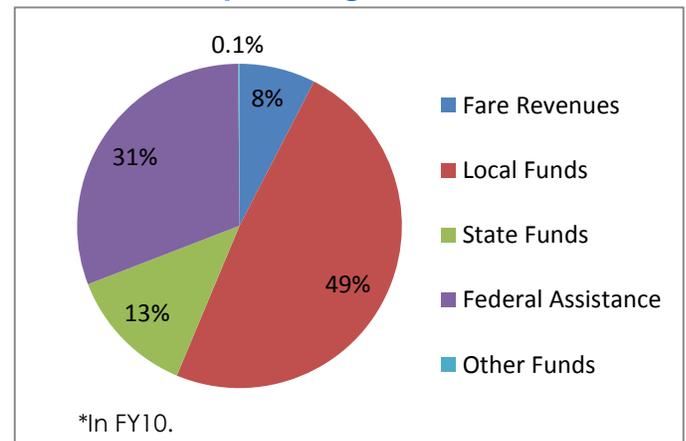
Transit Agency Characteristics¹

Service Area	Northwest Indiana communities including Hammond, Whiting, East Chicago, Highland, Munster, Southeast Chicago, and Dyer. 25-square mile service area and population of 83,000.
Annual Unlinked Trips	332,002 in 2011
Vehicles Operated in Maximum Service	Purchased transportation: 21 buses and 9 demand response - taxi
Organizational Structure	Regional Bus Authority, under the legislation enabled Northwest Indiana Regional Development Authority. Twenty-member Board appointed by governor, county executives, and mayors.
Number of Employees	4 direct staff, contractor has 46 employees ²

Annual Operating Expense Budget



Sources of Operating Funds*



Budget Issues

- Local government revenues were primarily impacted by state legislation that decreased property taxes and capped future property taxes. The recession has had secondary impacts on revenues.
- Resistance by other local transit agencies to consolidate into a regional bus system.

¹ Sources for the information below include funding projections from RBA (dated 6/12/12), RBA's 2010 Annual Report, RBA's 2010 NTD profile, RBA's CY 2011 National Transit Database Submission, and RBA's Website.

² Benman, K. (2012, May 8.) Layoff notices go out to all RBA employees. *nwtimes.com*. Retrieved from http://www.nwtimes.com/business/transportation/layoff-notices-go-out-to-all-rba-employees/article_aac473a1-aa74-5584-bb12-347888747d08.html.

- Transit funding problems are anticipated to worsen in the future, as the state's Public Mass Transportation Fund – the only dedicated sales tax revenue for transit statewide – will be eliminated in 2014. Then transit will need to compete with other public services funded through the state's general fund.

Cost-Cutting Actions

2009

- The original Hammond Transit System (then a municipal bus system) was slated for elimination at the start of 2009, but the City of Hammond decided to reduce services and maintain this service level through the end of the year, while transitioning services to a regional bus system.

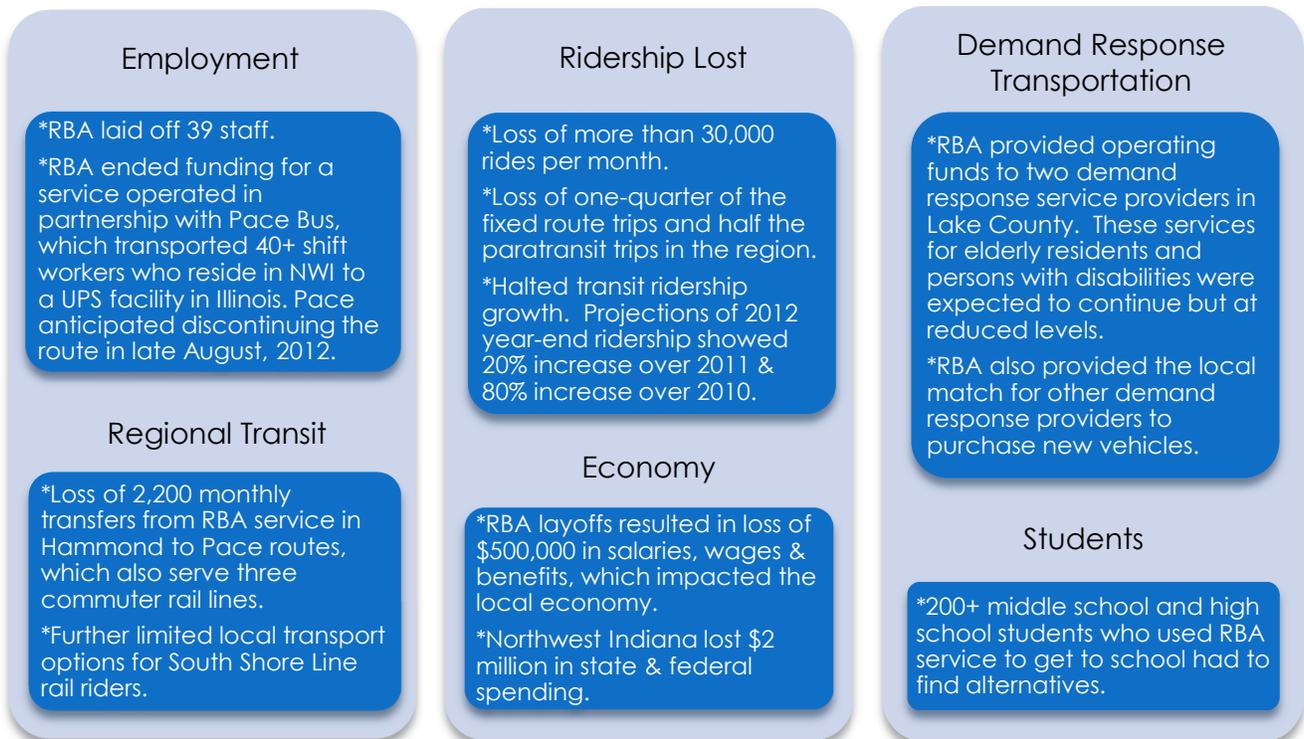
2010

- In January 2010, RBA took over transit services in Hammond with a two-year financial commitment from the City of Hammond (casino revenues) and the Northwest Indiana Regional Development Authority, as well as state and federal funding.

2011

- In order to stretch its funds, RBA cut service frequency from 30 minutes to hourly during peak periods on two of its four fixed routes.

Community Impacts³



³ Most impacts reported via email and phone interviews. RBA provided significant data regarding ridership.

Community Impacts - Hammond, Indiana

The City of Hammond is located in northwest Indiana, about 40 minutes outside of Chicago. Up until 2009, the City had operated its own municipal bus system, known as Hammond Transit System. The transit system included fixed-route service and complementary paratransit service, provided through contractors, throughout Hammond and Whiting. Four City employees in the Hammond Transit System department managed the transit services including determining eligibility for paratransit services.

The primary impetus for the City's decision to terminate Hammond Transit System in 2009 was direction from state leadership. In 2007, Governor Mitch Daniels convened the Indiana Commission on Local Government Reform to restructure local governments with the aim of increasing the efficiency and effectiveness of operations and reducing costs to taxpayers.¹ Transit was perceived as a redundant municipal service, best consolidated into a regional system.² In 2008, the Indiana General Assembly passed legislation to decrease property taxes – a major source of local tax revenues – and cap future property tax increases. The property tax caps resulted in a \$15 million city budget shortfall for the City of Hammond in 2009.³ While the recession contributed to the City's grim financial outlook during this time, it was a secondary influence on the City's decision to cut services and reduce employees citywide in response to state policies and legislation.

Hammond Transit System was initially slated for elimination at the start of 2009, but the City decided to reduce transit services and maintain this service level through the end of the year, while regional leadership discussed transitioning the transit services to the Regional Bus Authority (RBA). The RBA is a project of the Northwest Indiana Regional Development Authority (RDA), a quasi-governmental body established through state legislation in 2005 to promote economic development in Lake and Porter Counties. The RDA has among its duties support of a regional bus authority to coordinate regional transportation efforts and funding bus services and related projects.⁴

¹ Indiana Commission on Local Government Reform. (December 2007.) "Streamlining Local Government: We've got to stop governing like this." Retrieved from http://indianalocalgovreform.iu.edu/assets/docs/Report_12-10-07.pdf.

² R. Lendi and T. Dabertin, City of Hammond, personal communication, June 5, 2012.

³ Associated Press. (2009, February 17.) Disabled, elderly lament bus service's end. *wthr.com*. Retrieved from <http://www.wthr.com/Global/story.asp?s=9855709&clienttype=printable>.

⁴ Office of Code Revision Indiana Legislative Services Agency. "IC 36-7.5-3 Chapter 3. Development Authority Powers and Duties." Retrieved from <http://www.in.gov/legislative/ic/code/title36/ar7.5/ch3.html>.

In January 2010, with financial support from the City of Hammond and other funding sources, the RBA assumed responsibility for the transit services previously provided by the Hammond Transit System.⁵ The City agreed to designate \$900,000 annually from casino revenues in 2010 and 2011 to support RBA's operation of public transportation services in Hammond, with the understanding that all local transit systems would be consolidated into a regional bus system. The City's transit assets including buses and facilities were also transferred to the RBA. State and federal funding, coordinated through the Northwestern Indiana Regional Planning Commission, were additional revenue sources for RBA operations.

The RDA also made a two-year financial commitment including \$1.5 million annually for operating expenses⁶ when RBA took over Hammond Transit System. However, the RDA is meant to serve as a catalyst for economic development by providing public investment dollars to attract private investment. The RDA aims for its projects to identify other sources of revenue that "supplant or leverage RDA funds"⁷, and never intended to serve as a permanent funding source for RBA transit operations. While the RDA asserts that the localities must identify a sustainable funding solution, the cities have been unable to agree on a funding mechanism that is politically feasible and look to the RDA for leadership on a regional bus system.⁸ A separate issue that compounded the problem of public transportation funding in northwest Indiana was the elimination of the state's Public Mass Transportation Fund, the dedicated sales tax revenue for transit systems in the state. Starting in 2014, transit will instead be funded through the state's general fund, which changes each year.⁹

In the two years since RBA took over Hammond Transit and re-branded the service "easygo", transit services in Hammond have expanded and improved, and ridership has doubled on both fixed-route services, providing more than 30,000 rides per month, and paratransit services, providing nearly 1,500 trips per month. RBA has also implemented a new commuter bus to Chicago that provides 2,300 rides per month.¹⁰ However, the other public transportation providers in the region, Gary Public

⁵ City of Hammond's Transit Website, <http://www.gohammond.com/web/index.php?transit>.

⁶ Benman, K. (2011, December 30.) Local bus agencies boosting service in new year. *nwitimes.com*. Retrieved from http://www.nwitimes.com/business/local/local-bus-agencies-boosting-service-in-new-year/article_fe1b714c-e243-5bd9-97a0-cc1b2a39ab.html.

⁷ Northwest Indiana Regional Development Authority. (2010.) *Annual Report Fiscal Year 2010*. Retrieved from http://www.in.gov/rda/files/RDA_FY2010_Annual_Report-final_draft_062911.pdf.

⁸ Carlson, C. (2012, March 12.) End of the line coming for Northwest Indiana Regional Bus Authority. *Post-Tribune*. Retrieved from

<http://www.indianaeconomicdigest.net/main.asp?SectionID=31&SubSectionID=135&ArticleID=64342>.

⁹ Central Indiana Regional Transportation Authority. (2011, May 16.) Transit and the 2011 Indiana General Assembly: The Good, the Bad and the Ugly. Retrieved from

<http://cirtaconnects.blogspot.com/2011/05/transit-and-2011-indiana-general.html>.

¹⁰ March 2012 ridership data from RBA. K. Dallmeyer, RBA, personal communication, June 11, 2012.

Transportation Corp. (GPTC) and East Chicago Transit, have resisted efforts to regionalize transit services under RBA. Local leaders in Hammond, Gary, and East Chicago have agreed that public transportation service in northwest Indiana is important, but have yet to identify a politically feasible and permanent source of funding.¹¹ GPTC noted that the funding problem for public transportation would still remain even if the local transit systems were consolidated into a regional agency.¹²

RBA shut down its transit operations on June 30, 2012, ending service on four fixed routes, a regional commuter route, and complementary paratransit service. RBA had an operating budget of about \$5 million annually¹³ and needed \$1.5 million a year in local funding to continue current transit service levels.¹⁴ Though RBA no longer operates transit services, it continues its role in promoting public bus service in Lake and Porter Counties including providing subsidies to local transit providers and implementing transit capital improvements in the region.¹⁵ The following are the impacts to community organizations, businesses, and individuals anticipated with the end of RBA transit services:

Mobility and Access Impacts

- In 2011, when the RBA reduced peak hour service frequencies from 30 minutes to an hour, riders had trouble making connections to commuter trains and other bus services. This service was restored at the end of the year through a CMAQ grant.
- After services ended, 332,000 trips per year were no longer provided. In the first year of operations, RBA improved services to achieve a 58% increase in ridership. Data for the start of 2012 indicated that RBA ridership could have reached 396,000 this year – an increase of 19% over 2011 ridership and 83% over 2010 ridership.¹⁶

¹¹ Carlson, C. (March 2012.) End of the line coming for Northwest Indiana Regional Bus Authority. *Post-Tribune*.

<http://www.indianaeconomicdigest.net/main.asp?SectionID=31&SubSectionID=135&ArticleID=64342>.

¹² Amante, M. (2012, June 25.) Bus service brakes for June 30 end. *Post-Tribune*. Retrieved from <http://posttrib.suntimes.com/13203178-537/bus-service-brakes-for-june-30-end.html>.

¹³ K. Dallmeyer, RBA, personal communication, June 11, 2012.

¹⁴ Franklin, L. (2012, May 11.) Countdown to shutdown. *nwitimes.com*. Retrieved from http://www.nwitimes.com/business/local/article_563f5b94-10fb-5e62-b2f9-960fd5cafc5f.html.

¹⁵ Benman, K. (2012, May 31.) RBA may ride again, with or without wheels. *nwitimes.com*. Retrieved from http://www.nwitimes.com/business/transportation/rba-may-ride-again-with-or-without-wheels/article_9b7de04b-e57e-56d9-8ff9-127bae510293.html

¹⁶ The 332,000 annual trips represent CY 2011 data. Ridership data from K. Dallmeyer, RBA, personal communication, June 11, 2012.

- While other local transit systems could fill some gaps, RBA estimated that 570 paratransit riders in Hammond now have no access to public transportation.¹⁷
- RBA provides operating funds to two demand response service providers in Lake County. These transit services for elderly residents and persons with disabilities were expected to continue but at reduced levels.
- RBA routes facilitated a relatively high number of transfers with two Pace Suburban Bus (Pace) routes (which serve greater Chicago) in downtown Hammond, three CTA bus routes in southeast Chicago, and with GPTC and East Chicago Transit routes. Riders had to find another means to make these connections.
 - Pace routes, which also serve three commuter rail lines, lost 2,200 monthly transfers from RBA service in Hammond.
 - When Hammond service ended, Pace had no reason to continue transit service in Indiana since Indiana localities do not contribute any funding to their routes, and Pace's charter requires transit services operated outside their six-County service area to be funded 100% by a source other than the region's operating funds.¹⁸
- At least 200 middle school and high school students, who used RBA service to get to school, needed to find alternative transportation.¹⁹
- The students and employees at numerous schools located along RBA's fixed routes, including Purdue University Calumet, Calumet College, and eight high schools, lost transit service.
- Northwest Indiana lost one-quarter of the fixed-route transit trips and half the paratransit trips in the region.
- The community experienced the cumulative impacts of multiple transit service cuts from different agencies in the region in addition to the loss of RBA service.
 - Preceding the shutdown of RBA services, the Northwest Indiana Community Action Corp. ended its dial-a-ride service for the elderly and

¹⁷ Benman, K. (2012, June 20.) Hundreds of disabled Ind. Residents could lose transportation when transit service closes. *The Times of Northwest Indiana*. Retrieved from <http://www.greenfieldreporter.com/view/story/cc4668798ce040e8afd7f1f011d1fffd/IN--Exchange-Bus-Service-Ends>.

¹⁸R. Huffman, Pace, personal communication, June 19, 2012.

¹⁹ Franklin, L. (2012, May 11.) Countdown to shutdown. *nwitimes.com*. Retrieved from http://www.nwitimes.com/business/local/article_563f5b94-10fb-5e62-b2f9-960fd5cafc5f.html.

people with disabilities in February, 2009, due to a lack of funding from local governments and operating budget cuts. Seventy thousand annual rides were lost, and 21 buses were taken out of service.²⁰

- In 2011, GPTC also cut transit services including ending services earlier, cutting back trips on routes, and making transit service adjustments, due to revenue losses caused by the property tax caps and a mere 70% collection rate.²¹ Though GPTC won CMAQ grants to restore some transit service in January, 2012.²²

Economic and Financial Impacts

- RBA laid off 39 staff members including 35 bus drivers, two maintenance workers, and two utility workers.²³
- RBA layoffs were estimated to result in the loss of \$500,000 in salaries, wages, and benefits, which impacted the local economy.
- Northwest Indiana lost \$2 million in state and federal spending.
- RBA anticipated that without a regional funding source, all three local transit systems would eventually fail, resulting not only in the loss of bus service but also endangering future passenger rail expansion in the region, as federal funding for rail programs requires an accompanying bus system.
- A taxi ride that covers a similar service area as RBA's current local fixed routes in Hammond would cost up to \$20 or \$30 per one-way trip. This cost is more than 20 times higher than the adult fares for RBA service and more than 40 times the reduced fare.²⁴

²⁰ Associated Press. (2009, February 17.) Disabled, elderly lament bus service's end. *wthr.com*. Retrieved from <http://www.wthr.com/Global/story.asp?s=9855709&clienttype=printable>.

²¹ Kirk, C. (2011, March 4.) Gary Public Transportation Corp. makes first bus service cuts. *Post-Tribune*. Retrieved from <http://www.indianaeconomicdigest.net/main.asp?SectionID=31&SubSectionID=298&ArticleID=58831>.

²² Benman, K. (2011, December 30.) Local bus agencies boosting service in the new year. *nwintimes.com*. Retrieved from http://www.nwintimes.com/business/local/local-bus-agencies-boosting-service-in-new-year/article_fe1b714c-e243-5bd9-97a0-cccec1b2a39ab.html.

²³ Amante, M. (2012, June 25.) Bus service brakes for June 30 end. *Post-Tribune*. Retrieved from <http://posttrib.suntimes.com/13203178-537/bus-service-brakes-for-june-30-end.html>.

²⁴ Taxi costs based on trip from Shore Line station in Hammond to Walmart near Whiting and to Highland Grove Shopping Center in Highland. Source: Best Calumet Cab Company, personal communication, June 19, 2012.

- Riders who used RBA paratransit service to get to monthly medical appointments reported that they would call an ambulance to make the same trip, which costs significantly more per trip.²⁵
- Opportunity Enterprises (OE), an organization that supports persons with disabilities, has been a recipient of capital subsidies from RBA. If the RBA is no longer able to provide the 20% local share of the cost of new vehicles, OE would still be able to purchase the vehicles at additional costs of \$12,000 per vehicle. However, OE has also experienced funding cuts and would face difficulties keeping the vehicles on the road.²⁶
- RBA ended funding for transit service operated in partnership with Pace Suburban Bus (Pace), which transports 40+ shift workers who reside in NWI to a UPS facility in Illinois. Without replacement funding, Pace anticipated discontinuing the route in late August, 2012, resulting in hardships for these employees to access their jobs.²⁷
 - Pace vanpool services may be an option for some of the UPS workers.²⁸ If four of these riders were to form a carpool, the estimated cost is about \$5 per person per roundtrip. This cost is about 40% higher than the current roundtrip Pace fare. Each transit rider-turned-carpool participant would pay about \$360 more each year for his or her commute.²⁹
- Thirty-four small business owners reported that they would have to lay off workers who are transit-dependent when the RBA buses stop running.³⁰

²⁵ Franklin, L. (2012, April 5.) Bus service looking at the end of the road. *nwintimes.com*. Retrieved from http://www.nwintimes.com/news/local/lake/east-chicago/bus-service-looking-at-the-end-of-the-road/article_69fd88b2-3547-5988-b022-7715906d84d0.html.

²⁶ C. Taylor, Opportunity Enterprises, personal communication, June 18, 2012.

²⁷ R. Huffman, Pace, personal communication, June 14, 2012.

²⁸ R. Huffman, Pace, personal communication, June 19, 2012.

²⁹ Estimated the cost of the carpool based on the operating cost per mile of the average sedan, 19.64 cents. (Source: American Automobile Association. "Your Driving Costs 2012." Retrieved from <http://newsroom.aaa.com/wp-content/uploads/2012/04/YourDrivingCosts2012.pdf>.) The existing Pace route is about 100 miles round trip, so the cost of driving would be \$19.64 per round trip. Based on a four-person carpool, each participant pays \$4.91 per round trip, which is 40% more than the current Pace fare of \$3.50 per round trip. Assuming the employees work every weekday of the year, the increase in cost was multiplied by 254 weekdays per year, which equals about \$360 annually per person.

³⁰ Franklin, L. (2012, April 19.) RBA rally proposes options for permanent funding of bus system. *nwintimes.com*. Retrieved from http://www.nwintimes.com/news/local/lake/hammond/rba-rally-proposes-options-for-permanent-funding-of-bus-system/article_02bcc09c-569a-5530-a776-e8c4cd50ca50.html.

- The contractor that operated RBA's paratransit service, Triple A Express, anticipated selling their three wheelchair accessible vans when service ended.³¹
- A survey conducted by the South Shore Line, a commuter train serving Chicago and northwest Indiana, reported that its highest concentration of riders board at Hammond. While a small percentage of riders transfer to the train from buses, the Northern Indiana Commuter Transportation District reported that limited ground transport options make it difficult to attract Chicago residents to visit northwest Indiana. The end of RBA service exacerbated this problem, as the only other options are taxis.³²
- The region lost economic opportunities. The American Public Transportation Association estimates that every dollar invested in public transportation generates about \$6 in economic returns.³³ With the RBA's \$5.4 million annual operating budget, the end of transit service translated to a loss of about \$32 million in economic returns annually.

Social Equity Impacts

- Riders reported that without RBA service they would lose their jobs as well as access to medical services, grocery stores, and social and recreational events.³⁴
- Some riders with disabilities who are unable to drive or cannot afford a car had to find alternatives, such as walking long distances or taking taxis that are prohibitively expensive.
- The Mayor of Hammond anticipated that the loss of RBA service would have the greatest impact on the poor.³⁵

³¹ Benman, K. (2012, June 20.) Hundreds of disabled Ind. Residents could lose transportation when transit service closes. *The Times of Northwest Indiana*. Retrieved from <http://www.greenfieldreporter.com/view/story/cc4668798ce040e8afd7f1f011d1fffd/IN--Exchange-Bus-Service-Ends>.

³² Survey conducted in 2004. Source: J. Parsons, Northern Indiana Commuter Transportation District, June 19, 2012.

³³ American Public Transportation Association. Facts. Retrieved from <http://www.apta.com/mediacenter/ptbenefits/Pages/FactSheet.aspx>.

³⁴ Franklin, L. (2012, April 19.) RBA rally proposes options for permanent funding of bus system. *nwintimes.com*. Retrieved from http://www.nwintimes.com/news/local/lake/hammond/rba-rally-proposes-options-for-permanent-funding-of-bus-system/article_02bcc09c-569a-5530-a776-e8c4cd50ca50.html.

- The President of Franciscan St. Margaret Health – Hammond anticipated that “the decision to close this bus service will hurt the most vulnerable of patients and employees who may have no other way to get to a physician office or hospital or, if an employee, to get to work.” Furthermore, “this lack of affordable transportation could impact the timely treatment of illness or injury, making that treatment more expensive in the long run. If an employee does not have another way to get to work, it could mean loss of a job at a time few can withstand such an event.”³⁶
- Riders at an RBA public hearing expressed that they felt marginalized by the pending shutdown of service: “We have enough worries about losing our jobs and our homes . . . This makes us feel like we don’t count, like we’re a cup of spilled milk.”³⁷

Community Actions

- RBA reported that the best alternative transportation was the North Township Dial-a-Ride service, which the RBA has supported with local match for buses and the coordinated dispatch system. However, North Township only provides service to residents of the Township and for trips within the Township. The service has very limited capacity to expand due to tax caps and other funding restrictions. Townships may also be discontinued by the State. The second best alternative was South Lake County Community Services, which has not served urban communities historically and also has limits in expanding services.³⁸
- GPTC and East Chicago Transit estimated that they would be able to serve 130 to 150 riders who used RBA’s paratransit services. The two systems have also discussed altering some fixed routes that serve Hammond to fill in some of the service gap, but the changes would not occur for several months. Neighboring transit providers were willing to expand their paratransit

³⁵ Carlson, C. (2012, March 12.) End of the line coming for Northwest Indiana Regional Bus Authority. *Post-Tribune*. Retrieved from

<http://www.indianaeconomicdigest.net/main.asp?SectionID=31&SubSectionID=135&ArticleID=64342>.

³⁶ W. Bero, Franciscan St. Margaret Health – Hammond, personal communication, June 19, 2012.

³⁷ Quote by Edna Hammad, a Hammond resident. Source: Franklin, L. (2012, April 5.) Bus service looking at the end of the road. *nwitimes.com*. Retrieved from Franklin, L. (2012, May 11.) Countdown to shutdown. *nwitimes.com*. Retrieved from http://www.nwitimes.com/news/local/lake/east-chicago/bus-service-looking-at-the-end-of-the-road/article_69fd88b2-3547-5988-b022-7715906d84d0.html.

³⁸ K. Dallmeyer, RBA, personal communication, June 29, 2012.

services to help serve people with disabilities stranded by the end of RBA service, but confronted the same problem of insufficient funding.³⁹

- OE primarily serves people attending their programs, with midday transportation service available to the general public, mainly for Medicaid reimbursement. A small number of RBA riders who are in their service area could potentially use OE transportation as an alternative. OE's service area is limited to Porter County and eastern Lake County, though most calls they have been receiving from RBA riders request trips in the western part of the County. OE estimated that with their current vehicles and drivers they could serve 5-7% additional riders who are in their service area, but would incur additional costs with these added trips. As for costs to public riders, one-way trips in Lake County cost \$10, eight times the cost of RBA adult fares.⁴⁰

³⁹ Benman, K. (2012, June 20.) Hundreds of disabled Ind. Residents could lose transportation when transit service closes. *The Times of Northwest Indiana*. Retrieved from <http://www.greenfieldreporter.com/view/story/cc4668798ce040e8afd7f1f011d1fffd/IN--Exchange-Bus-Service-Ends>.

⁴⁰ C. Taylor, Opportunity Enterprises, personal communication, June 18, 2012.

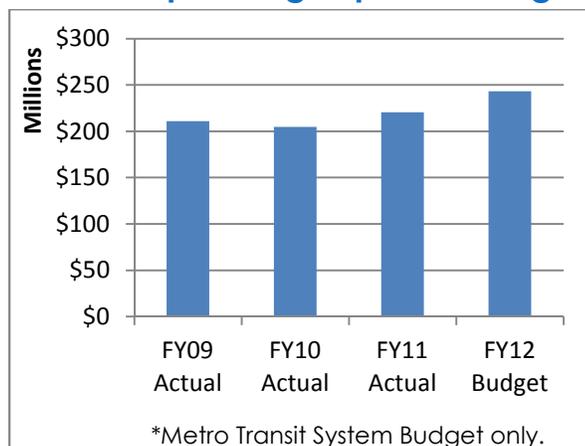
TCRP Project J-11/Task 15
Impacts of Cuts and Reductions in Public Transportation Funding
St. Louis, MO

Conducted during the first half of 2012, this case study involved interviewing Metro Transit, Metropolitan Congregations United (community organization of religious congregations), North County Incorporated (regional development association), Paraquad (nonprofit working with people with disabilities), and Transit Alliance (affiliated with Citizens for Modern Transit).

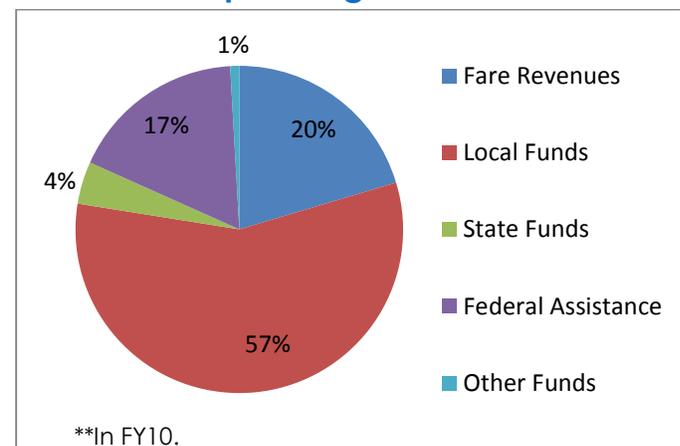
Transit Agency Characteristics¹

Service Area	St. Louis, MO-IL: 580 square miles and population of 1.6 million (2000 Census)
Annual Unlinked Trips	40.6 million in FY10
Vehicles Operated in Maximum Service	282 buses, 50 light rail, 95 demand response
Organizational Structure	Bi-State Development Agency. Ten-member Board of Commissioners sets policy and direction for the Agency. Governor of Missouri appoints five commissioners and County Boards of St. Clair and Madison Counties in Illinois appoint five.
Number of Employees	2,097

Annual Operating Expense Budget*



Sources of Operating Funds**



Budget Issues

- Flat sales tax revenue, combined with increasing expenses and a new MetroLink light rail extension to support, resulted in Metro Transit facing an \$8 million operating budget shortfall in FY 2009 and a \$46 million operating budget shortfall in FY 2010.²

¹ Sources for the information below include Metro Transit's FY 2011, FY 2012, and FY 2013 Operating and Capital Budgets, Metro Transit's 2010 NTD profile, and Metro Transit's Website.

² Thimangu, P. (2008, July 27.) Metro deficit: \$46 million. *St. Louis Business Journal*. Retrieved from <http://www.bizjournals.com/stlouis/stories/2008/07/28/story3.html?page=all>.

- In 2008, the failure of Proposition M, which would have increased the sales tax for transit in St. Louis County by a ½ cent, led to a fare increase in January, 2009 and major service cuts in March, 2009.
- Decreases in state and federal funding also contributed to budget shortfalls. The State of Missouri provides very limited operating dollars for transit (less than \$200,000 in FY 2011).
- Another referendum for ½ cent sales tax passed in April, 2010. Additional revenue allowed Metro Transit to restore services & replace \$5 million in lost sales tax revenue due to recession.

Cost-Cutting Actions

FY09

- In March, 2009, cut MetroBus by 44%, MetroLink light rail by 32%, paratransit service by 15%.
- Service cuts included longer headways, shorter span of service, elimination of commuter routes, truncating routes, and enforcement of the ¾ mile ADA complementary paratransit service area. About 80% of the cuts were geographic and 20% to service frequencies.
- Suspended service to more than 2,300 of its 9,000 bus stops, or one in four stops.
- Shut down a garage and stored 100 buses.
- Laid off nearly 600 employees (25% of the workforce), affecting all departments.
- Two-part fare increase, by \$0.50 total, and eliminated light rail free-ride zone in downtown.

FY11 (Despite passage of Proposition A, Metro still cut costs to prepare for service restoration)

- Froze salaries and hiring except for "mission critical" positions.
- Maintained a flat operating budget to ensure that new revenue covered service restoration and anticipated cost increases in medical expenses, fuel, and utilities.

Community Impacts³

Employment

- *Public transit access to jobs fell from 98% to 71%.
- *Transit-dependent workers lost access to jobs that have migrated to outlying suburbs.

People with Disabilities

- *Riders with disabilities were impacted by loss of ADA service after fixed-route cuts & by enforcement of the ¾ mile ADA boundary.
- *Paraquad reported 10-15% of their clients were impacted and couldn't get to work, received fewer services, some were isolated without support.

Ridership Lost

- *2009 4th quarter overall ridership down 25% from last year including 33% fewer bus trips, 12% less MetroLink trips & 29% less Call-A-Ride trips.
- *Total ridership loss of almost 2.8 million passenger trips in initial 3 months after cuts.
- *Madison County Transit (IL) saw ridership decrease by 15%, or 28,000 boardings per month, due to Metro's cuts & unemployment.

Increased Driving

- *Overcrowding on MetroLink led choice riders to drive.
- *Students formed carpools after the bus service cuts.

Tourism & Recreation

- *Cuts impacted Cardinals games since 50% employees & 20% fans use transit.
- *Lost tourism opportunities since conventions choose cities with good transit.

Rider Experience

- *Restored services were less convenient for some riders, providing less direct routes or requiring more transfers.
- *Changes to Call-A-Ride eligibility resulted in a wheelchair user traveling a mile to nearest bus stop; another wheelchair user must travel an additional 2.5-3 hours daily to go to college.

³ Most impacts reported during interviews. Metro Transit provided significant data on ridership and transit access.

Community Impacts - St. Louis, Missouri

The Bi-State Development Agency is an interstate compact between Missouri and Illinois that was formed in 1949 to enhance development in the St. Louis region without regard to municipal boundaries. The Agency first began providing public transportation in 1963 when it took over the operations of 15 transit companies in the region.¹ In addition to providing public transportation, Bi-State also operates St. Louis Downtown Airport, the Gateway Arch Tram, and the Gateway Arch parking facilities. The Agency officially adopted the name “Metro Transit” in 2003.

Metro Transit’s light rail system, MetroLink, opened in 1993 and was funded primarily through the Federal Transit Administration (FTA) (\$348 million out of a total project cost of \$465 million). Rights of way, rather than local cash, were used for local match by Metro Transit for this first line.

The local portion of Metro Transit’s public transportation operations budget has been financed over the years through a series of sales tax initiatives, the first of which was authorized by the Missouri Legislature in 1973. This initial local funding support was a ½ cent sales tax to be collected in St. Louis County and City to support transportation. Additional local funds in St. Louis County and City were approved in 1994 (¼ cent sales tax to operate and expand light rail), and a ½ cent sales tax was approved in St. Clair County, Illinois.

In 1997, Metro Transit attempted a ballot initiative, Proposition M, to expand MetroLink on the Missouri side of the system. This measure failed and the defeat slowed the expansion of MetroLink.

In 1999, the East-West Gateway Council of Governments, the metropolitan planning organization for the St. Louis area, made the decision to expand the MetroLink system by building the Cross-County Extension (now known as the Blue Line). The new line would be built without federal funding, as another federally funded light rail project in the area was already in progress. In 2001 MetroLink expanded from St. Louis to Southwest Illinois College in Belleville, IL. This extension was funded with federal funds (72%) and local funds from St. Clair County, IL.

The decision to build the Cross-County Extension was made with the general understanding that Metro Transit did not have a sufficient operating budget, and additional tax revenues would be required to support the rail line. The Cross-County Extension opened in 2006 (FY 2007), and CMAQ funding was available to partially offset the operating costs for three years.

¹ Metro St. Louis website, History page, <http://www.metrostlouis.org/About/History.aspx>.

In 2006 and 2007, with relatively flat sales tax revenue, increasing expenses, and a new rail line to support, Metro Transit needed to expand its local revenues in order to maintain existing transit service levels. Fares were raised in 2004 and 2006, but additional funds were needed. Metro Transit faced an \$8 million budget shortfall in FY 2009, and a potential \$46 million budget shortfall in FY 2010. The local sales taxes that Metro Transit depended on had not increased since 1994.² Proposition M, a ½ cent sales tax for St. Louis County, was put on the ballot in 2008. The failure of this measure, combined with the expiration of CMAQ operating assistance for the Cross-County Extension, led Metro Transit to begin the process of service reduction planning and another fare increase.

Metro Transit developed five service reduction scenarios for consideration and public discussion. The chosen scenario cut the annual operating budget by \$36.6 million, or 18%. These budget cuts resulted in a 44% cut in bus service, a 32% cut in MetroLink service, and a 15% cut in Call-A-Ride paratransit service. The cuts included a smaller geographic footprint for the transit system, longer headways, shorter span of service on some routes, truncating routes, elimination of express commuter routes, and an enforcement of the ¾ mile ADA complementary paratransit service area. The focus of the chosen scenario was to preserve the core service and trim less productive transit services. These cuts were put in place on March 30, 2009.

The state of Missouri, which historically provides very little transit funding, stepped in with a pledge of \$12 million in one-time, emergency funding assistance (ARRA funds), to be provided in monthly increments of \$1 million. With this funding, Metro Transit started in July 2009 to restore some of the transit services that had been cut, but this was a temporary measure as the emergency appropriation would only fund services for a year. During the discussion of the cuts and when the cuts took place, a grassroots campaign was started to try to get a ½ cent sales tax, known as Proposition A, back on the ballot. The effort, using the tag line “some of us use it, all of us need it,” was successful in getting the ballot measure approved, by 63% of voters, in April of 2010. A wide-ranging coalition of community interests participated in the campaign.

With the successful campaign, the state of Missouri, having provided \$8 million thus far, discontinued its emergency funding assistance. Metro Transit faced a \$4 million deficit as the Proposition A sales tax revenues did not become available until September, 2010. The estimated \$80 million in additional sales tax revenue per year effectively replaced the emergency funding assistance from the state and made up for the sales tax shortfall due to the recession. Metro Transit was also able to restore federal capital funding, which had been used for operating expenses, back to the capital

²Thimangu, P. (2008, July 27.) Metro deficit: \$46 million. *St. Louis Business Journal*. Retrieved from <http://www.bizjournals.com/stlouis/stories/2008/07/28/story3.html?page=all>.

program.³ Permanent service restoration was implemented in phases, starting in June, 2010, and the remaining transit service was restored by September, 2010.

The following community impacts have been reported as a result of the transit service cuts that were made in March 2009:

Mobility and Access Impacts

- Significantly fewer passenger trips were made on the Metro Transit system. During the last quarter of 2009, overall ridership was down 25% from the same period the year before, including 33% fewer bus trips, 12% fewer MetroLink trips, and 29% fewer Call-A-Ride trips. The total ridership loss for the initial three-month period was almost 2.8 million passenger trips, which equates to a loss of over 11 million annual passenger trips.
- Though all MetroLink stations were still served, frequencies decreased from six to four trains per hour. Overcrowding became a problem, causing some choice riders to shift to driving. Light rail passengers also faced difficulties when their bus connections to the light rail stations experienced service cuts.⁴
- Riders with disabilities were doubly impacted, first by Metro's enforcement of the ¾ mile ADA boundary, and second by the loss of ADA service areas when fixed routes were cut.
- Communities in the outlying parts of St. Louis County lost access to public transportation when the transit service cuts led to a smaller system footprint, mainly within I-270. However, Metro Transit staff reported that the cuts in transit service frequency impacted ridership more than shrinking the geographic footprint.
- Some community college students, impacted by the bus service cuts, began carpooling though it could be difficult for them to coordinate schedules.⁵
- A few private transportation alternatives were available, but had restrictions in service areas and capacity.
 - Bevo 2001 Center offers transportation to south St. Louis residents for various trip purposes including going to the senior center. A donation of \$1.50 is encouraged per one-way trip.⁶

³ Metro. (2010, May 21.) FY 2011 Operating and Capital Budget Presentation. Retrieved from <http://www.nextstopstl.org/2277/metro-board-approves-fy2011-operating-and-capital-budget/>.

⁴ R. Friem, Metro, interview, April 17, 2012.

⁵ D. Minor, Metro rider and participant at Paraquad (Transit Alliance member), interview, April 18, 2012.

⁶ Enabling Mobility Center. Transportation Options and Eligibility Criteria. Retrieved from https://enablemob.wustl.edu/AT%20Fact%20Sheets/trans_options.htm.

- Dee's Transit is a private service with one accessible vehicle.
- In 2011, Paraquad used a New Freedom grant to start accessible taxi service. These taxis are generally too expensive for frequent use, but are good for emergencies.⁷
- Madison County Transit, which provides local bus service in Illinois and commuter routes to downtown St. Louis, experienced a ridership decrease of nearly 15%, or 28,000 boardings per month, due to Metro's service cuts combined with the recession's impact on unemployment (resulting in fewer commute trips). Madison County Transit's ridership began to increase steadily as Metro permanently restored service in the summer of 2010.⁸
- Ridership has been slowly building since transit services were restored, but Metro Transit staff estimated that it will take about five years to re-build ridership to the pre-cuts level. Riders were forced to change their travel behavior as a result of the service cuts, and it has been difficult to get these riders back on the transit services.
 - Though the worst transit service cuts only lasted for four months and Metro Transit started restoring transit service in July 2009, ridership was only returning to a stable point in 2012, about three years after the service cuts.
 - In November 2011, ridership had increased 8% to 9% from a year ago, when most services had been restored. However, the 2011 ridership figure was still 15% lower than in 2009.⁹
 - A promising development for the first quarter of 2012 was that Metro reported the highest increase in ridership among large bus systems across the country. Metro provided 15.6% more trips than over the same period one year ago.¹⁰

Economic and Financial Impacts

- Public transit access (service within a ¾ mile walking distance of bus routes) to jobs in St. Louis County was reduced from 98% to 71% according to Metro Transit officials.

⁷Paraquad staff, interview, April 19, 2012.

⁸Hillig, T. (2012, March 4.) Madison County Transit shows strong ridership gains. *St. Louis Post-Dispatch*. Retrieved from http://www.stltoday.com/news/local/illinois/madison-county-transit-shows-strong-ridership-gains/article_3c814f4e-9000-56ae-970a-b6e4fa1d90f3.html.

⁹ R. Friem, Metro, interview, April 17, 2012.

¹⁰ American Public Transportation Association. (2012, June 15.) Ridership: 5% Jump in 2012 First Quarter. *Passenger Transport*.

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- With the migration of jobs to outer St. Louis County communities, the transit system's smaller footprint meant that workers who rely on public transit could not access job opportunities.¹¹
 - It was reported that people lost jobs, including transit-dependent riders who needed to ride the bus home from evening shifts and those who worked in areas that were no longer served. Minimum-wage workers could not find transportation alternatives within their pay scale.
 - Some employees had to quit their jobs or find jobs closer to their homes. Some workers ended up having to work multiple jobs instead of the one job they could previously access by transit. The additional time required for transportation and work had ripple effects including less time with family and a decreased quality of life.
 - Employees who worked in the western portion of St. Louis County had difficulty keeping their jobs without transit access. Some employees walked a mile or more to reach the nearest bus stop. One particular restaurant owner reported that all of his employees had called in to say that they could not come to work because the bus route to the restaurant had been cut.
 - Various types of employers, including nursing homes, restaurants, supermarkets, hospitals, and retailers, were impacted through their employees' transportation hardships and difficulties in hiring workers, who may rely on transit. Businesses even adjusted their operations as a result of transit cuts.
 - Some employers found creative solutions such as sending a car to the closest bus stop to pick up employees. Walmart used this approach and allowed employees to be 20 minutes late.
 - Some employers in the suburbs operate around the clock and had trouble finding workers for all shifts.
 - Some fast food restaurants could not serve breakfast because workers were coming from the city.¹²
 - The transit service cuts impacted St. Louis Cardinals games, as 50% of game-day employees and 20% of fans utilize transit to get to the stadium.¹³
 - The transit service cuts impacted tourists and the City's ability to attract conventions. Convention scouts value good public transportation in deciding

¹¹ R. Friem, Metro, interview, April 17, 2012.

¹² Interviews with R. Friem, Metro, and Transit Alliance members, April 2012.

¹³ Metro. FY 2009 Annual Report to the Community. Retrieved from http://www.metrostlouis.org/Libraries/Annual_Community_Reports/FY_2009_Annual_Report.pdf.

whether to hold their event in a city. St. Louis may have missed opportunities to generate tourism spending.

- Though Metro started restoring transit services in July 2009, the new and different services were less convenient for some riders, including shift workers for call centers, warehouses, and casinos in northern St. Louis County. The schedule for restored transit service changed though shift hours remained the same. The transit service cuts and subsequent restoration impacted people's ability to maintain and get these jobs.¹⁴

Safety and Security Impacts

- Paraquad, a local center for independent living, related stories about wheelchair users who would travel long distances to wait in a stranger's driveway to access Call-A-Ride service. This was a potential safety risk.
- A transit rider reported feeling unsafe while waiting for his bus late at night, as the restored transit service was not coordinated with shift workers' schedules, whereas the previous service had been.¹⁵

Social Equity Impacts

- While Metro's service cuts aimed to impact the fewest number of riders possible, those who lost transit service were probably the most transit-dependent (i.e., lived in outlying areas with minimal alternatives).¹⁶
- The transit service cuts were particularly difficult for people with disabilities, many of whom depend on public transportation. Changes to the ADA paratransit eligibility requirements made trips more difficult and time-consuming for some riders. Whereas Metro Transit had previously provided service beyond the ADA requirement of $\frac{3}{4}$ of a mile from fixed-route service, when faced with budget cuts Metro Transit had to enforce the ADA minimum and shrink the ADA service area. The Call-A-Ride fares were also increased, which was a hardship for riders with fixed incomes.
 - Paraquad reported that some people with disabilities were stranded by the loss of transit service and were unable to get to work or to be engaged in the community. Staff estimated that about 10-15% of their clients were affected by the transit service cuts.

¹⁴ Metropolitan Congregations United, interview, April 18, 2012.

¹⁵ Metropolitan Congregations United, interview, April 18, 2012.

¹⁶ Transit Alliance, interview, April 18, 2012.

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- Riders with disabilities that lived in outlying areas experienced greater impacts because their transit service was cut completely, compared to residents in the city, where most routes remained in service.
 - People with intellectual disabilities who could not use fixed routes and lacked a support network became very isolated, as Call-A-Ride was their only way to travel independently.¹⁷
 - A rider who uses an electric wheelchair previously had a bus stop outside his house, but must now travel a mile to take fixed-route service to get to work. The rider lives outside the ¾ mile ADA paratransit service area.¹⁸
 - Another rider, who uses a wheelchair, experienced a 2.5 – 3 hour increase in roundtrip travel time to attend college, due to the revised eligibility process of Call-A-Ride service. Metro Transit determined that the rider is able to use regular transit service, so the rider now transfers between Call-A-Ride, MetroLink, and Metrobus service to reach school, whereas the rider previously had a direct Call-A-Ride trip.¹⁹
- St. Louis reportedly lost citizens because transit services were not available. Metropolitan Congregations United described a young blind woman who was employed by Webster University. The bus service that she used to get to Webster was cut, and she lost her transportation to get to work. She could not find another high caliber job without access to transit. She found a job in another city, where she could live independently and use transit to get to work. Her parents also moved to the new city.

Intangible Impacts and Factors

- The campaign to bring the sales tax measure to a vote helped re-define how public transit is viewed by the public. The campaign focused on highlighting how transit is essential to the region, including the importance of transit in attracting national and regional job investment. “Some of us use it, all of us need it” was a very successful campaign message. The campaign also highlighted Metro Transit’s high performance ratings compared to other transit systems, and dispelled public perception that public transportation is a welfare program; it is a critical part of the region’s infrastructure.²⁰
- Metro Transit lost the trust of transit-dependent riders who are wary of depending on public transportation again. Some riders did not want to use

¹⁷Paraquad staff, interview, April 19, 2012.

¹⁸ J. Hogan, Metro rider (recommended by Metropolitan Congregations United), personal communication, April 19, 2012.

¹⁹ D. Minor, Metro rider and participant at Paraquad (Transit Alliance member), interview, April 18, 2012.

²⁰ Interviews with J. Nations, Metro, and Transit Alliance members, April 2012.

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- Metro Transit again even after transit services were restored. Major transit service cuts decreased community support for transit in the long-term.
- A person with a disability who lives in western St. Louis County depended on rides from family and friends during the service cuts. Now that the individual is eligible for Call-A-Ride again, he does not want to use the service even if it means limiting his own options.²¹
 - The transit service cuts set back the disability rights movement in St. Louis by taking away the primary transportation upon which people with disabilities depend and making them less visible within the community.
 - On the other hand, some people with disabilities also learned to adapt without transit service and developed new skills.²²

Community Actions

- When transit service cuts were being proposed, some additional funding was offered to maintain certain services.
 - St. Clair County, Il offered an additional \$1.9 million annually to fund the Missouri portion of MetroLink and preserve transit services, as nearly 90% of Illinois riders commute to Missouri.²³
 - The City of Chesterfield, MO offered to provide \$173,000 in local match for a federal grant to develop a new transit service between a MetroLink station and Chesterfield.²⁴ Metro did not end up using this funding after the State of Missouri providing emergency funding assistance.
- A very strong civic coalition formed during the campaign for Proposition A. The broad range of stakeholders that participated in the campaign included Citizens for Modern Transit (a civic organization dedicated to expanding light rail), colleges and universities, local unions, non-profit organizations, religious groups, developers, media, city and county officials, Civic Progress (whose members include the largest corporations in the metro area), and the Regional Business Council.²⁵

²¹Paraquad staff, interview, April 19, 2012.

²²Paraquad staff, interview, April 19, 2012.

²³ Volkman, K. (2008, December 19.) Metro to lay off 600, cut service. *St. Louis Business Journal*. Retrieved from <http://www.bizjournals.com/stlouis/stories/2008/12/15/daily73.html>.

²⁴ Volkman, K. (2009, March 30.) Commuters face Metro service cuts. *St. Louis Business Journal*. Retrieved from <http://www.bizjournals.com/stlouis/stories/2009/03/30/daily2.html>.

²⁵Swanstrom, T., Kimball, D., Shrout, T., & Wiedlocher, L. (2011, March.) From Checkbook Campaigns to Civic Coalitions: Lessons from the Passage of Prop A. University of Missouri-St. Louis, Public Policy Research Center. Retrieved from <http://pprc.umsl.edu/data/PropALessons.pdf>.

- The passage of Proposition A represented only the third time in Metro Transit's 60-year history that a new, permanent revenue source of public funding became available for transit.²⁶

²⁶ Metro. FY 2010 Annual Report to the Community. Retrieved from http://www.metrostlouis.org/Libraries/Annual_Community_Reports/FY_2010_Annual_Report.pdf.

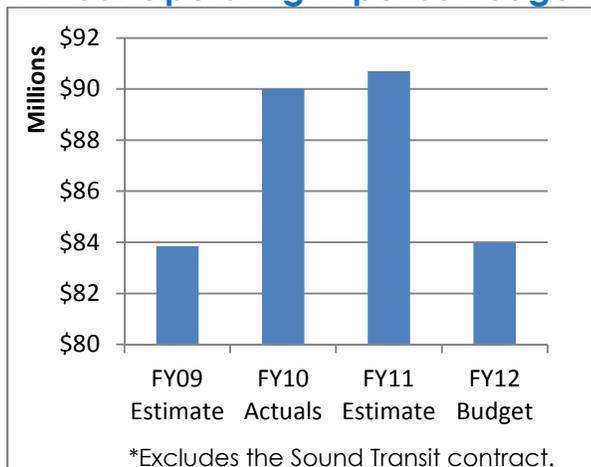
TCRP Project J-11/Task 15
Impacts of Cuts and Reductions in Public Transportation Funding
Tacoma, WA

Conducted during the first half of 2012, this case study involved interviewing Pierce Transit, Downtown On The Go (Tacoma Pierce County Chamber), Pierce County Community Connections (County agency providing human services), Tacoma School District, Transportation Choices Coalition (statewide, non-profit transit advocacy group), and Vadis (organization that assists people with disabilities with vocational opportunities).

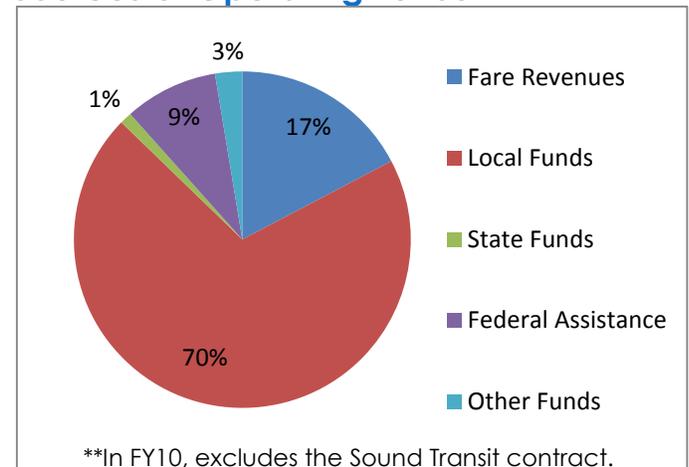
Transit Agency Characteristics¹

Service Area	414 square miles in Pierce County, WA and population of 759,000 (revised to 292 square miles and population of 557,000 with new boundary for the Pierce Transit Public Transportation Benefit Area, effective May, 2012)
Annual Unlinked Trips	15.3 million in FY10 (including 446,000 demand response and 825,000 vanpool)
Vehicles Operated in Maximum Service	127 buses, 101 paratransit vehicles, 320 vanpool, plus 101 vehicles for Sound Transit service
Organizational Structure	Municipal corporation (not part of the City of Tacoma or Pierce County). Ten-member Board of Commissioners includes elected officials within service area and one non-voting union representative.
Number of Employees	866 positions (844 full-time equivalents)

Annual Operating Expense Budget*



Sources of Operating Funds**



Budget Issues

- Pierce Transit has survived several recessions by using reserves. However, this recession has been unprecedented in the high amount of reserves needed to supplement operations.²

¹ Sources for the information below include Pierce Transit's FY 2012 and FY 2010 Budgets, Pierce Transit's 2010 NTD profile, Pierce Transit's Website, and Pierce Transit staff.

² Pierce Transit staff, interview, February 27, 2012.

- Sales tax revenue, the transit agency's primary funding source, has decreased steadily since 2007 and is not anticipated to return to pre-recession levels until 2017.

Cost-Cutting Actions

- Multiple transit service cuts: 1.9% in 2008; 5.8% in 2009; 35% in 2011 (20% in March, 2011, due to CNG fueling fire the transit agency implemented transit service cuts three months early). Cut approximately 43% of transit service related to recession.
- 18% cut in staffing (194 positions) implemented through three rounds, including 31% cuts in management.
- Staff wage increases have been deferred multiple times for non-represented employees.
- Increased employee health benefit contribution.
- Increased adult fares twice, by 33% total (\$1.50 to \$2.00). (No change in paratransit fares.)
- Partnered with largest adult day health agency to develop transportation service that shifted 10% of trips to a private provider, saving \$1.1 million annually.
- For human service agencies that had required a lot of ADA service, Pierce Transit found it more cost-effective to provide vans to the human service agency to provide their own trips.
- Deferred capital projects, and transferred Section 5307 funds from capital to preventive maintenance.
- Extended life of equipment including buses and shop equipment.
- Reduced overhead costs of operation and operating budget by canceling planned studies.
- Shed grandfathered non-ADA compliant customers and areas.
- Introduced ballot proposition to maximize taxing authority in February, 2011 (failed).
- Canceled rental of all modular buildings.

Community Impacts³

<p>Employment</p> <ul style="list-style-type: none"> *Service industry impacted with service ending at 10:00 pm. *Elimination of transit shuttle on Joint Base Lewis-McChord made it infeasible to use transit to access region's largest employer. *55 people with disabilities in Sumner lost access to their jobs. 	<p>Transit-Dependent Riders</p> <ul style="list-style-type: none"> *45% of riders do not have a car & 76% have household incomes below \$40,000. *2011 cuts to midday service frequency mainly impacted riders with household incomes below \$20,000. *33% fare increase was a hardship for low income riders. 	<p>Increased Costs</p> <ul style="list-style-type: none"> *Human service organization increased transportation after 2011 cuts, but cannot afford longer travel distances if further transit cuts occur. *Cost of Medicaid trips forced to other modes, after transit cuts, was on average 10 to 20 times more expensive.
<p>Residents in Outlying Areas</p> <ul style="list-style-type: none"> *People with disabilities had trouble getting to work sites. *Low-income residents who are not Medicaid-eligible faced problems accessing vital medical appointments. 	<p>Ridership Changes</p> <ul style="list-style-type: none"> *After 2011 cuts, smaller decrease (8%) in paratransit trips than anticipated; fixed-route ridership was projected to decrease by 22% & vanpool ridership was anticipated to increase by 16%. 	<p>Schools</p> <ul style="list-style-type: none"> *High school students that use transit passes decreased from 50% to 39%. *8 new school bus routes cost \$100,000 annually. *Open enrollment for high school students decreased.

³ Most impacts reported during interviews, including rider survey results from Pierce Transit.

Community Impacts –Tacoma, WA

Pierce Transit, operating in portions of Pierce County, Washington, is a Public Transportation Benefit Area (PTBA), incorporated as such under the Revised Code of Washington (RCW). Pierce Transit is permitted to levy up to a 0.9% sales tax to fund transit services. Pierce Transit currently levies a 0.6% sales tax. With the recession and subsequent drop in sales tax collections, which comprise approximately 70% of the transit agency's operating revenue¹, the 0.6% funding has not been providing adequate funding to meet Pierce Transit's expenses. A vote to increase the sales tax was put before the voters of the Pierce County Public Transportation Benefit Area (Pierce County PTBA) in February, 2011, and it was not successful. As a result of the failed ballot initiative, Pierce Transit has been forced to cut transit services and reduce staffing, in addition to other cost-cutting actions and fare increases that were implemented from late 2007 through 2010.

While the recession's impact on sales tax revenue was a paramount influence, other factors have also contributed to the transit agency's financial difficulties. Pierce Transit staff reported that one of the issues impacting sales tax collections was the deployment of soldiers in recent years, since the population associated with three military bases in the service area had historically contributed to steady sales tax revenues. Now that the troops have returned, the economy has started to improve but sales tax revenues still lag, as many soldiers make tax-free purchases on the installations. A significant non-recessionary factor was a fire at Pierce Transit's compressed natural gas (CNG) fueling station in February, 2011 that resulted in higher fuel and operating costs for more than a year. In fact, the transit agency was forced to implement transit service cuts early due to this accident.

State funding for transit has been minimal, as Washington State has no income tax and also highly depends on sales tax revenues impacted by the recession (\$6 billion to \$8 billion budget shortfall reported at the state level). Increased demand for transit services at a time when Pierce Transit was experiencing budget cuts due to the recession put additional pressure on the transit agency's financial health.

A distinction of the Pierce Transit case study is that the transit agency had been very proactive in increasing operating efficiencies and cutting costs before the media covered their budget problems due to the recession or the ballot initiative. Even before the recession, the transit agency's Board had conducted a strategic positioning process to gather community input and prepare the agency for likely future scenarios. This strategic direction included increasing productivity and efficiency while retaining

¹ Excluding revenue from Sound Transit and a one-time sale of property. Source: Pierce Transit 2012 Budget.

innovation (i.e., technological improvements) and customer focus. Thus the recession-related transit service cuts that Pierce Transit eventually made were less harmful to the community, because the transit agency had planned ahead, than if the agency had cut services in an entirely reactionary process. Since 2008 Pierce Transit has saved or cut nearly \$111 million including the transit service cuts.²

Pierce Transit's plan to reduce transit service in response to reduced sales tax revenue focused on maximizing productivity by preserving efficient routes and reducing or eliminating non-productive service. This philosophy has minimized overall ridership loss due to transit service reductions, but has had significant impacts for residents of the suburban, ex-urban, and rural areas of Pierce County, as well as for riders who use the system on weekends and evenings. Pierce Transit has also raised fares, but the fare increases were not reported to have affected the community as much as the transit service reductions. The following community impacts have been reported:

Mobility and Access Impacts

- Ridership has declined, but not proportionate to the total transit service cut.
 - Following the 6% transit service cuts in 2009, fixed-route ridership decreased by 5%.³
 - Pierce Transit had anticipated a sizeable reduction in demand for paratransit trips after the 35% service reduction in 2011, but had only seen an 8% reduction by early 2012. Fixed-route ridership was anticipated to decrease by 22% by the end of 2012.⁴
- The 2011 transit service cuts included major cuts in weekend and evening transit service, and riders traveling during those times had to find alternative transportation or forego their trip.⁵
- The northeast part of Tacoma has become isolated after the transit service cuts.

² L. Erickson. (2012, June 11.) Pierce Transit Board puts forward ballot measure. Retrieved from <http://www.piercetransit.org/press.htm>.

³ According to operating statistics (excluding Sound Transit service operated by Pierce Transit) in Pierce Transit's 2010 Budget.

⁴ According to projections for Pierce Transit Fixed Route Local, BusPLUS & Express service in Pierce Transit's 2012 Budget.

⁵ Source for description of cuts: K. Sherman. (2011, March 29.) Pierce Transit reductions to stay; more cuts are set for October. The News Tribune. Retrieved from <http://www.thenewstribune.com/2011/03/29/1603694/transit-cuts-to-stay.html#storylink=misearch>.

- Riders in smaller, outlying communities must now travel to Puyallup to access the remaining Pierce Transit services after the 2011 cuts.
- The Tacoma Public School System purchases transit passes from Pierce Transit to provide transportation to school for about 39% of the high school students in the City, down from about 50% prior to the service cuts. The transit service cuts have impacted the school community in the following specific ways:
 - Public transit services were reduced to a popular public magnet art school. The school system added eight new school bus routes to serve this school, at a cost of about \$100,000 annually. These new school bus routes provided new jobs.
 - The Tacoma School District had 1,400 students riding Pierce Transit before the service cuts. If the transit routes were still available, an additional 400 kids would have used transit to get to school.
 - The school system offers open enrollment for high school students, whereby they can choose which high school to attend. With reduced public transit services it is harder for kids to attend school outside of their neighborhoods.
 - School principals have reported that parents are having difficulty accessing their children's schools as a result of the transit service cuts.
 - Students who live in outlying areas do not have bus service to get to Tacoma to access the train or commuter buses to the University of Washington or Seattle art schools.
- In some of the suburban neighborhoods, where the transit service cuts resulted in less frequent service and/or connecting service that was previously direct, choice riders choose to drive rather than take transit. As gas prices increased, more people were interested in using transit, but found that the reduced schedules were not convenient.
- People who work on the Joint Base Lewis-McChord - the region's largest employer - no longer have internal shuttle service (among Pierce Transit's service cuts), which provided service to employees' final destinations. The lack of shuttle service makes it difficult to use public transportation to access the Base, which is very large (415,000 acres).
- There are fewer public transit options for state workers who live in Tacoma and work in Olympia. Prior to the transit service cuts there were 48 daily one-way bus trips on the I-5 corridor between the two cities, with Pierce Transit operating 16 of these trips and Intercity Transit operating 32 of these trips.

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- Pierce Transit discontinued all of its trips and Intercity Transit was able to add only 4 trips, for a net loss of 12 daily transit trips in the I-5 corridor.
- At least one new vanpool to Olympia formed as a result of the transit service cut.
 - Riders who used Sound Transit's late night commuter bus service no longer had local transit service once they returned to Tacoma. Cutting the span of local service impeded riders' abilities to use the regional transit system.
 - Seven dialysis facilities and two adult day care facilities experienced transit service reductions.
 - Pierce Transit previously increased service for a number of special events, but has discontinued these supplemental services. Special community events that have public transportation needs now must hire private operators to meet this transportation demand. The Puyallup Fair, for example, tried to hire a private operator that uses yellow school buses, but faced problems because the vehicles were not accessible.
 - Following the 2011 transit service cuts, vanpool usage was estimated to increase by 16% in 2012, from a ridership of 729,000 to 848,000.⁶
 - Riders became more dependent on family and friends for rides.

Economic and Financial Impacts

- Pierce Transit anticipated that the 33% fare increase would be a hardship for a high portion of riders, many of which have lower incomes. Three out of four riders have annual household incomes below \$40,000, and 56% of riders have household incomes below \$20,000.⁷
- Five percent of downtown Tacoma employees commute by bus and were potentially impacted by the transit service cuts. Downtown on the Go, a transportation partnership in downtown Tacoma, reported that the number of businesses enrolled in the City's transit benefits program, in which employers provide transit passes to their employees, has remained steady despite the transit service cuts.

⁶According to projections in Pierce Transit's 2012 Budget.

⁷According to Pierce Transit's 2010 Customer Survey.

- Reduced transit service on weekends and evenings has impacted service industry employees who can no longer use transit to get home from work. Many are now forced to pay for a cab ride home, which cuts into their earnings significantly.
- Human service agencies, many of which have also experienced budget cuts, were spending time, money, and energy piecing together transportation arrangements for their clients who have lost service. In one example of an agency in Sumner that provides vocational opportunities for persons with disabilities, both the clients and the organization were impacted by transit service cuts.
 - More than half of the human service agency's 230 clients used ADA paratransit service. After the 2011 service cuts, the nearest stop for clients to access the site was the Sumner train station, where the agency would pick clients up. The additional time that clients spent traveling translated to fewer hours that they could work and lost income. The safety of clients also became a concern as some had to wait alone at a bus stop for the organization to pick them up, whereas the client could directly travel to the site previously.
 - After the 2011 service cuts, work crew leaders had to work overtime (start work 30 minutes earlier) to pick up clients who previously could ride a Pierce Transit bus to access the site. The loss of public transit service as a reliable and efficient form of transportation for clients potentially impaired the organization's ability to maintain and win work contracts.
 - With the May, 2012 decision to shrink the Pierce Transit tax boundary (see Community Actions below), Sumner was among five cities that chose to leave the Pierce Transit service area. Forty-three people with disabilities were no longer able to access the organization's group employment program and an additional 12 in the individual employment program lost access to their jobs. The closest remaining transit service was farther away in Puyallup, and the human service agency did not have funding to cover the additional expense to pick up clients. The operations expense for drivers was the main issue for the agency, not vehicles. Transportation to the site was anticipated to be a significant hardship for the clients' families.
- Four work sites that provide employment opportunities to people with disabilities were impacted by transit service cutbacks.
- With the majority of Medicaid trips in Pierce County scheduled on public transit, the Medicaid Broker incurred additional costs for trips that could no longer use public transit due to the service cuts. In scheduling trips on other

transportation modes, the Medicaid Broker had to pay on average ten times the cost for trips previously taken on fixed routes and 21 times the cost for trips previously taken on ADA paratransit service.⁸

Social Equity Impacts

- Transit service cuts impacted a highly transit dependent population. More than one-quarter of riders have no licensed drivers in the household, and nearly half of riders do not have a working vehicle. Nearly one in five riders also reported that they would not take their trip if their regular route was unavailable.⁹
- In 2011 Pierce Transit also reduced frequencies on midday transit service (many routes to hourly service), which mainly impacted low-income riders. 62% of midday riders have household incomes below \$20,000 per year.¹⁰
- Low-income and/or people with disabilities who live in the outlying areas and are not Medicaid-eligible were having trouble accessing life-sustaining medical appointments.
- People with disabilities who live and/or work in the outlying areas were having a hard time accessing employment locations. For those who live in areas that have lost service, some have lost their jobs. Others experienced much longer travel times.
- Residents without cars, those whose income was not low enough to qualify for Medicaid, and Medicare recipients were among the vulnerable populations that “fell through the gaps” and could not access human service transportation alternatives. Their loss of transportation to access opportunities perpetuated the poverty cycle.

Intangible Impacts and Factors

- The transportation difficulties for residents in outlying areas, as a result of transit cuts, have highlighted the link between affordable housing and

⁸ Cost differentials calculated based on an average cost per trip of \$3.28 for fixed-route trips, \$1.63 for ADA trips, and \$33.99 for Medicaid trips excluding public transportation. (Costs as of 2006-2007.) Source: Pierce County Coordinated Transportation Coalition. (2010, December.) Report to the Legislature.

⁹According to Pierce Transit’s 2010 Customer Survey.

¹⁰ Ibid.

¹⁴ J. Leighton, Pierce Transit. (2012, June 18.) “Pierce Transit’s New Boundary.” Retrieved from <http://www.downtownonthegeo.com/uncategorized/pierce-transits-new-boundaries>.

transportation. Whereas individuals and organizations or businesses have moved to suburban and rural areas for affordable housing and facilities, transportation became a problem when transit service was not an option and gas prices increased, making driving unaffordable.

- Cities that chose to leave the Pierce Transit boundary effective May, 2012 (see Community Actions below) considered alternatives for transit service. If the cities decided to operate their own transit service, they had to consider multiple issues including the high cost associated with capital requirements and the need for a secure revenue stream to contract out service. In order to receive federal transit funding, the cities would need to obtain grant recipient status from the FTA. Pierce Transit staff anticipated that unions will also pressure the cities and demand comparable wages, since the cities were formerly in the Pierce Transit service area.

Community Actions

- Franciscan Health Systems started its own shuttle to help employees with transportation.
- A local human service transportation program, Beyond the Borders (BTB), was trying to expand and fill some of the gaps, but had limited resources. The focus of the BTB program was to provide transportation from riders' homes to the closest fixed-route - "last mile" service. BTB had to expand its service area to try to serve high need trips in another two-thirds of the County that the program did not previously serve. BTB also needed more funding to provide additional services, and was seeking new revenues including local match from city governments and grants from the metropolitan planning organization.
- The human service community was working together to pool resources and had obtained vans from Pierce Transit's vanpool program to help with some of the subscription demand. Improving the coordination of human service transportation was viewed as a way to help stretch limited funding.
- The public process of determining how to best address the financial shortfall has resulted in the further development of a coalition of community members coming together in support of transit through the advocacy group, Transportation Choices Coalition. This group worked with community leaders and elected to advocate for a solution that impacted the fewest riders. Pierce Transit's original plan for cutting service spread service thinner over a larger service area, which would have resulted in a significantly larger drop

in ridership than the ridership-based plan that was ultimately implemented. Transportation Choices Coalition estimated that the revised plan for cutting service kept 2.4 million trips per year that would have been eliminated from the original service reduction plan.

- The human service community, through the Pierce County Coordinated Transportation Coalition, was working together on a number of coordination initiatives to help provide transportation for people in the outlying areas where Pierce Transit service has been eliminated.
- Several small cities and towns as well as members of the Pierce County Council raised concerns when transit service was cut or eliminated from their community. Addressing these concerns, the Pierce Transit Board of Commissioners convened by resolution on November 14, 2011 a Public Transportation Improvement Conference (PTIC). The PTIC was a formal process by which the boundaries of the PTBA could be changed according to RCW 36.57A.020. The purpose of this conference was to consider changing the current boundaries of the Pierce County PTBA. If the boundaries of the PTBA were reduced, the sales tax revenue collected would be lower, but residents of the resulting smaller PTBA might be more receptive to a second ballot initiative to increase the sales tax for transit from 0.6% to 0.9%. The Transportation Choices Coalition advocated for a smaller PTBA that could focus on improving transit services to areas where public transportation is the most productive.
 - The PTIC approved a new boundary for Pierce County PTBA effective May 8, 2012. Five cities and portions of unincorporated Pierce County, including eastern county, mid county, and a great portion west of the Tacoma Narrows Bridge, chose to leave the PTBA. Beginning October, 2012, Pierce Transit collected \$8 million less annually in sales tax revenue due to this change.¹⁴ As a result Pierce Transit may need to implement further transit service reductions, and higher productivity services would be cut. These additional cuts will challenge the viability of Pierce Transit.
- The Pierce Transit Board decided to put forth a second ballot proposition to increase its sales tax authority by 0.3% for the November, 2012 election. The passage of this ballot, with the new transit boundary, would allow Pierce Transit to restore services for seniors, people with disabilities, and transit-dependent riders.¹⁵

¹⁵ L. Erickson, Pierce Transit. (2012, June 11.) "Pierce Transit Board Puts Forward Ballot Measure." Retrieved from <http://www.piercetransit.org/press.htm>.

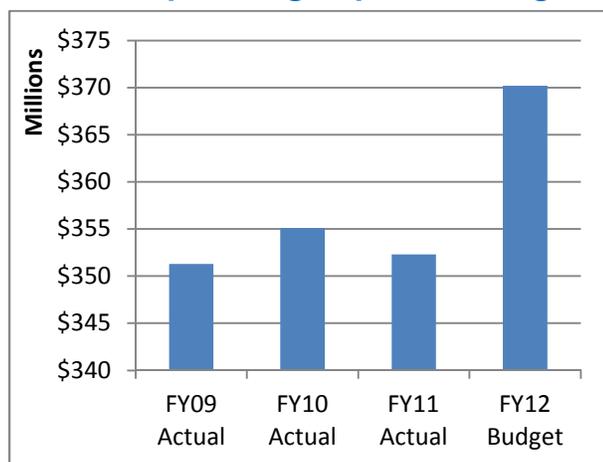
TCRP Project J-11/Task 15
Impacts of Cuts and Reductions in Public Transportation Funding
Pittsburgh, PA

Conducted during the first half of 2012, this case study involved interviewing the Port Authority of Allegheny County, ACCESS Transportation Systems, Inc. (paratransit service), Allegheny Conference on Community Development, Heritage Community Initiatives, Pittsburgh Community Reinvestment Group, and Pittsburgh Downtown Partnership.

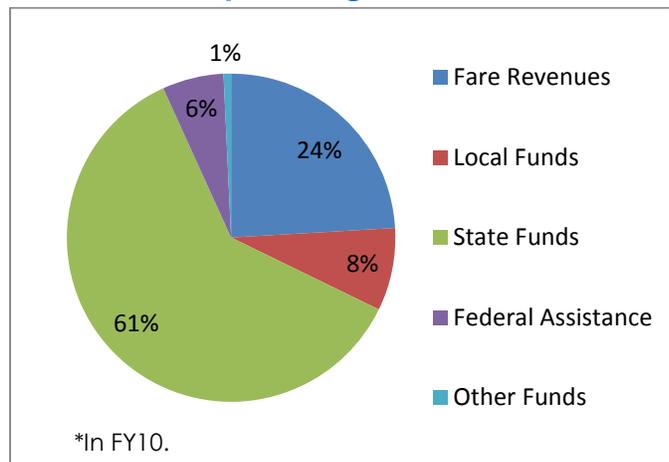
Transit Agency Characteristics¹

Service Area	Allegheny County, PA: 745 square miles and population of 1.2 million (2010 Census)
Annual Unlinked Trips	63.8 million in FY11 (including 1.7 million on ACCESS)
Vehicles Operated in Maximum Service	746 buses, 83 light rail, 398 demand response, 4 inclined plane
Organizational Structure	Authority, serves as an agency of the Commonwealth of Pennsylvania. Nine-member Board appointed by Chief Executive of Allegheny County
Number of Employees	2,446

Annual Operating Expense Budget



Sources of Operating Funds*



Budget Issues

- State funding for transportation is not indexed to inflation and does not generate enough revenue to cover costs of maintaining the transportation network.
- Revenues have been impacted by the recession (lower sales tax collections) and people driving more efficient vehicles (less fuel tax revenue per vehicle).
- Local government has few mechanisms to raise revenue.
- Market collapse of 2008 caused Port Authority's pension funds to lose 30% of their value.

¹ Sources for the information below include Port Authority's FY 2012 Operating and Capital Improvement Budgets, Port Authority's 2010 NTD profile, Port Authority's Website, and Port Authority staff.

- Expenditures on retiree healthcare, \$30 million in FY 2011, have more than doubled since FY 2003, and retirees in the healthcare plan now outnumber active employees.

Cost-Cutting Actions²

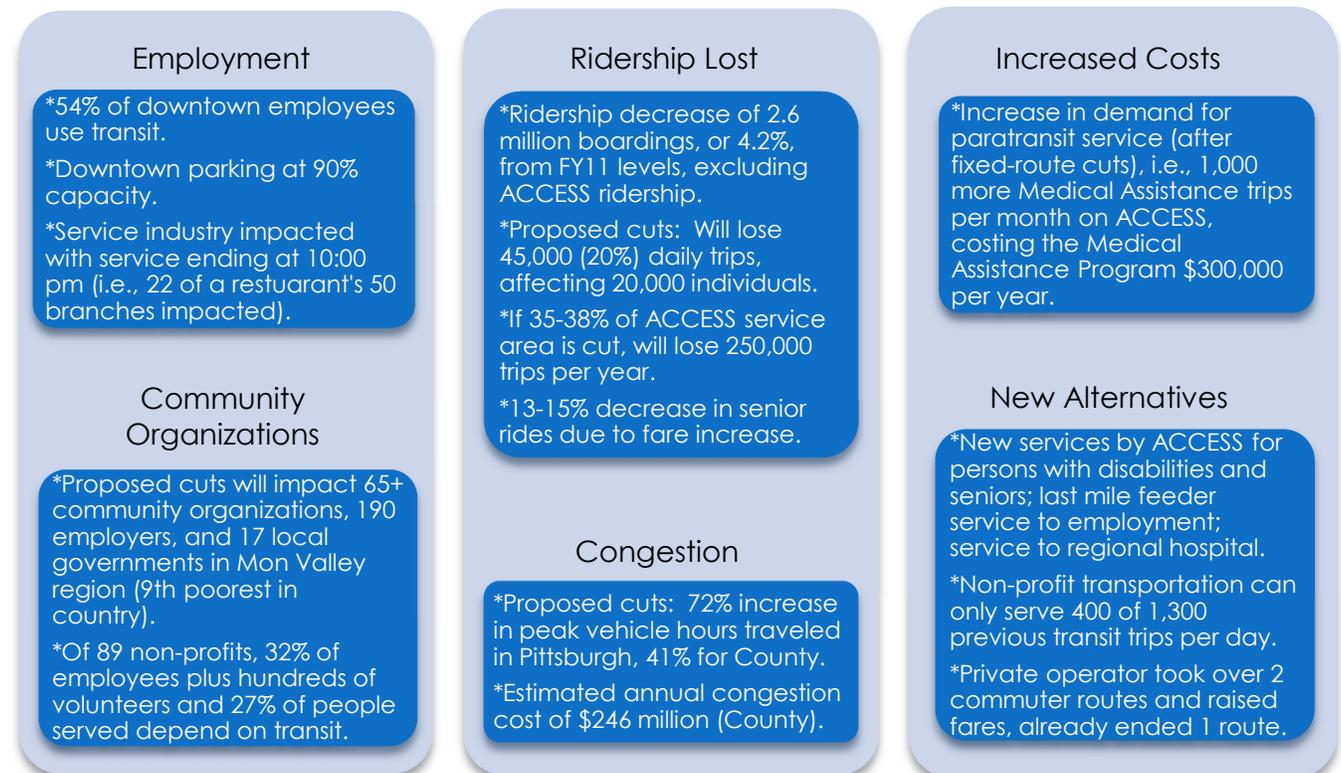
FY11

- Cut services by 15% including elimination of 29 routes, reduced service on 37 routes, and closure of Harmar Garage (scaled back from the original 35% cuts, or 45 bus routes).
- Increased full fare by 13-18% and half fare by 10-19%. Increased transfer cost by 33-43%. Monthly and Annual Passes increased 13-24%. Created Ten-Trip Tickets.
- Reduced workforce by 255 positions including 180 layoffs.
- Wage freezes for non-represented staff.
- Restructured debt to reduce annual debt service by \$7 million annually.
- Obtained private sector sponsorships to expand free fare zone on newly opened subway extension, resulting in net financial benefit of approximately \$600,000 annually.

2012 Proposal for FY13 (Actions marked with asterisk (*) were deferred until at least FY14)

- In July, 2012, increased full fare by 11-15%, half fare by 14-16%, and Monthly and Annual Passes by 8-13%. Third fare increase since 2010, totaling a 25-36% increase in full fares and up to a 39% increase in passes. New full fare is among most expensive nationwide.
- *Thirty-five percent reduction in service hours, including elimination of 46 routes out of 102 (current total). Service reductions (days, hours, frequency) on almost all routes.
- *Closure of the Collier operating division.
- *Elimination of 500-600 additional positions (400-500 through layoffs).

Community Impacts³



² List is not exhaustive and represents a sample of Port Authority's cost-cutting actions.

³ Most impacts reported during interviews. Additional sources included The Forbes Foundation for survey results from non-profits; and Southwestern Pennsylvania Commission and Texas Transportation Institute for congestion impacts.

Background - Pittsburgh, Pennsylvania

The Port Authority of Allegheny County provides transit service throughout Pittsburgh and Allegheny County. The recession has exacerbated decreases in state funding and caused the Port Authority's pension funds to lose 30% of their value. However, the primary driver of the transit system's service cuts has been a structural problem with transportation funding at the state level. Transit programs in the Commonwealth of Pennsylvania have historically received a portion of their funding from the State's Transportation Fund, which is funded through a gas tax, other liquid fuels taxes, tolling on the Pennsylvania Turnpike, licenses and fees, sales tax, lottery proceeds, general fund monies, and other more minor sources. These funding sources are not currently indexed to inflation and do not generate enough revenue to cover the costs of maintaining the transportation network in the Commonwealth. These revenues also have been impacted by people driving more efficient vehicles (less fuel consumption) and the recession (lower sales tax collections).

Act 44, passed in 2007, is the enabling legislation for transportation funding in Pennsylvania. This act included a provision to raise additional revenue by tolling I-80. In 2010, the Federal Highway Administration denied the State's request to implement a toll on I-80. The rejection of this funding mechanism has resulted in a dramatic shortfall in funding for the State's Transportation Fund, and the Port Authority lost \$35 million annually in operating funds. In previous years, the Governor flexed funds from the State's Highway Fund to the Port Authority to help fill the funding gap created by the inability to toll on I-80. Flexing funds in this manner is no longer a viable option, given the Commonwealth's current transportation infrastructure needs.

Additionally, local government in Pennsylvania has very few mechanisms to raise revenue. In 2008, Allegheny County was approved to collect a rental car tax of up to \$2 per day and a drink tax of 10%, which was subsequently reduced to 7%. These two mechanisms add up to about \$33 million each year, which is most of the \$35 million total annual match provided by Allegheny County for the Port Authority.

The Port Authority has also been evolving into a more compact transit agency for a number of years, reflecting the changing demographics and economy of Western Pennsylvania. In 1950 Pittsburgh was a city with a population of about 680,000, while in 2010 the population was 305,704.¹ The Port Authority first reduced transit service in 2003, in reaction to fiscal pressures and the need to "right-size" to better match the level of transit service provided to the changing demographics. The 2003 transit service reduction did not have a big impact upon the community. A second significant transit

¹ U.S. Census.

service reduction took place in 2007. This 15% reduction targeted low performing transit services, and similar to the 2003 cuts, minimal community impacts were reported, though 450 Port Authority employees were laid off.

In 2011, the Port Authority cut another 15% of services and also raised fares by 13% to 18% (for regular fares depending on the zone). The transit service cuts again focused on trimming routes with low productivity and reducing duplicative services, though more community impacts were reported with this round. These cuts eliminated 29 routes and reduced service on 37 other routes. Port Authority also closed a garage and reduced its workforce by 255 positions. Despite the combined 30% reduction in transit service, the Port Authority has retained 95% of its ridership by preserving routes with high productivity and reducing service on routes with poor productivity. Of the 30% of transit services that Port Authority has cut, the last 7% had a stronger impact on communities.

A more extensive round of transit service cuts – 35% of service hours – and a fare increase of another 11% to 15% was scheduled for FY13 unless a financing solution was found. The proposal included shrinking the geographic footprint of the system considerably by eliminating 46 of the transit system’s current 102 routes, reducing frequency, reducing evening service so that most routes will end at 10:00 p.m., reducing weekend services, and raising fares. Commuter express routes in particular were slated for cuts, with 17 of 25 existing commuter routes proposed for elimination. Significant community impacts were expected if this proposal was implemented.

In August, 2012, Port Authority’s Board of Directors voted to defer the 35% transit service reduction for at least one year, following the ratification of a new labor contract with its largest employee union. State and Allegheny County officials will continue working on a long-term funding strategy for transportation including transit services.²

Community Impacts of 2011 Cuts³

For the transit service cuts that occurred in 2011, the following community impacts were reported:

² Port Authority. (2012, August 21.) 2012 Service Reduction Information. Retrieved from <http://www.portauthority.org/paac/CompanyInfoProjects/BudgetFinances/ServiceReductions.aspx>.

³ The reported impacts have been differentiated by type of community impacts; note that some could fall under multiple categories.

Mobility and Access Impacts

- Port Authority expected to lose 13,000 riders due to the 2011 cuts. Twelve neighborhoods lost service entirely.⁴
 - Excluding ACCESS ridership, FY12 ridership was anticipated to decrease by 2.6 million boardings, or 4.2%, from FY11 actual levels primarily due to the 15% service reduction.⁵
 - Port Authority estimated that 6,000 daily riders would likely switch to driving.⁶
- Riders reported that the remaining Port Authority buses are crowded. In the months after the 2011 transit service cuts, the average number of riders per vehicle trip on Port Authority's fixed-route service increased by 26%. The riders per revenue hour increased by 30%.⁷ While these increases signified improved productivity for the transit system, the riders experienced more crowded buses, and full buses sometimes had to pass riders by.
- After the 2011 transit service cuts, many riders still had route options, but they had to walk farther to access a bus stop.

Economic and Financial Impacts

- Two hundred fifty-five Port Authority positions were eliminated⁸ including about 180 layoffs.⁹
- The fare increases have been difficult for low-income riders to absorb. 53% of riders earn less than \$50,000 per year.¹⁰

⁴ Daley, L. (2011, January 13.) Port Authority board approves service cuts. *Pittsburgh City Paper*. Retrieved from <http://www.pittsburghcitypaper.ws/SlagHeap/archives/2011/01/13/port-authority-board-approves-service-cuts>.

⁵ Port Authority. (2011, June.) Operating and Capital Improvement Budgets Fiscal Year 2012. Retrieved from <http://www.portauthority.org/paac/portals/Capital/2012Budget/2012BudgetBook.pdf>.

⁶ Prine, C. (2011, March 28.) Port Authority service cuts could be felt in earnest today. *Pittsburgh Tribune-Review*. Retrieved from http://webcache.googleusercontent.com/search?q=cache:NhZ5KmXuqugJ:www.pittsburghlive.com/x/dailycourier/news/s_729515.html+port+authority+cuts+6,000+passengers+switch+to+cars&cd=1&hl=en&ct=clnk&gl=us

⁷ March through September 2011 productivity data for fixed-route services from the Port Authority. September 2011 represented the peak of productivity in the months after the March 2011 cuts. While productivity decreased slightly thereafter, it has still remained higher than before the March 2011 cuts.

⁸ Port Authority interview, January 2012.

⁹ Daley, L. (2011, January 13.) Port Authority board approves service cuts. *Pittsburgh City Paper*. Retrieved from <http://www.pittsburghcitypaper.ws/SlagHeap/archives/2011/01/13/port-authority-board-approves-service-cuts>.

Social Equity Impacts

- The 2011 transit service cuts had a significant impact on transit riders in the Mon Valley area¹¹, which is an area with high levels of poverty and unemployment. The average household income in the Mon Valley is \$10,000 per year. A lack of transportation is the largest barrier for area residents to access goods, services, employment, and education.
 - The Port Authority's fixed routes that previously served this area provided 1,300 trips per day. When these transit services were cut, the Port Authority asked a local non-profit group, Heritage Community Initiatives, to change their existing JARC route to accommodate some of these trips. Heritage Community Initiatives did so, but could only accommodate 400 trips per day, which resulted in a net loss of 900 passenger trips per day in the Mon Valley.

Community Impacts of Proposed Cuts

While the Port Authority was able to defer for at least one year the 35% transit service cuts originally planned for September, 2012 (FY13), the following community impacts are anticipated if the transit service cuts must be implemented in the future:

Mobility and Access Impacts

- Estimates for ridership loss range from 30,000 to 45,000 daily transit trips, or 15,000 to 20,000 transit riders losing transit service.¹²
- ACCESS is expecting a drop in ridership of 250,000 annual trips (35-38% of total ADA rides) for seniors and people with disabilities;¹³ an estimated 1,800 passengers will lose transit service on weekends and 1,300 on weekdays.¹⁴

¹⁰ According to market research conducted by FSC JonesWorley Transit Marketing LLC for Port Authority in 2011.

¹¹ The Mon Valley area is a multi-county area, including Allegheny County, in southwestern Pennsylvania.

¹² The more conservative estimates were provided through the Southwestern Pennsylvania Commission's regional travel demand model analysis on the proposed FY13 transit cuts, while the higher estimates were provided by Port Authority.

¹³ ACCESS interview, January 2012.

¹⁴ (2012, May 15). Keeping ACCESS: A bill can save transit for the county's disabled. *Pittsburgh Post-Gazette*. Retrieved from <http://www.post-gazette.com/stories/opinion/editorials/keeping-access-a-bill-can-save-transit-for-the-countys-disabled-635919/>.

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- ACCESS expects a 13-15% drop in senior ridership when the fare increase (37%) proposed for July, 2012 is implemented.¹⁵
 - ACCESS reports that 60 major destinations including four hospitals, four higher education campuses, the Pittsburgh International Airport, and numerous townships will be cut entirely from the ADA-eligible service area. 41 communities will experience partial ADA service loss. These numbers do not include hundreds of other destinations such as medical offices, social services, and housing complexes, which will also be impacted. While most locations in downtown Pittsburgh will still have weekday ADA service, some areas may lose weekend service. ADA-eligible trips will also experience the same cuts to hours of service as the fixed routes.
 - Access to goods, services, medical care, jobs, and education will be further restricted, as area human service agencies have already filled in as many gaps as they are able to.
 - Heritage Community Initiatives reports that more than 65 community organizations including medical services and community college campuses, 190 employers, and 17 local governments in the Mon Valley region will be impacted by the transit service cuts.
 - A survey of 89 non-profit organizations indicates that 27% of the 1.4 million people that they serve depend on public transportation to access services; and 58% of people served will experience negative impacts including parking challenges and difficulty accessing areas outside of downtown.¹⁶
 - One organization that provides meals among other services reports that nearly all their clients depend on the bus system. For example, 40 to 50 people access their site for lunch daily, and nearly half arrive by bus. Their clients also use the bus to access their jobs and go to the grocery.
 - Another organization has 15 birth parents that ride the bus in order to adhere to their court order to visit their children one to three times per week, in their efforts to regain custody.¹⁷
 - Travel from downtown to other parts of the region will be restricted especially for residents with no or limited access to a personal vehicle.
 - Point Park University reports that 1,000 resident students, who live downtown in Point Park housing, depend on public transportation to get to areas outside of downtown.¹⁸

¹⁵ ACCESS interview, January 2012.

¹⁶ V. Luk, The Forbes Funds, personal communication, April 26, 2012.

¹⁷ Ibid.

- The Port Authority service is among the options that schools use to transport students, who will be adversely affected by the proposed cuts:
 - The Pittsburgh Public School District partners with Port Authority to purchase monthly bus passes for 3,887 students who live more than two miles from their high school. Due to the proposed fare increase, the school district plans to buy 1,300 fewer bus passes for students for the fall of 2012. While the students will still be able to get to school by private yellow school buses, they will lose access to other opportunities that the bus pass provides such as “rehearsals, auditions, jobs, social events, and independence.”¹⁹
 - Community in Schools Pittsburgh-Allegheny County (CISPAC) is a drop-out prevention program that provides daily bus passes to their students. 20% of these at-risk students will have no way to get to class since CISPAC’s academies in the East End, Springdale, and Homestead will experience severe service cuts and possibly lose service entirely.²⁰
- While Port Authority has made efforts to identify weekday alternatives for fixed routes that will be eliminated, riders on seven routes will have no other fixed-route service options.
- The Southwestern Pennsylvania Commission (SPC), the regional planning agency and metropolitan planning organization for the Pittsburgh ten-county area,²¹ conducted an impact analysis of Port Authority’s proposed FY13 service cuts on the region. Testing two scenarios, before and after the transit cuts, the SPC’s regional travel demand model projected:
 - Decreases in daily transit person trips to downtown Pittsburgh by 15,700 (21%) and to Oakland by 2,700 (14%).
 - Significant ridership loss among suburban transit users, with daily transit person trips originating in suburban Allegheny County dropping by 20,500 (33%).²²

¹⁸ Ibid.

¹⁹ Daley, L. (2012, May 2.) School Bust: PAT cuts will sharply impact student riders. *Pittsburgh City Paper*. Retrieved from <http://www.pittsburghcitypaper.ws/pittsburgh/school-bust-pat-cuts-will-sharply-impact-student-riders/Content?oid=1519927>.

²⁰ Ibid.

²¹ Southwestern Pennsylvania Commission Website, <http://www.spcregion.org/about.shtml>.

²² Abridged PowerPoint presentation, “2012 Public Transportation Crisis: Southwestern Pennsylvania”, developed by the SPC and presented to the SPC Transit Operators Committee on June 13, 2012. Received via personal communication from C. Sandvig, Pittsburgh Community Reinvestment Group (PCRG), June 22, 2012.

- While previous transit service cuts did not lead to notable increases in congestion, the proposed cuts primarily target suburban and exurban routes that come into downtown Pittsburgh. Data from the SPC model indicated an increase in driving:
 - In Pittsburgh a 72% increase in daily vehicle hours traveled during the peak period, and in Allegheny County a 41% increase.
 - Increases in daily auto trips: 12,300 (8%) more in downtown Pittsburgh, 2,200 (2%) more in Oakland, and 16,100 more daily auto trips (1%) starting in suburban Allegheny County.²³
 - An average increase in daily peak period travel time by 16 minutes (from 24 minutes currently to 40 minutes) in Pittsburgh, and by 11 minutes (from 26 minutes currently to 37 minutes) in Allegheny County overall.
- Downtown Pittsburgh has approximately 38,000 parking spaces including off-street parking. The SPC estimates that roughly 3,800 parking spaces are available downtown on any given day.²⁴ Based on SPC's projections, downtown Pittsburgh alone will have a gap of 2,350 parking spaces to meet the additional demand anticipated after the transit cuts.²⁵
- Port Authority will close several park and ride lots due to route eliminations, with a total of 2,786 spaces lost. These lost spaces will translate into parking challenges as riders move to the next closest park and ride lot, many of which are already at capacity, or try to find local parking near their bus routes. Some riders may decide to drive the entirety of their commute, incurring the additional costs associated with driving and contributing to congestion on the roadways.

²³ Abridged PowerPoint presentation, "2012 Public Transportation Crisis: Southwestern Pennsylvania", developed by the Southwestern Pennsylvania Commission (SPC) and presented to the SPC Transit Operators Committee on June 13, 2012. Received via personal communication from C. Sandvig, PCRG, June 22, 2012.

²⁴ Estimate for available parking downtown was based on historical inventory by the Pittsburgh Public Parking Authority, which shows 10% of total spaces are available. Source: Abridged PowerPoint presentation, "2012 Public Transportation Crisis: Southwestern Pennsylvania", developed by the SPC.

²⁵ The SPC regional travel demand model estimates that daily auto trips destined to downtown will increase by 12,300 if the proposed transit cuts occur. The parking gap estimate assumes that all these daily auto trips are taken in single occupancy vehicles and that each commuter takes two trips per day; then 6,150 cars are projected to need parking in downtown Pittsburgh. The demand of 6,150 cars minus the estimate of 3,800 available parking spaces results in a parking gap of 2,350 spaces.

Economic and Financial Impacts

- Up to 500 Port Authority employees, or 20% of the workforce, will be laid off.²⁶
- With two fare increases implemented in two years, about three-quarters of Port Authority's riders will have experienced a 25% fare increase, while one-quarter of the riders will have paid 36% higher fares (for regular fares in Zone 1 and Zone 2, respectively).²⁷
- The Pittsburgh Community Reinvestment Group estimates that annual transit user household costs will increase by \$4,000 to \$9,100 per rider, or by \$60 million to \$137 million for the southwestern Pennsylvania region.²⁸
- ACCESS' subcontractors worry about staying in business if the proposed cuts occur. The subcontractors already have trouble filling driving positions, given low pay and drug and alcohol testing requirements.
- Industries with shift workers, such as restaurants and hotels, will have difficulty attracting and retaining employees since the proposal reduces evening and weekend transit services. Transit service will end at 10:00 p.m. on most routes.
 - The Western Pennsylvania Chapter of 32BJ SEIU reports that over 85% of their members, or more than 2,100 property services workers,²⁹ depend on the bus to get to and from work. The 2011 cuts already had a negative impact by increasing the difficulty of getting home after eight-hour shifts. Even more property services workers will face this challenge with the 2012 cuts. If the transit service cuts are implemented, 32BJ anticipates that workers will be walking to work, spending more out of pocket money for

²⁶ Port Authority interview, January 2012.

²⁷ Estimates for the split between riders who pay Zone 1 and Zone 2 fares received from Wendy Stern, Port Authority, personal communication, March 15, 2012.

²⁸ The regional cost was based on SPC's projected decrease of 30,200 daily transit person trips for the region if the proposed cuts are implemented. Assuming each rider takes two trips daily, this projection translates to 15,100 fewer transit riders. This number of stranded riders was multiplied by the estimated cost increase per rider to determine the regional cost. Source: C. Sandvig, PCRG, personal communication, June 22, 2012.

²⁹ Job types include Security Officers, Cleaners, School Bus Drivers, Crossing Guards, Clerks, Clerical Workers, Teachers' Aides, Mechanics, Window Washers, Groundskeepers, Incinerator Operators, Food Service, Maintenance, and other Property Service Workers. (Source: 32BJ SEIU Website, http://www.seiu32bj.org/au/District_westernPA.asp.)

- transportation to get to their jobs, and in the worst cases giving up their long-term employment with good wages and benefits.³⁰
- A hotel near the Pittsburgh International Airport reported 56 employees who use public transportation to get to work. Thirty-six percent of these employees work the evening and weekend shifts, and will likely face difficulties getting transportation home. Another hotel in Monroeville surveyed its employees who regularly use public transportation to get to work.³¹ Many of these workers will have at least one route option eliminated. The remaining transit services will be reduced (lower frequencies) and/or require transfers, resulting in longer travel times and fewer alternate route options.
 - Employers of all sizes are equally likely to be impacted as Port Authority riders are distributed quite evenly among different size employers, ranging from those with less than 50 employees to those with more than 1,000.³²
 - DialAmerica is an employer with 300 employees in its Pittsburgh office. More than half of these employees commute to work on a bus route that is proposed for elimination. A vice president of the company reported that proximity to public transportation service was the top consideration in moving to the current office location. The company deferred its plan to add 150 new call center positions at the Pittsburgh office as a result of the proposed transit service cuts.³³
 - Non-profit organizations report that their employees and volunteers will face transportation difficulties. Of 89 organizations, 32% of their 8,100 employees use transit to get to work, and 52% of their employees will be negatively impacted, since even those who drive will experience increased congestion and parking difficulties when traveling to work and meetings. Organizations reported that hundreds of volunteers also rely on public transit, and transit service cuts would undermine their ability to recruit such volunteers.³⁴
 - One organization reports that 76 employees will be at risk of losing their ability to get to work.
 - Another organization reports that the benefits they receive from hundreds of volunteers would be jeopardized as 50% rely on public transit.

³⁰ H. Delaney, 32BJ SEIU, personal communication, May 17, 2012.

³¹ Transit survey results from members of the Greater Pittsburgh Hotel Association. R. Strunk, GPHA, personal communication, May 17, 2012.

³² Pittsburgh Downtown Partnership's 2010 Employee Transportation Needs Assessment.

³³ Maher, K. (2012, June 4.) Sharp transit cuts pinch riders and employers. *The Wall Street Journal*. Retrieved from <http://online.wsj.com/article/SB10001424052702304791704577418643668145680.html>.

³⁴ V. Luk, The Forbes Funds, personal communication, April 26, 2012.

- For the Pittsburgh Public School District's purchase of monthly bus passes for high school students, the proposed fare increase translates to \$7.50 to \$16.25 more per pass. Not only would the school district be paying more per student for less transit service in the area, but the school district is facing its own operating deficit and must cut expenses. The school district's plan to buy 1,300 fewer student bus passes for the fall of 2012 saves \$1.2 million. The school district has also adjusted school start and end times to arrange for these 1,300 students to be picked up by private operators of yellow school buses.³⁵
- If a Port Authority rider loses their service and decides to drive, the average cost to drive alone is estimated at \$324 per month, plus an average parking cost of \$111, for a total of \$435 per month.³⁶ Since Pittsburgh transit users spend \$80 per month on average, the cost of driving alone is quadruple that of taking public transportation. Even a more conservative estimate for driving, which only takes into account the costs for gas, maintenance, and tires, estimates that the average downtown commuter would pay \$96 per month to drive alone. When adding the cost of parking, the monthly total of \$207 is still 1.5 times more than the cost for the average transit rider.
- The SPC projects a 41% increase in traffic congestion due to Port Authority's proposed transit service cuts.³⁷ Applying this projection to the Texas Transportation Institute's estimate for congestion costs in Pittsburgh translates to \$246 million in additional congestion costs in Allegheny County if Port Authority implements the proposed cuts.³⁸

³⁵ Daley, L. (2012, May 2.) School Bust: PAT cuts will sharply impact student riders. *Pittsburgh City Paper*. Retrieved from <http://www.pittsburghcitypaper.ws/pittsburgh/school-bust-pat-cuts-will-sharply-impact-student-riders/Content?oid=1519927>.

³⁶ Used the 2010 average cost of 56.6 cents per mile for the average sedan, based on 15,000 miles of annual driving, identified in AAA's annual "Your Driving Costs" study (retrieved from <http://newsroom.aaa.com/2010/04/2010-your-driving-costs/>). The monthly cost of \$324 assumed the commuter would drive 26 miles round trip per day (source: Pittsburgh Downtown Partnership's 2010 Employee Transportation Needs Assessment) for an average of 22 work days per month. Used the 2010 driving cost in order to make comparisons to parking and transit costs identified in the 2010 Employee Transportation Needs Assessment.

³⁷ Increase in traffic congestion is approximated by the 41% increase in daily vehicle hours traveled during the peak period in Allegheny County. Source: SPC data received from C. Sandvig, PCRG, personal communication, June 22, 2012.

³⁸ The Texas Transportation Institute (TTI) develops an annual Urban Mobility Report, which estimates both time-related and monetary congestion costs. The 2011 report provided 2010 data for the Pittsburgh urbanized area, including \$850 million in congestions costs (retrieved from <http://mobility.tamu.edu/files/2011/09/pitts.pdf>). The SPC's projection of a 41% increase in daily vehicle hours traveled during the peak period was used to approximate the increase in congestion due to the proposed transit cuts. The 41% increase was applied to the \$850 million total congestion cost for the

- If the City of Pittsburgh were to build new structured parking facilities to meet additional demand from increased auto trips after the transit service cuts, the new capital costs to fill the estimated parking gap in downtown alone would be \$47 million to \$71 million.³⁹ Assuming a new parking space had to be built for each additional car traveling into Oakland, the capital costs to the City to build structured parking would be \$22 million to \$33 million.⁴⁰ Furthermore, the annual operating cost associated with 3,450 new structured parking spaces between downtown and Oakland is about \$12 million per year.⁴¹
- The annual lease rates to park at private facilities, not operated by the Pittsburgh Parking Authority, are expected to increase. Private operators control more than three-quarters of downtown parking spaces, and the percentage is even higher in Oakland. Their annual leases are more susceptible to price hikes spurred by increased parking demand. Current leaseholders could experience a significant increase in costs.⁴²
- Other economic impacts that are less quantifiable include the losses of new jobs in the region, young professionals who want public transportation services, and employers who cannot get employees to work; a decrease in the tax base; and new costs to seniors and persons with disabilities, who are currently living independently, but must now move into a care facility or require significant caregiving by a family member.

urbanized area to get \$349 million in additional congestion costs if the proposed transit cuts are implemented. In order to determine the additional congestion cost just for Allegheny County (since a large influx of commuters travel from the County to downtown Pittsburgh) rather than the urbanized area, the percentage that the County's population comprises the urbanized area population was applied to the \$349 million cost. 2010 Census data indicated that Allegheny County constitutes 70.5% of the Pittsburgh urbanized area; applying this percentage to \$349 million results in \$246 million in additional congestion costs in Allegheny County if Port Authority implements the proposed cuts.

³⁹ Based on estimated cost per structured parking space of \$20,000 to \$30,000. Source: C. Sandvig, PCRG, personal communication, June 22, 2012.

⁴⁰ Uses the same cost estimate per parking space as in the downtown calculation. Estimate of 1,100 additional cars is based on SPC projection for the increase in daily auto trips into Oakland after the transit cuts; assumes auto trips are single occupancy vehicles and that each commuter takes two trips per day.

⁴¹ Estimated operating cost per space based on annual operating expenses (\$29.1 million) reported in the Pittsburgh Parking Authority's 2009 annual report divided by the total number of spaces the Authority manages (8,200 per the SPC PowerPoint). Multiplied this cost by 3,450 new spaces needed in downtown and Oakland to estimate annual operating expenses at \$12 million.

⁴² C. Sandvig, PCRG, personal communication, June 22, 2012.

Community Actions

- After the Port Authority's 2011 transit service cuts, several new transportation services were implemented, resulting in increased paratransit and human service transportation demand and ridership:
 - The Port Authority agreed to fund paratransit service in some areas where fixed route bus service was cut due to low productivity and shifting demographics. Several neighborhoods with fixed route bus service had served only a few riders, most of whom were senior citizens. In these areas the fixed routes were discontinued, and senior residents could utilize paratransit services instead.
 - The 2011 transit service cuts resulted in new Medical Assistance demand from riders who previously could walk to a bus stop. ACCESS, the regional paratransit broker, reported that demand for Medical Assistance trips increased by 1,000 trips per month, which added \$300,000 annually in expenses to the Medical Assistance Program.
 - A new "Connection" program was implemented by ACCESS. This program provides paratransit service for people with disabilities who are not ADA eligible and do not live near a bus stop. This service, funded through a New Freedom grant, was also extended to a regional hospital twice a day when fixed route service was cut to the hospital. The hospital pays the customers' fares.
 - An Elder Express deviated fixed-route was implemented and connects a neighborhood with a high concentration of seniors to the nearest fixed route and provides local circulator service, which was desired by the seniors. This route is operated in partnership with the Jewish Community Center, which provides some funding as well.
 - A JARC service was implemented in the Robinson Town Centre area in collaboration with the Airport Corridor Transportation Association (ACTA), a transportation management association. This service, Ride ACTA, provided "last mile" feeder service from the closest fixed route stations to work locations in the area. This service was recently discontinued.

- As mentioned previously, Heritage Community Initiatives adjusted their transportation service to help fill gaps in the Mon Valley region after Port Authority's March, 2011 cuts. The WorkLink service provides 9,000 rides each month, but residents may only use the van transportation for work-related trips.

- A private transportation operator, Lenzner Coach, started service on two Port Authority commuter bus routes that were eliminated. One of those routes is

- still operating currently, serving about 250 riders per day (which is about 1/3 of the ridership that Port Authority experienced when they operated the service, albeit at a higher level of service). The private operator canceled the second route after eight months (during which the route operated half the trips and served only 15% of the ridership compared to the previous Port Authority service).⁴³
- The fare for the private bus service was \$5 one-way, a 54% increase over the Port Authority's previous \$3.25 fare. The private operator initially required riders to purchase a \$200 monthly pass, but since ended the requirement. Lenzner Coach pays \$1,600 per month to use a parking lot at the end of the remaining line. The private operator is not allowed to pick up passengers at Port Authority stops or locations built with federal money.⁴⁴
 - The Community College of Allegheny County (CCAC) – West Hills Center, located near Pittsburgh International Airport, was previously served by five Port Authority routes. After the 2011 transit service cuts, one remaining route operating on a more limited schedule served the Center. To supplement this reduced transit service, CCAC contracted with the Airport Corridor Transportation Association to provide a shuttle (free to students) from a nearby bus stop to the Center when classes are in session. In 2011, the shuttle provided more than 1,200 rides to students. The ridership for the first part of 2012 indicates an increase in shuttle usage.⁴⁵
 - The remaining Port Authority route that directly serves the Center is scheduled for elimination in the proposed cuts. Riders will still have one route option to reach the nearby bus stop, served by the contracted shuttle.
 - On behalf of its members who are property services workers, 32BJ SEIU has suggested shift changes to contractors to assist workers facing transportation challenges with the 2012 cuts: 1) Change the 4:00 p.m. – 12:00 a.m. shift back to overnight 10:00 p.m. – 6:30 a.m., and 2) Permit employees to work through their breaks, which amount to an hour per shift. The building owners who employ the contractors must approve such changes.⁴⁶

⁴³ Lenzner Coach ridership data, from April 2011 through January 2012 for the Marshall and Franklin Park routes, from the Port Authority.

⁴⁴ Luna, T. (2011, November 10). Lenzner Coach eliminates bus route. *post-gazette.com*. Retrieved from <http://old.post-gazette.com/pg/11314/1188664-54-0.stm?cmpid=neighborhoods.xml>.

⁴⁵ D. Hoover, Community College of Allegheny County, personal communication, May 22, 2012.

⁴⁶ H. Delaney, 32BJ SEIU, personal communication, May 17, 2012.

- Locally there is an active group advocating for transit preservation through a website, keepppghmoving.com, which serves as a conduit of information concerning transit funding.
- The Keystone Funding Coalition is a statewide group advocating for a solution to Pennsylvania's transportation funding crisis. The coalition includes members of the highway construction industry, public transit agencies, labor unions, farm organizations, AARP, bicycle and pedestrian transportation advocates, land-use advocates, AAA, air and seaport organizations, organizations representing local governments, Chambers of Commerce, travel and tourism organizations, environmental advocates, freight and passenger rail organizations, and truck freight haulers.
- The Commonwealth Transportation Funding Advisory Commission Report, published in 2011, made a number of recommendations to solve Pennsylvania's transportation funding crisis, but none have been implemented to date.
- In July, 2012, Port Authority's Board of Directors voted to accept \$3.65 million in state and federal funding to temporarily avoid the cuts to ACCESS transit service proposed for September, 2012. The federal funding sources were two programs that benefit transit riders with disabilities: the Job Access and Reverse Commute and New Freedom programs. PennDOT provided the match for the federal funding. If no long-term funding solution for transportation is in place by September 1, 2013, the Port Authority may implement the ACCESS transit service reductions.⁴⁷
- In August, 2012, Port Authority's Board of Directors voted to defer the 35% transit service reduction for at least one year, following the ratification of a new labor contract with Amalgamated Transit Union's Local 85.⁴⁸ The new contract included two years of wage freezes, increased worker contributions to the pension fund, and other concessions that cut costs and allowed Port Authority to defer the major transit service cuts and layoffs planned for

⁴⁷ Port Authority. (2012, July 27.) ACCESS Paratransit Service Cuts Temporarily Avoided. Retrieved from <http://www.portauthority.org/paac/NewsEvents/LatestNews/tabid/96/newsid731/954/mid/731/ACCESS-Paratransit-Service-Cuts-Temporarily-Avoided/Default.aspx>.

⁴⁸ Port Authority. (2012, August 21.) 2012 Service Reduction Information. Retrieved from <http://www.portauthority.org/paac/CompanyInfoProjects/BudgetFinances/ServiceReductions.aspx>.

September, 2012.⁴⁹ State and Allegheny County officials will continue working toward a long-term funding solution for public transportation.

⁴⁹ Schmitz, J. (2012, August 19.) Port Authority ratifies contract to head off service cuts. *Pittsburgh Post-Gazette*. Retrieved from <http://www.post-gazette.com/stories/local/region/port-authority-workers-begin-voting-on-contract-649625/>.

Chapter 4

Cross-Cutting Findings

The research found that drastic transit service cuts have negatively impacted individuals, businesses, community organizations, schools, local and regional economies, and the overall quality of life in communities. One of the only positive impacts reported was the formation of community coalitions in support of public transportation.

Several themes emerged after reviewing five American communities that have experienced drastic transit service cuts as a result of the economic downturn. The common actions that communities have taken in response to transit service cuts and the cost and social implications are summarized below.¹

While transit professionals may have anticipated the types of impacts that would occur as a result of severe transit service cuts, this research collected data directly from community sources including transportation providers, governmental entities, business associations, economic development organizations, non-profit organizations, human service agencies, medical facilities, schools, and advocacy groups. The numbers and qualitative insights collected during the case studies may serve as useful examples for communities that face similar transit funding cuts, where advocates are presenting the case to continue and maintain public transportation services.

Note that this research provided a sample of community impacts where drastic transit service cuts have been implemented as a result of the recent economic downturn. A lesson learned from the case study approach was that few community organizations collect data on what their employees, patrons, or clients do in the face of drastic transit service cuts or fare increases. While transit agencies and community transportation providers typically maintain statistics on their budgets, ridership, and other

¹The community impacts have been categorized based on the transit benefits and disbenefits – or impacts – discussed in public transportation literature. Congestion impacts were categorized under “Mobility and Access,” and no other environmental or energy impacts were reported in the case studies. Source: Cambridge Systematics, Inc. and Apogee Research, Inc. (1996). *Measuring and Valuing Transit Benefits and Disbenefits* (TCRP Report 20). Washington, DC: National Academy Press. Retrieved from http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_20.pdf.

performance measures, most community organizations can only share general ways that their constituents have adapted and individual stories; few have collected quantitative data at the organizational level to demonstrate the community impacts of significant transit service cuts.

MOBILITY AND ACCESS IMPACTS

- When transit service cuts have been required, transit agencies have generally focused on preserving core services and cut less productive suburban and commuter services, resulting in a smaller transit footprint. This strategy largely preserves ridership, but results in hardships for transit-dependent suburban riders. These transit service cuts also affect those who reverse commute to the suburbs, where workers can sometimes access better paying jobs.
- Transit agencies that previously provided ADA complementary paratransit service beyond the three-quarter-mile area around fixed routes have cut back their ADA services to the minimum requirement. Combined with the shrinking footprint of the fixed-route network, large areas have lost access to ADA paratransit services.
- Significant cuts to local transit services undermined the effectiveness of regional transit systems. Where local buses previously connected to commuter services and trains, riders now face difficulties making connections to the regional transit network. Riders who travel between neighboring cities must also find alternatives to connect to other local transit systems.
- Communities typically have transportation options other than public transit, but these services are limited in their scope. Human service transportation providers usually establish eligibility requirements that specify the people who can use their services and the types of trips provided. Human service organizations have limited transportation resources that can only be stretched so far to accommodate additional needs. Many community alternatives are lifeline services and do not provide convenient transportation to meet various needs.
 - These community organizations have also experienced recession-related budget cuts themselves. Hardships for transit-dependent riders are even more pronounced when multiple community transportation resources are cut simultaneously.

- Other types of transit services such as commuter buses and trains may still be available, but riders faced difficulties in local transportation to reach the commuter stops. Some ride with family or friends, bicycle, walk, or travel by wheelchair a considerable distance. Many endure hardships and safety risks due to long travel distances to the nearest stop, the length of time required for the additional travel, and environments that are unsafe and inaccessible for pedestrians because they are oriented toward automobiles.
- Where transit riders have been able to continue using the remaining transit services after significant cuts, the convenience of transit services has decreased due to geographic changes, route restructuring, and decreases in frequency. Some riders need to make transfers where they previously had a direct trip, or they need to make more transfers than before. Some transit riders also have a longer distance to travel to reach the nearest stop. Even if the rider still has a one-seat ride, the route may be less direct. Overcrowding and buses passing by riders have also been concerns on some remaining transit routes. Riders have experienced longer travel times due to transit agencies' cost-cutting actions.
- Private transportation alternatives generally provided lower quality service and charged riders significantly higher fares. Private operators that implemented new services to replace transit routes usually cut service spans, frequencies, or the number of trips in comparison with the previous transit route, thereby rendering the service much less convenient for riders. When private operators have not achieved ridership expectations, they end the service and some even go out of business. Taxis provide convenient service but are too expensive for most riders to use as everyday transportation.
- The increased number of cars on the road (whether from ridesharing or single occupancy vehicles whose occupants previously used transit) contributed to traffic and congestion problems particularly in urban areas and along major highways and arterial roads.

ECONOMIC AND FINANCIAL IMPACTS

- Residents have lost access to jobs because public transportation service is no longer available, and they have no other affordable and reliable form of transportation. Transit users have had to leave their current jobs because their transit route was cut. Residents applying to jobs have been unable to secure jobs due to transportation obstacles.

- Businesses that employ transit-dependent workers have lost employees, and in more severe cases, have shut down entirely because they were unable to find employees with dependable transportation.
- Significant numbers of transit agency employees have lost their jobs. Transit agencies also have fewer employment opportunities, as positions have been eliminated.
- Transit-dependent and choice riders alike chose to move to a different community that provides public transportation. This population loss bore economic impacts through a decreased tax base and the loss of workers and patrons upon which local businesses depend.
- Human service organizations have had to increase their spending and staff resources on transportation. Some organizations operate their own transportation, and they have stretched their resources including staff time to transport clients who previously used transit. When staff members spend more time figuring out transportation to get their clients to services and jobs, less time is spent on the primary programs that carry out their actual mission.
- Cost shifting has occurred in various forms. Within a transit agency, costs have shifted to providing demand-response service for riders who previously used fixed routes. Human service transportation providers have borne additional costs from providing transportation to clients who previously used transit. Adjacent transit agencies also incur additional costs in trying to fill some service gaps, especially where a local transit system has shut down. Medicaid transportation programs must also pay for more expensive options when public transit is no longer available. With transit service cuts, the overall cost of providing community transportation may increase (as trips by other alternatives are often more expensive than transit trips) regardless of costs to individual providers and agencies.
- In school districts that use public transportation, school budgets were impacted by fare increases when bus passes became too expensive to purchase for students, and by the additional costs incurred in providing new school bus service. Transit's role in school transportation has decreased considerably in some communities.
- Residents no longer had the option to save commuting costs by taking public transportation when gas prices were high, a popular incentive for those who

usually drive to use transit. Transit agencies that have cut transit services had no way to provide additional service when demand increased due to high gas prices.

- Some previous transit riders formed carpools or vanpools when their transit service was cut, particularly for commuting trips. Ridesharing may lessen the cost of commuting by car by dividing the expenses between participants, but the cost per person was likely still higher than transit fares especially when taking into account the fuel, parking, and maintenance costs of driving.
- Choice riders went back to driving, which increased their personal expenses (fuel, parking, and maintenance costs) and could add stress to their commutes, particularly in congested traffic conditions.
- The increase in cars on the road raised congestion costs including time delays and fuel use, and contributed to pollution and health concerns. Congestion costs affected individuals (both drivers who used to take transit and those who have always commuted by car), businesses and employers, and the local and regional economy.
 - Where existing parking inventories were limited, the increase in parking demand resulted in new capital and operating costs for local governments and private operators.
- Public transportation was one factor that businesses and institutions such as schools considered when planning expansions or new branches. The lack of transit service may not have been a major reason to forego development, but could still negatively impact the decision-making process.
- When transit-dependent riders and transit agency employees lost their jobs, the local economy suffered a “ripple effect” from decreased spending as salaries, wages, and benefits associated with the jobs were lost.
- Communities lost state and federal money that had been invested in public transportation. Diverted elsewhere, those dollars could be very difficult to get back if the community is later prepared to provide the local match.

SAFETY AND SECURITY IMPACTS

- Transit users who must now bicycle or walk several miles to the nearest transit stop (where a local bus service was previously available) were exposed

to dangers to their safety and health. Some had to travel in automobile-oriented environments that lack pedestrian safety amenities such as sidewalks, crosswalks, and lighting. Riders who use wheelchairs faced similar dangers in physical environments that are not wheelchair accessible and in inclement weather. ADA paratransit users have taken creative approaches to access remaining transit services including waiting in the driveway of a stranger whose home is within the ADA service area. This posed a safety risk to ADA paratransit riders who may be vulnerable to begin with.

SOCIAL EQUITY IMPACTS

- The most vulnerable populations in a community including the elderly, people with disabilities, and low-income residents were left with few transportation alternatives. Without public transportation, these transit-dependent people lost their independence including access to jobs and medical services. In the worst cases, vulnerable residents were stranded at home. In many cases, they relied on others for rides or incurred financial burdens, in spending higher portions of their low or fixed incomes on transportation rather than meeting other basic needs.
 - Even with the transportation alternatives provided through human service agencies, segments of the vulnerable population slipped through the cracks, such as residents whose income is not low enough to qualify for Medicaid and residents without cars.

INTANGIBLE IMPACTS AND FACTORS

- Some clients of human service organizations that do not provide transportation have found alternatives, such as switching from fixed routes to using demand-response service or riding with family or friends. However, these clients often ended up making fewer trips to access the services they need.
- The threat of transit service cuts and the cuts themselves have put transit in the spotlight, increasing community awareness of public transportation. A positive result was community coalition building across many sectors including businesses, unions, human services, medical facilities, schools, religious groups, and advocacy groups. These coalitions were often instrumental in generating community support for transit and passing ballot

- measures to provide transit funding. However, anti-transit community members also expressed their views advocating for the end of taxpayer support of public transportation services. The prioritization of transit among other public services became apparent in community discussions and funding decisions by local and regional leaders.
- Viewpoints that support or campaign against public transportation were often divided by urban and rural lines. Residents in and near the urban core typically used transit more, or at least saw the benefits of transit, whereas residents in outlying areas did not want their tax dollars to pay for transit services that they did not use or receive.
 - Students who previously received bus passes to cover their school transportation were put onto yellow school buses. While they could still get to school, they lost access to other opportunities including jobs, training, and social activities. For transit dependent students, the elimination of their route or drastic frequency cuts resulted in such hardships that even with a bus pass provided, they did not go to class or dropped out of school. At the programmatic level, transit service cuts impacted high school open enrollment programs because students lost reliable transportation to attend the school of their choice.
 - In addition to difficulties transporting clients, human service agencies and non-profit organizations had employees and volunteers who faced hardships in getting to work. While employees typically made the effort to identify transportation alternatives, transit cuts hurt community organizations' ability to recruit volunteers, which diminished the extent and quality of the services they could provide.

APPENDIX A

Review of Transit Budget Cuts and Cost-Cutting Strategies

Appendix A

Review of Transit Budget Cuts and Cost-Cutting Strategies

The research team conducted a literature review to determine the magnitude of budget reductions that transit agencies have experienced as a result of the economic downturn, and the consequent strategies they have implemented or proposed to confront this funding dilemma. The sources for this review included publications by national research and advocacy organizations, such as TCRP, APTA, and Transportation for America; reports by local, regional, and state organizations, including state transit associations; and various online news articles and websites, including information provided by the transit agencies on their websites.

APTA's three recent survey results, *Challenge of State and Local Funding Constraints on Transit Systems: Effects on Service, Fares, Employment, and Ridership* (June 2009) and *Impacts of the Recession on Public Transportation Agencies* (March 2010 and August 2011), served as the primary literature. Numerous news articles and online descriptions, provided by transit agencies on their budget difficulties and the resulting strategies that they have employed or proposed, served as supplemental information.

BUDGET CUTS AND STRATEGIES IMPLEMENTED OR CONSIDERED IN RESPONSE TO THE ECONOMIC DOWNTURN

According to the National Bureau of Economic Research, the United States experienced its longest recession since World War II from December 2007 through June 2009.¹ The recovery of the American economy has been uneven in the three years that have passed since then. While some big businesses, banks, and wealthy Americans have seen increasing revenues and profit, small businesses and "Main Street" Americans have had more stagnant experiences, largely due to the slow rates of recovery in job creation and the housing market.² Transit agencies have had arguably worse experiences as significant sources of funding – local, regional, and state revenues – have shrunk and caused budget shortfalls. With higher gas and utility costs and increased demand for service contributing to the challenge of revenue declines in many communities, transit agencies have implemented different strategies to cut costs.

¹ Bartash, Jeffrey and Mantell, Ruth. "U.S. Recession Ended June 2009, NBER Finds", MarketWatch, September 20, 2010, from <http://www.marketwatch.com/story/us-recession-ended-june-2009-nber-says-2010-09-20>.

² Scherer, Ron. "Two years after end of Great Recession, how are we doing?" May 26, 2011, from <http://www.csmonitor.com/Business/2011/0526/Two-years-after-end-of-Great-Recession-how-are-we-doing>

Three APTA surveys were reviewed as the primary data available on the impacts of the economic downturn on transit agencies' budgets and the strategies that agencies have taken to meet budgetary challenges. The first survey, *Challenge of State and Local Funding Constraints on Transit Systems: Effects on Service, Fares, Employment and Ridership*, was conducted in May 2009. Reporting on experiences over the past year, 98 transit systems conveyed the extent to which they faced decreasing revenues and their strategies for responding to this financial hardship. The survey respondents represented more than half of the country's public transit ridership and included ten of the top largest transit agencies by ridership. It is worth noting that the reporting period included the transit systems' experiences with record high fuel prices during the summer of 2008. The resulting spike in operating costs, compounded by increased demand for services as drivers shifted to transit to seek relief from gas expenses, added additional stress to transit agency budgets that were already experiencing declining revenues. Some of the major funding sources on which transit agencies rely - local and state revenue from property, sales, payroll, and gas taxes - shrank or remained stable, in better scenarios, as a result of the economic recession.

The second APTA survey, *Impacts of the Recession on Transit Agencies*, was conducted in March 2010. This survey sought to better isolate the impacts of the economic recession, outside of the fuel price hikes in 2008, on transit agencies. The reporting period for this survey was January 2009 to March 2010, providing a couple months' overlap with the previous survey. One hundred fifty-one transit agencies, representing more than 80% of public transit riders across the country, reported on the actions they have already implemented or are considering in response to the economic recession. The survey respondents included light rail, commuter rail, and heavy rail operators, as well as 19 of the top 25 largest transit agencies by ridership. This survey provided additional data on the magnitude of funding cuts from local, regional, and state sources and of projected budget shortfalls. The survey report provided a good framework of strategies that transit agencies have implemented in response to the economic downturn, and served as a model for data collection for the case studies in this research.

APTA provided a 2011 update to this survey in August 2011, having collected the data in March 2011. This survey sought to collect information on the recession-related actions that transit agencies had taken since January 1, 2010 and anticipated taking in the future. A total of 117 transit agencies responded to this survey. The results indicated that a large number of transit agencies continue to face a decline in funding, especially from state and local sources. In response to fiscal cutbacks, transit agencies have implemented service cuts, fare increases, and reductions in staff and benefits. In addition, transit agencies have delayed plans for capital projects, including maintenance of existing facilities and the replacement of aging vehicles and facilities.

Another recent study was also included in this data analysis due to its pertinence in describing transit agencies' cost-cutting strategies taken amidst declining revenues related to the weakened economy.³ This report, *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases*, focused on the strategies that transit agencies implemented during the peak of fuel costs in the summer of 2008, which coincided with the first part of the economic recession. Higher gas and utility costs, coupled with shrinking revenues during the economic downturn, led transit agencies to implement several cost-cutting actions that were highly similar to the strategies reported in the two, more recent APTA surveys. This report also portended the continued financial hardships that transit agencies would face in the country's recovery from the economic recession. Though several systems were able to cover past increases in fuel costs, the 2008 peak was so dramatic that many transit agencies exhausted their reserves and expected to feel the "real effects" of high fuel prices and decreased revenues in their FY09 and FY10 budgets.

Magnitude of Budget Cuts

The results of the first APTA survey indicated that from June 2008 to May 2009 more than 80% of transit systems in the United States reported flat or declining revenues from local, regional, and state sources. A larger proportion of transit agencies, 55%, experienced a decrease in local and/or regional funding in the past year compared to 48% experiencing a decrease in state funding. However, the average amount by which state funding decreased, 21.9%, was notably higher than that by which local and/or regional funding decreased at 12.8%. About one-quarter of transit agencies reported that local and/or regional funding remained flat over the past year, while 34% reported that state funding remained the same. Interestingly, nearly one-fifth of transit agencies reported increases in local and/or regional and state funding.

The data reported for the second APTA survey from January 2009 to March 2010 demonstrated worsening financial conditions for transit agencies: about 90% reported flat or declining local and/or regional revenues and state revenues. Again, a higher percentage of transit agencies experienced a decrease in local and/or regional funding in the current year, 66% compared to 56% of agencies that saw declines in state funding. The proportion of transit agencies whose funding remained the same in the current year was very similar to the previous survey at 24% for local and/or regional funding and 33% for state funding. Noticeably fewer respondents, only about one-tenth, reported increases in these revenue sources for the current year.

The March 2010 survey also examined the recession's impacts on fare revenue, the third type of funding that transit agencies commonly use in addition to local and/or

³ KFH Group, Inc., prepared for APTA. *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases*. September 22, 2008.

regional and state revenues. The survey found that nearly half the transit agencies have experienced decreased fare revenue and 23% remained flat. Job losses due to the economic recession and consequently fewer commuters, typically a major portion of regular transit ridership, likely contributed to the loss in fare revenue in some communities. Thirty percent of transit agencies reported increases in fare revenue, likely the result of these systems increasing fares in response to declines in local, regional, and state revenues. The challenge with raising fares is that some riders may stop using transit if it is no longer more affordable than driving, though many transit agencies' experiences during the peak of gas prices in 2008 also demonstrated that ridership continues to increase despite the implementation of higher fares.⁴

The second survey also captured data on transit agencies' projected budget shortfalls for the upcoming year. Nearly 70% reported budget shortfalls for the coming year, forecasted at a total of \$2 billion for all survey respondents together. More than half the systems projected a shortfall of 10% or less, a third estimated a larger shortfall up to 20%, and about 13% of respondents predicted a shortfall greater than 20%. Five transit agencies even forecasted budget shortfalls of more than \$100 million. Funding from the American Recovery and Reinvestment Act (ARRA), passed in February 2009, provided some relief for transit systems' capital costs during the survey period. In July 2009, ARRA was amended to allow transit agencies to use up to one-tenth of their ARRA funds to cover operational costs; about a third of survey respondents took advantage of this funding flexibility to relieve operating budget constraints.

The 2011 survey demonstrated a continuation of budget difficulties for transit agencies, but a gain in the percentage of agencies receiving an increase in funding from the previous year. The data indicated that 71% of public transit agencies faced flat or decreased local and/or regional funding, and 83% faced flat or decreased state funding. The percentage of transit agencies facing a decline in local and/or regional funding dropped from 66% in the 2010 survey to 33% in the 2011 survey. About 40% of respondent agencies experienced a decrease in state funding, compared to 56% in the previous year. Nearly 30% of agencies received an increase in local and/or regional funding, and about 18% received increases in state funding. In 2010, only about 10% of transit agencies had reported increases in local or state funding.

According to the 2011 survey, fewer transit agencies had decreases in fare revenue than the previous year, 28% in 2011 compared to 47% in 2010; while more agencies experienced fare revenue increases, 46% in 2011 compared to 30% in 2010. However, the majority of increases in farebox revenue were attributed to higher fares rather than increases in ridership. Fare increases are anticipated to reduce transit demand, and accordingly ridership, in the long term.

⁴ KFH Group, Inc., prepared for APTA. *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases*. September 22, 2008.

The 2011 survey results also found that approximately 35% of transit agencies project budget shortfalls in the coming year, totaling over \$600 million for all respondent agencies. This is a substantial improvement from the previous survey where 70% reported budget shortfalls totaling nearly \$2 billion. Of those projecting shortfalls, 83% forecasted the shortfall to be 10% or less, while 8% of agencies projected shortfalls greater than 20%.

For the first time, the 2011 APTA survey asked transit agencies to identify the highest sources of stress in their operating budget. The top responses provided by transit agencies included the status of local and/or regional funding and increases in fuel prices (both selected by 74% of respondents), the status of state funding (72% of respondents), and an increase in overall operating expenses (66% of respondents). The uncertainty of funding from local, regional, and state revenues is a major challenge for many transit agencies. In the face of rising operating expenses and expected increases in demand, the instability of funding sources have forced transit agencies to implement or consider a variety of cost-cutting measures, which are discussed below.

Cost-Cutting Strategies

The resources referenced above outlined numerous strategies that transit agencies implemented or proposed to cut costs in the midst of budget difficulties associated with the economic recession. Different categories of cost-cutting actions and the strategies themselves are listed in Table A-1. Keep in mind that the extent to which these strategies were implemented differed between communities, depending on the magnitude of the budget gaps that transit agencies faced. Some transit agencies also implemented the same strategy multiple times over the years of the recession and during the subsequent recovery, or are considering doing so. As mentioned previously, many transit systems used a multi-faceted approach and implemented cost-cutting actions simultaneously. This research will determine the impacts to the community, actual and anticipated, depending on the combinations of these factors that were implemented or proposed.

The strategies marked with an asterisk (*) were identified in the APTA study, *How Transit Agencies are Addressing the Impact of Fuel Price and Ridership Increases*, which provided an in-depth review of the simultaneous impacts of record fuel prices in 2008 and the start of the economic recession on 17 transit agencies. While these strategies were not specifically named in the APTA surveys, transit agencies may have implemented these actions at the height of fuel costs in 2008 and continued to do so to reduce expenses as budget strains worsened with the recession. This study also provided helpful observations regarding the implementation of cost-cutting strategies. For example, the report found that systems were adjusting their spending and generating additional fare revenue, where feasible, at a slower rate than operating costs increased due to fuel prices. Strategies such as service cuts and fare increases had to be

reviewed by transit boards and the public, which could be time consuming, before implementation. Therefore transit agencies experienced a lag time where they could not carry out cost-saving and revenue-generating measures for several months, and consequently had to wait to experience the associated benefits, whereas fuel prices continued to increase in the meantime.

The study also found that transit agencies were most successful in battling budget problems with a multi-strategy approach, including service cuts, fare increases, and other means of increasing revenue. Several transit agencies also survived the unexpected spikes in operating expenses caused by fuel cost increases because they had contingency funds or reserves. Some transit agencies planned to set up such “rainy day” funds in anticipation of future budget issues related to economic downturns. A unique finding highlighted in the same study was transit systems’ efforts to increase revenues by generating new ridership. Some case studies expanded their pass programs to encourage new riders to try transit, in hopes of bringing in additional revenue through fares.

The Extent to Which Various Strategies were Implemented or Considered

May 2009 Survey Results

The earlier APTA survey results indicated that from June 2008 through May 2009 three out of four transit agencies had implemented fare increases or service cuts; 63% had implemented fare increases, with the average fare hike at more than 20%, and about half had implemented service cuts. Approximately one-third of survey respondents had implemented both measures. Four out of ten transit agencies had also transferred funds from capital use to operations. Transit systems that experienced decreases in local, regional, and/or state revenues took similar measures to an even greater extent: nearly nine in ten transit agencies had implemented fare increases or service cuts in the past year; 74% had raised fares; 63% had implemented service cuts; and nearly half had implemented both measures. More than half the transit agencies that suffered declining revenues had also transferred funds from capital use to operations.

Over the same time period, the survey respondents carried out various types of service cuts, the most common of which was eliminating or reducing off-peak service. The strategies to eliminate or reduce weekend service and peak period service were utilized to a similar extent by more than half the transit agencies. Forty-eight percent of transit agencies had reduced the geographic coverage of their service to cut costs. Half of the survey respondents also eliminated staff positions, some as many as 400 or more employees, to try to decrease operating costs. As mentioned previously, transit agencies benefited from ARRA funding, but this money could only be used for capital

at the time this survey was conducted, leaving transit systems to struggle with shortfalls in their operating budgets.

In May 2009, about two-thirds of transit agencies were considering each of these strategies for future implementation: service cuts, staff reductions, and seeking new dedicated funding sources, such as a new or increased local tax. About one out of two transit agencies considered each strategy of implementing fare increases or transferring capital funds to operations in the near future. As local, regional, and/or state revenues continued to decline, transit agencies would be implementing some of these cost-cutting strategies for a second or third time.

March 2010 Survey Results

The results of the second APTA survey provided more detail regarding cost-cutting actions that could be implemented multiple times.⁵ Nearly one-quarter of survey participants had already implemented service cuts and were considering further cuts. About 15% of transit agencies had previously reduced staff positions or transferred capital funds to operations, and proposed to implement these strategies again. Less than one-tenth of respondents were considering implementing the following strategies again: using reserves, increasing fares, implementing both fare increases and service cuts, instating a hiring freeze, or laying off workers. The survey also differentiated whether transit agencies were applying furloughs, a salary freeze or reduction, or decreased benefits to union or non-union employees, and found that less than 5% of transit agencies were considering multiple implementations of these strategies (except for freezing or reducing the salary of non-union workers, which 9% of transit agencies were considering again). However, the fact that some transit systems needed to consider implementing the same strategies again within such a short time period demonstrated their dire budget situations, even as the American economy started its recovery from the recession.

Another interesting result from the March 2010 survey was the smaller proportions of the transit agencies, despite the larger pool of respondents, that reported implementing or approving for implementation various cost-cutting strategies. For example, whereas 76% of respondents reported increasing fares or cutting service in the May 2009 survey, that figure was down to 59% in the March 2010 survey results. The proportion of transit systems that had implemented both strategies was 36% in the earlier survey and 28% in the latter. The data for survey participants that had increased fares was notably higher in the previous survey, at 63%, compared to 44% in the later survey. This observation is not meant to undermine the widespread implementation of measures to close budget gaps that occurred in the wake of the economic recession –

⁵ Because the reporting periods of the 2009 and 2010 APTA surveys overlapped by five months, from January through May 2009, the data in the later survey could not be utilized to confirm whether respondents had indeed implemented strategies multiple times.

more than eight out of ten transit agencies implemented a fare increase or cut service between January 2009 and March 2010, or were considering these actions in the near future. Rather, the higher incidents of implementation in the earlier survey may indicate the additional stress put on transit budgets as a result of skyrocketing fuel prices in 2008.

The March 2010 survey also provided additional details on transit agencies' cost-cutting actions related to staffing and employee benefits. The most common personnel actions, implemented by one in two transit agencies, were reducing the number of positions and freezing or reducing salaries for non-union employees, followed by implementing hiring freezes. About one-third of the transit agencies had to lay off workers, or had approved layoffs, between January 2009 and March 2010. A quarter of survey respondents had also implemented the strategies of decreasing employee benefits or mandating furloughs for non-union employees, or freezing or reducing the salaries of union employees. Generally, more transit agencies had implemented personnel actions for non-union staff compared to union staff.

Another trend demonstrated in the second survey results was the economic recession's more severe impact on larger transit agencies, those that provide 25 million trips or more each year. A higher proportion of large transit agencies experienced declining revenues: about 85% of larger agencies versus 60% of smaller agencies saw decreases in local and/or regional funding; and about 70% of large systems experienced declines in state funding versus 50% of smaller systems. A higher percentage of large transit agencies, nearly 60%, even suffered decreases in fare revenue compared to smaller agencies, of which about 45% did.

Accordingly, the larger transit agencies implemented cost-cutting strategies to a greater extent. More than six in ten large agencies had already implemented or approved service cuts or the transfer of capital funding to operations. More than one-half of large transit agencies had already reduced peak period service, raised fares, or used funding reserves, or had approved implementation of these strategies. About one-third of large transit agencies had also reduced geographic coverage of their service, compared to just one-tenth of smaller agencies.

Larger transit agencies also implemented personnel actions to a greater degree. Eight out of ten large transit agencies reduced positions, nearly twice the proportion of smaller agencies that used this strategy, and about seven in ten froze or reduced salary levels for non-union workers compared to less than half of small transit agencies that did so. The next most common staff-related strategies employed by large transit agencies were layoffs and hiring freezes; the proportion of large agencies that had implemented or approved layoffs was notably twice that of small systems. The survey results included seven transit agencies that had laid off 100 or more employees, four of which had exceeded 250 layoffs.

Perhaps the bigger transit agencies needed to employ more cost-cutting strategies to fill gaps in budgets that were larger to begin with. The 2008 study on the impact of high fuel costs on transit agencies did find that multi-faceted approaches were more effective in addressing budget problems. However, large transit systems also tend to serve bigger and denser communities, so higher numbers of transit riders were likely impacted by these transit agencies' actions in response to the economic downturn. The potential differences in community impacts, including the magnitude of impacts, related to the size of the transit agencies and the types of service provided were examined as part of this project's case study research.

March 2011 Survey Results

The 2011 APTA survey focused on the actions that transit agencies have taken in response to budgetary challenges, since January 1, 2010, or anticipate taking in the near future. Seventy-one percent of transit agencies have implemented or are considering service cuts since the beginning of 2010. Nearly half (47%) have implemented service cuts since January 1, 2010, and 28% are considering service cuts in the near future. A total of 58% of transit agencies have either increased fares since the beginning of 2010 or are considering this action in the future. Four in ten (41%) respondent agencies have recently implemented both fare increases and service cuts, or are considering both actions in the future.

Beyond raising fares and cutting services, many transit agencies indicated that they have sacrificed capital and/or reserve funds to address their operating budget constraints. A total of 46% have transferred funds from capital budgets to operations or are considering this action in the future. More than half (53%) have utilized reserve funds or are considering doing so.

Transit agencies have also implemented hiring freezes, stagnated salaries, conducted layoffs, mandated furloughs, or reduced employee benefits. Nearly one out of two (48%) respondent agencies indicated they have implemented hiring freezes or are considering this action. Almost two out of three (62%) transit agencies have implemented or are considering salary freezes for non-union employees. A total of 34% have conducted layoffs or are considering future layoffs. More than one out of five (22%) agencies have implemented or are considering furlough days for non-union employees, while 26% and 14% have reduced benefits to non-union and union employees, respectively.

The 2011 APTA survey also examined differences in impacts based on the size of the transit agencies' operations. In general, the number of agencies reporting decreases in local, regional, and state funding has declined since the 2010 survey. However, a greater percentage of larger transit agencies, those providing at least 25 million annual

trips, continued to face funding decreases compared to smaller agencies. Interestingly, a greater percentage of larger transit agencies also experienced an increase in local and/or regional funding since the beginning of 2010. Larger transit agencies were more likely to experience increases in fare revenue, 75% versus 40% of smaller transit agencies. This difference was attributed to the fact that a greater percentage of larger agencies raised fares during this time period.

The 2011 survey found that larger transit agencies have had to implement more cost-cutting actions than smaller agencies. Nearly three out of four (71%) larger transit agencies have implemented or approved service cuts since January 1, 2010, compared to 41% of smaller agencies. Fifty percent of larger transit agencies have implemented or approved reductions in peak-period service and 25% have reduced their geographic coverage area, compared to 41% and 10% of smaller agencies, respectively. At least half the larger agencies have implemented or approved fare increases (50%), transfers of capital funds to operations (54%), or the use of reserve funds (58%) since the beginning of 2010.

Larger transit agencies were also more likely to have implemented or approved internal policies as another cost-cutting measure. More than twice as many larger agencies (63%) than smaller agencies (30%) have implemented or approved hiring freezes since January 2010. Three out of four larger transit agencies have implemented or approved reductions in their number of positions, while nearly half (46%) have implemented or approved layoffs, compared to just 15% of smaller agencies. Finally, a greater percentage of larger transit agencies have implemented or approved salary freezes or reductions, 71% versus 51% for non-union workers, and 38% versus 24% for union workers.

New for the 2011 survey, transit agencies were asked about their capital funding constraints. Only 15% of respondent agencies reported an increase in capital funding. As a result of flat or declining capital budgets, 31% of agencies reported delaying vehicle acquisition. About one in five transit agencies delayed construction (21%) or delayed capital maintenance (20%) due to capital budget shortages.

The 2011 survey demonstrated that transit agencies continue to face funding challenges stemming from the economic downturn. As a result, many transit agencies have increased fares, cut service, and implemented other cost-cutting measures such as hiring freezes and decreasing positions. Capital budget constraints have also led to delays in vehicle replacement, capital construction, and maintenance of facilities. Anticipated rises in gas prices will increase operational costs and drive greater demand for transit, placing additional pressure on transit agencies' limited resources. In order to provide quality service while meeting the demands of increasing costs and ridership, transit agencies must be able to rely on stable and adequate funding sources.

Summary

The data collected from the three APTA surveys and the 2008 study on the impact of fuel prices on transit agencies demonstrated that strategies to deal with dramatically higher fuel costs and declining revenues due to the economic downturn were quite similar. Fare increases, service cuts, transferring funds for capital use to operations, and eliminating staff positions were the most commonly implemented cost-cutting strategies in response to the economic downturn. Several trends emerged from the survey results, including the majority of transit agencies experiencing declines in revenue, transit agencies' implementation of several strategies simultaneously, their implementation or consideration of implementing one strategy multiple times, and the recession's greater impact on large transit agencies.

The proportion of survey participants that faced decreases in local, regional, and state funding remained high over the near three-year period covered by APTA's surveys. The March 2010 and 2011 survey results showed the continued impacts of the recession, even after its official end in June 2009, on transit agencies. With two-thirds of transit agencies having implemented or approved service cuts for two consecutive years, individual passengers and communities have experienced the compounding effect of multiple service cuts as well as fare increases.⁶ While the percentages had decreased by 2011, one in four transit agencies was still considering future service cuts, fare hikes, and other actions including decreasing staff positions and employee benefits, salary freezes, layoffs, and use of reserves. These results give cause for concern about the longevity of the recent recession's impacts on transit agencies and subsequently the communities they serve. Three years after the recession ended, transit agencies' budgetary problems and actions to cut costs are still common headlines in local, state, and national news.

⁶APTA. (2011, August.) *Impacts of the Recession on Transit Agencies: 2011 Update*.

APPENDIX B

Research Work Plan

Appendix B

Research Work Plan

The first part of the research work plan involved identifying potential candidates for the case studies. Then the research plan outlined the methodology for collecting data and analyzing the case study findings. Both parts of the research methodology are described below.

IDENTIFYING TRANSIT AGENCIES AND COMMUNITIES TO RESEARCH

The first part of the process to identify potential case study candidates involved examining the respondents to APTA's recent surveys regarding the impacts of the recession and funding difficulties on transit agencies. APTA published the results of its update to the 2010 survey, *Impacts of the Recession on Public Transportation Agencies*, in July 2011. Between these two surveys, data is now available on the impacts of the economic recession on transit agencies, in terms of cuts to local, regional, and state funding, for two consecutive years.¹ Transit agencies also identified the various cost-cutting strategies that they implemented to meet budget shortfalls. The study team wanted to take advantage of the data already provided in these APTA surveys, and looked for transit agencies that had responded to both the 2010 survey and the 2011 update to identify the first set of potential case study candidates.

Of the 151 APTA members that completed the 2010 survey and the 117 respondents to the 2011 update, 79 transit agencies provided data regarding their financial difficulties and actions taken for two consecutive years. The study team selected potential case study candidates based on the:

- Size of the transit agency, by annual ridership;

¹APTA also conducted a related survey, *Challenge of State and Local Funding Constraints on Transit Systems: Effects on Service, Fares, Employment and Ridership*, in June 2009. While this survey was analyzed as part of the literature review, the study team relied more heavily on APTA's 2010 and 2011 survey results on the "Impacts of the Recession on Public Transportation Agencies" to determine potential case study candidates. The 2009 survey reported cost-cutting actions primarily in response to the rapid increase in fuel costs in 2008, while the 2010 and 2011 surveys better isolated the impacts of the recent economic downturn on transit agencies.

- Size of cuts in local and/or regional or state funding; and
- Actions taken to address budget constraints, with an emphasis on agencies that had already implemented service cuts or reductions in geographic coverage of service.

This subset of 79 transit agencies was categorized into large, medium, and small systems based on ridership. Large transit agencies were those that provided 25 million or more annual trips, as identified in the 2010 survey. The study team defined medium-size transit agencies as those providing more than 10 million, but less than 25 million annual trips, and small transit agencies as those providing fewer than 10 million annual trips. The data on ridership was primarily obtained from the transit agencies' National Transit Database Report Year 2009 profiles, where available, and from the most recent data available on their websites otherwise.

Within each size category, the study team highlighted the agencies that had experienced the highest decreases in local/regional and/or state funding. APTA staff had provided input that the places with medium and small size agencies may demonstrate the community impacts of service cuts and other actions related to funding difficulties more readily than large cities, which have more transportation alternatives available. Therefore the first set of potential case study candidates focused on medium- and small-size transit agencies, but still identified a few potential large transit agencies for case studies. The study team examined the responses to the APTA surveys regarding percentage changes in local and/or regional and state funding, and highlighted the agencies that had experienced the greatest funding cuts.²

Next, the study team looked at the actions that agencies had reported taking to address funding cuts, with an emphasis on agencies that had already implemented service cuts or reductions in geographic coverage of service. The data on other actions taken such as transfer of funds from capital use to operations, using all or a portion of agency reserves, and administrative actions related to staffing and employee benefits were also considered. However, a primary research objective is to examine the effects that significant decreases in transit services, due to the recent economic downturn, have on communities. Therefore the study team focused on transit agencies that had implemented service cuts, among other strategies to counter budget difficulties, as potential case study candidates.

The surveys had also asked agencies to report actions that had been approved, but not yet implemented, and future actions under consideration but not yet approved.

²For the medium-size agencies, approximately 30% decreases or more in any type of funding were considered significant; while for the small-size agencies decreases of 15% or more were considered significant.

The data on these types of strategies were also considered, but more weight was assigned to transit agencies that had already implemented actions, with the assumption that the local communities would be better able to report the impacts of these actions and discuss any alternatives that had been developed in place of transit services lost.

A set of potential case study alternatives was identified after this initial process. The transit agencies that have implemented service cuts or reductions in geographic coverage of service twice over the two-year period are included at the top of the list per size category. These criteria were also applied in identifying the few large transit agencies for potential case studies. The rationale for this criteria was that community impacts are likely greater where transit agencies have reduced service multiple times.

For the second part of the process to determine potential case study candidates, the study team reviewed the literature including news articles and online postings. The literature review served two purposes: 1) to review the press generated around service cuts and other actions of the “short list” identified in the initial set of case study candidates, and 2) to identify additional transit agencies that had recently implemented significant service cuts as potential case study candidates. For both the APTA survey candidates and additional candidates identified through online news, the study team highlighted places where local media portrayed larger, more fervent community reactions to proposed service cuts as better potential case studies. These online resources were helpful in identifying potential stakeholders to contact and interview regarding the community impacts of service cuts, in the event that the transit agency and community are selected as a case study for this research.

Since the APTA surveys did not collect data on the magnitude of service cuts that transit agencies had implemented, additional review of the literature helped fill this information gap, including details on the types of service cuts implemented (i.e., a percentage of service hours, or specific routes). Where local media covered the transit cuts proposed or implemented by the case study candidates identified through the APTA surveys, the study team also examined the levels of community response described in the media. Of the candidates identified during the first part of the process, the following were highlighted because online news and postings documented significant public outreach and community reactions regarding service cuts:

Large Transit Agencies

- Orange County Transportation Authority (OCTA), Orange County, CA
- Greater Cleveland Regional Transit Authority (GCRTA), Greater Cleveland, OH

Medium Transit Agencies

- Transit Authority of River City (TARC), Greater Louisville, KY
- SamTrans/Caltrain, San Mateo County, CA
- Kansas City Area Transportation Authority (KCATA), Kansas City, MO and KS

Small Transit Agencies

- Riverside Transit Agency, western Riverside County, CA
- Laketran, Lake County, OH
- Citibus, Lubbock, TX

Additional transit agencies were also considered as case study candidates where 1) the literature described significant and/or multiple service cuts, and 2) numerous online news articles and user postings described individual and community impacts that had already occurred or were anticipated as a result of service cuts. These additional case study candidates included:

Large Transit Agencies

- **Metro Transit, St. Louis, MO** - In March 2009, after the defeat of a measure to increase the sales tax to help fund transit, Metro cut its bus service by 44%, its light rail service by 32%, and its paratransit service by 15%; 2,300 of Metro's 9,000 bus stops were no longer served. Fares were also increased, and a quarter of the workforce - 600 employees - was also laid off. Residents in the area had to adjust to these reduced service levels and other impacts for almost 1.5 years before some services were restored, after another measure to increase the sales tax to support transit was passed. The efforts to pass this measure included broad support from businesses, healthcare providers, educational institutions, and religious groups.
- **Port Authority of Allegheny County, Allegheny County, PA** - The Board originally proposed the largest service cuts in the agency's history, a 35% decrease leaving more than 50 communities without service, due to inadequate state funding. However the reduction plan was amended to cut 15% of bus and light rail service in March 2011. Significant local media coverage of the proposed cuts and initial impacts on riders is available online. The union representing bus drivers led community protests to the cuts, and community leaders reacted to the cuts.

Medium Transit Agencies

- **Pierce Transit, Pierce County, WA** – Pierce Transit has cut service by 43% in the last several years (35% cut by October 2011) due to funding issues, including multiple service cuts within a calendar year. A measure to increase the sales tax to help fund transit was rejected in February 2011, and an accident at its natural gas refueling station has added to financial woes. Pierce Transit has worked with neighboring transit agencies to determine the impacts of service cuts on their riders too. The agency has conducted significant public outreach.
- **Community Transit, Snohomish County, WA** – Community Transit cut service by 15% in 2010, including eliminating Sunday and holiday service. Proposes a similar decrease in hours of service for February 2012, which will be another 20% service cut. In 2012, the agency would have cut one-third of its services and its workforce, compared to the beginning of 2010. Community Transit has conducted significant public outreach, including engaging riders in a Transit Values Exercise regarding the upcoming 2012 cuts and launching a Buy Local for Transit campaign. The agency has utilized social and electronic media in its approach to the second round of service cuts.

Small Transit Agencies

- **C-TRAN, Clayton County, GA** – The only transit system in the country known to have shut down completely in March 2010, as a result of the impacts of the recession. Eight thousand four hundred daily riders were stranded, though one-third were estimated to be able to use Georgia Regional Transportation Authority express buses. At least two private providers began service on former C-TRAN routes, though one has already ceased operation in July 2011. Since the shutdown of C-TRAN, Clayton County residents have voted in favor of joining MARTA, though County Commissioners must also vote and approve this measure before transit service can be provided.

The study team referenced the APTA surveys to determine if any data regarding budget cuts and associated actions were available for these additional candidates. (Community Transit, Pierce Transit, and Port Authority completed the 2011 survey, and Metro Transit completed the 2010 survey.) Table B-1 provides the NTD 2009 statistics for these additional candidates.

Table B-1: Additional Potential Case Study Candidates from the News Review

Transit Agency	Modes of Service Provided*	Vehicles Operated in Maximum Service	Annual Unlinked Trips	Service Area Population	Urbanized Area Population
Metro - St. Louis	Bus, Demand-Response (DR), Light Rail	335	52.7 million	1.2 million	St. Louis, MO-IL: 2.1 million
<p>Cost-cutting Strategies Reported for 2009:</p> <ul style="list-style-type: none"> ▪ Reduce bus service by 44%, MetroLink service by 32%, and Call-A-Ride service by 15% ▪ Increase fares by \$0.50 ▪ Lay off 600 workers (25% of its workforce) <p>Service Restored in 2010 after Sales Tax Approved to Support Transit:</p> <ul style="list-style-type: none"> ▪ Increase MetroLink service by 25% ▪ Restore 20 bus routes ▪ Add 125 new employees 					
Community Transit	Bus, DR, Vanpool	640	11.4 million	730,405	Seattle, WA: 2.7 million
<p>Cost-cutting Strategies Reported:</p> <ul style="list-style-type: none"> ▪ 2010 cut service by 15% ▪ Another service cut in 2012, engaged riders in Transit Values Exercise, launched Buy Local for Transit campaign ▪ By 2012, will have cut service by 30% and eliminated 1/3 of its workforce compared to early 2010 (<u>Passenger Transport</u> article) 					
Port Authority of Allegheny County	Bus, DR, Inclined Plane, Light Rail	1,156	68.7 million	1.4 million	Pittsburgh, PA: 1.8 million
<ul style="list-style-type: none"> • March 2011, reduced service by 15% to address loss in state funding (29 routes eliminated and weekday service decreased on 37 other routes) • Also closed a bus division • Eliminated 270 jobs including 180 layoffs 					
Pierce Transit	Bus, DR, Vanpool	491	15.6 million	754,700	Seattle, WA: 2.7 million
<p>Cost-cutting Strategies Reported:</p> <ul style="list-style-type: none"> ▪ Three rounds of layoffs in three years (2011 round was the largest), 31% of layoffs at management level, 27% at administration level, 18% involving front-line jobs ▪ Reduce bus service hours by 20% in June 2011 and another 15% in October 2011 – a total of 35% in three years 					
CTRAN - Clayton County	Bus, DR	27	2.0 million	263,900	Atlanta, GA: 3.5 million
<p>Cost-cutting Strategies Reported:</p> <ul style="list-style-type: none"> ▪ Eliminate service on weekends ▪ Fare increase to \$2 and temporary surcharge of \$1.75 <p>Notes: October 2009 Clayton County Commission voted to end CTRAN service in March 2010 due to budget pressure. In January 2011, ClaytonCounty voted to join MARTA and invest new sales tax in transit.</p>					

*Includes directly operated and purchased transportation.

Sources: All data is based on 2009 National Transit Database Reports, except for CTRAN, for which the most recent report was 2008.

Recommendations

All of the transit agencies and their communities highlighted above (the subset from the initial process and the additional candidates where the literature review documented significant public outreach efforts and strong community reactions to service cuts) have experienced severe transit service reductions and would serve as good case studies for this research. The study team identified several community stakeholders to potentially interview based on the online literature. Because this project has a limitation to the resources available, the list of candidates was narrowed down to five case studies. Pending the transit agencies' willingness to participate and approval by the study's TCRP panel, the study team recommended the following transit agencies and communities as case studies on account of the variation in size, geography, types of services provided, and community stakeholders that reacted to drastic service cuts:

Large Transit Agencies

- 1) **Metro Transit, St. Louis, MO** (Bus, demand-response, and light rail; Metro cut its bus service by 44%, its light rail service by 32%, and its paratransit service by 15%; community adjusted to service cuts for 1.5 years before a second measure to increase the sales tax to support transit was passed, with broad support from various community entities)

Alternates: *OCTA, Orange County, CA* (Bus, demand-response; 20% cuts to service in 2009 and 2010; multiple service cuts within a year; various advocacy groups active)

Community Transit, Snohomish County, WA (Bus and demand-response; cut service by 15% in 2010, eliminated Sunday and holiday service; another 20% service cuts proposed for February 2012; significant public outreach, including Transit Values Exercise and Buy Local for Transit campaign; used social and electronic media)

Medium Transit Agencies

- 2) **SamTrans/Caltrain, San Mateo County, CA** (Bus, demand-response, commuter rail, employer shuttles; cuts to Coastside bus service and Caltrain; community stakeholders include Hispanic riders, Silicon Valley Leadership Group, Friends of Caltrain)
- 3) **Pierce Transit, Pierce County, WA** (Bus, demand-response, and vanpool; cut service by 43% in last few years including multiple cuts in a year; significant layoffs; extensive public outreach; planner willing to serve as contact)

Alternates: *TARC, Greater Louisville, KY* (Bus, trolleybus, and demand-response; February 2010 eliminated five services and reduced service on 17 routes; June 2010 proposed more cuts, officials modified cuts after significant public input)

KCATA, Kansas City, MO and KS (Bus and demand-response; 2009 service cuts; City used tax revenue purposed for transit to plug other holes in its budget)

Small Transit Agencies

4) C-TRAN, Clayton County, GA (Bus and demand-response; only transit system in the country known to have shut down completely; 1.5 years has passed to capture community impacts; two private services began in place of popular C-TRAN routes; broad support for Clayton County to join MARTA)

5) Laketran, Lake County, OH (Bus, demand-response, and commuter bus; eliminated all evening and Saturday service for fixed-route and paratransit; state budget made further cuts to transit; persons with disabilities, students, access to jobs affected)

Alternates: *Citibus, Lubbock, TX* (Bus and demand-response; 2010 proposal to cut service scrapped; 2011 proposal to cut service hours and increase headways drew heated public response; riders willing to pay more taxes before raising fares or cutting service)

Riverside Transit Agency, western Riverside County, CA (Bus, trolleybus, and demand-response; multiple service cuts per year due to lower local sales tax revenue; online coverage of response by advocacy groups)

The list of potential case study candidates, along with the draft research plan for carrying out the case studies, was reviewed and approved by the study's TCRP panel before the study team commenced arranging the logistics to conduct the research. In reaching out to the fifth transit agency to participate as a case study, the study team faced difficulties finding an agency to agree to participate. Seven different agencies were contacted, and the Regional Bus Authority serving Hammond and other parts of Northwest Indiana graciously agreed to participate, even as the agency approached a deadline for shutting down service on June 30, 2012.

DETERMINE DATA TO COLLECT

The study's given objective to examine the community impacts of transit agencies' actions to temper financial constraints translated into several research questions:

- What are the impacts on communities of different sizes?
- Do these impacts vary by transit mode?
- How have communities responded to cutbacks in transit service?
- What are the implications for other community organizations and the provision of new transportation services?

Based on these research questions, the study team proposed to collect the following data for each case study:

- Size of the transit agency, by annual ridership or service area
- Size of the urban area, by population, to be categorized as small, medium, or large
- Modes of transit service provided, such as bus, light rail, heavy rail, and paratransit services
- Levels of service provided, such as days, span, and frequency of service
- Magnitude of budget reductions, by percentage, during specific time periods, by months or years
- Strategies that transit providers have employed as a result of financial constraints, including the extent of actions taken
- Communication processes that transit providers have used to inform the community about financial constraints and related changes in services
- Potential community organizations and entities that transit service cutbacks may affect, such as city governments, social service agencies, businesses, employers, economic development interests, educational institutions, healthcare providers, and tourism and recreation interests

- Ways in which community organizations and entities have been impacted by transit service cutbacks and other changes related to transit agencies' financial difficulties (i.e., clients can no longer access social services, or employees must find alternative transportation for commute)
- Any actions, both current and anticipated, that the community stakeholders have taken in response to drastic service cuts.

DEVELOP THE INTERVIEW GUIDES

The interview guide was designed to ascertain the data pieces that the study team could not identify as part of their preparatory work. This was a particularly important component of the methodology since it guided the study team in collecting the primary data for this research in a consistent and efficient manner. Two interview guides were proposed to collect slightly different information from transit agencies and from community organizations and entities. Based on the data needs described above, the study team proposed the following questions to guide the interviews with transit providers:

First, the data regarding the size of the transit agency and modes and levels of service provided would be verified and any updates noted. Then the questions in Table B-2 were asked.

Table B-3 displays a sample matrix (modeled after APTA's surveys on the impacts of the recession on transit agencies) that the study team used to help collect and summarize information on strategies from the transit providers. Since many of the case studies provided this information through the APTA surveys, the study team filled in the matrix ahead of time and confirmed with the providers during the interview. The study team focused on getting more details per strategy, such as whether it had been implemented once or multiple times, the magnitude of service cuts, or specific geographic areas that have lost service.

The study team also tried to capture whether community impacts varied with the magnitude of service cuts and other actions. Table B-4 includes the proposed interview guide for community stakeholders.

TableB-2: Interview Guide for Transit Agencies

1. What has been the magnitude of budget reductions, by percentage or dollar amounts, caused by the economic downturn in the last few years? Please note the specific time periods.
 2. What types of strategies has the transit agency considered in response to budget shortfalls?
 3. What strategies has the transit agency actually implemented, or will soon implement, to reduce transit costs, raise revenues, and/or garner additional funding sources?
 - Have any strategies been implemented more than once?
 - Have any strategies been implemented at different magnitudes? (i.e., cutting service hours by 10% or 20%)
 4. Regarding those strategies that have been implemented, did the transit agency successfully reduce costs or obtain the anticipated cost savings?
 5. How has the transit agency informed riders and community entities about changes in transit services related to financial constraints?
 - Did the transit agency provide opportunities for riders or community entities to give input on the proposed changes?
 - What type of input, if any, did the transit agency receive from stakeholders?
 - Did the input affect the transit agency's decisions about implementing cost-cutting strategies?
 6. What impacts on transit patrons and community entities has the transit agency seen or heard about, or anticipates, as a result of implementing these strategies?
 - Which community organizations or entities have/will transit service cutbacks affected/affect? (i.e., city governments, social service agencies, businesses, employers, economic development interests, educational institutions, healthcare providers, and tourism and recreation interests)
 - What actions has the community taken in response to drastic service cuts?
 - Were the community impacts different after implementing strategies multiple times? (i.e., raising fares three times, or cutting back service first through decreased headways and then through shorter spans of service)
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Table B-3: Strategies Matrix for Transit Agency Interview

	<i>Transit Agency X Decision-Making Process</i>				
<i>Strategies to Reduce Costs</i>	Already Implemented, or Approved for Implementation Once	Considering Implementing in Future for First Time	Already Implemented Previously, Has Implemented or is Approved to Implement Again	Already Implemented Previously, Considering Implementing Again	<i>Details</i>
Fare increases					
Service cuts					
Transferred funds from capital use to operations					
Staff reductions and other management cuts (salary freeze, hiring freeze, cuts in staff benefits)					
Seeking new dedicated funding source					
Use of reserves					
Other:					
Other:					

Table B-4: Interview Guide for Community Stakeholders

1. Who does your organization serve or represent? How does transportation impact your mission and daily activities?
 2. How did your organization learn about changes in transit services (related to financial constraints)?
 - Did the transit agency provide opportunities for you to give input on the proposed changes?
 - What type of input, if any, did you provide to the transit agency regarding the proposed changes?
 3. What impacts has/does your organization and its constituents felt/anticipate as a result of cutbacks in transit services and other transit changes?
 - Were the impacts different when the transit agency implemented changes under different circumstances? (i.e., when fares were raised the third time as opposed to the first time, where service was cut in different geographic areas, or when service was cut for specific days or times of the day)
 - Can you provide any data as evidence of the impacts your organization has experienced as a result of transit service cutbacks and other changes?
 4. What actions has your organization taken in response to drastic service cuts?
 - How has your organization changed in order to implement these actions?
 5. What have been the positive and negative experiences associated with transit service cutbacks and other transit changes?
 6. Do you know other community organizations or entities that have been, or you anticipate will be, affected by transit service cutbacks? (i.e., city governments, social service agencies, businesses, employers, economic development interests, educational institutions, healthcare providers, and tourism and recreation interests)
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Some overlap exists between the interview guides for transit agencies and community entities, in terms of the perceived community impacts of changes in transit services. The questions geared toward community entities delved into more detail on the community effects of transit service cutbacks and other changes, since only these stakeholders can provide information on the specific ways that their constituents have been impacted. The study team collected information on any actions that the community organizations have taken in response to transit service cuts.

It is important to note that these questions provided a framework for the study team to collect data, and further follow up questions will be asked where needed. This fluid approach to data collection allowed the study team to obtain more insight into the complex and little known issue of the community effects of transit service changes during the ongoing economic downturn.

COLLECT PRELIMINARY DATA AND SET UP INTERVIEWS

The study team compiled some of the data for the case studies ahead of time including the:

- Size of the transit agency, by annual ridership or service area;
- Size of the urban area, by population, to be categorized as small, medium, or large;
- Modes of transit service provided, such as bus, light rail, heavy rail, and paratransit services;
- Levels of service provided, such as days, span, and frequency of service; and
- Types of strategies implemented or considered as a result of financial difficulties related to the recession.

The study team was also responsible for setting up the interviews with the transit agencies and community stakeholders. The first meetings to set up were those with the transit providers. When the study team called to set up this meeting, they also asked the transit providers to recommend community organizations, known to use transit services, to interview for this study.

The study team tried to arrange three to five in-person interviews with community stakeholders; some were one-on-one, while others involved interviewing with multiple entities at once. If any existing groups of organizations, such as a

regional council of human service agencies, would be appropriate to provide input on the community effects of transit service cuts, then the study team made an effort to meet with these groups during the on-site visit. Depending on the number of community organizations and entities recommended, the study team followed up with additional community entities through phone interviews. Each case study was anticipated to include one interview with the transit provider(s) and three to five interviews with community entities (possibly more if a coordinated group of organizations is involved).

In arranging these interviews, the study team emailed the interview guide to the interviewees ahead of time, so that the transit agencies and community organizations could prepare their responses and relevant data.

Conduct On-Site and Telephone Interviews

The study team sent teams of two to conduct one on-site visit, which lasted two to three days, per case study. A lead interviewer was accompanied by a staff member to assist in carrying out logistics and documenting the interviews. During the on-site visit, the study team interviewed the transit provider(s) and held three to five interviews with community organizations and entities. If the interviewees recommended additional community entities to provide input for the study, the study team contacted these entities after returning from the on-site visit, and conducted phone interviews. Both the in-person and phone interviews were anticipated to take 45 minutes to an hour. The study team documented the discussions in the interviews through electronic notes.

Create Case Study Profiles

Once the interviews were completed, the study team reviewed and analyzed the data collected per case study. The study team developed a case study profile for each of the five transit agencies and their communities that summarized the transit strategies implemented during the economic downturn and the reported community impacts. These profiles not only provided straightforward overviews of the data collected per community, but the consistent format for data collection and presentation also facilitated the study team's assessment and conclusions in the next tasks.

A sample case study profile is included in Table B-5.

Table B-5: Sample Case Study Profile for TRANSIT AGENCY X

*A Case Study of A [Small/Medium/Large] Transit Agency and the
Community Impacts of Cost-Cutting Actions*

Agency Characteristics:

Service Area: [geographic description and service area population]

Types of Service: [transit modes]

Number of Vehicles:

Annual Ridership:

Organizational Structure:

Annual Budget:

Funding Sources:

Community Characteristics:

Urbanized Area: [include population]

Budget Reductions:[Specify time period]

Strategies Implemented or Approved for Implementation: [in response to budget reduction during given time period]

Consequent or Anticipated Impacts on Community: [Specify community groups or population segments impacted, provide quantifiable impacts where available]

Community Actions in Response to Strategies: [i.e., coalitions formed, campaigns to pass new taxes to support transit]

Organizations and Entities Interviewed:

Notes on format of case study profile:

- *The information above could be captured for several different time periods, each in a separate text box, which could be useful for seeing the sequence of budget reductions, strategies implemented, and additional or even cumulative community impacts.*
 - *Another option would be to organize the data by strategy, listing when it was implemented and its associated community impacts. This format would be useful for discerning the impacts of different strategies.*
 - *Yet another option is to list all strategies together and all community impacts separately. This format may make sense if the various strategies resulted in many of the same community impacts. The community impacts could be differentiated by type or population segments affected (i.e., economic or equity impacts, or older adults or commuters affected by the strategies).*
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SUMMARY

Though the case studies themselves had different characteristics, such as transit modes provided and sizes of communities, this plan outlined a methodology to consistently collect and analyze information on the cost-cutting strategies and community impacts that have occurred or are anticipated as a result of budget difficulties in the recent economic downturn. This plan aimed for comparable data to be collected from the different communities to facilitate cross-case analysis and the development of research conclusions.

