Report from an Interdisciplinary Case Study on a Public Transit System in Crisis

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Abstract

This article describes how a public transportation system in a mid-sized southern state was assessed in regard to its adequacy in providing transportation services. The article begins by discussing the trends in current transportation patterns, funding of public transit, and special populations served by public transit. A case study is then presented of a transit system that was experiencing what has become a typical problem for similar transit systems across the nation: intensified public and political pressures caused by funding cuts and unfunded mandates from the federal government. Findings from the case study are then provided along with recommendations for change. Finally, the outcome of the study is presented.

Introduction

The personal automobile continues to be the favored mode of transportation in the United States, in spite of public support for mass transit. A recent survey showed that about 10 percent of Americans use public transit regularly (Larwin 2005). Thus, the vast majority of Americans rely on their personal automobiles to meet their transportation needs. Factors that have resulted from increased reliance on automobiles include the expansion of urban boundaries, urban planning that discourages use of public transit, rising numbers of those who own a car, a
readily available freeway system, and long commuting trips to areas where there is no public transit service. However, there are those who simply do not have access to an automobile and who rely solely on public transit to get them to and from work, medical appointments, child care facilities, and leisure activity sites.

In large metropolitan areas with well-utilized public transit systems, riders are more diverse in regard to socioeconomic status. However, in small to mid-size cities, riders tend to be predominantly poor and live in the innercity. In regard to planning, transit operators across the United States are increasingly pressured to provide transportation services to those with automobiles who live in outlying areas. This emphasis on commuter-oriented express (both bus and rail), in many respects, directly conflicts with transportation services that are increasingly needed in the innercity. The working poor are particularly at risk in that adequate and reliable transportation is seen as a primary barrier to self-sufficiency (Perry-Burney and Jennings 2003), in addition to getting and keeping a job (Brabo et al. 1997).

Conditions for Crisis

In the United States, public transit service is subsidized to a great extent. However, since 1980 Congress has increasingly reduced transit funding, leaving greater fiscal responsibility on state and local governments for funding public transit services. Additionally, the Americans with Disabilities Act (ADA) placed unfunded mandates on local transit, which were required to provide door-to-door service for those who were disabled. Transit officials also had to expand their fleet of small buses to accommodate this mandate or re-equip existing buses for easier access. More stringent federal emissions regulations required that many buses be replaced with more energy-efficient ones.

When combined, these factors have placed a great deal of pressure on local governments to continue providing quality services, while at the same time experiencing cuts in funding. In several areas of the United States, transit authorities, with support from state legislatures and local government leaders, have attempted to offset these funding cuts with various combinations of state funding, motor vehicle taxes, and the collection of local taxes directed specifically for transit (Chan et al. 2003). The following is a case study of one such public transit system that found itself at the crossroads of having to make significant changes in order to continue offering high-quality and reliable transit services to the population it served. In
many respects, this case study reflects the realities that are faced by several transit systems in small and mid-sized cities across the United States.

**Case Study Background**

In February 2003, a Pulaski County (Arkansas) judge, in conjunction with the mayors of Little Rock, North Little Rock, Maumelle, and Sherwood and the Central Arkansas Transit Authority (CATA) board president, sent a letter to the University of Arkansas at Little Rock (UALR) chancellor requesting that the university conduct an analysis of the adequacy of transit service provided by CATA. Their specific concerns focused on issues of affordability, maintaining standards of service, financing, governance, and future developments in regard to CATA.

In April 2003, the UALR chancellor convened a 10-member multidisciplinary task force comprising those with expertise in business, public administration, organizational design, engineering, finance, communication, social work, marketing, law, political science, and urban studies.

**Central Arkansas Transit Authority**

**History of Structure and Governance**

From 1950 to 1972, the transit system in the Little Rock area was privately owned and operated. During this period, three private entities attempted to make a profit on transit operations and failed. A 1971 study recommended that the transit system shift to public ownership under the direction of a regional authority. Area leaders formed a transit policy board (Metroplan), made up of elected officials from Pulaski and surrounding counties, and in 1972 the Central Arkansas Transit Authority (CATA) began operations as a publicly-owned entity (Chan et al. 2003).

In 1986, Pulaski County, along with the cities of Little Rock, North Little Rock, Cammack Village, Maumelle, Sherwood, and Jacksonville (Jacksonville withdrew in 1987) entered into an Interlocal Agreement that established CATA in its current form. The agreement was deemed necessary because these local governments were being asked to infuse increasing amounts of money into CATA and wanted more of a say in the operations. Additionally, at the time it was determined that CATA was not being managed or supervised effectively as a transit operation (Chan et al. 2003).
The Interlocal Agreement determined that CATA would be governed by a 13-member board of directors whose members would be appointed for four-year, staggered terms by the six participating area governments that oversee CATA. Board membership is representative of the funding percentage by each participating government. As the largest financial contributor at the time of this study, Little Rock had five members appointed by the Little Rock board of directors, two of whom were City employees. Three CATA board members were appointed by the mayor of North Little Rock, one of whom was a City employee, and two were appointed by the Pulaski County judge, one of whom was a County employee. Finally, three board members were appointed by the mayors of the three additional communities that CATA served, one of whom was a City employee at the time of this study (Chan et al. 2003).

History of Funding and Finance

Until the 1970s, federal funds accounted for up to half of operating funds. Starting in 1984, funds were reduced, and then in 1990–1991 there was a total withdrawal of federal operating funds for public transit. CATA, along with transit authorities across the nation, was faced with the dilemma of finding alternative sources of funding. Among the options were taking a portion of highway revenues and applying them to local transit, creating a dedicated funding source, and/or creating a combination of state and local taxes, in addition to fares.

In regard to securing dedicated funding sources for transit, several states have gone to levying sales taxes (Las Vegas; New York City Transit; Mass Bay Transit, Massachusetts), property taxes (Bay Area Rapid Transit, California; New York City Transit), and fuel taxes (Metropolitan Transit, Tennessee; San Diego Transit). In regard to local dedicated funding sources for public transit, several cities have implemented sales taxes (Foothill Transit, Los Angeles County; Norwalk Transit, California), property taxes (Birmingham-Jefferson Transit, Alabama; Orange County Transit, California), and fuel taxes (Los Angeles County Metro; Washington DC Metro) (Federal Transit Administration 2006).

In CATA’s case, funding at the local level was established by a mileage formula within the 1986 Interlocal Agreement. Contributions were based on revenue miles, resulting in Little Rock at 73.29 percent; North Little Rock, 18.64 percent; Pulaski County, 7.09 percent; and Maumelle, Sherwood, and Cammack Village all less than 1 percent. Due to operations and capital expenditures, the local governments grew from 1986 to 2002. During that time, Little Rock’s appropriations to CATA grew from $2 million to $4.5 million in 2001. Fiscal crisis and deficits
prompted reduced service in 2002 and 2003. At the time of this study, 78 percent of CATA funds were obtained at the local level, 20 percent were derived from fares (farebox revenue totaled $1.3 million), and approximately 2 percent came from state revenues (Central Arkansas Transit Authority 2002).

Additionally, the ADA created unfunded mandates on local transit to provide door-to-door service for the disabled. A large proportion of funds was needed to equip buses for increased accessibility for those who had disabilities. Finally, tighter federal air emission standards required that CATA replace its fleet of buses to meet the new standards.

As a result of a funding crisis, in 1993 voters of Little Rock adopted a half-cent sales tax earmarked, in part, for public transit. This was a particularly important development, especially since CATA receives a small percentage of its operating budget from the State (Arkansas ranks last among all states in transit spending.). The increased tax revenue was distributed to the general funds of participating cities, where transit funds would compete with police, fire, and solid waste disposal services. During each yearly budgetary session, CATA was placed in the position of lobbying local government leaders for its share of the funds. CATA became engrossed in a year-to-year struggle to maintain even minimal transit services. As operating costs have increased dramatically over the past several years, this process had become quite contentious (Chan et al. 2003).

CATA responded to fiscal stress by reducing its staff (CATA had the smallest professional staff of all comparable systems studied) and cutting back service hours through route contraction. A reduction in service, along with the publicized budget battles, resulted in deterioration of the public’s image of and trust in the public transportation system.

**Demographics, Current Operations, and Rider Profile**

At the time of this case study, CATA had 45 large buses, 10 small buses, and 18 vans in daily use. The authority provided 21 regular fixed-routes, 10 express routes, and paratransit services. CATA served 8,000 to 9,000 riders per day, of which almost 60 percent were employed full-time, another 15 percent were employed part-time, and 8 percent were students. Thus, 83 percent of CATA consumers were economically active outside the home or were students in preparation for work life.

CATA’s standard of bus frequency, regardless of day or whether peak/off peak hours, is that there should be one bus every 30 minutes at designated stops. In
2002, however, a number of weekday buses typically required more than 30 minutes to make the route.

The income of CATA riders was low, with 56 percent making less than $20,000 a year. Those who had incomes between $10,000 and $14,999 represented the highest percentage of riders. Only 13 percent of riders reported income of $40,000 or more. Those who used the bus seven days a week had lower incomes than those who used the bus five or six days a week. Seven-day riders were thus more transit dependent as a result of their low incomes. Seventy-two percent of riders were above the age of 31, and a large percent (73%) were African American. More than 80 percent of CATA riders lived in households with no car (Central Arkansas Transit Authority 2002).

**Case Study**

**Participants**

Six bus riders and 53 public transit stakeholders (community leaders, CATA board/staff members, and area experts on public transportation) participated in the case study.

*Public Transit Stakeholders.* This group included Little Rock City board members, CATA staff and board members, area mayors, the executive director of Metroplan, the Little Rock City manager, and several area experts on transportation and the poor.

Experts on services to the poor included one executive director of a public service agency that works on behalf of the poor, three case managers from this same organization, and one executive staff member from the Department of Human Services.

*Bus Riders.* Riders who took part in this case study comprised daily consumers of CATA. They included underrepresented minorities, those economically disadvantaged who were currently employed, and long-time users of the CATA system. Participants in this group included two men and four women. There were four African Americans and two European-Americans. Two members were daily bus rides at the lower end of the economic scale (working class at a service industry pay scale). Four participants had physical disabilities, were enrolled in programs at Goodwill, and were receiving assistance to help them become more independent and self-reliant through job training, job placement, or life skills development.
Data Collection
Information for the case study was collected over a period of five months. The task force reviewed previous reports and surveys that involved CATA and its operations, conducted structured interviews, and performed an analysis of CATA and its operations compared to other transit systems in comparable-size cities. Participants were interviewed either face-to-face or within the context of a small group. A set of structured interview questions was developed by task force members to achieve uniformity in information and to assure that important themes were adequately captured by all participants who were interviewed.

Findings and Recommendations
Findings from this case study were organized into three separate categories: (1) funding and structural factors, (2) governance, and (3) operational conditions.

Funding and Structural Factors
A consistent theme that emerged from the case study was the funding crises in public transit. At the time of this case study, CATA was struggling to meet its already-reduced services and had no anticipated funds to expand services in needed areas. From its findings, the task force recommended two strategies: (1) seek additional funding for current operations by securing a countywide hotel/motel lodging tax of $1 per bed per night and (2) mount a campaign to pass a countywide, one-fourth cent sales tax dedicated to transit in the area. It was anticipated that such funding would act to secure a dedicated funding source for CATA and put an end to the yearly budget battles. Such funds would then allow CATA to not only fund its current operations more predictably and autonomously, but also would allow the operation to grow and develop as a public system. Ending the yearly budget battles, which are publicized, would create conditions where CATA could begin to rebuild its public image as a reliable transportation alternative.

Governance
A common theme that emerged from the interviews with those familiar with the structure of the CATA board was that its composition was problematic. The current structure of having City and County employees occupying key positions on the CATA board was perceived by participants as being a conflict of interest. Several participants believed that the current structure focused more on the status quo of service delivery and was more maintenance versus leadership oriented. From these findings, the task force recommended that City and County employ-
ees should not serve as CATA board members. Instead, it was recommended that the board be restructured to include a mix of elected officials and other residents who have no major governmental or public agency affiliation. The task force anticipated that this change in composition would build a more independent and more regionally focused board that could effect change (Chan et al. 2003).

The case study also found that transit in Central Arkansas had outgrown the conditions present when the 1986 Interlocal Agreement was formed. The task force recommended that, in its place, a Regional Transit Authority be established. The authority would be governed by a board consisting of the mayors and the county judge. The Interlocal Agreement would create a legal entity separate from the previous jurisdictions. The authority would have the power to issue revenue bonds, but would not have an independent authority to tax. The Regional Transit Authority would be responsible for operating a transit system that satisfies the basic needs of equity, accessibility, and special needs, as well as for planning economic development, land use, and work access that is securely connected to transit. Decisions regarding transit would not be made in isolation, but rather as an integrated part of regional development (Chan et al. 2003).

**Operational Conditions**

Findings from this component of the case study were obtained primarily from bus riders and local experts on transportation and the poor. Both riders and experts perceived a lack of adequate service for those working shifts and nontraditional work hours in locations where no public transportation is available or is limited.

All the participants in this group were aware that major growth was occurring in the western region of the city where bus service is limited. In many instances, social service providers and case managers had little trouble getting jobs for their clients, but had great difficulty getting them to and from these jobs. Bus rider participants expressed overall distrust in public transit. They were acutely aware of services being cut and had no confidence that the routes they currently relied on, most particularly on weekends, would continue. Other barriers to adequate transportation expressed by riders were not living near a bus route, limitations in the number and frequency of routes, limitations in the hours and days of operation (limited on Sundays), and difficulty in trip chaining.

Based on these findings, the task force recommended that a reverse-commute service be added to assist those dependent on transit to reach work in suburban fringe areas. The task force also proposed expanded paratransit services for dis-
abled riders and urged CATA to begin working with major employers to attract and retain employees who rely on public transit. A cost feasibility analysis would be needed to justify the implementation of these recommendations.

Outcome of the Case Study
On September 7, 00, the Metroplan board of directors approved a final draft of METRO 2030, the region’s federally mandated long-range transportation plan. METRO 2030 was built on previous efforts that produced METRO 2020 in 1995 and METRO 2025 in 2000. The policies put forth in METRO 2030 represent a series of strategies that determine the region’s planning and transportation direction. In regard to public transit, the plan recommended that new funding sources be identified and developed with the goal of doubling the size and service of the bus transit system. Longer range plans included bus rapid transit, light rail, or commuter rail systems. The plan also called for proposals for dedicated local funding for transit projects. METRO 2030 recommended retaining current fixed routes, adding more routes, increasing frequency of routes, extending express service from Little Rock to West Little Rock, extending service hours, and providing Sunday service. The plan also included expansion of paratransit services over the planning period. In addition, during the planning period, funding for CATA would increase from $307 million to $758 million. The additional $451 million represents 2-1/2 times more service and service hours when compared to existing transit service. The additional funding is expected from a .25 cent local option sales tax levied in Pulaski County within the first five years of the plan. Such a strategy would require the referral of the tax to voters by the Pulaski Quorum Court, in addition to a successful campaign to gain voter approval (Metroplan 2005).

Conclusions
It is axiomatic that the success of an assessment on any organization and the services it provides lies in the utilization of its recommendations by its stakeholders. The findings and recommendations from this case study were presented to all the stakeholders mentioned above and to the general public. It was encouraging to find that several of the central recommendations (primarily around service delivery and funding) were reflected in Metroplan’s METRO 2030 final draft.

As evidenced in this case study, no single solution will solve the problems related to public transit. Public transportation has become, in most metropolitan areas,
conceptualized as a social service for the poor. To be productive participants in society, those who are economically disadvantaged must have access to reliable transportation that gets them to and from work every day. There is increasing pressure placed on those who rely on government subsidy to seek employment, and there are significant barriers to getting and keeping jobs for the poor. As these pressures mount, it is imperative that communities work toward improving the reliability and availability of public transportation. Any effort toward significant and lasting change must involve the entire community in a coordinated effort that focuses on several factors simultaneously. In an effort to bring about substantial change in services to the poor, organizations, such as the one presented in this article, must be assessed in such a way that considers the complex array of internal and external factors that impact that particular organization and the services it provides.

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