CHAPTER FIVE

### CONCLUSIONS

#### INTRODUCTION

This chapter summarizes key findings, presents conclusions from this synthesis project, and offers areas for future study. The literature review, surveys, and case studies all provided valuable information for a better understanding of the implementation and outcomes of fare-free public transportation. In short, fare-free transit has gone from being problematic in prior demonstrations to being a problem-solver in the right locations. The chapter is organized in four sections:

- Knowledge gained from past fare-free demonstrations and feasibility studies
- Conditions for implementing fare-free public transit and where it is most likely to succeed
- Outcomes of providing fare-free public transit
- Areas of future study.

## KNOWLEDGE GAINED FROM PAST FARE-FREE DEMONSTRATIONS AND FEASIBILITY STUDIES

- Fare-free transit was implemented in the United States in the 1960s and early 1970s in a few small urban communities such as Commerce, California, and East Chicago, Indiana, where it has been popular and is still in place almost 50 years later. These communities proved to be the exception, as nearly all other public transit agencies charged fares.
- In the late 1970s, the Urban Mass Transit Administration funded demonstrations in the larger urban communities of Mercer County, New Jersey (Trenton area), and Denver, Colorado. These one-year demonstrations provided fare-free transit during off-peak hours and resulted in increases in ridership of between 25% and 48%. These demonstrations also produced overcrowded buses, less reliable schedule adherence, more disruptive passengers, and driver complaints. The demonstration projects were discontinued after a year, concluding that pricing strategies might achieve less substantial but still meaningful ridership increases without the negative consequences noted earlier.
- Shorter-term experiments in a variety of cities that were designed with the intent to market the public transit system also enjoyed ridership increases in the short term ranging from 13% in Salt Lake City to 86% in Topeka, Kansas. These marketing experiments were usually credited with helping build modest long-term gains in ridership

- once the experiments were completed. The most recent short-term experiments were for 90 days in Asheville, North Carolina, in 2006 and for seven months in 2007 in Milton, Canada. Both enjoyed ridership increases of approximately 60%, although they also experienced reduced schedule reliability and some overcrowding. They accomplished the goal of marketing their service and retained modest increases in ridership once the experiment ended. Topeka, Asheville, and Milton are all communities with populations of less than 100,000.
- A 15-month totally fare-free demonstration in Austin, Texas, was conducted in 1989–1990. Ridership increased as much as 70%; however, the transit system was reported to have experienced significant issues with overcrowded buses, disruptive passengers, and unhappy bus operators. The demonstration dampened interest in fare-free transit for a number of years in large urban areas.
- Since 1999, a number of cities including Eugene, Oregon; San Francisco, California; Portland, Oregon; and Hamilton, Canada, have seriously reviewed the feasibility of implementing a fare-free policy. The previous demonstrations and experiments allowed them to realize the need to plan for more capacity, security, and maintenance. Quality of service and travel time savings have been shown to be more important to choice riders than a reduction in fares. However, the fundamental reason these systems could not implement fare-free service was the lack of a source of revenue to replace the substantial amount collected in fares. They have concluded that the amount of revenue that would be required to not only replace fares, but to also pay for the extra service, equipment, and facilities to meet increased demand, is an amount that exceeds the political will of their leaders or communities to accomplish.

# CONDITIONS FOR IMPLEMENTING FARE-FREE PUBLIC TRANSIT AND WHERE IT IS MOST LIKELY TO SUCCEED

 Although transit systems in larger communities shied away from implementing fare-free transit after the Austin, Texas, experiment, the concept took hold in many smaller communities throughout the country shortly thereafter. Smaller systems tended to have smaller total fare revenues to replace, and in many cases the cost of collecting fares was often almost as great as, or greater than, the fares being collected.

- The 39 public transit systems identified in this report that currently offer fare-free service in the United States are all located in one of three categories of communities:

   (1) small urban and rural communities,
   (2) university-dominated communities, and
   (3) resort communities.

   The same holds true for fare-free systems in Europe and China.
- Smaller public transit systems often have relatively low ridership and available capacity. Increases in ridership of 100% or more can usually be accommodated with existing capacity. The reduction in the average time of boarding resulting from the elimination of the fare usually allows fare-free systems to maintain schedules even with substantial increases in ridership and boardings.
- The political philosophy (conservative, progressive, or mixed) prevalent in a community does not determine whether fare-free service will be provided. The major factors are the internal business case that can be made for eliminating the fare collection process and the external business case of providing a service that will help the local economy or improve the sustainability and livability of a community.
- Champions/initiators of fare-free transit include mayors, city councils, public transit general managers, community sustainability coalitions, transit advisory boards, Native American tribal councils, developers, and park managers. Sponsoring agencies have included city and county councils, regional transit authorities, Native American tribes, and nonprofit agencies.
- Some small transit systems can sometimes earn more revenue by eliminating fares, which increases ridership, which in turn increases state and federal funding they receive through formula programs that take ridership into account. Care needs to be taken to balance any additional revenues against the potential of additional costs if ridership increases so much that additional vehicles and operators are required.
- University communities want to use limited campus space for buildings and facilities other than parking garages and consequently are very open to offering fare-free transit and remote parking as an acceptable alternative to providing facilities for more automobiles on campus. It is also compatible with their sustainability goals and desire to improve safety on campus. Farefree transit allows boarding through all doors, helping to speed the boarding process when there are crush loads of students.
- Resort communities experience enormous surges in population during high season and offer fare-free service to encourage people to park their cars and use transit for the majority of their trips. This helps to reduce the amount of traffic congestion and cruising that occurs on their roads. Fare-free transit allows crush-loads of skiers to board through both doors without the need for them to find change while wearing ski outfits.
- Even though at least 39 public transit agencies offer fare-free service in the United States, all of them are in

communities of less than 175,000 people. Chapel Hill Transit is the largest fare-free agency in the world, with 98 buses carrying 7.5 million passengers a year.

## OUTCOMES OF PROVIDING FARE-FREE PUBLIC TRANSIT

- Synthesis results indicate that ridership has always increased significantly when fare-free transit is offered. Reported increases ranged from 21% in Boone, North Carolina, to more than 200% in Hawaii and Macomb, Illinois. Substantially higher increases of more than 1,000% have been experienced in Europe and China. Ridership has increased very quickly in many instances, with increases of as much as 60% within two months. The disproportionate increases in ridership beyond what typical elasticity formulas would predict might be attributable to the psychological barriers that are removed when fares are no longer required. Public transit agencies that consider offering fare-free service need to be prepared to respond quickly to increases in demand to avoid the degradation of the quality of service, negative media coverage, and the potential loss of long-time passengers.
- Although public subsidy and sometimes total cost may increase, the subsidy per passenger drops significantly.
   The effectiveness and productivity of the public investment in transit is enhanced.
- Public transit agencies with fare-free policies tend to experience a few more "problem passengers"; however, in the vast majority of cases, it is not a problem that seriously affects passenger satisfaction or community acceptance. Agencies can help minimize the problem with enforced codes of conduct, video surveillance, active supervision, cooperative relationships with local law enforcement and the court system, and passenger support.
- Fare-free systems have enjoyed a reduction in the expenses and administrative functions associated with fare collection. Charging even a nominal fare to avoid issues dealing with "problem passengers" could reduce ridership substantially and might not cover the costs of fare collection.
- As opposed to the earlier fare-free experiments in Trenton, Denver, and Austin, bus operators are reported to be very supportive of fare-free policies in almost all locations where they now exist. Although they might have to contend with a few more "problem passengers," they regard that as a fair tradeoff for not having to deal with fares and fare disputes. Vehicle operators often serve as better ambassadors for the system and the community when they do not have to collect and enforce fares, and can spend more time answering passengers' questions and focusing on safe bus operation.
- Fare-free policies generally result in more efficient operations because of the opportunity for passengers to board through all doors and the elimination of the fare collection process. These time savings are sometimes countered by the increased number of passengers boarding

- and the more frequent stops buses need to make. However, many ski resort towns and universities carry crush loads and would find it impossible to keep current schedules if they were not fare-free.
- Resort communities in particular recognize the positive economic contributions fare-free transit makes in their communities. It helps make visitors' experiences more pleasant, reduces traffic/cruising/parking requirements, improves safety on the roads by offering an attractive option for people who like to party after skiing, and provides affordable transportation to a service workforce that often lives far from the resorts.
- Public transit agencies in small urban and rural communities cite the significant benefits fare-free service offers to students, seniors, and lower-income residents. In both small urban and rural communities, local property owners are able to promote their locations as "being on the free bus line." Transit managers reported that more people want to retire in communities with fare-free public transit. Universities have been able to minimize their investments in parking facilities when fare-free transit is offered, enabling them to build more teaching facilities and dormitories. University communities also noted that fare-free transit provides a measure of equity to nonstudent residents who are usually lower-income and would be the only ones needing to pay a fare when they board.
- Transit agencies offering fare-free service have expressed pride in their contributions to livability and environmental objectives no matter what type of community they serve. Many have documented the amount of carbon that has been eliminated and take credit for cleaner air, reduced traffic congestion, and less dependence on gasoline and autos.
- The elimination of fares essentially places transit in the same category of services as schools, libraries, and most community parks. Although these services are paid for with community taxes, people usually do not pay a service charge to use them. They are regarded as essential elements of what a community deems important and why it is worth living in. Removing the fare requirements of transit democratizes the service, making it equally available to everyone regardless of income, to use as often as they like. If properly funded and maintained, the image of the buses change from being the clunky transportation choice of last resort to the service that connects all elements of the community and provides equal opportunity to access all that a community offers.
- Fare-free transit has been a source of community bonding and pride that also has helped local communities earn positive recognition. A number of communities offering fare-free transit have received state and national awards as "best places to live." Fare-free service is reported to help bridge the divides that exist in "town and gown" communities.
- Although fare-free transit is very popular where it is provided, many managers of such systems are concerned that there will be pressure to consider implementing fares as the national economy continues to

- sputter and revenues at the local level are more difficult to secure. They also note that fare-free ADA service must also be provided, putting additional pressure on their ability to stay within their budgets.
- Transit managers noted the importance of taking the time to educate their passengers, the community, the media, elected officials, and law enforcement officials (including judges) about the program. They also noted the importance of meeting with their own employees to discuss the program in depth and explain all the goals in an effort to get their insights and concerns, as well as their buy-in and support to help the program succeed.

### **AREAS OF FUTURE STUDY**

Based on information collected for this report, the following items are offered for future study:

- Fare-free public transit is of particular benefit to lower-income passengers. However, most transit systems that charge fares cannot or will not identify alternative sources of funding to allow them to offer fare-free service. Absent the implementation of fare-free service, how can public transit be made more affordable to low-income individuals? What have any public transit agencies done to reduce the cost for the most financially needy in their communities?
- Totally fare-free systems are surprisingly rare in university-dominated communities. There are often separate transit agencies for the universities that operate fare-free and for the surrounding communities that do not. In the rare cases where there are single operating agencies that offer fare-free service to everyone in the community, there has been tremendous acceptance and success. These communities usually are judged among the most attractive and livable communities in the United States. Additional research on why consolidation of public transit service is not happening in more communities might increase efforts to provide fare-free service in more communities of this nature.
- One of the arguments advocates of fare-free public transit use is that it will introduce young people to public transit and make them more likely to use the service as adults. Long-term studies that follow the travel habits of young people who have used services available in communities where all public transit is fare-free could help determine just how valid that theory is and possibly provide another reason for communities to implement the policy.
- The Simpson-Curtin elasticity model does not apply when it comes to reducing fares to zero. Ridership increases of 200% and more have resulted when farefree service is introduced. Given the experience gained from more than three dozen public transit agencies providing fare-free service, the rising cost of gasoline, and the possibility of higher unemployment and under-employment being the "new normal," it would

- be beneficial to study the appropriate elasticity for farefree public transit service.
- This report covers what a few public transit agencies have done to deal with "problem passengers" such as school truants, drug addicts, alcoholics, and the homeless. Since this issue affects all public transit agencies, not just fare-free systems, additional research on the most effective ways to deal with these kinds of passengers would be helpful to the entire industry.
- Agencies responding to this survey provided anecdotal information on the economic benefits of fare-free public transit. A more detailed study of the economic impacts of fare-free transit might help communities determine if it is a policy they would like to adopt. Similarly, a more in-depth study that quantifies the social benefits of fare-free public transit would be helpful to those who establish policy that effects transportation funding.
- Major public transit capital investments costing hundreds of millions, if not billions, of dollars are often proposed in communities to help increase ridership.
   This report has shown how implementing fare-free

- transit has resulted in substantial increases in ridership at relatively low cost. A comparison of the costs and benefits of providing fare-free transit with minimal investments to the costs and benefits of a major transit investment would help demonstrate if fare-free transit should be considered as a legitimate alternative when local, state, and federal agencies are weighing major public transit investments, especially during times of reduced federal and state funding.
- As this report has documented, fare-free transit has the
  potential to attract many new riders. More in-depth case
  studies could examine what impact this increased transit ridership has on traffic congestion and safety. Additional research could also be conducted to quantify the
  environmental, health, and livability benefits of farefree transit.
- Additional research could be done on specific case studies to examine the travel time impacts from faster boardings and reduced dwell times measured against the increased boardings and additional stops associated with fare-free transit service.