

# REVIEW OF RELATED LITERATURE AUTOMATED FARE

*Read chapter Chapter Two - Literature Review: TRB's Transit Cooperative Program (TCRP) Synthesis Implementation and Outcomes of Fare-Free.*

The group developing the study researched the possibility of imposing a regional parking tax, but found there were a number of legal, institutional, and economic issues that would be difficult to overcome see Table 2. In , this financially challenged and car-choked city of 70, determined it would completely modify its approach to transportation. These employees had several duties, and consequently, eliminating fares would not result in the elimination of jobs. Although they did not do a specific cost-benefit analysis, they believed that foregoing farebox revenue would result in very low net costs because the additional funding they could receive from both state and federal formula grants would be increased as their ridership increased C. It was recommended that fares be established only as a last resort. The Denver experiment was more difficult to analyze because the transit agency also implemented major route restructuring during the experiment, had insufficient pre-demonstration data, and changed the off-peak hours during the experiment. They found that demand is slightly more sensitive to rising fares. Such systems are currently being used in developed countries. To date, Advance Transit remains a fare-free service. As a report on fare-free public transit systems prepared for the Washington State DOT concluded, smaller communities are more likely to encounter fewer problems and more success, as are transit agencies and communities that are committed to the concept owing to concerns over the environmental impacts of transportation or social equity 5. Anger at Oyster cards 'rip-off' as millions hit for not 'touching out'. A review of 23 fare changes in United States cities, selected for similar size, found that the fare elasticities were almost identical for fare increases and fare decreases. All rights reserved. An advanced econometrics model was used to review the results of fare increases and decreases at 52 transit agencies, examining the ridership performance 24 months before a fare change and 24 months after a fare change. The city of Milton, Canada, near Toronto, was the first municipality in Canada to provide fare-free service for an extended period of time. The study documenting this fare-free program did not include information on how many more buses were required to carry this substantial increase in ridership. The less cash that is handled, the lower the cost of the fare collection process, and the less delay there is in the boarding process. They are identified in the next chapter, along with the reasons why they have found fare-free public transit to be a positive service in their communities. The net costs were seen as substantial burdens to municipalities and the report casts doubt that the German government would be willing to fill the revenue gaps that fare-free transit would produce. Should Duluth proceed with a fare-free system, it would become the largest community, in terms of population, to have such a policy in place. A few women reported being uncomfortable with what was described as a rougher than normal customer group; however, no reports of any actual physical abuse were made concerning these fears. Templin, a health resort town located in Brandenburg, Germany, with approximately 14, inhabitants, modified their small bus service to be fare-free on December 15, Chapters three and four provide information received directly from representatives of the dozens of agencies currently providing fare-free service. However, because fare-free transit will attract many more passengers, the bus is likely to make more stops than it would if fares were charged. For example, a customer service representative sells fare instruments, but also conducts trip planning for telephone callers and for walk-in customers. The council was in deep debt in the mid-80s and the radical approach was partly prompted because it could not afford a new ring road. However, there have also been reports produced over the years that provide valuable information and insights regarding the experiences of those who have either implemented, or considered implementing, fare-free transit see Table 1. That may or may not be true, but there is sufficient evidence that the cost of fare collection has been examined through research and by a number of agencies. Only one bus a day was added to address problems of overcrowding, indicating that smaller systems carrying lighter loads of passengers can accommodate rather large increases in ridership without needing to provide additional capacity. Hence, fares collected would exceed the annual cost of collecting the fares, but only barely in one scenario. The main selling point for the Opal card is that commuters will never have to queue for tickets again. Similar concerns indicating a decline in morale were expressed by bus operators during the Denver and Trenton demonstrations. These elasticities can vary

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significantly depending on local circumstances such as income, driving conditions, level of transit service, and the location of work places in relation to the population.