An Innovative Public Transportation System for a Small City: The Merrill, Wisconsin, Case Study

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This paper describes a recently implemented innovative transportation system which can serve as a prototype for similar systems in other areas. The system was implemented in Merrill, Wisconsin, a city of 9500 persons that has had a long history of public transportation, but has been unable to maintain high-quality transit service in recent years. A point deviation bus system, a form of demand-responsive transportation that has seen little experimentation, has been introduced in Merrill with the help of a state demonstration grant. The system uses two vehicles which make scheduled stops at checkpoints located around the city, but also respond to requests for doorstep pickups or drop-offs between checkpoints. A higher fare is charged for the premium doorstep service. With operating data for the first 7 months of service available, it appears that the point deviation concept is operationally valid. The service has been of high enough quality to attract a significantly greater number of passengers then had been using the transportation services that previously existed in Merrill. The higher cost, doorstep service option has been chosen by almost 40 percent of the adult ridership. Cost per hour has been below the cost of many other demand-responsive transportation systems. The system has demonstrated how high-quality transportation service can be provided in a small city.

Small cities in the United States, like their larger counterparts, have witnessed a deterioration in public transportation service during the past few decades. With few parking or congestion problems, these cities have not had strong community support for transit; as a result, the failure of private bus companies has often meant an end to public transit service. It was recently estimated that, of all urban areas with populations between 10 000 and 50 000, only 313 are served by public transportation systems (1).

The recently awakened interest in public transportation has been experienced in small cities as well as in larger cities, and numerous public transit services have been introduced in smaller cities during the past few years. Unfortunately, a lack of financial resources limits the potential of public transportation systems in these cities. Federal operating assistance is not at present available to cities with populations below 50 000, and local resources are rarely sufficient to subsidize a high-quality public transit system. Recently state governments have begun to play a more important role in developing public transit services in small communities. The state of Wisconsin is one of the first states to go beyond the provision of operating assistance by introducing a Transit Demonstration Program. Programs of this sort make it possible for small cities to develop and operate innovative, high-quality public transportation services and demonstrations such as these may lead to the next generation of public transportation systems in small cities, and perhaps larger cities as well.

This paper presents the experience of the Merrill-Go-Round, an innovative transit system recently implemented in Merrill, Wisconsin, under the Wisconsin Transit Demonstration Program. This system, which has combined the characteristics of fixed-route and demand-responsive transportation service, has performed extremely well thus far and may serve as a prototype for other cities.

BACKGROUND OF TRANSIT IN MERRILL, WISCONSIN

Merrill, Wisconsin, is a city of some 9500 persons located in the central part of the state. Although agriculture is no longer the dominant industry, small farms dot the gently rolling countryside that surrounds the city. The setting is not one that would be expected to serve as a test area for numerous transit innovations.

Yet Merrill has been a harbinger of urban transportation trends since 1891, when it became the first city in Wisconsin to be served by an electric street railway system. Trolley service, augmented for a short period of time by one of the nation's first trackless trolleys, continued until it was replaced by bus service in the 1920s. In 1955, when the bus service was experiencing significant losses, Merrill became one of the few small cities in the nation to take over the operation of public transit service. The city ran the service until 1970, by which time annual ridership had decreased to 29 000 from a 1956 high of 78 000 and the deficit had increased to $25 000. After a citywide referendum, the bus service was discontinued. However, city officials were unwilling

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to eliminate public transportation entirely, and therefore agreed to provide a local charter bus operator with a modest subsidy, in order for him to operate in-city school bus service and taxi service. Merrill then became one of the first cities in the country to subsidize a taxi operator, predating the recently awakened interest in utilizing taxi companies to provide mass transportation services.

Despite the subsidy the taxi operator soon ran into financial difficulties. While debating the merits of an eventually granted rate increase, city officials conferred with representatives of the state Division on Aging, to determine whether transit subsidies could be obtained for senior citizens. Instead, the city applied for and received a grant to purchase a vehicle and operate a free transportation service for the elderly and handicapped. At the urging of the Division on Aging, the city purchased the first battery-powered vehicle to be used for transit service in the United States since the early part of the century. In what was termed dial-a-bus service, the bus followed a designated route, but would deviate to provide doorstep service for the handicapped. Unfortunately, the bus was completely unreliable, and the service never attracted more than 30 passengers/day.

With the prospect for continued state funding of the dial-a-bus system reduced and with the taxi company experiencing increasing costs, Merrill officials next approached the Wisconsin Department of Transportation (WISDOT) in October 1973 to request state transit operating assistance but were informed that only common carrier operations were eligible for transit operating assistance. Although the in-city school bus service was eligible, the taxi company was not. However, the city was eligible for funds under a Transit Demonstration Program. At that time, WISDOT was interested in testing the concept of demand-responsive transportation. Since Merrill had already briefly experimented with the concept, it seemed to be a logical location to attempt the integration of various transportation subsystems into a cohesive demand-responsive transportation system. WISDOT hired the transportation consulting firm of Multisystems, Inc. (formerly ECI Systems, Inc.), to perform a transit feasibility study, apply for the funds, and design the Merrill system (2).

DEMAND-RESPONSIVE TRANSPORTATION IN MERRILL

The feasibility study focused on the generation and evaluation of transit alternatives for Merrill. A fixed-route alternative was considered, but rejected because significant improvements over the previous fixed-route service would not be possible within the budget constraints. Three other alternatives, all characterized as demand-responsive services, were also evaluated.

Demand-responsive transportation (DRT) is a concept that has received increasing interest during the past decade in response to the shift in development patterns to lower density development that is not readily (or economically) served by conventional fixed-route transit systems. There are many types of DRT systems; what they share is a degree of flexibility not found in conventional transit systems. They respond in some degree to the spatial or temporal demands of the passengers. Unlike taxis, however, which generally are constrained to serve only one passenger group at a time, DRT systems can transport many persons simultaneously, providing high-quality, door-to-door transportation (3). The cost per passenger of providing DRT service is typically between the costs of taxi and fixed-route bus service.

The three DRT alternatives considered, in order of increasing demand-responsiveness, were: route deviation service; zonal dial-a-ride service, and areawide dial-a-ride service. In a route deviation system vehicles travel along a fixed route, but may deviate from the route on demand to pick up or drop off passengers. In a zonal dial-a-ride system point-to-point service is provided anywhere within a single zone, but transfers are required for trips between zones. An areawide dial-a-ride system is perhaps the most fully demand-responsive service; point-to-point service is provided anywhere within a given service area. These three systems have different operating characteristics; the evaluation of these options was based on a comparison of such factors as cost, capacity, expected patronage, level of service, and vehicle fleet requirements.

The evaluation of the alternatives led to a recommendation to implement a route deviation system in Merrill (2). As the implementation proceeded, and for reasons that will be discussed later, it was decided to modify the system into what has been called a point deviation system. The relationship between point and route deviation, and the characteristics of these systems, are described below.

CONCEPTS OF ROUTE AND POINT DEVIATION

A route deviation system attempts to offer the best of all possible worlds by providing the best service to the most people. In a highly developed travel corridor many persons can easily reach a bus stop and do not require a door-to-door service. Even in such a corridor, however, there will be persons, in many cases senior citizens, whose origins or destinations are not within easy walking distance of a bus stop. A route deviation service can provide low-cost, scheduled service for those persons who can use the fixed-route option, and higher cost (if a higher fare is charged for premium service), more personalized service for those who request it. This type of service makes most sense in an area with a well defined travel corridor, but with a demand density too low to support an exclusively fixed-route service. It is not feasible in an area in which fixed-route service can operate at capacity, or in long travel corridors where scheduling would be difficult and travel times unreliable.

A point deviation system differs from a route deviation system in that the vehicles are scheduled to make stops at fixed checkpoints, but are free to respond to demands for doorstep service between checkpoints. In a point deviation system vehicles are not required to follow a specific path when not responding to a doorstep service request. This type of service is better suited to areas with less well defined travel corridors and more diffuse origin-destination patterns.

The basic advantages of route and point deviation services over conventional fixed-route services are increased coverage and improved level of service for persons receiving doorstep service. Their major advantage over pure door-to-door demand-responsive services is the capacity gained because not all passengers receive personal service. This increased capacity translates directly into a lower cost per passenger. A secondary advantage over pure door-to-door service is reduced dispatching requirements, which also lowers costs.

These advantages are not achieved without any disadvantages. Passenger travel time in a route or point deviation system might be greater, and more variable, than the travel time in a fixed-route system. Furthermore, if there is a fare differential between bus stop and doorstep service, persons who do not live near a bus stop may consider the fare structure inequitable, although this would probably be less of a problem when an existing fixed route is converted to route deviation. These disadvantages, however, do not seem to offset the potential advantages of route and point deviation services.

The concept of route deviation can be traced back to the jitneys, which flourished in the United States until strong lobbying on the part of street railway companies forced them off the road before 1930. Owner operated jitneys would travel up and down main streets, stopping to pick up and drop off passengers anywhere along the route. In some cases the jitneys would deviate a few blocks from the route to drop people off, charging a premium fare for this service. While jitneys are still popular in other parts of the world, few legal jitney services operate in the United States today.

Although both route and point deviation services have been considered integral forms of demand-responsive transportation since interest in DRT reawakened, neither option has yet received much attention (3). One demonstration of route deviation service was conducted in Mansfield, Ohio, in 1971, where an underused route was converted to route deviation (4). Passengers were able to hail the bus anywhere along the route, or request to be picked up at their door. From an operational viewpoint the system worked well and, although there was no net ridership gain, about 20 percent of all passengers chose the deviation option. The experiment was abandoned in 1972 when all public transportation service in Mansfield was discontinued. A point deviation system has operated for a few years in the Model Cities area of Columbus, Ohio (5). Vehicles in the Columbus system are constrained to depart from designated checkpoints at fixed times, but are free to take any path between checkpoints. Thus, unlike the jitney, which can be considered a fixed-route, variable-schedule service, the Columbus system is a variable-route, fixed-schedule service.

In the proper setting, a route or point deviation system offers an effective means of meeting a wide range of travel demands with a relatively high level of service. Merrill appeared to be ideally suited for a demonstration of this type of concept for a number of reasons:

1. The city of Merrill is long [over 6.4 km (4 miles)] and narrow [under 2.5 km (1.5 miles)]. Its main streets, on which many of the major demand generators are located, bisect the city lengthwise. With a route or string of stops located along the main streets, a system that allowed deviations would be able to serve the entire city with reasonably short headways.
2. Preliminary demand estimates indicated that a purely demand-responsive system would require three vehicles in order to maintain an adequate level of service. A route deviation system would require that only two vehicles be in operation at one time.
3. A small number of senior citizens in the city do not have private telephones, making access to a fully demand-responsive system difficult. Furthermore, the experience of the previous dial-a-bus service suggested that many senior citizens in Merrill preferred the regularity of scheduled service.

The introduction of a point deviation system in Merrill provided an opportunity to demonstrate the concept of point deviation and to test its ability to provide service in a small city.

THE MERRILL-GO-ROUND SYSTEM

Operation

The decision to shift the emphasis from route deviation to point deviation was based on the results of preliminary community contact rather than on analysis of the physical characteristics of the city. The general public familiarity with fixed-route bus service made the concept of deviations difficult to grasp, and extensive explanations were necessary before people understood that the buses would not be constrained to a fixed route. Rather than attempt a massive reeducation program, the system was changed to a point deviation one. The word route was eliminated from all advertising material and a system map that showed only checkpoints was developed. The system, which had earlier been referred to as a route deviation system, became known as the Merrill-Go-Round. (The name was selected from the entries received in a Name the Minibus contest.)

Ten checkpoints were established at major activity centers and other locations around the city, as shown in Figure 1. A maximum distance of 0.8 km (½ mile) was maintained between successive checkpoints, which were located such that over 60 percent of the population live within 0.4 km (¼ mile) of a checkpoint. Two buses operating on 30-min headways make scheduled stops at each checkpoint. Passengers can board at any checkpoint and be taken to any other checkpoint for a base fare of 25 cents; or they can ask to be taken to any other location in the city (checkpoint to doorstep) for 40 cents. Persons not within an easy walk of a checkpoint can request doorstep pickup. Doorstep to checkpoint service costs 40 cents; doorstep to doorstep service costs 50 cents. The extra charge for doorstep service is charged only once per pickup, whether one or more persons are traveling.

When no requests for doorstep service are received, the buses follow the most direct route between checkpoints. Buses responding to doorstep service requests need not return to the route, but can proceed directly to the next checkpoint; unlike the route deviation system that operated in Mansfield there is no guarantee that a vehicle will always follow the same path. This feature of the Merrill system increases its ability to serve doorstep requests but severely limits the potential for hailing a vehicle.

Merrill-Go-Round service is provided seven days a week: 6:30 a.m. to 6:00 p.m. Monday through Thursday; 6:30 a.m. to 9:30 p.m. on Fridays (to accommodate shoppers); and 8:00 a.m. to 5:00 p.m. on Saturday and Sunday. In addition to the basic service, direct service is provided to and from each school in the city once in the morning and once in the afternoon; at those times the 30-min headways are adjusted slightly. Fares are 15 cents per trip for checkpoint to school (or return) and 30 cents per trip or $2.50 per week for doorstep to school (6).

The system uses three 21-passenger Flexible Flxettes, with one of the vehicles serving primarily as a spare but also available for charter service. To improve their accessibility to the elderly and handicapped, the vehicles are equipped with retractable first steps housed under the entranceway to the vehicle, which reduce the height of the first step from 35 to 20 cm, and extra entranceway handrails.

Dispatching

In most taxi or dial-a-ride systems a central dispatching staff receives all service requests, decides which vehicle to assign to each request, and contacts the vehicle with the necessary information, usually by means of a mobile radio system. In a route or point deviation system, where only a portion of the passengers request doorstep service and where the assignment of passengers to a vehicle is almost an automatic decision, the dispatching requirements are sharply reduced. To take full advantage of this characteristic, it would be desirable to eliminate the dispatcher entirely and have the drivers

Figure 1. Merrill-Go-Round checkpoints.

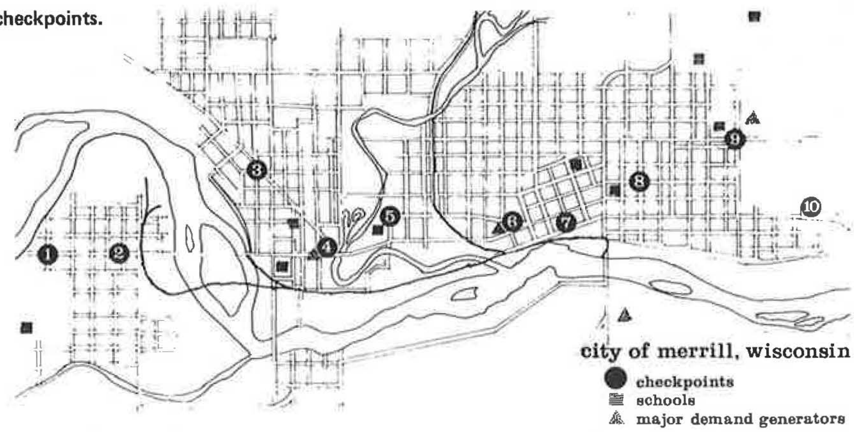


Figure 2. Average ridership.

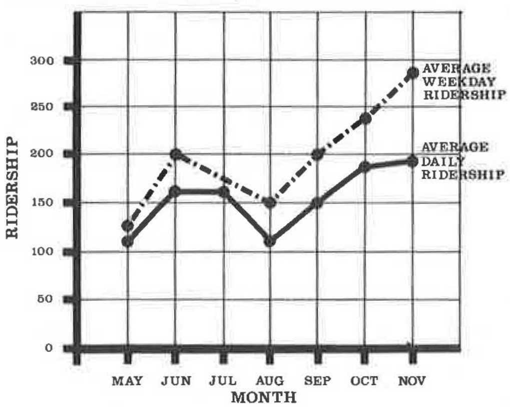
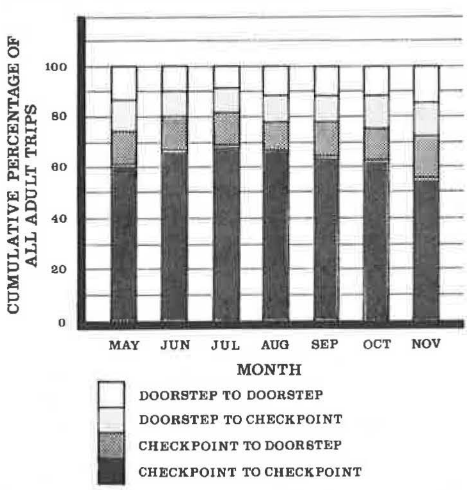


Figure 3. Use of doorstep service option.



themselves handle the dispatching task. This requires a direct passenger-to-driver communications system such as a mobile, or radio telephone. A mobile telephone was used in the Mansfield experiment (4). Unfortunately, there are two major problems associated with the use of mobile telephones in this manner: First, long telephone conversations can result in significant vehicle delays. The second and more serious problem is a result of the limited frequency spectrum allotted to mobile telephones. All mobile telephones in an urban area share a common set of one or more frequencies. For example, in Mansfield 22 subscribers shared a single frequency with the bus system and passengers were frequently unable to reach the bus by telephone. In Merrill, 34 subscribers shared two frequencies. Although there was a higher probability of successful calls in the Merrill system, there was still the possibility that passengers would have difficulty reaching the vehicles by mobile telephone.

The Merrill system presented another opportunity to test the suitability of mobile telephones for DRT dispatching, but rather than relying solely on it, a radio transmitter that had been obtained for the elderly dial-a-bus system was retained, two additional mobile radios were purchased, and a part-time dispatcher was hired to share dispatching duties with the system administrator. Plans at the beginning were to use the mobile telephones only during the periods of the lowest expected demand on the DRT system and of the lowest expected use of mobile telephones by other subscribers, and then, if the telephones were acceptable during these periods, to test them during other hours of the day.

Scheduling

Scheduling was the major concern during the system design phase. Would the vehicles be able to make doorstep pickups and drop-offs and still make scheduled stops at the checkpoints and maintain the basic headway? The limited experience this type of service has seen did not fully answer this question. The 30-min design headway allowed 15 min for deviations. Preliminary estimates suggested that this would allow an average of up to five deviations per run, which was considered to be sufficient. This estimate assumed that the average doorstep stop would be at a point midway between the route traced out by the checkpoints and the service area boundary, and hence would add to the run length twice the distance between the route and this point. The schedule of stops at the checkpoints was developed by first timing the direct run from checkpoint to checkpoint, and then adjusting the running times to incorporate sufficient time to serve the expected number of doorstep service requests between checkpoint pairs. Origin-destination data from the taxi company were used to identify potential locations of doorstep service requests. If too much time is scheduled between checkpoints, a bus may arrive at a checkpoint too early, and, since drivers in the Merrill-Go-Round system were instructed to remain at a checkpoint until the scheduled departure, the resulting delay might be unsatisfactory for passengers already on board. On the other hand, if scheduling is tight, buses may frequently arrive late at some checkpoints. The initial schedule was felt to be a reasonable compromise, but it was understood that because of the stochastic nature of doorstep service requests both situations described would, at times, occur. Operating experience would, of course, dictate schedule adjustments.

Early Operating Results

Merrill-Go-Round operations began smoothly on April 21, 1975, and no major operating problems were encountered during the early weeks of service. Ridership was slightly higher than expected at first, and rose fairly steadily. Data are now available for the first 7 months of operation.

Ridership

Average daily ridership and average weekday ridership per month are shown in Figure 2. Ridership has risen steadily, except during the summer months when school was not in session. As expected, the onset of cold weather had a significant impact on ridership, with the average weekday ridership increasing from 213 to 288 between September and November.

The most dramatic increase was in the ridership of school children. During May, when the weather was excellent, school children accounted for 30 percent of all weekday trips (average of 46 trips per day); in October, school children accounted for 45 percent of all trips (average of 145 trips per day). School trips showed a 150 percent increase between May and October, while adult passenger trips increased 32 percent during the same period.

As expected, the second major market group has been the senior citizens, who comprise 18 percent of Merrill's population and just over 20 percent of the ridership. However, according to an on-board survey conducted in early December 1976, 64 percent of the adult passengers are actually under the age of 65 and work trips account for 22 percent of all from-home trips. Thus, the system is serving the overall community, not just school children and senior citizens. In addition, according to the on-board survey, almost one-fourth of all adult passengers had been diverted from the automobile.

The average weekday ridership of 288 during the month of November 1975 is more than 2.5 times the combined daily ridership of 90 to 110 averaged by taxi and in-city school bus services that had ceased operation when Merrill-Go-Round service began. If the daily ridership were to continue at that level throughout the year, the total yearly ridership of over 80 000 would exceed the highest recorded ridership of the old fixed-route system (78 000 in 1956).

Average system productivity, or passengers per vehicle per hour, increased from six during the first month of operation to eleven during the month of November, and on some days approached twenty. Most fully demand-responsive systems, such as the one in Haddonfield, New Jersey, exhibit maximum productivities of between six and seven. Thus the Merrill experiment has already demonstrated that point deviation systems offer potentially higher capacity than other forms of demand-responsive service.

Use of the Doorstep Service Option

During the first few months of service, approximately 38 percent of all adult passengers requested doorstep service for one or both ends of their trips. This suggests that the marketing campaign had been successful in transmitting the concept of doorstep service to the community. After the introduction of a tenth checkpoint in mid-June, the percentage of doorstep service users fell to 30 percent, but as the weather turned colder the use of the doorstep service option increased again. By October 1975, 37 percent of all trips involved doorstep pickup or drop-off. In November this rose to 44 percent, and indications are that it rose even higher in December. The use of the doorstep service option over the first 7 months of service is shown in Figure 3.

The issue of the trade-off between walk time and cost made by passengers in the decision whether to request doorstep service is one for which no information is available. In the on-board survey passengers were asked how far they had walked to a checkpoint or, in the case of those persons requesting doorstep service, how far they had been from the nearest checkpoint. As might be expected, for very short walk distances (1 block or less) everyone chose checkpoint pickup. For walks beyond 6 blocks everyone chose doorstep service. For trips of intermediate length both options were chosen, with the percent choosing doorstep service increasing with increasing distance. The trade-off point occurred at about 4.5 blocks, or approximately ½ km (⅓ mile); at that distance people were equally likely to choose to walk to the nearest checkpoint or to request doorstep service. In analyzing these results, one must be careful to consider that fare differential and weather conditions are factors that will strongly influence the trade-off. [The day of the survey was a sunny winter day, with a temperature of about -3°C (25°F).] Another factor that will probably influence the trade-off point is age but insufficient data are available to test its significance on the decision.

Schedule Adherence

The concern over the ability of the vehicles to maintain schedules while serving doorstep requests dissipated quickly. The vehicles had little difficulty maintaining the headway during the early months of service. Although accurate statistics are not available, on-time performance has been estimated at 90 to 95 percent. Late arrivals at the end of a run have generally been the result of very long deviations from the direct path, rather than of too many deviations. Drivers have been able to make up time on the next trip when they were running late. Up to six requests for doorstep service have been handled during a single run without delays being incurred.

The buses do occasionally arrive as much as 4 min early or 5 to 6 min late at interim checkpoints. Thus far there have been few complaints from either passengers waiting for a late bus or those waiting on board an early bus. The schedule has been revised to minimize the problem, and no serious problem appears to exist now.

Communications System

As noted earlier, one of the subobjectives of the demonstration was to test the ability of the radio telephone to serve as the sole communications link in a point deviation system. During the first few months of service a series of tests of the system was conducted. Test calls were placed to the vehicles every 2 min during 60 to 120-min periods on a number of occasions over a 1-month period, both during the times the radio telephones were being used and during times that they were not in use. The basic results of these tests were:

1. Before 8:00 a.m. on weekdays and on Saturdays there should be no difficulty in using the mobile telephones. The success ratios, or the ratios of completed to attempted calls, for those two periods were 85 percent and 76 percent respectively.
2. After 5:00 p.m. on weekdays and on Sundays there may be difficulty in using the mobile telephones. Success ratios for these two periods were 60 percent and 50 percent respectively.

3. During the normal 8:00 a.m. to 5:00 p.m. business day it does not appear possible to use the mobile telephones; the success ratio varied between 30 and 40 percent for any 1-h time period.

4. Although there are technical difficulties when using mobile telephones, saturation of the system is the major problem. Busy signals accounted for 80 percent of all noncompleted calls.

Complaints about the mobile telephones were infrequent during the first weeks of service but increased after the summer. In October 1975, construction on a highway near Merrill was completed and the leases of about 25 percent of the mobile telephones in the area terminated. This reduced the severity of the problem, but the problem clearly remains. No formal tests of the system have been conducted since this change, but it is apparent that during normal working hours the mobile telephone cannot be used as the only communications link. Although the evidence is certainly not conclusive, radio telephones may not be generally satisfactory for demand-responsive transportation use with the present frequency allocation procedure.

The use of the telephones by the drivers in Merrill has not been a problem. The drivers have been able to answer the telephones and record the necessary information without any delay. They have not yet handled more than three telephone requests per hour, but even during peak hours when radio communications are used the number of doorstep pickups per bus per hour rarely exceeded four. Thus, although mobile telephones may not be sufficiently flexible to provide the sole communications link in a point deviation system, they are useful as an adjunct to a centralized dispatching system. They can be used during off-peak periods, and can serve as a backup in the event of failure of the regular two-way radio system to reduce labor costs and increase system reliability.

Operating Cost

Some operating cost figures for the first 6 months of operation are compared below with values projected prior to the start of service.

Indicator	First 6 Months of Service ($)	Projected First Year ($)
Operating cost/km	0.49	0.59
Operating cost/h	9.49	10.79
Operating cost/passenger	0.99	1.10
Fare box revenue/passenger	0.26	0.27
Total revenue/passenger	0.28	0.29
Net cost/passenger	0.71	0.81

Cost is running significantly below the projected level. This is due in part to the fact that the drivers were not eligible for all city benefits during their first 6 months of service, in part to low vehicle maintenance costs (with much of the maintenance covered by warranty), and in part to the lower than expected need for driver overtime. The first two costs will increase during the next few months.

Fare per passenger is running below the expected value, but has increased since October because of the increased use of doorstep service. Based on presently projected December ridership and cost figures, the operating cost per passenger should decrease during the winter months to about 85 cents and the net cost per passenger to about 56 cents. Although revenue would account for only 34 percent of cost, an 85 cents/passenger cost is significantly lower than the cost experienced by most other demand-responsive transportation services (3). While this lower cost is due partly to the low wage rate of the nonunionized labor in Merrill ($4.50/h including benefits) it is also due partly to lower dispatching costs and higher than average productivity.

CONCLUSIONS

After only 7 months service, it is difficult to report final conclusions on the results of the Merrill demonstration. However, the consistency of the results to date must be considered. Based on these results, the following tentative conclusions are offered:

1. Point deviation appears to be a viable transportation option, at the very least in a geographic setting such as Merrill. It is able to serve a variety of transit needs with a high level of service. Some of the potential advantages of point deviation over more fully demand-responsive modes, including higher capacity, more reliable service, and lower costs, have already been shown.
2. A well-marketed, high-quality transit service that combines flexibility, reliability, and comfort with high frequency and total coverage can attract new transit ridership in a small city, and divert people from the automobile.
3. With the help of a progressive state operating assistance program like the one in Wisconsin, which covers ⅔ of all operating deficits, the operation of a high-quality service is well within the financial means of most small cities. Merrill's projected share of the deficit following the demonstration period is less than $2/capita annually.

The Merrill-Go-Round system has thus far achieved or exceeded all expectations in terms of operating performance, community acceptance, and ridership. It should serve as an example of how small cities can be served by relatively inexpensive, high-quality transportation services, and has indicated that such services will be used even in areas with little or no parking or traffic congestion problems.

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