



Citizens League Report

New Destinations for Transit

*public affairs
research and education
in the Minneapolis-Saint Paul
metropolitan area*

Citizens League Report

"New Destinations for Transit"

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EXECUTIVE SUMMARY

Current trends of travel and vehicle use threaten to diminish individual mobility in the Twin Cities metropolitan area.

To counteract those trends and to preserve individual mobility, the region must increase the practice of riding with others.

Peak-period congestion has increased and will get worse. Road capacity will not meet demands. Money is not available to build new road capacity. The bus system, operating on fixed routes and schedules and historically oriented to the two downtowns, does not and cannot economically serve a spread-out population that lives where it wants to, works where the jobs are, and prefers the private automobile as a way to move around.

The Regional Transit Board (RTB) was created by the Legislature to sort out these trends and to improve transit in the metropolitan area. To be successful in its mission, the RTB must recognize where people live, where people work, and how they prefer to get from one place to the other.

Transit must respond to the way the Twin Cities region has developed and the dispersed travel patterns of its residents. Transit must respond to the way people are known to behave. It has to compete with the private, single-occupant automobile.

Transit is more than publicly-owned vehicles that run on regular routes. Transit "happens" whenever a person chooses to ride rather than to drive alone. That can be by bus, in another individual's private vehicle, in a taxi, in a carpool, in a van, in a vehicle that runs on roads or on rails.

This definition of transit is important. The public debate has concentrated on the shortcomings of the existing bus system or the possibilities of a potential new system with vehicles running on a fixed guideway like a modern streetcar.

Neither of those systems, as planners think about them today, will meet the transit needs of the Twin Cities metropolitan area. The bus system of the Metropolitan Transit Commission carries fewer people right now than ride to work in carpools and vanpools. Rail systems can only serve directly the people who live and work close to them.

A Commitment to Ridership

Thus the region, and the RTB, must make a policy commitment to increasing ridership--not as a goal in and of itself but as a means of reducing congestion and improving mobility at the same or reduced cost to taxpayers, to help shape development consistent with community plans, and to provide transportation to those who do not drive.

The RTB should set an explicit and measurable goal for increased ridership--such as the number of people riding compared to the number of people driving alone--and develop strategies to achieve the goal.

The RTB, Minnesota Department of Transportation (Mn/DOT), municipalities, and private businesses also should emphasize strategies that encourage people to use high-occupancy vehicles. Merely providing an alternative to driving alone will not create demand for transit unless it offers a competitive level of travel time, convenience and price. An alternative that simply costs less than driving alone will not motivate people to change.

To encourage ridership, multi-passenger vehicles must have priority use of the roadways and parking facilities. Transit alternatives should be oriented toward people's homes to reduce or eliminate waiting and transferring.

Mn/DOT should routinely include preferential access for all multiple-occupant vehicles, not just buses. The agency should also provide lanes for use by multiple-occupant vehicles during periods of restricted access and construction. Multiple-occupant lanes should be included in plans for reconstruction of major highways, such as along the work proposed for Interstate 94, and in areas subject to heavy congestion.

Municipalities should provide reduced parking rates for multiple-occupant vehicles in city-run parking lots and ramps and set aside preferred parking spaces for those vehicles. Municipalities also should reduce parking space requirements of developers who produce transit plans in conjunction with their projects. The same preference should be given expanding businesses that offer transit alternatives for their employees.

The RTB should be responsible for encouraging businesses to adopt such plans and to work with local businesses in other ways to promote ridership.

Financing and Developing Public Transit

The existing bus system of the Twin Cities area performs a needed service. But it faces a decline in public funding at the same time that developing living, employment and travel patterns are changing the basic requirements for transit.

By 1980 only seven percent of the region's employees worked in downtown Minneapolis and 4.1 percent in downtown St. Paul. Of all work trips each day, 55 percent were destined for points in the suburbs.

But the public bus system runs primarily on the same routes established in the late 1800s for a radial streetcar system designed to serve the two downtowns and a population dependent for its mobility on the system. Now more than 68 percent of all daily trips in the region are made by drivers alone in their vehicles. And people approach any given destination from every direction.

Both jobs and population are expected to grow in the suburbs in the future. The central cities are expected to decline in population but grow slightly in employment by 2000.

The cost of the public bus system is increasing at the same time revenues from federal and state sources are declining. This forces heavier reliance on property tax revenues and fares.

From 1971 to 1985, the cost in constant dollars rose 169 percent. Part of the increase paid for an increase in the number of bus-miles traveled. The most costly additions were for service extensions into the suburban areas that required significantly increased trip lengths, fewer passengers per mile and split shift wages for full time drivers whose shifts covered both morning and afternoon peak travel times.

Clearly, fixed-route transit--the conventional bus system--meets only part of the region's transit needs, and at increasing cost.

The RTB must find low-cost ways to meet the region's other transit needs. And it should institute competitive bidding among transit providers for service on the existing system, both on individual routes and on an area basis. In evaluating the bids, the RTB should emphasize the service, not the kind of vehicle used to provide it.

In extending service to areas not served by the existing system, the RTB should open up the process to a variety of public and private vendors, including taxi operators, limousines, bus companies, paratransit services, the MTC, groups of individual MTC drivers, and any others who surface.

The Legislature should expand the role taxicabs could play as transit providers by allowing metropolitan-wide licensing of cabs, an unlimited number of licenses, unregulated fares, and shared service.

As a variety of transit mechanisms emerge, the RTB must be responsible for maintaining the regional nature of the system and for high standards of performance. Riders must be able to transfer easily between vendors. They must have adequate information about service. There should be a central clearing house for complaints.

The performance of a vendor should be measured in terms of the number of riders served.

The Metropolitan Council should take the lead in proposing transit-financing changes. The Council is charged with coordinating the various regional systems, including transit, and is in the best position to analyze the competing needs of transit and other regional services.

Reliable sources of financing are needed, but a dedicated source is not. A dedicated fund removes incentives for efficiency.

As federal assistance declines, the state or region will have to pick up more of the cost of facilities and equipment. As responsibility for capital improvements shifts to the state or region, operating costs should increasingly become the responsibility of the users and possibly the businesses that receive the benefits of transit. Fares must more accurately reflect the cost of the service.

Property taxes should continue to provide a threshold level of transit service. Communities on the edge of the transit-financing district should not be able to discontinue the tax but should be allowed to pay a lower minimum rate to subsidize service for transit-dependent people and for strategies related to congestion relief.

The Council also should take the lead in aiding formation of "transportation management organizations" in the region. These are organizations of employers, developers, and local governments that seek solutions to transportation problems.

When the Council reviews the comprehensive plans of local units of government, it can require those units to include a transit component. Local units should incorporate transit planning into the approval process for all major developments and redevelopments. When a city lacks transit planning expertise, the RTB should provide technical assistance.

Exploring Fixed-Guideway Options

The Metropolitan Council should not request a public investment of money for constructing a transit system in which the vehicle is fixed to the guideway. Nor should the Legislature appropriate money for such a project.

But the RTB can continue to explore fixed-guideway options, concentrating its efforts on the application of such systems to small areas in the region. The RTB should prepare proposals for not fewer than two locations in the region, such as the downtowns, the Carlson development in Plymouth, and the area between the airport and east Bloomington.

The Metropolitan Council should not act on any fixed-guideway proposal, including the most recently analyzed corridors along University Avenue and the Southwest diagonal, until small-area applications are designed and analyzed in comparison with corridor applications.

The Council should base its decision on a fixed-guideway proposal on whether (1) it would attract significant numbers of drivers out of their single-occupant cars or otherwise reduce the need for travel on highways, (2) sufficient private dollars have been leveraged from benefiting property owners to implement the project, (3) the public dollars required are providing the most ridership per dollar, and (4) public and private actions required to effect necessary development and land-use changes are assured.

Investment in a fixed-guideway project should not come at the expense of existing transit programs. Those programs already face financial problems. No additional demands should be placed on stretching those dollars to cover the high capital costs of fixed-guideway transit.

Special Transportation Needs

Demand is increasing for special transit services for persons unable to use the basic bus service because of physical disability.

Metro Mobility, a state-funded, publicly organized program providing door-to-door transportation for handicapped individuals, has certified approximately 13,000 individuals to receive service and receives up to 300 requests for certification each month. As the number of certified riders increases, so does the number of times that requested trips must be denied.

The RTB should design a pricing system for Metro Mobility that induces people to choose vendors based on price. It should create a pilot program that gives the public subsidy to the riders rather than to the vendors as a way to control costs and to increase the number of rides available. The RTB would certify the vendors who meet minimum financial and quality standards. It would provide the central clearinghouse for rider information.

The RTB should allow Metro Mobility vendors to set fares even though the RTB continues to reimburse part of the cost. The RTB could still maintain its fare-to-subsidy ratio, but let the vendors determine the price to charge.

Low-income riders should receive priority so they are not priced out of transportation. A co-payment system should be instituted on a sliding-fee scale in which riders pay a portion of the ride's cost based on their ability to pay. Riders could select higher-priced vendors if they chose to pay a larger share out of their pockets.

INTRODUCTION

Transportation is linked to the region's development.

Development in the Twin Cities has evolved hand-in-hand with the transportation system. Roads and transportation facilities enabled people and businesses to move farther from the central cities. As businesses and people moved out, roads and other infrastructure followed. Today we have high rise developments and transportation congestion on the suburban highways, as well as in the central cities.

Transportation trends that began years ago in the Twin Cities metropolitan area have continued and in some cases accelerated. We make more trips than we did in the past and we make most of our trips by car. Some of us ride public transportation, but more of us ride as passengers in cars and vans, and the overwhelming majority of us choose to drive alone. More of us own cars, vans, and pick-ups than before; fewer households have no vehicle available at all. The proportion of trips made via public transportation remains small. The average distance of our trips is longer -- a result of the ongoing dispersion of our homes and workplaces.

The trend in the number of trips destined for either downtown Minneapolis or St. Paul is downward.¹ More and more businesses, retail centers, and residential areas are developing in the suburbs. Minneapolis' and St. Paul's collective share of regional employment decreased from 56 percent in 1970 to 44 percent in 1980, and is projected to decrease to 35 percent by the year 2000.² The central cities' share of population in the region decreased from 40 percent in 1970 to 32 percent in 1980, and is expected to decline to 26 percent by the year 2000.³

Transit strategies must accommodate these patterns. Transit must accommodate where the people are, where the jobs are, and where the trips go.

Regional agencies with transit concerns

In the Twin Cities, the Metropolitan Council is charged with long range transportation planning; it coordinates this planning with that of the other regional systems like sewers and airports to guide the orderly development of the Twin Cities area.

The Regional Transit Board (RTB) was created as a result of the 1983-84 Joint Legislative Commission on Metropolitan Transit's conclusion that policy-making functions should be separate from the actual day-to-day operations of the bus system. The RTB is responsible for short- to mid-term transit planning and administration. It is a policy board only. It does not operate any transit systems. The RTB is to foster new and alternative transit services for the region. Thus, the RTB is essential to implementing this report's recommendations.

The Metropolitan Transit Commission (MTC) is the public agency which operates the publicly financed bus system and the formal ridesharing program.

This Citizens League committee was charged with determining if an increase in ridership is desirable, and if so, what strategies would accomplish that. The committee agreed transit means any trip other than one in which a single occupant drives a vehicle.

Organization of this report

This report is divided into five sections.

The first one deals with the need to increase ridership in order to reduce transportation costs, reduce congestion, increase mobility, and preserve job opportunities.

The second section looks at how transit should be provided in our region, given how the region has developed and how it is expected to grow.

The third section discusses the issue of fixed-guideway transit in the Twin Cities.

The fourth section addresses improving mobility for people who are unable to ride the mainline bus system.

The final section contains appendices and background materials.

FOOTNOTES

1. "Travel Behavior Inventory," (TBI), Metropolitan Council, 1982.
2. Development Framework Data Report, December 1975; Metropolitan Development and Investment Framework (MDIF), Metropolitan Council, September, 1986.
3. "1979 Population Trends," Metropolitan Council; "MDIF," Metropolitan Council.

I. The Need to Increase Ridership

1. FINDINGS

A. Our future mobility is at risk because of trends in travel and vehicle use.

Peak-period congestion has increased in our area and is expected to worsen. In the past the region has accommodated increasing congestion by adding to road capacity. This area has maintained high levels of mobility which have contributed to its level of development, economic health, and quality of life. However, major new road construction in the developed areas will be very limited.

1. Congestion will increase

a. Road capacities will not meet demand--Demand for the freeway system is expected to be much greater than the supply. Between 1980 and 2000 the Minnesota Department of Transportation (Mn/DoT) expects freeway capacities in the region to increase by 28 percent, while demand on the freeways in terms of vehicle miles traveled will increase 76 percent.¹

Mn/DoT estimates that the overall capacity of the regional road system will increase by only 10 percent by 2000. At the same time, the number of vehicle miles traveled on the regional system is expected to increase 36 percent, assuming current trends continue.

Mn/DoT has estimated that of 525 miles of freeways and highways in 1984, 60 miles were congested to service level D, and another 72 miles were congested to levels E and F.² Even with 34 more miles of metering, the addition of 72 miles of new freeways, and 17 miles of upgraded routes by 2000, more miles of roadway are expected to be congested. The region is expected to experience 81 miles of congestion at service level D and 125 miles of congestion at service levels E or F.

For instance, in 1984 Highway I-494 experienced major levels of congestion (service level F) between County Road 18 and I-35W. By 2000, the boundaries of the major congestion on Hwy. I-494 are expected to expand in both directions, westward to Hwy. 212 and eastward beyond 24th Avenue. [

b. Changing Location of Traffic Congestion--Major traffic congestion in the Twin Cities has expanded outward over time to include more and more of the highway facilities in the suburban areas of the region. According to Mn/DoT, in 1972 major congestion was found along the segment of Hwy. I-94 between Minneapolis and St. Paul, and along Hwy. I-35W between Hwy. I-494 and South Minneapolis. By 1984 major congestion could still be found in those two areas but had extended to include: roadways along Hwys. 12 and 169, Hwy. I-494 between Hwy. 35-W and County Road 18, and segments of Hwys. 212 and I-694. By the year 2000 major congestion is expected to extend

even farther, into the outer suburbs. Portions of Hwy. I-35W are expected to continue having major congestion, as are even longer stretches of Highways I-694 and I-494, a segment of County Road 36, Hwy. 100, and a long segment of County Road 18. Still other roadways are expected to experience congestion, but of a lesser severity.⁴ (See map.)

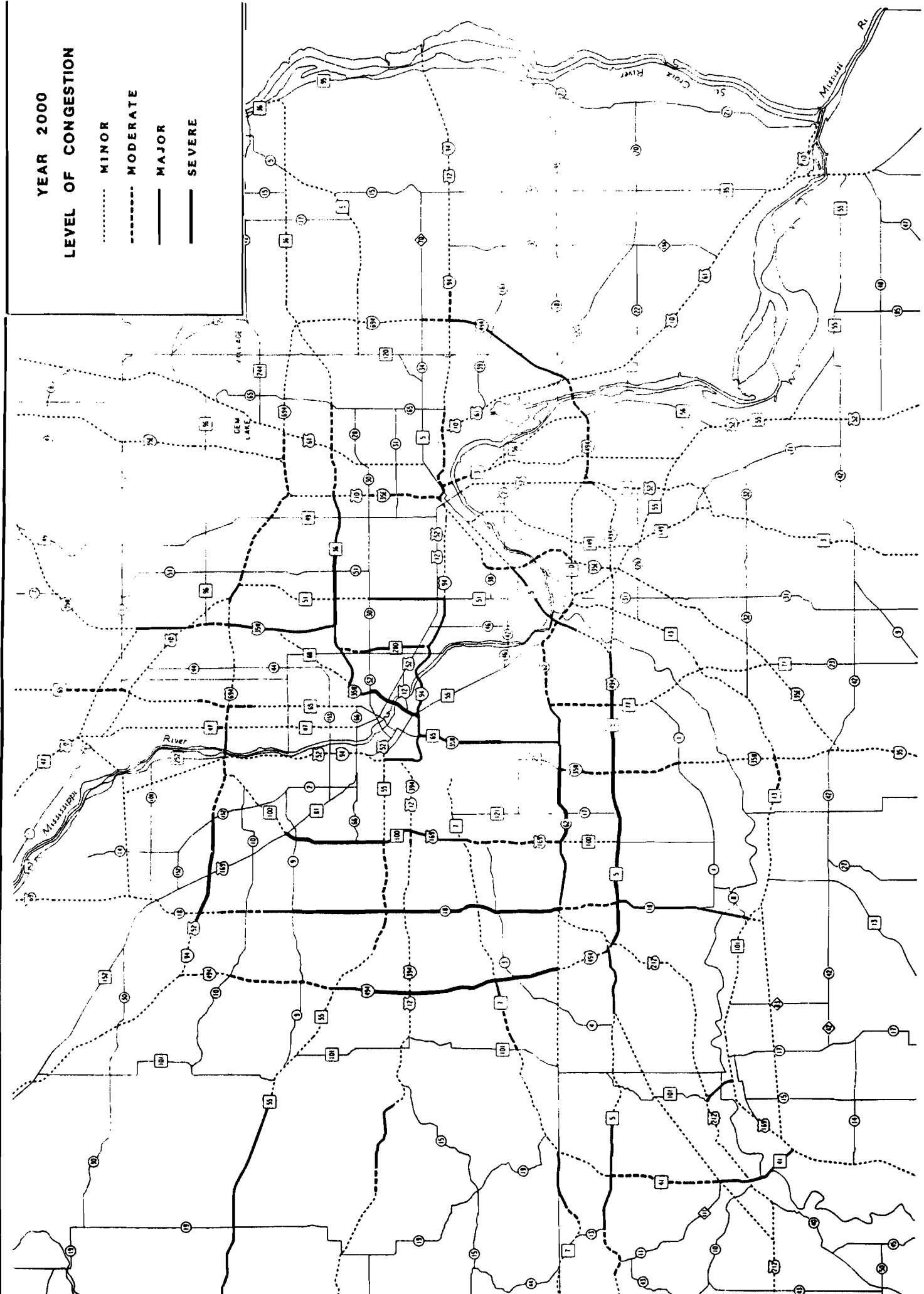
Routes to suburban retail centers in Burnsville, Roseville, and other communities experience increasing congestion problems. According to the Dakota County traffic engineer, the average daily traffic count on County Road 42 near the Burnsville Shopping Center increased nearly fivefold between 1974 (before the shopping center was built) and 1984. New major commercial/retail areas such as the proposed Carlson development in Plymouth and the mega-mall on the old Metropolitan Stadium site in Bloomington will concentrate hundreds of employees and visitors on roads already heavily taxed by traffic.

The committee recognized that congestion in different areas might call for different transit and traffic management solutions. Spot congestion occurs when many cars congest many roads in a small area, such as in one of the major downtowns, or around a suburban shopping center. A second type of congestion occurs on highways which have parallel paths onto which traffic can flow when congestion occurs; for instance, I-35W has the adjacent non-freeway options of Portland, Park, Nicollet and Lyndale Avenues. A third type occurs in areas with extremely limited non-freeway options, such as along parts of I-494.

c. High standard of mobility--Even though the number of vehicles on our roadways and the number of miles traveled in our vehicles is steadily increasing, congestion in our metropolitan area is not as severe as that experienced in other cities around the country.

In a survey of 20 selected standard metropolitan statistical areas (SMSAs) during 1977-78 the U.S. Census Bureau found that people traveling by auto or truck in the Minneapolis/St. Paul SMSA arrived at work in a median time* of just under 19 minutes. Only five areas -- Albany, Madison, Saginaw, Spokane, and Wichita -- experienced shorter median travel times to work, even though our median distance to work (7.4 miles) was about the median distance for all 20 areas studied. Boston, Newark, Anaheim, Detroit, Los Angeles, Pittsburgh, Washington D.C., Dallas, Fort Worth, Memphis, Tacoma, Orlando, and Phoenix all had median travel times to work that were longer than that in the Twin Cities.⁵

*The median time means half of the surveyed people arrived over that time and half under it.



d. We're traveling more often and longer--Metro travelers are making longer trips. The average trip distance increased from 4.87 miles in 1970 to 5.67 miles in 1982, up 16 percent. The average distance (which is different from the median distance referred to earlier) of work trips increased 23 percent, from 6.57 miles in 1970 to 8.11 in 1982.⁶

Assuming current trends continue, by the year 2000 we are expected to make more trips per day: from 3.37 to 3.60 trips per capita.⁷ In this Mn/DoT analysis, the average length of trips is assumed to remain unchanged from the year 1984 to 2000.

2. We can't expect additional roadways to relieve congestion

In the past new highway construction alleviated congestion and allowed new development to expand the urbanized area. The roadways are our transitways. However, the era of increasing transportation mobility through new roadways in the Twin Cities is nearing its end. Conflicting land uses and constrained dollars make building more roads less practical. Consequently, little new road construction is planned. Mn/DoT's emphasis is shifting to maintaining and reconstructing the existing road network, much of which was built more than 25 years ago and is now in need of extensive rehabilitation.⁸

a. Conflicting Land Uses--Land use conflicts have sometimes delayed the process of building roads. Especially in the built-up communities, residential neighborhoods are increasingly reluctant and vocal about adding new roads. The long running conflict over the expansion of Hiawatha Avenue is a case in point. Plans to rebuild Hiawatha Avenue appear to be finally proceeding after almost 25 years of on-again-off-again proposals that were stopped because of neighborhood opposition to a fast roadway next to their homes. U.S. Senate and House conferees in 1986 agreed to include \$10 million in the omnibus spending bill to begin the \$80 million project.⁹

b. Budget Constraints--In addition, the dollars available are insufficient to meet all resurfacing, reconstructing, and road-widening needs. Mn/DoT districts statewide requested 180 major reconstruction and construction projects for the period between 1986 and 1991, the equivalent of 1,060 miles, with a pricetag of \$975 million. However, based on anticipated resources the department has only been able to schedule 120 of these projects, for 625 miles and \$445 million.¹⁰

3. Car use is prevalent

The Twin Cities area has more than one and a half vehicles for every household. In 1970 about 33 percent of Twin Cities households had two or more vehicles; by 1982, the percentage was 54 percent.¹¹

a. More of us are using cars

1. Motor vehicle registrations have increased--Between 1970 and 1985, the number of motor vehicles registered in Minnesota increased more than 40 percent, according to the Department of Public Safety. During that same time, population in the state increased 10 percent.

2. Automobile industry expects ongoing success--Ford Motor Co. expects an industry growth rate of two to three percent annually for U.S. new car sales in the coming decade.¹² (See Appendix 1.)

3. Increased fuel efficiency adds to attraction of cars--Cars are becoming more fuel efficient and, thus, even more attractive to drivers; domestic passenger car manufacturers nearly doubled the fuel economy of their average model in the past eleven years, from 13.2 miles per gallon for a 1974 model to 25.7 mpg for a comparable 1985 model.¹³

b. Higher auto prices have not deterred sales--It costs more to purchase and operate an average car today than ever before; nevertheless, people continue to buy them.

1. Capital costs increased--Consumers paid an average of \$11,274 for a new car in 1984. This was 6.4 percent more than was paid in 1983, and 154 percent more than was paid ten years ago. The increase in average purchase price reflects consumers' choice of additional options and safety equipment, as well as inflation and federal regulations on emission control equipment.

2. Operating costs increased--According to the U.S. Department of Transportation, in 1984 the cost of owning and operating an intermediate-sized auto was \$4,865 for the first year of ownership, a 14 percent increase over 1982 costs, and was estimated to total \$33,415 over the twelve-year life of the vehicle.¹⁴ (Appendix 2)

3. Car sales continue to increase--Domestic sales of almost eight million cars in 1984 were up 17 percent over 1983. Import sales increased to 2.4 million, up two percent over 1983.¹⁵ The general manager of Chevrolet Division said 10 to 10.5 million car sales appeared to be the standard for sales over the next four to five year cycle.¹⁶

4. Personal incomes increased--The higher one's annual income the more likely one is to own two, three, or more motor vehicles.¹⁷ Minnesota ranked second in growth of per capita personal incomes among the twelve-state north central region in 1985. Minnesota's 7.3 percent growth in personal income between 1984 and 1985 was also higher than the 6.3 percent U.S. average growth.¹⁸

5. Autos also available for lower incomes--Older autos are available to people with a wide range of income levels. More old vehicles are on the road today than in previous years. The mean age of cars on the road was 7.5 years in 1984 -- the highest since 1950. Over 22 percent of the 1984 cars on the road were 11 years or older, compared to 10 percent in 1975.¹⁹

c. More of us are driving alone--Over 68 percent of all daily trips in the region are made by drivers alone in their vehicles. Automobile occupancy rates have declined from 1.57 in 1958 to 1.5 in 1970 to 1.3 in 1982.²⁰ That is, where we had 15 people in every 10 cars in 1970 we had 13 people in every 10 cars in 1982.

Auto occupancy is lowest for work trips. Solo drivers account for about 80 percent, passengers (which include carpoolers) about 12 percent, and the public bus about eight percent of all home-based work trips. During the peak hours, auto occupancy is consistently lowest for the trips from home to work and back.

Solo drivers also account for the majority of trips made from home to destinations other than work, and non-home based trips.²¹ (Appendix 3)

4. People value time when making their trips

Some studies point to time savings as one of the most important criteria people use in deciding their mode of travel.

a. Saving time is important factor to potential riders--In a report on mode choice prepared for the Metropolitan Council, willingness to ride the bus was most influenced by the amount of time people had to spend parking their automobiles. That is, the more time needed to locate a parking space and park the vehicle, the more one would be motivated to ride on the bus. Bus ridership was also sensitive to increases in fares, though less so than to time spent parking. Interestingly, compared to the time spent parking the costs of driving and parking had small influences on the level of bus ridership.²²

The MTC's 1975 study entitled "Automated Small Vehicle Fixed Guideway Systems Study" also indicated that increases in transit ridership were very sensitive to decreases in travel time. It stated transit patronage could increase .7 percent with each one percent decrease in travel time between home and transit station.

b. Time loss is deterrent to carpooling--People not involved with ridesharing associated longer travel times with pooling rides and indicated the travel time and departure inflexibility were reasons they viewed ridesharing negatively, in a survey commissioned by the MTC of people who had applied to Minnesota Rideshare.²³

c. Drivers would rather spend money to save time--Over 56 percent of freeway drivers surveyed last year said they would rather spend more tax dollars to finish construction earlier than save dollars by taking more time to finish, according to a survey done by Mn/DoT of freeway drivers experiencing congestion during road construction last summer.²⁴

5. Sharing rides eases congestion but not enough people rideshare

The number of people who carpool and vanpool exceeds the number of riders on the MTC buses. About 22 percent of all persons traveling in the region on a weekday are passengers in private vehicles.²⁵ Even during the peak morning and afternoon hours of travel more people share rides than take the bus.²⁶ Most of the shared rides are done on an individual, informal basis, although several formal ridesharing programs exist.

a. Advantages of ridesharing--An effort that attracted 15 percent of employees to share rides would reduce the number of vehicles by eight percent, according to an economic analysis of ridesharing done in the Twin Cities in the mid 70s.²⁷ Sharing rides bypasses some of the difficulties presented to bus riders; people who poolrides do not have to come to where the bus is at a specific time and transfer through a system of feeder and trunk lines, they have the potential of getting to a wider number of destinations, they have an element of privacy, they operate non-stop more easily, and they have some flexibility when non-planned schedule changes occur. Ridesharing also offers service close to home, which is advantageous to most trips in the region. In 1982, about 72 percent of the 6.7 million one-way trips each day had their start or finish at home.²⁸

b. Ridesharing costs--When employees live great distances from their work destinations they are more likely to share rides to lower their travel costs. A survey of carpoolers and vanpoolers conducted for the MTC revealed that over 83 percent of those people sharing rides lived 10 or more miles from work; over 53 percent lived 20 or more miles from work.²⁹

Ridesharers can cut their parking, gasoline, insurance and auto maintenance costs by up to \$1500 per year, according to Minnesota Rideshare.³⁰ Convincing people to rideshare requires significant potential savings in commuter costs, according to a 1985 survey commissioned by the MTC of people who had applied to Minnesota Rideshare. People not involved with ridesharing indicated they would only consider it if it reduced their costs by at least 30 percent.³¹

In a market analysis done in the Twin Cities in the mid-70s, carpools were found to be the least expensive way for commuters to get to work for trips of all distances, and only carpools could compete economically with solo driving on short trips to destinations without parking charges.³²

c. Minnesota Rideshare--The RTB contracts with the MTC to run Minnesota Rideshare, a computerized match-up service for people interested in sharing rides. In 1984, the program had 3,200 carpoolers with a matching list of 11,000 names.³³ Minnesota Rideshare also maintains a vanpooling program with 191 registered vanpools.

Minnesota Rideshare selectively targets businesses in concentrated areas, or where parking problems exist, and businesses changing locations, to offer them promotional materials and technical assistance. Roughly half of Rideshare applicants come from these targeted outreach efforts. After an intensive month of promoting Minnesota Rideshare with ads, mailings and special events, the program received another 1,300 applicants in June of 1986, double the number that has applied in the past.³⁴ The number of free parking spots in Minneapolis registered to carpool increased by over 500 to approximately 850 as a result of the June promotion.³⁵

d. Employer programs--More than 15 private firms in the region operate vanpool programs for their employees. 3M was the first to run such a program and still operates the largest in the area. Out of 12,700 employees 2,998, or 24 percent, rideshare to work. Although the number of work trips to 3M increased 35 percent from 1970 to 1985, the number of occupants per vehicle has increased from 1.24 to 1.5, and the number of vehicles entering the grounds during the peak 15 minutes has decreased.³⁶

The Minnesota Business Partnership participated in a major effort to encourage ridesharing and published a handbook to facilitate employers' efforts to promote rideshare.

e. Exclusive lanes for people who rideshare--During the 1970s Mn/DoT constructed preferential bus accessways to some freeways in our region. This concept of giving preference to high occupancy vehicles on the roadways was expanded with the plans for reconstruction of Interstate 394. The so-called "sane lane" along Highway 12 is open exclusively to vehicles with two or more occupants, or high occupancy vehicles (HOVs). Currently, it is used to siphon some of the heavy traffic during peak hours off Highway 12 which is under construction. When the conversion of Highway 12 to I-394 is completed, the diamond lanes reserved for HOVs will run in each direction along the six lanes of I-394 from Wayzata to Highway 100. Reversible HOV lanes will continue to the Third Avenue distributor in Minneapolis.

"Sane lane" vehicles average 2.2 people per vehicle, excluding buses. Outside the "sane lane", the vehicle occupancy rate is around 1.2.³⁷ Planners hope to utilize a wide range of transit strategies along I-394 including park and ride lots, transit stations, timed-transfer bus routes, reduced parking rates for HOVs, and employer-based ridesharing programs.

f. Incentives to rideshare--Despite these successes, formal ridesharing is not widespread. Some issues identified years ago are still around today and need resolution before ridesharing captures a larger piece of the market: lack of incentive for ridesharing in locations with multiple employers and small firms; lack of common work start and finish times; insurance coverage for multi-employer van pooling; and incentives to attract employers and riders.³⁸ For instance, despite 3M's extensive ridesharing program it was required by local ordinance to construct the same number of parking spots as if it had no ridesharing. According to Minnesota Rideshare, only the city of Minneapolis offers free parking for poolers, and it is only available in five select parking facilities.

Incentives to ride instead of drive alone could come through making transit alternatives more convenient and less expensive. Or driving alone could be made less convenient and more expensive. Some of the latter strategies include: adding a surcharge on parking fees for single occupant vehicles, road tolls, and differential pricing of parking/driving during peak travel times. Electronic toll systems that would charge the highway user for entering certain areas at specific times are already in use. The Delaware River Port Authority system assesses tolls electronically. Drivers purchase bar-coded stickers for their rear windows which are recorded by optical scanners when the vehicles pass through the tolling place.

6. Low availability of public transportation

Here and elsewhere around the country, people and jobs have moved to places where traditional public transportation was not available or not conveniently accessible. Most people who commute in a private vehicle do so because either public transportation is not available or it could not conveniently get them to work, according to an analysis of a 1980 U.S. Census Bureau survey of selected SMSAs including the Twin Cities. Nearly half of those surveyed said they did not use public transportation because it was not available; about 25 percent indicated the transit available was not convenient to their travel needs. Less than 13 percent said they simply prefer to use their own private vehicle, and less than one percent said they did not use public transportation because it was too expensive.³⁹

2. CONCLUSIONS

A. Increasing ridership is desirable.

In the absence of more ridership we will have increased congestion and increased travel time and costs. We could tolerate this, but we have the opportunity to avoid it. We need not endure the inconvenience of not getting where we want to go in a timely manner, nor the unnecessary costs of solo-occupant cars, nor the loss of job opportunities for people unable to transport themselves.

The conditions are urgent for the region to make a policy commitment to ridership. But the committee believes the region would be unwilling to increase ridership at high cost. The committee determined that increasing ridership should not be a goal in and of itself.

Increasing ridership is desirable when it:

1. reduces congestion and improves mobility at the same or reduced cost to the taxpayers,
2. helps shape development consistent with overall community development plans, and
3. provides transportation to those who do not drive.

B. However, incentives are needed to encourage ridership.

1. Merely providing an alternative to driving alone will not create demand for transit unless it offers a competitive level of travel time, convenience, and price.--Ridership should be encouraged where it can compete effectively with the single-occupant auto in terms of time, convenience, and expense. An alternative that simply costs less than driving alone will not motivate people. We have those alternatives today in the form of buses and ridesharing, but a small percentage of the total trips are made using those alternatives. Regardless of the form of ridership -- in a bus, carpool, or taxi -- it has to attract people.

2. To encourage ridership, multi-passenger vehicles must have priority use of the roadways and parking facilities.--Little incentive to ride exists when it costs the rider in terms of time or dollars.

3. Although negative incentives to ride instead of drive have some appeal, they are not practically feasible.--It was the committee's sense that positive inducements to favor transit alternatives are more effective and thus preferable to negative sanctions against driving alone.

4. Transit alternatives should be oriented toward people's homes.--To orient service toward people's homes requires services other than the traditional bus lines with limited origins and destinations. Especially in Minnesota's climate, the more waiting and transferring that riders must tolerate the less likely they will consider an alternative to driving alone.

5. The "Sane Lane" should be used to determine what components of ridesharing work best.--The region needs information on what arrangements make ridesharing attractive to the most riders for the dollars expended. The sane lane could be used as a model to gain information about effective ridesharing along a corridor leading into downtown. From it we could determine what transit components are cost-effective to the public and the participants: park and rides; timed transfers; busing from major enclosed transit stations; vans owned by the public but driven by volunteers; carpools formed by employers, by groups of employees or by a public agency; free or low-cost parking for poolers; preferential access to major congestion points such as I-94 into the Lowry Tunnel, or other methods.

3. RECOMMENDATIONS

A. The RTB should make explicit its commitment to ridership by setting a measurable goal of ridership.

After setting a goal for a specific vehicle occupancy rate for the region, the RTB can concentrate on strategies for achieving it and measure its progress toward that goal year by year.

B. MNDOT, the RTB, municipalities, and private businesses should give more emphasis to those strategies which encourage people to use high-occupancy vehicles.

1. Mn/DoT planners should routinely include ramp bypasses or metered entrances to the freeways to allow preferential access for all multi-occupant vehicles (not only buses). Instead of having to justify such access, transportation planners should have to justify not allowing HOV access.

2. Mn/DoT should routinely incorporate lanes for high-occupancy vehicles during periods of restricted access and reconstruction, as well as after construction of the major roads is completed. HOV lanes should be included in the plans for reconstruction of major roads, particularly along Highways 35W and I-94 and in the areas subject to very heavy congestion.

3. Municipalities with city-leased or city-owned parking facilities should designate preferential parking arrangements for high occupancy vehicles. Municipalities should provide reduced parking rates for HOVs in their parking ramps and lots. They should set aside preferred parking spots for HOVs. Wherever possible, special entrances and exits should be provided to HOVs much like some parking ramps now offer special exits for contract parkers.

Particularly in cases where public dollars are being used in the construction of parking facilities, such as with the use of tax increment financing, industrial development bonds, or other bonding, the city should require preferential treatment for high occupancy vehicles. Cities should also encourage private owners of parking facilities to provide preferential space and reduced rates for high occupancy vehicles.

4. Local units of government should reduce parking space requirements for developers who produce transit plans in conjunction with their development projects or for expanding businesses which plan transit alternatives for their employees.

The RTB should be responsible for encouraging businesses to adopt such plans, providing technical assistance for the planning if requested, and evaluating the plans for compliance with ridership goals.

5. Minnesota Rideshare should work with local governments to encourage building ridesharing proposals into the plans for major new developments or redevelopments.--Minnesota Rideshare should actively seek out those cities embarking upon plans for major developments. Cities that monitor and approve development agreements for projects within their city boundaries would have leverage to incorporate transit planning into these major development projects. Transit plans for trips to and around the development could be required as a precondition to approval.

6. The RTB should study the concept of "impromptu ridesharing."--Although the committee did not design a detailed proposal for impromptu ridesharing, it did advocate studying how to utilize the vast amount of unused ridership capacity now available in people's privately owned vehicles. The committee envisioned a system in which riders going to a given destination would be able to ride with drivers going to that same location without prior arrangements. Such a system has evolved informally in some areas. At Bay Area Rapid Transit (BART) stations in San Francisco an informal ridesharing arrangement evolved when, after parking their cars, riders would wait outside the station and ride into downtown with drivers heading in that direction.

7. The RTB should work with local businesses to promote ridership.--For instance, the RTB could encourage car rental companies to develop programs to make available pools of vehicles for employers with needs for vehicles during the work day. For a fee eligible employees would be able to use the rental vehicles during the work day and still have the opportunity to commute to work in multiple-passenger vehicles.

FOOTNOTES

1. "Year 2000 Highway System Forecast Analysis," Minnesota Department of Transportation, April 1986.
2. Service level D, or moderate congestion, is congestion from one to two hours in duration such that freedom to change lanes is restricted, traffic spacing allows little room to absorb additional vehicles or minor incidents, and any small increase in traffic will cause a substantial deterioration in the service. Service level E, or major congestion, is congestion from two to four hours in duration where roads are at capacity with no usable gaps in the traffic stream. Service level F, or severe congestion, is congestion where traffic is greater than capacity, with a breakdown in the traffic flow.)
3. "Year 2000 Highway System..." Mn/DoT, April 1986.
4. "Year 2000 Highway System..." Mn/DoT, April 1986.
5. "Travel to Work," Census Bureau, January 1981.
6. TBI, 1982.
7. "Year 2000 Highway System ..." Mn/DoT, April 1986.
8. MNDOT News, May 5, 1986.
9. Mpls. Star & Tribune, October 7, 1986.
10. Conversation with Minn. Dept. of Transportation, Highway Planning Staff, October 1986.
11. TBI, 1982.
12. Ward's Automotive Yearbook, 1985.
13. Motor Vehicle Manufacturers Association (MVMA) Facts and Figures '85.
14. "Cost of Owning and Operating Automobiles and Vans 1984," and 1982, U.S.D.o.T..
15. MVMA, 1985.
16. Ward's Automotive Yearbook, 1985.
17. MVMA, 1985.
18. State of Minnesota Official Statement, August 1, 1986.
19. MVMA, 1985.
20. TBI, 1982.
21. TBI, 1982.
22. "Development and Calibration of Mode Choice Models for the Twin Cities Area," Metropolitan Council, October 1984.
23. Minnesota Rideshare Survey, Metropolitan Transit Commission, 1985.
24. "Survey of Attitudes About Metropolitan Highway Construction," Mn/DoT, February 1986.
25. Regional Service and Finance Study on Transit, Metropolitan Council, January 1984, page 2.
26. TBI, 1982.
27. "Shared Ride Services," Public Services Options, 1975.
28. TBI, 1982.
29. Minnesota Rideshare Survey, Metropolitan Transit Commission, 1985.
30. "Corporate Ridesharing," Minnesota Rideshare, Metropolitan Transit Commission.
31. Minnesota Rideshare Survey, Metropolitan Transit Commission, 1985.
32. "Shared Ride Services," Public Service Options, 1975.
33. "Transit Needs Assessment," RTB, 1986, page 37.
34. "Express," Minnesota Rideshare, Vol. 5 No. 3, Summer 1986.
35. Marcia Diers, manager, Minnesota Rideshare.
36. Bob Owens, transportation manager, 3M Company.
37. Craig Robinson, I-394 interim project manager, Mn/DoT.
38. "Shared Ride Services," Public Services Options, 1975.
39. "Public Transportation: Solving the Commuting Problem," Philip N. Fulton, U.S. Bureau of Census, 1983.

II. Given the dispersed travel patterns in the region, coupled with the current funding and cost situation for transit, the region will have to change the way public transit is provided.

1. FINDINGS

A. Growth in travel will occur all over the region but can be expected to be highest where the growing population and employment centers are located -- increasingly in the suburbs.

Our public bus service is focused on destinations in the two central cities. If residents happen to be traveling to those destinations and if their trips originate near the bus routes, they are well served. If not, traditional public bus service is much less likely to be an option for them.

1. Our dispersed pattern of travel--We have a dispersed pattern of travel in all directions as a result of the area's widely dispersed pattern of residential and employment locations. This was made possible by the availability of private cars and our relative affluence. Higher income people take more trips¹ and log more miles each year² than lower income people. Personal income levels in Minnesota have been above U.S. income levels per capita since the mid-70s.

a. Residents travel to many different destinations--People travel to numerous destinations in our region, coming from all directions. Unlike in some major cities such as Chicago which is situated on Lake Michigan, our residents travel in every direction, unrestricted by geophysical barriers.

Trips into the two downtowns account for only 3.5 percent of all 6.7 million person-trips during an average day.³ This figure takes into account trips for all purposes--work, shopping, and recreation.

b. Work destinations are dispersed across the region--Looking only at figures on employment confirms the dispersed destinations of the region's employees. Of the 941,000 employees in the metro area during 1980, 7 percent worked in downtown Minneapolis, 19.8 percent in the rest of Minneapolis, 4.1 percent in downtown St. Paul, 14.8 percent in the rest of St. Paul, 29.9 percent in Hennepin County suburbs, and 24.5 percent in all other suburbs.⁴

Of all work trips each day in 1980, 55 percent were destined for the suburbs, outside any part of Minneapolis or St. Paul. Of trips that were not work trips (83 percent of daily trips) about 66 percent were destined to suburbs.⁵

The dispersion of trips is also evident in central city neighborhoods. For example, of the residents who live in Minneapolis' Bryn-Mawr neighborhood (which immediately adjoins downtown Minneapolis to the west) and who are employed in the region, 18 percent worked in the central business district (CBD) of Minneapolis, 46 percent worked somewhere in the remainder of Minneapolis, 25 percent in the remainder of Hennepin County, two percent in St. Paul's CBD, six percent in the remainder of St. Paul, and three percent in the rest of the region.⁶

2. People approach any given destination from every direction-- Employees come from all parts of the region to work in the Minneapolis and St. Paul downtowns, which represent the two greatest concentrations of jobs. According to the 1980 census about 37 percent of non-Minneapolis residents working in downtown Minneapolis came from the north and northwest suburbs; 29 percent from the west and southwest; 16 percent from the south and southeast; and 18 percent from the east and northeast, including St. Paul.

Of the non-St. Paul residents coming into St. Paul's downtown to work, about 32 percent came from the suburbs north and northwest of St. Paul; 22 percent from the west and southwest, including Minneapolis, 31 percent from the south and southeast, and 15 percent from the east and northeast.⁷

3. Growth in the suburbs--Both jobs and population are expected to grow in the suburbs; the central cities are expected to decline in population but grow slightly in employment by 2000.

a. Population growth--Population concentrations indicate where trip origins and destinations will be. Population has grown steadily in the suburban areas and is expected to continue increasing there. Major population increases between 1980 and 2000 are forecast for Eagan (141 percent), Eden Prairie (164 percent), Plymouth (83 percent), Maple Grove (104 percent), and Woodbury (123 percent) by the Metropolitan Council.

Moreover, population increases between 1980 and 1986 indicate these communities are already heading rapidly in that direction. The Metropolitan Council's 1986 population estimates show the following increases since 1980: Eagan, 71 percent; Eden Prairie, 61 percent; Plymouth, 30 percent; Maple Grove, 51 percent; Woodbury, 41 percent.⁸

Less strong but still significant population increases are projected between 1980 and 2000: in the northwestern suburbs of Brooklyn Park (45 percent), Coon Rapids (59 percent) and Blaine (57 percent); in the southern suburbs of Bloomington (12 percent), Burnsville (37 percent), Apple Valley (65 percent), Prior Lake (81 percent), and Lakeville (55 percent); and in Minnetonka (27 percent), Cottage Grove (26 percent), Oakdale (35 percent), Shoreview (50 percent), and Inver Grove Heights (28 percent).

In absolute numbers the largest increase in population between 1980 and the year 2000 is expected to be Eagan with 29,300 additional people, Eden Prairie with 26,737, Plymouth with 26,385, and Coon Rapids with 21,174 additional people.

b. Population declines in center cities--Both Minneapolis and St. Paul are expected to decline in population between 1980 and 2000, by eight and six percent respectively. Some first ring suburbs, including Golden Valley, Edina, Brooklyn Center, Hopkins, New Hope, Richfield, Robbinsdale, and Roseville, are expected to remain stable in population or experience slight decreases.⁹

Again, the population estimates for 1986 indicate these communities have experienced population decreases. Population estimates show the following decreases since 1980: Minneapolis, three percent; Golden Valley, five percent; Brooklyn Center, three percent; Richfield, two and a half percent; Roseville, two percent, and one percent decreases for St. Paul, Edina, Hopkins, New Hope, and Robbinsdale.¹⁰

c. Employment--Major employment centers are also increasing in the suburbs. Although Minneapolis and St. Paul are expected to experience increases in the number of jobs between 1980 and 2000 (five and three percent respectively), major increases are projected for Blaine (136 percent), Coon Rapids (86 percent), Fridley (64 percent), Burnsville (112 percent), Eagan (221 percent), Hastings (59 percent), Bloomington (53 percent), Brooklyn Park (192 percent), Eden Prairie (212 percent), Minnetonka (83 percent), Plymouth (125 percent), Edina (32 percent), Maplewood (45 percent), Roseville (34 percent), and West St. Paul (56 percent).

Moreover some of these cities have already experienced significant growth in employment from 1983 to 1985. Some of the larger growth included: Blaine at about 77 percent, Burnsville 36 percent, Eagan 29 percent, Brooklyn Park 45 percent, Eden Prairie 35 percent, Minnetonka 37 percent, Plymouth 24 percent, and Roseville 21 percent.¹¹

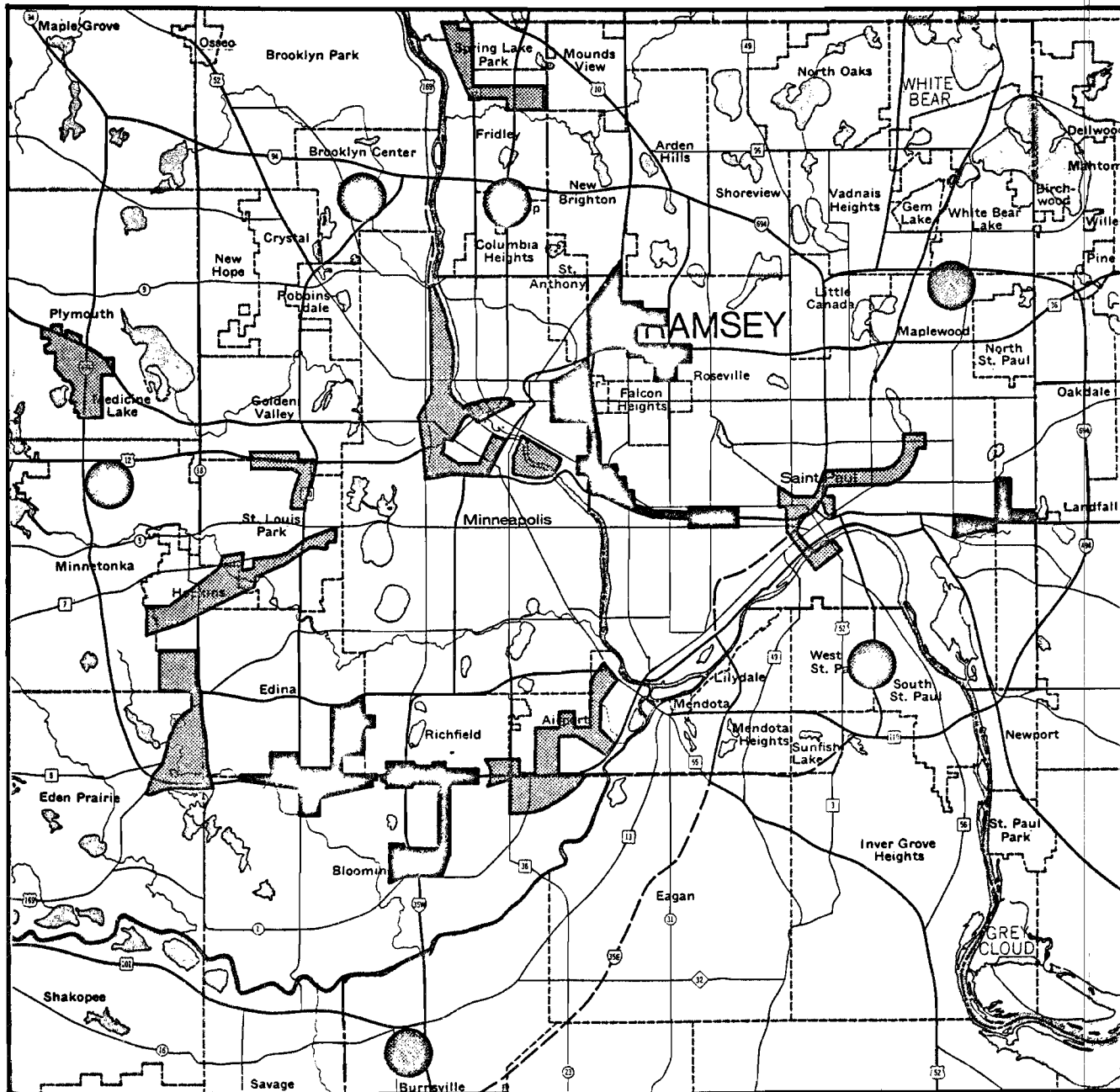
In absolute numbers the largest employment increases between 1980 and 2000 are expected in Bloomington with an increase of 31,000 jobs, Eden Prairie with 25,800 additional jobs, and Plymouth with 25,000 new jobs. Minneapolis and St. Paul are expected to increase by 14,000 and 6,000 respectively.

The current concentrations of commercial-industrial development in the suburbs also indicate where some major trip destinations potentially lie. (See map.) Growth in commercial-industrial development is expected to be heaviest in the south and west areas of the region.

B. The cost of fixed route bus service is increasing at the same time revenues from federal and state sources are declining, forcing heavier reliance on property tax revenues and fares.

1. Cost of the public bus system--The cost of regular route bus operations has risen well in excess of inflation. Since 1971, operating costs have increased over seven-fold, from \$12.7 million to \$93 million in 1985. In constant 1986 dollars the increase is \$58.7 million, an increase of 169 percent. Part of the increased costs resulted from expanded services. Overall, bus-miles increased 52 percent from 18.6 million per year in 1971 to 28.3 million in 1985. Bus-miles per year increased through 1977, dipped slightly for two years, climbed again to a peak of 30.6 million bus-miles in 1981, and have stabilized at about 28 million.

REGIONAL BUSINESS CONCENTRATIONS



Concentrations with employment of 10,000 or more



Concentrations with retail sales of \$100 million or more



Concentrations with employment of 10,000 or more
and retail sales of \$100 million or more

<u>MTC Operating Indicators</u>			
Actual Dollars (1986 dollars)			
	<u>1971</u>	<u>1981</u>	<u>1985</u>
Wages(Top driver wage/hour)	\$4.45 (\$12.17)	\$11.40 (\$13.86)	\$13.57 (\$13.63)
Fringe Benefits (in millions)	N/A	\$23.2 (\$28.2)	\$22.3 (\$22.4)
Fuel(cents/ gallon)	11.6 (31.7)	106.5 (129.5)	83 (83.39)
Total Op.Costs (in millions; reg.route only)	\$12.7 (\$34.7)	\$86.5 (\$105.2)	\$92.7 (\$93.1)
Bus Miles (millions/ year)	18.6	30.6	28.3
Employees*	1,189	2,375	2,280

*Employees include full-time and part-time drivers, full-time mechanics, and other full-time employees.

Sources: Regional Service & Finance Study, 1984; MTC 1987 Budget; MTC memo to House Appropriations Committee, Jan. 8, 1986; MTC financial statements.

a. Wages and benefits--Wages (which account for about 55 percent of the MTC's operating expenses) increased about 12 percent over and above inflation between 1971 and 1985. As of October, 1986, wages for the upcoming year had yet to be negotiated. Wages increased nearly 205 percent from 1971 to 1985 (not adjusted for inflation). This compares to a 162 percent increase of the average of median monthly wages in Minnesota from 1970 to 1986 as computed by the Minnesota Department of Jobs and Training. 12

Fringe benefits have accounted for about 24 percent of the MTC's operating costs and include vacation, sick days, uniform, insurance for health and life, pensions, FICA, unemployment insurance, and workers compensation (which is not negotiated). Between 1981 and 1985 expenditures for fringe benefits fluctuated slightly from year to year and dipped almost four percent (in current dollars) from 1981 levels in 1985 because of lower health insurance, life insurance, and unemployment insurance costs.

b. Fuel costs--Fuel costs rose about 163 percent over inflation between 1971 and 1985. For 1987, the MTC estimates fuel price per gallon at 67 cents, a 19 percent decrease from 1985 prices.¹³

c. Service levels--Between 1971 and 1981 service expanded in terms of bus-miles by 65 percent. After peaking in 1981 the number of bus-miles fluctuated downward to its 1985 level of 28.3 million miles, a seven percent decrease from 1981. The number of employees doubled during the 1970s, the period which included service expansion. From 1981 to 1985, the number of employees decreased four percent.

d. Total operating costs for regular route service--The costliest addition to the MTC's operating costs, which rose 203 percent (in 1986 dollars) between 1971 and 1981, was its service expansion into the suburbs, according to the Metropolitan Council.¹⁴ Significantly increased trip lengths and lower numbers of passengers per bus-mile traveled add to the expense. Labor provisions which provide premium pay for work performed beyond a certain number of hours per day combined with the heavy peak hour demand also add to the cost. The ratio of payroll hours to actual productive hours indicates that the MTC pays for an average of 1.20 hours for each productive hour.¹⁵

2. Ridership changes--Because of service expansion, the energy crunch, and increased fuel prices, ridership increased steadily from 56.9 million passengers in 1971 up through 1979 when it peaked at 93.4 million riders, an increase of 64 percent. After that point the number of riders decreased to the 1985 level of 73.5 million. This represents an aggregate 21 percent decrease in riders between 1979 and 1985.

Ridership declined for a number of reasons, according to the MTC. In 1983, the MTC lost the University of Minnesota inter-campus service through competitive bidding to Medicine Lake Lines, a privately owned bus company, resulting in a decline of 4.5 million passengers for the MTC. Fare increases between 1979 and 1982 caused some loss in ridership. Fuel prices fell, accompanied by the recession of 1982-83, resulting in a ridership drop. Some losses are also attributable to the MTC's continuing refinement of routes including the dropping of high-cost and low-ridership services.

a. MTC's service is important--The MTC service is a valuable one for those riders whose destinations are in and near the vicinity of the two major downtowns. Access afforded by the MTC to these downtowns distinguishes them from all other centers in the metropolitan area. People can get there and home again from many directions without a car. During the peak 15 minutes of rush hour traffic into downtown Minneapolis about 48 percent of the people entering downtown come by bus. Over a 12 hour day, of all the people entering or leaving Minneapolis' central district, 22.9 percent come by bus.¹⁶

3. MTC is working to increase productivity--The MTC has begun action on several different fronts to make its service more productive. The MTC worked jointly with the RTB on route performance standards to help decide whether to keep, change, or drop MTC routes that exceed a standard subsidy per passenger.¹⁷

The MTC has also worked to improve employee absenteeism, and shifted its use of bus storage facilities for more efficient and centrally-located bus layovers. To generate additional revenues the MTC began leasing some of its storage capacity to private bus companies.

Although 45 percent of the MTC's active bus fleet is twelve years old or older (the generally accepted useful life of a bus), the MTC has a fleet modernization plan to replace the worn out vehicles through a combination of rehabbing old buses and buying new ones.

a. MTC compares favorably--When compared to similar public transit operations around the country, the MTC's performance rates well on many operating and financial standards.¹⁸

4. State revenue reductions--The MTC is facing the same pressure faced by the bus system twenty years ago: raise fares or reduce service. The 1986 Legislature cut about \$4 million from an original \$45 million appropriation for metropolitan transit. This is further evidence of the gradual erosion of one traditional revenue source for transit. As a percent of transit revenues, the state's share has decreased from 31 percent in 1978 to 13 percent in 1983.¹⁹ The state's share has remained at approximately that same level in recent years. In addition to the state appropriation, the state uses non-property tax revenues such as those from income and sales taxes, to reimburse the RTB for property tax feathering²⁰ and the homestead tax credit.

The debate over transit funding in the 1986 Minnesota Legislature was intense. A House Appropriations subcommittee had proposed a \$12 million cut for metropolitan transit. MTC representatives stated such a reduction would force the MTC either to increase all fares (from the \$.60 base fare to \$.75, from the \$.75 peak hour fare to \$1.00, and from the \$.10 social fare to \$.25) and cut two million bus-miles (out of about 28 million per year) or forego increasing fares but reduce service by 4.2 million bus-miles per year.

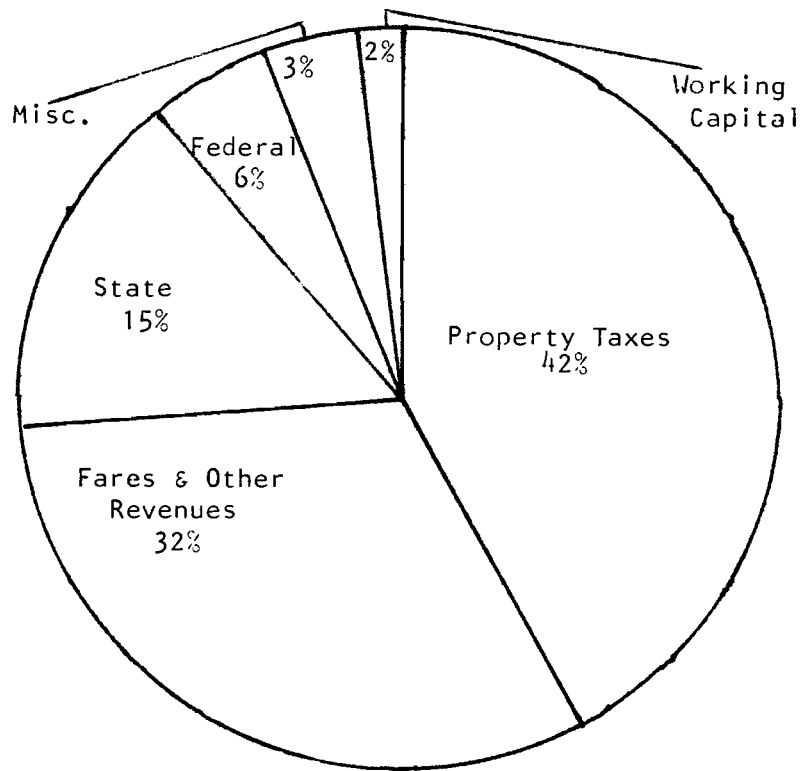
Also in 1986 the Legislature delayed the transfer of revenues from the motor vehicle excise tax into a special fund for roads and transit. The money went instead into the state's general fund. This did not constitute a reduction in total transit funding because general fund revenues were used instead. According to a 1981 law, revenues from this sales tax on motor vehicles were to be gradually transferred into funds for roads and transit.

5. Federal revenue reductions--The MTC is assuming a 20 percent cut from 1984 in federal operating assistance for calendar year 1987 and assumes that level will remain constant for 1988 and 1989. The 1987 MTC budget assumes a 25 percent reduction in federal capital assistance from the 1985 level. Based on the 1987 budget, federal dollars would make up about six percent of the MTC's \$104 million operating revenues, and over 75 percent of its \$39 million capital revenues. (See chart.)

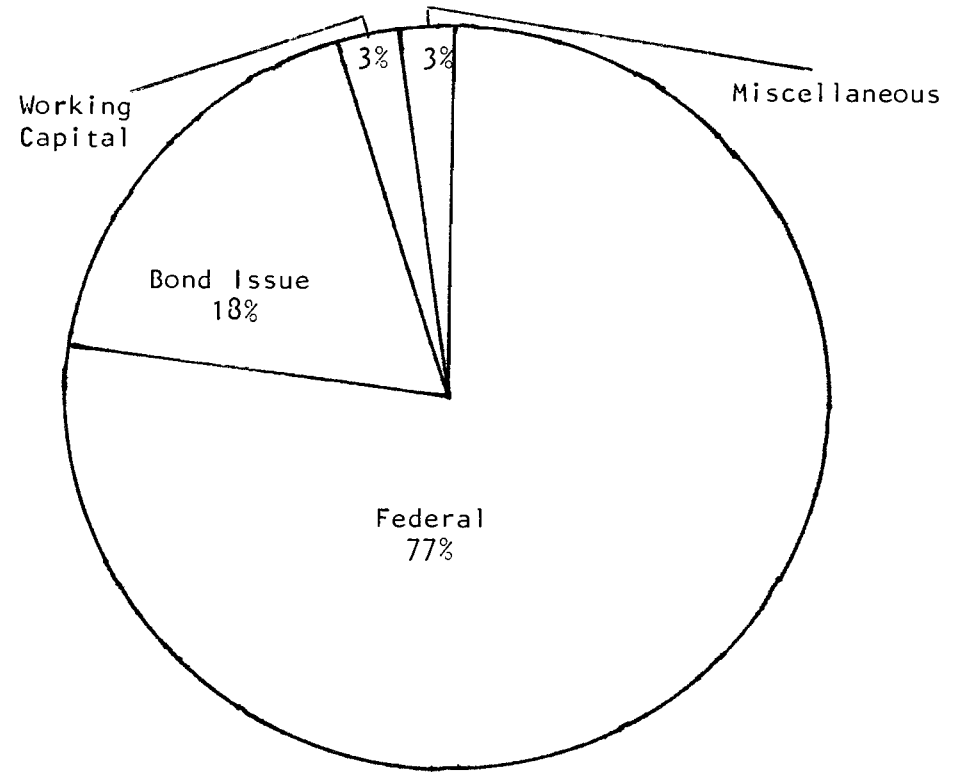
MTC REVENUE SOURCES

1987

Operating Revenues



Capital Revenues



Source: "MTC 1987 Budget," MTC, June, 1986.

(Percentages may not add to 100 due to rounding.)

The Gramm-Rudman-Hollings legislation passed by Congress automatically cut 4.3 percent of federal mass transit spending levels last spring resulting in a loss nationwide of \$157.8 million for fiscal year 1986.

a. Congress reduced grants to mass transit--Congress appropriated \$3.4 billion for mass transit in fiscal year 1987, about \$100 million less than last year's level.

b. Administration attempted to drastically cut transit funding levels--In an attempt to remain clear of the local debates on transportation priorities, the President's budget for fiscal year 1987 called for combining grants for transit and aid to highways into one block grant. Local officials would decide whether to spend the dollars on roads or transit services depending on local needs. The total amount available nationwide for transit and highways together (\$3.3 billion) would have been less than the amount appropriated for transit alone last year (\$3.6 billion).²¹

6. Reliance on property taxes has increased--As other revenues decline, the share of the MTC's costs borne by property taxes increases. From 1978 to 1983, property taxes increased from 21 percent to 41 percent of the MTC's total funding sources.²² Property taxes have continued as a 40-45 percent share of the MTC's revenues.

7. Reliance on fares--In 1971 the MTC recovered over 90 percent of its operating costs through fare revenues. This percentage fell considerably when the MTC expanded service in the mid 70s.²³ In 1978 fares accounted for 28 percent of MTC revenues and then continued to increase as a share of total revenues, up to 37 percent in 1983.²⁴ In the 1987 MTC budget, fare revenues account for about 32 percent of all sources of income.

When the Joint Legislative Commission on Metropolitan Transit recommended the creation of the RTB, it also recommended that fares and property taxes should each make up about 35 percent of revenues.²⁵

To the advantage of its riders, the MTC has not had a fare increase since 1982 when it began charging peak hour fares that reflected the higher costs of providing service during that time of day.

C. People without a car or unable to drive a car have mobility needs that are going unmet.

Some people do not have access to private vehicles yet do not qualify to ride Metro Mobility, the specialized transit service for handicapped people. Youths under 16 years of age, some senior citizens, visitors to the region, and low-income people are generally without private means of transportation.

1. Residents without cars have limited opportunities--Although fewer households in the region in 1982 were without their own vehicle as compared to 1970, approximately 74,000, or 10 percent of all households, were still carless.²⁶

People without cars generally have limited job opportunities -- limited to employment in areas to which potential employees have

access, whether by MTC, carpooling, walking, or other mode. As employment opportunities increase in the suburban areas, people without cars have increasing difficulty reaching potential jobs. Nor do transit-dependent people have the opportunity to travel to other destinations in the region to which car drivers enjoy easy access, like shopping centers, recreational centers, and churches.

Employers' pools of applicants are limited when potential employees do not have a means of transportation to the job site. Because of this problem, the Northern Dakota County Chamber of Commerce identified a need for transit service to bring employees from the West St. Paul/ South St. Paul/Inver Grove Heights areas to major employers in Eagan like Sperry, Blue Cross-Blue Shield, Coca-Cola, and a bulk mail service. In June, 1986 the Chamber submitted a request to the Dakota County Board of Commissioners to develop a short- and long-range public transit proposal to meet transportation needs in Dakota County.

People seeking employment who are eligible for free or reduced fares are restricted to MTC routes. Reduced fares to ride the MTC are available to seniors and youths but are restricted to off-peak hours along MTC routes.

D. Transit planning is largely done at the regional and state levels.

1. Metropolitan transit planning--The Transportation Policy Plan is the Metropolitan Council's set of policy guidelines for overall transportation planning (including transit) in the metro area. The policy plan is due to be updated in 1987. Its focus is regional and it is not intended to detail how individual local governments plan or use transit. One of the RTB's major undertakings is the Transit Needs Assessment study which assesses the overall transit needs in the Twin Cities area, identifies markets of transit customers, and proposes transit services to meet them.

2. Metropolitan highway system evaluation--The Metropolitan Council, Mn/DoT, and the RTB began joint meetings early in 1986 to evaluate the metropolitan highway system for its use in the long term future. Part of this study's purpose is to develop "a clearer integration of transit and highways," and to determine what strategies are necessary to maintain good mobility in the region. In their preliminary work the participants have agreed to "retain preferential features for transit" in developing all projects on the Metro Highway System.²⁷

3. Local transit planning is not common--The Minnesota Legislature mandated all metropolitan local governments to complete comprehensive plans to enhance their orderly growth. Although the plans have been completed, they do not necessarily have a transit component. When the Metropolitan Council reviews these comprehensive plans it may require local governments to include a transit component if the Council deems this is needed to complement the other regional systems (such as sewers and highways). The Council also has the authority to require local transit planning through its "metropolitan significance" reviews, such as the one it completed on the proposed Megamall for the old Metropolitan Stadium site in Bloomington. However, such reviews are rare.

4. Transportation management organizations--In several areas around the country, private business concerns have taken a more active role in transit development and transportation management. In what planners are calling Transportation Management Organizations, developers, employers, and local governments have come together to find solutions to local transportation problems. The private business' role differs significantly from the traditional stance that was more often reactive to public decisions than proactive. The involvement of the organizations ranges from monitoring and advising to promoting and planning to managing and financing. Their interest has produced a number of privately initiated programs and project proposals in Hartford, Syracuse, Denver, Baltimore, Orlando and elsewhere.

Just such an organization evolved in Atlanta to establish a downtown circulation system with good connections to convention and hotel facilities.²⁸ The transit bill proposed by the 1985 Minnesota House of Representatives also included this type of organization.

E. Various ways of providing the service are possible--What improvements make the most sense?

1. One possibility is expanding the current fixed-route system to destinations other than the two downtowns-- While the current fixed-route system does have some crosstown routes, it largely serves the areas in the vicinity of the two downtowns. Expanding the fixed-routes would require running lines from virtually every neighborhood with a given concentration of people to nearly every destination. The impracticality of such a system is overwhelming. It also would exacerbate the highest cost portion of the MTC's service today: the peak hour, long distance runs.

2. Another option is expanding the present network of routes that radiate into the two central downtowns--This essentially would increase service into Minneapolis and St. Paul. As pointed out earlier, these two destinations are already served quite well. Expanding the route network might pick up a few additional riders on the margins but only those heading to destinations in either Minneapolis or St. Paul. This strategy is one the MTC employed earlier but with limited success. It led to higher costs and few additional riders. Many of those extended suburban routes leading into the downtowns are the first to be cut when the Legislature gets concerned about costs and tightens the budget.

3. A third option is to use "better" vehicles or vehicles other than the ones now used by the MTC, such as vehicles fixed to a guideway--However, any system of fixed-route vehicles focused on two destinations will run up against the same problems now facing the MTC. People are making trips to places other than those that a fixed-route system with limited destinations can reasonably handle.

4. A fourth option is to allow vendors to compete to offer the service, with the expectation of reducing service costs. This is already being done in the Twin Cities.

a. The University of Minnesota takes bids for its intercampus bus service. During its last bidding process the University awarded the contract to Medicine Lake Lines which submitted a bid about 40 percent lower than the MTC's bid. About 25,000 people ride the University's intercampus route daily, approximately the same number as ride the MTC's 16A-University Avenue line, the MTC's most highly patronized route.

b. Over 60 percent of the 48 school districts in the seven county area rely totally on contracts with private bus companies to transport their pupils. About 27 percent use district-owned buses exclusively and 12 percent use some combination of contracted buses and district-owned vehicles.²⁹ The St. Paul School District relies entirely on private school bus companies to transport students along over 200 routes each school day. The district determines the routes, the number of stops, and the times of the runs. Vendors who meet the district's qualifications bid on specific routes in the district, usually those in closest proximity to their terminals. Bids are let each school year and have provided the district with what its transportation director calls some of the lowest school transportation costs around.

c. Efficiency through competition is the goal of the RTB's effort to establish competitive bidding for transit services in an area west of Minneapolis encompassing 25 communities surrounding I-394. The Board recently received a grant from the federal Urban Mass Transportation Administration to begin this competitive bidding process as a demonstration program.

d. Constraints to competition--Today a bus company must operate "closed-door" when in the MTC service area. In some cases private bus companies serve areas not now served by the MTC but travel through the MTC service area to bring passengers to their destinations. While in the MTC service area on their way to downtown for instance, the private companies are not allowed to pick up passengers. Even if a private company's schedule or service might better serve the travel needs of passengers in the MTC service area, it can not offer its services to them.

Today when charter bus operators want to begin or expand service they must file a request with the Transportation Regulatory Board of Mn/DoT. This is followed by publication of the request, and if protested, by a formal administrative hearing where the applicant must prove that the new service is needed and cannot be furnished by existing vendors. The hearing is a formal, legal procedure including witnesses, cross examination, and expert testimony, sometimes stretching into lengthy, adversarial proceedings.

2. CONCLUSIONS

A. Improvements are needed to ensure the region is getting the most mobility out of its public transit dollar.

1. Competition between transit providers would benefit service.--Low-cost options are needed so the greatest amount of transit service is offered per dollar. To many people transit means a big, 50-passenger MTC bus which runs at scheduled times and at fixed pick-up points. Given this limited definition of transit no real prospect for major improvement is reasonable.

A broader definition of transit, however, expands the range of solutions. The MTC should be one of many vendors with which the RTB contracts for service. In terms of a ride for a low-income worker to a non-downtown location, the size or ownership of a vehicle is unimportant; the mobility is what is important.

2. Competition would benefit those areas not now served by the MTC--Competitive bids should be sought in areas not served by the MTC today. Expanding service in this way would open up additional travel opportunities both for those who are now drivers and for people without access to a private vehicle. To the extent the entire transit system is improved with additional vendors and service to more destinations, those unable to drive, visitors to the region, and other transit-dependent people will benefit. In these areas where no service exists now, not one but many vendors should be allowed to provide service.

B. Fixed-route service along radial routes into and in the vicinity of the two major downtowns fills an important transportation need which should continue to be served.

For those people whose destinations are primarily along one of these radial routes, our public buses provide a good level of service. Many downtown workers choose to use the bus service for their daily commute. A smaller but still important group of people use the bus to get to medical, retail, cultural, and other functions near the downtowns and in some central city neighborhoods. Service should be maintained to fulfill these ongoing transportation needs where ridership justifies it.

C. Fixed-route transit only partially meets the region's transportation needs.

1. Our travel patterns and diverse trip origins and destinations require a variety of transit services.--Despite service modernizations, today's bus routes, on which most of our public transit dollars are spent, were built largely upon the same routes designed in the late 1800s for a radial, street railway.³⁰ While that system adequately served the needs of a society virtually dependent on the rail lines for mobility, it is no longer adequate.

Because a significant and growing share of today's commuter trips begin and end in dispersed suburban locations, fixed route transit into the downtowns serves a smaller and smaller share of work trips.

2. Competition would benefit those areas along fixed routes now receiving peak hour service only--Private bus companies, taxis, limousines, and other vendors should be allowed to compete for riders currently served only during peak hours. Competition is needed to provide the most service per dollar expended. Competitors for service along fixed routes should be granted exclusive franchises for the period of the contract.

3. Competition would benefit riders along fixed routes now receiving all-day service--Private vendors (private bus companies, taxis, limousines, etc.) should be allowed to compete directly with the MTC for daily service. The destinations to which people will have access could be expanded beyond those now reached by the MTC. Subsidies to ride the MTC now provided to some of the transit-dependent population (for example, people over age 65 and youth too young to drive) could also be used to buy rides from other vendors.

4. RTB must coordinate a diverse mix of transit services--The diversity of the region presents a wide range of transportation problems, all of which cannot be solved with one transit mode. Different needs demand a range of different solutions. What works well in one part of the region may not be well suited in another part. A transit solution for transit-dependent people will not address the needs of people now driving alone.

D. In its work to build a regional transit system, the RTB should encourage local governments to play more active roles in transit.

Local involvement is crucial for transit programs to proceed. Additionally, if transit improvements are considered for an area and supported by the local governmental units, the local governments must also be willing to support appropriate zoning changes. When transit planning for major capital improvements conflicts with local land uses, it is unlikely to succeed. The RTB should provide the coordination, support, and funding opportunities for the regional system. But at the same time, local governments, businesses and citizens are most aware of their local transportation needs and should be involved with transit planning.

1. Transportation Management Organizations are needed to assure adequate local involvement and private sector involvement in transit planning and implementation--In congested areas both in the suburbs and in the fully developed parts of the region, local organizations focused on transit issues can be helpful in making transit improvements.

2. The success of transit service should be measured in terms of the number of riders served--The evaluation of a vendor should be based on demonstrated ridership. Successful transit will draw people out of their single occupant cars, regardless of the vehicle used to do that. It will also serve those people who do not have access to a private vehicle.

3. Reliable financing is needed, but a dedicated source of money is not--To facilitate planning for transit from year to year, reliable sources of money are needed. However, the committee did not believe a dedicated fund for transit is necessary because first, as needs for services vary from year to year, money should be able to flow to the area of greatest need. Second, when services are guaranteed a sum of money, their managers have no built-in incentives to provide the service efficiently. Third, our public officials are elected to make the hard decisions about what should be funded. In addition, dedicated funds do not necessarily guarantee a minimum or stable level of money as users of gas-tax revenues will testify. However, the committee recognized the need for revenue dependability and stability to plan for service.

a. The region--As federal assistance declines, the state or region will have to pick up more and more of the costs of facilities and equipment.

b. Users of transit must continue to pay--As financial responsibility for capital improvements shifts to the state or region, operating costs should increasingly become the responsibility of the users and possibly the retailers and other businesses which receive the benefits of transit.

Fares must more accurately reflect the cost of the service. Bus riders (especially those who ride out of choice and not necessity) should expect to pay for larger portions of the capital and operating costs through fares. This also suggests that peak hour fares for all transit services (not only the MTC) be set at a higher rate than mid-day service, and relate to the distance traveled.

c. Property tax payers should continue to pay--Financial support through the property tax should continue to provide a threshold level of transit service. Pegging the property tax rate to the actual level of service received ("feathering") should continue but needs adjusting to reflect the heavy concentration of use in the downtowns. Communities on the edge of the transit financing district should not be able to discontinue the tax but should be able to pay a lower minimum rate to subsidize service for the transit dependents and for strategies related to congestion relief.

d. Equipment and facilities paid for with public dollars should be available for use by both public and private transit vendors. Private vendors should be able to lease the publicly paid-for equipment and facilities as available.

3. RECOMMENDATIONS

A. The RTB should phase in competitive bids for service to lower the cost of bus-hours of service.

1. The RTB should focus its competitive bidding on the highest cost portion of the MTC -- the peak hour service.--In the short term the most significant cost reductions can be attained by changing the high-cost, peak-hour service. Over time the RTB should also consider competitive bids for service in the off-peak hours, along crosstown routes, in areas with low ridership densities, and in both the urban and suburban service areas. In evaluating the bids the RTB should emphasize the service, not the kind of vehicle used to provide it.

a. The RTB should consider bidding both on an individual route basis and on an areawide (subregional) basis.--In some instances bidding on routes or parts of routes may make the most sense. In others, service in particular geographic areas should be open to competitive bids. Vendors based in the northeast quadrant of the metro area, for instance, might be most interested in competing for service near their existing garages and other facilities.

2. To make such bidding possible for vendors who are small businesses, MTC equipment and facilities should be made available for leasing on an as-available basis. Private leasing of MTC equipment and facilities would keep the publicly-owned equipment in service.

3. In developing procedures and regulations for competitive bidding among transit vendors, the RTB should facilitate the process and avoid lengthy, costly, adversarial hearings which discourage potential vendors.

4. Those routes not meeting the minimum subsidy per passenger standards set by the RTB under any transit provider should be discontinued.--If a route fails to meet the criteria for a successful route regardless of the vendor utilized, it should be dropped.

B. The RTB should expand service into areas not served by the fixed-route system by opening them up to bid to a variety of public and private sector vendors.

This includes taxis, limousines, bus companies, paratransit services, and other vendors.

1. The Legislature should expand the role taxicabs may play as transit providers by allowing metropolitan-wide licensing of taxicabs, an unlimited number of taxi licenses, non-regulated fares, and shared, group-ride service.

a. The taxi license should permit taxis to pick up and drop off passengers anywhere in the metropolitan area, reducing the number of "deadheaded" trips when the taxi must return without passengers.

To ensure quality service the RTB should have the legal responsibility for setting minimum safety standards for taxis. To maintain the RTB's role as a policy-making body the inspection and evaluation duties should be contracted to an agency without direct interests in the taxi industry but familiar with regulating and inspecting vehicles as well as enforcing vehicle safety regulations. The Department of Public Safety is a possible agency to handle the licensing and enforcement responsibilities.

b. Taxi fares should be set by the taxi owners. Although no public agency should determine fares, to prevent price gouging taxi owners should be required to file their rates and post them conspicuously in and outside the taxicab. In heavy taxi-use areas such as the airport, the RTB must provide the opportunities to make consumers aware of differences in rates.

c. Taxis should be encouraged to offer group rides as an alternative to the exclusive-ride business that has prevailed in the Twin Cities. Passengers should be able to request exclusive service, and drivers should have the right to price this service higher than a shared-ride service.

C. The RTB should be responsible for maintaining the regional nature of the transit system and for high standards of performance.

It will be the RTB's duty to ensure that riders can transfer easily between vendors and that they have adequate information about what services and routes are available. The RTB should maintain a central clearing house for rider complaints. It should ensure that service meets operating standards, such as promptness, maintenance of vehicles and stops, driver knowledge of routes, and other standards (realizing that standards may vary from contract to contract depending upon the service provided).

D. The Metropolitan Council should take the lead in recommending transit financing changes.

Because the Metropolitan Council has the broad role of coordinating the regional systems, it is in the best position to analyze the competing needs of transit and the other regional services. Transit is one of many functions competing for limited resources at the regional level. The Council is responsible for analyzing the question about more reliable financing arrangements, proposing alternatives, and advocating change to the Legislature.

We include for consideration several financing alternatives tried elsewhere in the country in Appendix 4, although we have not endorsed any of them.

a. The Metropolitan Council should facilitate transportation management organizations within the region.--The Council should provide coordination for locally controlled organizations, consisting of employers, developers, and local governments, working to solve local transit problems.

E. Local units of government acting alone or jointly with adjacent units should ensure land-use policies are congruent with transit policies.

Local governments should incorporate transit planning into the approval process for all major developments and redevelopments. It is at the development approval stage that a city enjoys the most leverage over proposed developments. Cities should capitalize on this opportunity to ensure transit alternatives are considered for the development. Where a city lacks the planning expertise, the RTB should provide technical assistance.

FOOTNOTES

1. TBI, 1982.
2. MVMA, 1985.
3. TBI, 1982, page 12.
4. U.S. Census, 1980.
5. "Transit Needs Assessment, Phase I," Regional Transit Board, pages 93-95.
6. U.S. Census, 1980.
7. Ibid.
8. "April 1, 1986 Population Estimates," Metropolitan Council, July 1986.
9. MDIF, Metropolitan Council, September 1986.
10. "April 1, 1986 Population Estimates," Metropolitan Council, July 1986.
11. "September 1986 Employment Estimates," Metropolitan Council, September 1986.
12. "Review of Labor and Economic Conditions," MN Dept. of Jobs and Training, August 1986.
13. MTC 1987 Budget, Metropolitan Transit Commission, June 1986.
14. Regional Service and Finance Study, Metropolitan Council, January 1984; MTC memo to MN House Appropriations Committee, January 1986.
15. "Comparable Transit System Survey," MTC, January, 1986.
16. "Minneapolis Cordon Count," Minneapolis Traffic Engineering Division, Department of Public Works, 1984.
17. "Development of Interim Financial and Performance Standards for MTC Regular Route Transit Services," Joint RTB/MTC Committee on Performance and Financial Standards, March 19, 1986.
18. "Comparable Transit System Survey," MTC, January 1986.
19. Regional Service & Finance Study, Metropolitan Council, 1984, page 34.
20. Property tax "feathering" refers to three levels of taxation differentiated by the level of bus service: areas receiving all-day service levy two mills; areas receiving peak hour service and limited off-peak service levy 1.5 mills; and areas with peak-hour service only levy 1.25 mills. For communities paying less than two mills, the state pays the difference between the local mills and the full two mills.
21. Conversation with Congressman Martin Sabo's staff, July 1986.
22. Regional Service and Finance Study, Metropolitan Council, January 1984.
23. "Interim Implementaion Plan 1985-87," RTB, December 1984.
24. Regional Service & Finance Study.
25. "Report of the Metropolitan Transit Study Commission," Legislative Study Commission on Metropolitan Transit, February 24, 1984.
26. TBI, 1982.
27. "Executive Summary, Metro Highway System Evaluation, Phase I," Metropolitan Council, February 1986.
28. "The Transportation Management Organization", Urban Mass Transportation Administration, U.S. Department of Transportation.
29. "1984-85 Transportation Reports," MN Dept. of Education, 1985.
30. "Streetcars and the Urban Morphology of the Twin Cities," Antony Goddard, University of Minnesota, 1986.

III. The Issue of Fixed-Guideway Transit: The Twin Cities region has not adequately discussed how fixed-guideway might be best applied to increase ridership.

Fixed-guideway is transit in which the vehicle is fixed to an exclusive guideway and picks up riders at predetermined pick-up points. In this report it is understood to include a variety of technologies.

1. FINDINGS

A. Over the years, public and private organizations in the Twin Cities have discussed various types of fixed-guideway transit to serve travel needs and to shape the development of the region.

The RTB and the MTC before it, the Hennepin County Regional Rail Authority, the Metropolitan Council, the Citizens League, the city of St. Paul, the city of Minneapolis, and Minneapolis' Downtown Council are some of the groups who have taken active roles in the fixed-guideway debate.

1. Early discussions of fixed-guideway--In the early 70s the MTC approved a transit program including automated vehicles on fixed guideways and express buses, as well as people-mover systems within major centers.

In the early 1970s a group at the University of Minnesota began studying the potential of personal rapid transit (PRT).¹ The Metropolitan Council revised its transportation policy plan in 1972 by advocating busways instead of a fixed-guideway system. The Legislature authorized a major expansion of the bus system in 1974 and advocated low-cost transit alternatives.

In the mid-70s the MTC completed a small-vehicle study which rejected the use of PRT and proposed further analysis of light rail transit (LRT).² The Citizens League issued a report recommending fixed-guideway transit within major activity centers where vehicle congestion was the worst and where the potential seemed best for encouraging development to occur close in and around the center.

In 1976 the Metropolitan Council adopted a plan that prohibited fixed-guideway transit except downtown circulators. (This prohibition was removed a few years later.) In the later part of the decade the city of St. Paul began investigating in earnest the use of an internal circulator in downtown; this was later rejected in a St. Paul referendum, largely for cost and aesthetic reasons.

In 1980 the Metropolitan Council began a feasibility study of LRT at the request of the Legislature, and two years later amended its policy plan to remove the prohibition against fixed-guideway systems. The city of Minneapolis and Mn/DoT studied transit alternatives for the Hiawatha Avenue corridor and recommended in 1983 upgrading the highway and adding a light rail transit line.

2. Most recent discussions of fixed-guideway--Based on further studies of three possible LRT corridors -- University Avenue, Hiawatha Avenue, and the Southwest corridor -- the Metropolitan Council voted to proceed with preliminary engineering studies for

LRT along University Avenue in 1985. However, the Legislature postponed further work on LRT until the RTB could complete a comprehensive study of the needs for transit in the region.

The Metropolitan Council is now involved in a Long Range Transit Analysis which is to determine whether "major transit improvements, such as bus lanes, busways, high occupancy vehicle lanes, or light rail transit, may be warranted" in the region.³ Although the advisory committee conducting the study is discussing a number of technologies for the corridors, they have dropped two technologies from further consideration: 1) heavy rail transit because of its high capital costs and small labor savings, and 2) personal rapid transit because the technology has not been demonstrated in an urban setting and its cost estimates are hypothetical.

B. The region has in fact proceeded with forms of transit along exclusive roadways -- but not with vehicles fixed to guideways.

The region has several examples of rights-of-way designed exclusively for multiple-occupant vehicles: contra-flow bus and taxi lanes along Marquette, Hennepin, and Second Avenues in Minneapolis, bus lanes on Nicollet Mall, preferential access ramps leading to some freeways, the high occupancy vehicle lane along Highway 12, and the University of Minnesota transitway scheduled for construction in 1987.

C. The discussion of fixed-guideway transit can be separated into different applications which achieve different purposes.

The committee did not debate the various fixed-guideway technologies but instead looked at how fixed-guideway might be applied differently in the region.

1. Corridor applications of fixed-guideway--A corridor application of fixed-guideway is understood to mean a mid- to long-distance line-haul route serving trips that have a common destination such as a major downtown. It is used in densely developed areas, or where a system of feeder buses and park-and-ride facilities bring riders to the fixed-guideway station for a trip into a major center.

2. Small area applications--A small area application of fixed-guideway is understood to mean a short-distance route (under three miles) that connects various points within a major center such as a Brookdale, Southdale, downtown Minneapolis, or downtown St. Paul. This could be a route that circulates around a major development or a downtown, or one that travels along short spokes to a hub.

D. Little comparison has been done of the relative advantages and disadvantages of the corridor and small area applications of fixed-guideway transit.

Many of the region's fixed guideway studies focused on corridor applications: the 1972 MTC Development Program; Minneapolis' and Mn/DoT's alternatives study for Hiawatha Avenue; the Metropolitan Council's feasibility study of LRT issued in 1981; the St. Paul Planning Commission's 1984 study of the University Avenue corridor; the "Southwest/University Avenue Corridors Study,"

prepared by the Metropolitan Council in 1984-85; the 1985 LRT Implementation Planning Program put together by the Metropolitan Council, RTB, several cities, Hennepin County and the Downtown Council; the current Metropolitan Council long range transit study. The MTC's "Automated Small Vehicle Fixed Guideway Systems Study" in 1975 looked at long distance systems that included circulating routes in the downtowns of Minneapolis and St. Paul.

Some specific uses of fixed-guideway in small area applications have been studied, with the St. Paul downtown people-mover as the most comprehensive studied. The MTC looked at the Southdale area in 1972 for its potential to use circulating transit. In addition, a study was conducted in 1975 of a circulating transit line for downtown Minneapolis and the University of Minnesota including the St. Paul campus and the West Bank area.

E. The two applications of fixed-guideway have different characteristics.

1. The corridor application of fixed-guideway:

- a. Links major centers in different parts of the metropolitan area with each other.
- b. Provides an opportunity for speeding up development around the stations in a manner complementary to local land uses, provided the land is zoned accordingly and economic conditions are favorable.
- c. Provides commuter trips for persons whose trips are along heavily-traveled roadways where additional roadway improvements are impossible or unadvisable, and whose destinations coincide with the corridor.
- d. Provides rides for people whose trips start and end near the guideway stations; for those not traveling to one common destination, the corridor application requires a distribution network to bring riders to their final destinations.
- e. Requires transfers and an extensive system of feeder buses and park-and-ride stations for the personal autos of those people whose trips do not start near the guideway stations.

2. The small area application of fixed-guideway:

- a. Allows people to live closer to retail, employment, and cultural facilities and to travel to these points within a major center without transferring to a different vehicle.
- b. Encourages short trips; does not serve the long distance trips provided by line-haul transit and the road system which allow people to live farther out from the centers.
- c. Reduces the total demand for travel to the extent that residential developments occur near the guideway.

- d. Supports high density development in areas already zoned for high densities or scheduled for high density redevelopment.
- e. Provides an alternative to the automobile in highly developed areas where the inconvenience of congestion and costs of parking make the single-occupant automobile most vulnerable.
- f. Permits buses and other high occupancy vehicles to stop at the fringe of the highly developed area where the fixed-guideway would distribute riders to various points within the area; makes it possible to keep trunk line vehicles out of the center of the highly developed area.
- g. Is complete in and of itself; does not require further extensions of the guideway.
- h. Would be less risky than a longer distance fixed-guideway line in terms of capital investment.
- i. Allows frequent service because the service area is contained and of a short distance.

F. Linking fixed guideway and the private sector

Around the beginning of the century both here and elsewhere, trolley lines were financed and built by land developers to provide access to housing being constructed on the edges of the urban area.

Today there is new evidence of private sector involvement in transit issues. As mentioned earlier in this report, transportation management organizations comprised of developers, employers, and local governments have worked together on local transportation problems that affected them directly. Their involvement ranged from advising to financing projects.

However, experience around the country indicates that appropriate scale is necessary to attract private capital to the capital-intensive projects. The risk inherent in large rail networks is generally too great to attract private investors.⁴ Smaller-scale, privately financed fixed-guideway projects do exist, such as people-movers at airports, monorails in amusement parks, and internal circulators in private residential developments.

2. CONCLUSIONS

A. Any investment of money for a fixed-guideway project should not come at the expense of existing transit programs.

Existing transit programs are already constrained for financing from their traditional funding sources. No additional demands should be placed on stretching these dollars to cover the high capital costs of fixed guideway transit.

B. A decision to pursue fixed guideway and the financing for the costs associated with it should come from the area it will serve.

Because many benefits of a fixed-guideway system are localized to the area immediately surrounding the guideway, the local governmental units, private businesses, and citizens in the area must decide whether fixed-guideway is a solution to their travel needs with the knowledge they will pay more than people who do not live in the vicinity. Few firms or taxpayers would be willing to invest money in a fixed-guideway proposal if they were located on one side of the region and the guideway is proposed for the other. The benefits of such a project simply would not accrue sufficiently to them to entice them to commit dollars to the project.

C. Substantial private sector involvement and money is needed to build fixed-guideway.

Without evidence that fixed-guideway is in the general public interest, the extent of private involvement must be greater. Public dollars should be used only to leverage private sector investment. They should not account for the bulk of the dollars needed to construct the project. Public dollars should be used only on the margin, after private sector dollars have made the project viable. A plan for fixed-guideway that does not arouse private sector interest should not be pursued.

D. A comparison of the advantages and disadvantages of the different applications of fixed-guideway is needed.

A comprehensive understanding is needed of what small area fixed-guideway and corridor fixed-guideway applications will provide, how they would affect congestion and the single-occupant vehicle, and how they would impact development. Just as the corridor application takes on real meaning when we talk of the Southwest diagonal or Hiawatha Avenue, we should be able to talk about small area applications in terms of central Minneapolis, the Megamall/Airport area, or the proposed Carlson development in Plymouth.

E. Any proposal for fixed-guideway should be evaluated on at least the following criteria.

1. It must increase ridership significantly. Riders should be attracted out of their single-occupant automobile. Riders from other transit modes should account for a small share of the total ridership attracted. As stated earlier in the report, to entice riders transit must respond to the ways people are known to behave and offer levels of travel times, convenience, and price that are comparable to the single-occupant vehicle.

2. It should not be undertaken until its ramifications on surrounding land use arrangements are clearly understood and accepted.

3. It must require a small investment of public dollars. Public dollars should be used only to leverage private dollars for the project.

4. It must get the most people to their destinations per public dollar expended.

3. RECOMMENDATIONS

A. The Metropolitan Council should not request a public investment of money for, and the Legislature should not approve, constructing fixed-guideway.

Instead the Council and the RTB should focus on phasing in competitive bids for transit service around the region, and providing incentives to increase ridership in the expanded transit system recommended earlier in this report.

B. The RTB should continue to explore fixed-guideway, concentrating on enhancing the level of understanding how small area fixed-guideway projects might make sense in the region.

1. It should prepare proposals for not fewer than two locations in the region. Possible locations include: the Minneapolis or St. Paul downtowns, the Carlson development in Plymouth, the area between the airport site and East Bloomington.

2. It should not disregard personal rapid transit, nor any other technology, at this time.

C. The Metropolitan Council should not act on any fixed-guideway proposal until small area applications of fixed-guideway are designed and analyzed in comparison with corridor applications.

D. The Metropolitan Council should facilitate transportation management organizations within the region.

Because of the financial commitments involved with fixed-guideway, locally controlled organizations comprised of employers, developers, and local governments should be included in the policy discussions which form the basis of support for any fixed-guideway application. As mentioned earlier in the report, these organizations would also be useful for transit projects other than fixed-guideway.

The Metropolitan Council should provide the overall coordination for any joint transportation and land use development such as fixed-guideway.

E. The Council should decide to accept or reject a fixed-guideway proposal based on:

1. Whether the project would attract significant numbers of drivers out of their single-occupant cars, or otherwise reduce the need for travel on highways,

2. An assurance that when a fixed-guideway proposal depends on development and land use changes, that the public and private actions necessary to bring those changes about will be accomplished,

3. Whether sufficient private dollars have been leveraged from the benefiting property owners to implement the project, and

4. Whether the public dollars involved are providing the most ridership per dollar.

FOOTNOTES

1. PRT is an automated, on-demand system of small, lightweight vehicles traveling an exclusive guideway. "Derivation of a New Transit System," J. Edward Anderson, July 1982.
2. LRT is an electrically propelled vehicle that operates singly or in trains on predominantly reserved, but not necessarily grade-separated rights-of-way. "Transportation Development Guide," Metropolitan Council, December 1984.
3. "Report of Phase I of the Long-Range Transit Analysis," Metropolitan Council, 1986.
4. Toward a Policy for Suburban Mobility, C. Kenneth Orski, 1986.

IV. How to Make Rides Available for People Unable to Use Mainline Transit. Demand for this form of mobility is increasing while money is restricted.

1. FINDINGS

A. Special transit service is available from four categories of providers for elderly and handicapped people:

1. Part of this special service is offered through Metro Mobility, a service which is publicly organized and publicly financed for persons unable to use the mainline MTC service. (The MTC also plans to add about 20 handicapped-accessible buses into its mainline service in 1987.)
2. Special service is also available through many non-profit and for-profit agencies for elderly and disabled people.
3. Medical Assistance reimburses medically related trips for eligible people.
4. Many elderly and disabled people also rely on their informal network of friends and relatives for transportation.

B. Metro Mobility

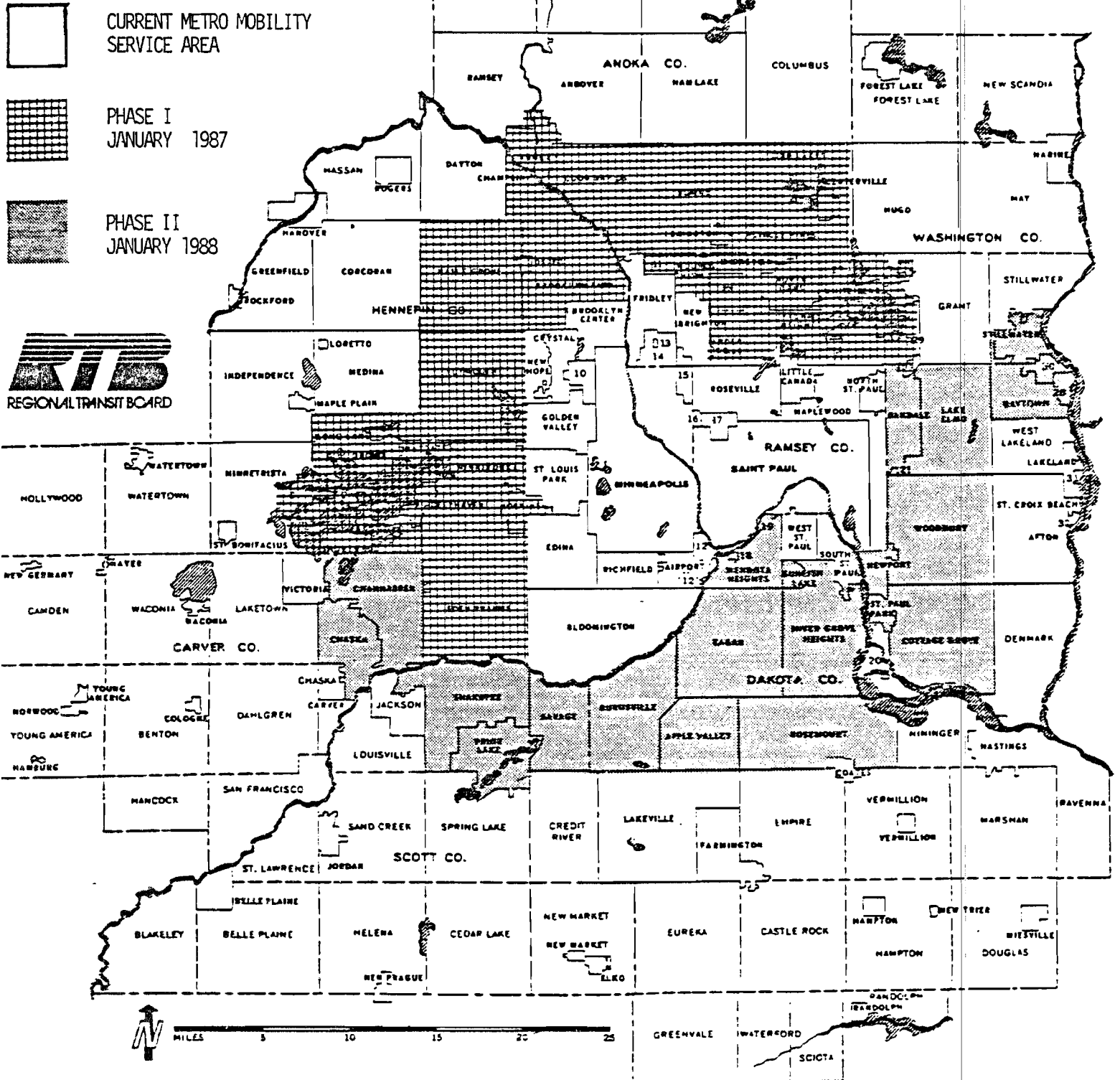
The program known as Metro Mobility is the state-funded, publicly organized program that offers door-to-door transportation for handicapped individuals.

1. Who the riders are--Ridership is limited to people meeting certain disability criteria¹ and who live within a service area concentrated in the central cities and first ring suburbs. (See map.) Income is not a criterion for eligibility. About 20 percent of the Metro Mobility riders qualify for Minnesota's program of Medical Assistance and General Assistance. About two-thirds of the riders are participants in the state's Supplemental Security Income program.²

2. Current program demand--While the MTC's regular route bus system has experienced declining or stable ridership, Metro Mobility has been turning away riders because the demand is greater than the supply of rides available. Metro Mobility continues to receive requests to certify about 300 additional people per month as eligible for the service in addition to the approximately 13,000 already certified, even though it is at capacity.³

As the number of certified riders increases so does the number of trip denials, particularly in the winter months. In January, 1984 about 270 trips were denied; in January, 1985 550 trips were denied.⁴ In 1986 Metro Mobility is expected to provide over 542,000 trips.⁵ Metro Mobility provided 412,400 in 1983 and 486,800 in 1984.⁶

METRO MOBILITY SERVICE AREA AND PROPOSED METRO MOBILITY EXPANSION



Source: "Metro Mobility Implementation Plan," Memo to RTB, June 9, 1986.

3. Costs of Metro Mobility service--The number of state dollars spent on Metro Mobility has increased substantially.

Between 1979 when the Legislature established Metro Mobility and 1985, Metro Mobility expenditures increased from \$2.3 million to \$5.5 million, about 140 percent (not adjusted for inflation). During that approximate time period, ridership per month increased about 100 percent.⁷

About 54 percent of the Metro Mobility budget in 1985 went to that part of the service offered by the MTC.⁸ Of the five groups of vendors offering rides through Metro Mobility then, the MTC provided about 36 percent of the rides, Minneapolis taxis about 28 percent, St. Paul taxis about 18 percent, Morley Bus Co. about nine percent, and Suburban Paratransit about eight percent.⁹

Trips on Metro Mobility in 1985 were subsidized an average \$10.41 per passenger. Broken down by providers the cost ranged from \$15.63 per passenger per trip with the MTC's service, to \$12.80 with Suburban Paratransit, to \$4.68 with Morley Bus Co., to \$4.18 with three taxi companies, and \$3.68 per passenger per trip with the other three taxi companies.¹⁰ Costs vary among vendors because of different labor costs, varying trip lengths, different hours of service, and the difference between trips requiring wheelchair lifts and trips for ambulatory riders.

4. Financing Metro Mobility--The 1985 Legislature appropriated \$11 million to finance Metro Mobility over the biennium. It kept Metro Mobility free from cuts in funding even though other transit services took a \$4 million cut in 1986. However, the high costs of the current service preclude satisfying all of the demand. In an effort to increase the number of rides available, the Regional Transit Board recently approved and is now implementing a plan to allow additional transit vendors to supply rides.

5. Restructuring Metro Mobility--The RTB hopes to make an additional 103,600 trips (an increase of 19 percent) available to people within both the existing service area and an expanded service area by 1988. (See map.) The plan calls for eligible riders to select from among a group of qualified vendors.

The RTB had lengthy deliberations over the level of fares, vendor qualifications, the process for allocating rides, and determining what trips would qualify for reimbursement. Although the reorganized program is being implemented in October, 1986, the RTB plans ongoing studies of the program, including its impact on the non-Metro Mobility county providers, and its impact on social service agencies which will no longer be able to rely on Metro Mobility.

a. The riders--Riders are served on a first-come-first-served basis. Riders who call for a ride after the day's allotment of rides have been used must go without. Riders must schedule their rides at least a day prior to when the ride is needed.

Riders will pay \$1.00 for a ride up to eight miles in length. On a trip over eight miles vendors may charge up to \$1.00 per mile but may not exceed a charge of \$3.75 for a one-way trip. The only inducement to select lower-priced vendors occurs in a limited fashion for trips longer than eight miles.

In the RTB's reorganized system, trips to social service agencies will not be eligible for reimbursement after 1988. These rides to social service agencies make up a large share of the Metro Mobility ridership: about 40 percent of Metro Mobility trips serve these agencies.¹¹ The RTB believes these agencies should pay the costs for their own transportation needs and wants its present subsidies for these agencies used instead to expand the number of Metro Mobility rides.

b. The vendors--Qualified vendors must meet minimum financial and service standards, such as providing service during pre-set hours throughout the week and within minimum service areas.

The RTB will reimburse vendors at a rate of \$11.50 for riders requiring wheelchair lifts and \$5.50 for ambulatory riders. The pre-set reimbursement affords lower-cost vendors no opportunity to market their services based on lower reimbursements.

The MTC's portion of Metro Mobility will have to lower the cost of providing its service or subsidize it with other parts of their service if it wants to continue to compete.

B. Other vendors of specialized transportation

Metro Mobility is only one piece of a large network that provides specialized transportation. Other formal providers include county providers, churches, non-profit groups, senior centers, and other social service agencies. They tend to concentrate on the more frail and elderly passengers, though not exclusively so. Many of the services depend heavily on volunteers, and rely on a combination of financial assistance from local and federal government dollars, corporate grants, as well as revenues from private contracts.

Five counties -- Dakota, Scott, Carver, Washington, and Anoka -- have their own transit services for the elderly and handicapped. Collectively they provided about 198,000 trips in 1985 for \$876,000, or an average of \$4.42 per trip.¹²

In addition, West Metro Coordinated Transportation in Hennepin County coordinates about 40 organizations that provide transportation in Hennepin County to elderly and disabled people. Slightly less than half of the 318,738 recorded trips provided to persons over 60 years in 1984 were provided by community centers, churches, and other privately provided services, and the rest were provided by Metro Mobility.¹³

In Ramsey County the St. Paul chapter of the American Red Cross coordinates over 20 agencies that provide specialized transportation. A survey revealed that 23 social service providers in Ramsey County provided 11,896 rides in November, 1984--1,654 more than the number provided by Metro Mobility that month.¹⁴

The county providers together with the coordinated services in Hennepin and Ramsey counties provided nearly the same number of rides as did Metro Mobility in 1985. These providers furnished 455,595 rides in 1985, compared to 501,564 rides by Metro Mobility that year.¹⁵

C. Trips reimbursed through medical assistance

The Twin Cities has several for-profit transportation services providing medically-related trips reimbursed through the state Medicaid program. These providers usually contract with hospitals or nursing homes to transport clients to medical offices, dental appointments, or for hospital admissions. Minnesota's Medical Assistance program reimburses the providers a \$16 base fare plus about \$1.00 per mile traveled. For fiscal year 1985 the state spent \$6.3 million on medically-related transportation, about half of which occurred in the metropolitan area.¹⁶

Currently, riders who receive transportation with the help of Medical Assistance have the freedom to select from among many vendors. There is no direct cost to the rider.

Vendors are reimbursed the same amount, regardless of the length of the trip, quality of the ride, or true cost of the ride. The \$16 base-fare-plus-mileage reimbursement offers no opportunity to induce lower prices through competition.

D. Rides provided informally

Friends and relatives of elderly and handicapped people provide an unknown number of rides. One Metropolitan Council survey indicated nearly 70 percent of people over the age of 60 in the center cities drove their own car or rode with someone, and about 30 percent used a public bus, taxi or senior citizen van for their usual mode of transportation. About 89 percent of people over 60 living in the inner suburbs, and 98 percent of that population living in the outer suburbs drove themselves or rode with someone.

The same survey indicated that 40 percent of seniors with transportation difficulties living in the urban area used informal means of getting around, that is, relied on neighbors and relatives; about 23 percent of those living in the suburban area used informal means, and 74 percent of those living in the rural areas used informal means to get around.¹⁷

2. CONCLUSION

A. To make the most rides available for disabled and elderly people who are transit dependent, financial incentives are needed that encourage selection of vendors based on both the quality and the price of the service.

1. Providers should be allowed to compete with each other based on the price of their service to the riders--The vendors should be able to offer rides for any price up to a maximum, permitting riders to choose among a variety of rides and prices. As set up the RTB's restructuring plan does not encourage use of the low-priced providers, which is necessary if additional rides are to be made available without changing the expenditures on the program.

Vendors could vary the price they charge based on their level of service. In areas where full-time and weekend service may not be warranted because of lack of demand, the lower-priced, part-time vendors should be allowed to operate and price their service accordingly. Some vendors are able to group riders together and offer the ride on the same day as the ride request is received. For instance, taxi companies with the capability to group riders together might want to offer same-day rides to Metro Mobility riders. On snowy days at the beginning of a month when demand for taxi rides is high, some taxi dispatchers currently group riders together with others who have common destinations. Some Metro Mobility riders might view the same-day ride as an advantage and be willing to pay for it; others may decide that scheduling the trip the day before is sufficient for their needs. Both options should be available.

2. Riders need incentives to choose lower-priced vendors--The subsidy should go to the riders, not to the vendors. Although riders will be able to choose any vendor under the RTB's proposal, they also need an inducement to select the lower-priced vendors.

3. RTB should entice vendors to compete--The RTB should focus its attention on increasing the supply of trips for Metro Mobility riders and extricate itself as much as possible from those elements of the program that are not direct transportation problems, such as: developing measures to determine who can and cannot receive Metro Mobility reimbursements, distributing subsidies to the riders, and determining who is eligible to ride without a subsidy. Instead, the RTB should be encouraging a variety of vendors to compete for riders.

4. Allocate the subsidy based on income levels--Because the number of rides is finite, the subsidy should be allocated on the basis of the eligible riders' adjusted income, and type of service needed. The purpose of the trip should not play into the decision of what trips are eligible for reimbursement. Riders should be able to use Metro Mobility for any of their trip needs, whether they are to a day care center or to a doctor's office.

5. Medical Assistance reimbursements should be related to trip costs--Trips reimbursed through Medical Assistance should operate under the same incentives as trips provided through Metro Mobility. The price of the ride should be related more closely to its actual cost. Vendors should be selected on the basis of both quality and price.

3. RECOMMENDATIONS

A. The RTB should modify its plan for restructuring Metro Mobility to induce riders to take vendors' prices into account when choosing vendors.

1. For the long term, the RTB should design Metro Mobility with a pricing system that induces people to choose vendors based on price--The RTB should design a pilot program that gives the public subsidy to the riders rather than to the vendors as a way to control costs and increase the number of rides available. With a specific amount of money for transportation each month (depending on need), riders would have an incentive to ride with the lowest-cost vendors to stretch their transportation allocation farther. They could choose to spend a few dollars to receive many trips, or spend more per trip and get fewer trips per month.

a. The RTB's role--Under this approach, the RTB would certify the vendors that meet minimum financial and quality standards. The RTB would also be the central clearinghouse for rider information. It would publicize information on vendor costs, procedures for requesting and cancelling trips, service hours, and other information needed to understand how the program works.

b. The RTB would not be involved in administrative duties--Administration of the program would be similar to that of the RTB's "Jobseekers" program for the unemployed. Responsibility for recording and monitoring riders' eligibility and income level and for distributing the allocation for rides to the riders should be provided by agencies with such expertise. The Department of Human Services is a possible choice to handle these administrative duties, allowing the RTB to concentrate on the transportation vendors. Alternatively, social service agencies serving handicapped and elderly people could also be used for these administrative services.

2. In the short term, the RTB should continue to reimburse Metro Mobility vendors but allow vendors to set fares--The RTB should modify its reorganization of Metro Mobility to allow variable fares among vendors. The RTB could still maintain its same fare-to-subsidy ratio, but let the vendors determine the price to charge for their services. Vendors now receiving \$6.50 per trip (\$1.00 fare and \$5.50 subsidy) could charge any price up to that maximum charge. For instance, a low-cost vendor might find he can offer the trip for a \$.90 fare and a \$4.95 subsidy, 10 percent less than the maximum charge.

a. Allow part-time vendors to compete--The RTB should not preclude those vendors which operate only part-time during the day or only during the work week from offering their services.

b. Allow trips to social service agencies--The RTB should rescind its determination that trips to social service agencies are ineligible for reimbursement. The RTB should not base its Metro Mobility reimbursement on the destination of the trip, but rather on the adjusted income of the rider.

3. The system should have a sliding scale of co-payments for low-income riders--In both the short and long terms, low income riders should receive priority so they are not priced out of transportation. A co-payment system should be instituted on a sliding fee scale in which riders pay a portion of the ride's cost based on their ability to pay. Riders could select higher-priced vendors if they chose to pay a larger share out of their pocket. Of course, riders willing and able to pay the full fare should be allowed to use the service. An adjusted income level above which riders would not be eligible for reimbursement with public dollars should be designated.

B. Rides reimbursed through the state's Medical Assistance program should be integrated with other transit services under the RTB.

Trips reimbursed through Medical Assistance should be subsumed into the revamped Metro Mobility program. Reimbursements would be granted to providers on the basis of their service and price bid. The RTB would be responsible for certifying the vendors and providing information about the program to the riders.

FOOTNOTES

1. In order to qualify an individual must meet one or more of the following criteria: 1) Inability to maneuver oneself 1/4 mile or more; 2) Inability to go up or down the steps of a mainline bus; 3) Inability to wait outdoors for ten or more minutes; 4) Inability to use or learn to use the mainline bus service due to a mental impairment or learning disability; 5) Inability to use or learn to use mainline bus service as specified by an orientation and mobility specialist. The duration of the disability should last at least one year.
2. RTB memo, "Metro Mobility Fare and Hardship Policy," Sept. 2, 1986.
3. RTB memo, "Staff Recommendations for Improving Metro Mobility Service," Oct. 23, 1985.
4. Metro Mobility Monthly Report, Metropolitan Transit Commission, July 1985.
5. RTB memo, "Metro Mobility Implementation Plan," May 15, 1986.
6. RTB memo, October 23, 1985.
7. Ibid.
8. Ibid.
9. Metro Mobility Monthly Reports, MTC.
10. Conversation with RTB staff, Nov. 13, 1985.
11. RTB memo, "Metro Mobility Implementation Plan," May 15, 1986.
12. "County Providers Position Statement on Metro Mobility," D.A.R.T.S., June 29, 1985.
13. "1984 Senior Citizen Transportation Provider Survey," West Metro Coordinated Transportation, June, 1985.
14. "Transportation for Elderly and Handicapped Citizens," St. Paul American Red Cross, Jan. 29, 1986.
15. "County Transit Rides 1985," St. Paul American Red Cross, Sept. 1986.
16. Conversation with Department of Human Services staff, November 1985.
17. "Health, Housing & Aging Study," Metropolitan Council, 1981.

V. Appendices and Background Information

APPENDIX 1

Analysts project a continued increase in sales; Automotive News reported auto analysts in stock brokerage houses predicting new car sales in 1987 and 1988 at 10.3 and 10.8 million respectively.

In February, 1985, General Motors announced plans to spend \$9 billion worldwide on production for that year, the second-highest spending in GM's history. Chrysler Corp. said it planned to spend \$2.8 billion in 1985 on new products, plants, and equipment, and \$10.5 billion in the next five years.¹

APPENDIX 2

In 1973, 17.5 weeks of median family income equalled the average cost of a car. This rate increased fairly steadily up through 1984 when the equivalent of 22.5 weeks of a median family's income was required to equal the average cost of a car.²

The Hertz Corporation calculated that Minneapolis area drivers paid 1.2 cents per mile more than the national average of 47.64 cents per mile to own and operate their cars in 1985.³

APPENDIX 3

Solo drivers account for about 62 percent of all trips from home to destinations other than work, passengers about 25 percent, public bus riders about three percent, and school bus riders about ten percent.

Solo drivers make up 75 percent of non-home based trips, passengers 18 percent, public bus passengers three percent, school bus passengers three percent, and one percent by some other mode.⁴

APPENDIX 4

Alternative Financing Arrangements

1. In Denver, Colorado ten cents is assessed on each square foot of land along an exclusive transit corridor lined mostly with commercial and retail firms. The revenues go to operating the transit service and retiring the debt. Assessing against the linear foot encouraged more dense development along the corridor.

2. In Orlando and St. Petersburg, Florida property owners in improvement districts have the option of contributing to a Transportation System Management (TSM) Fund in lieu of building a required number of parking spaces. Orlando permits developers to reduce off-street parking by 20 percent; they must contribute 80 percent of the cost of the foregone parking to the TSM fund which is used for capital and operating expenses of the local transit system and for traffic management.⁵

3. The state of Texas passed legislation in the late 1970s enabling major cities to levy a one-cent sales tax and dedicate the revenues to transit. Houston, Dallas, San Antonio and Austin have each passed the required referendums allowing them to levy this tax. Revenues may be spent on transit capital and operating expenses, as well as road improvements.⁶

FOOTNOTES

1. Wards Automotive Yearbook, 1985.
2. "MVMA Motor Vehicle Facts & Figures '85," Motor Vehicle Manufacturers Association, 1986.
3. "New Car Ownership and Operating Costs for '85," Hertz Corporation, March, 1986.
4. TBI, 1982.
5. Urban Transit The Private Challenge to Public Transportation, 1985, p. 315.
6. Conversation with Houston-Galveston Transit, September, 1986.

WORK OF THE COMMITTEE

The committee responsible for developing this report was formed by the Citizens League Board of Directors, which adopted the following charge to the committee on July 29, 1985:

TRANSIT -- Determine whether an increased level of transit ridership would be desirable for the metropolitan area and, if so, recommend strategies to accomplish such an increase.

This study will examine: (1) reasons why large numbers of people in the Twin Cities metropolitan area have chosen non-transit forms of transportation, (2) types of people and the kinds of trips most likely to use a transit option, if offered, such as people who live here and need to get to work, outsiders visiting the Twin Cities area, including tourists or business people, and people without access to cars, (3) whether public policies should be changed to increase transit ridership, (4) what steps need to be taken, such as changes in parking regulations, to divert significant numbers of people, cost-effectively, from driving to riding, and (5) the dollar investment that might be required to accomplish a significant diversion of car drivers to transit, and what sources of revenue should be used. Transit is broadly defined to encompass any form of riding other than driving alone.

A total of 29 people took an active part in the work of the committee. They are:

Dean Lund, Chair	Tom Jensen
Donald Anderson	Ted Kolderie
Mary Anderson*	Ray Lappegaard
Thomas Baerwald	Margaret Martin
Lester Bolstad*	Herbert Mohring
Virginia Carroll	Donald Nelson
Charles Clay	Robert Owens
Ann Duff	David Pratt
Hugh Faville*	Mary Anderson Roberts
Virginia Flygare	Marty Romano
Gene Franchett	Alan Shilepsky
Richard Graham	Dale Simonson
James Hibbs	Bill Smith
Edmund Howard	James Swadburg
John Jamieson*	

*The committee members designated by asterisks disagreed with parts of the section dealing with fixed-guideway; they believed the Metropolitan Council should proceed with developing financial guidelines for a transit system that includes light rail transit. The full text of their views is available from the Citizens League office.

The committee met a total of 39 times between October 16, 1985, and October 15, 1986. During that time it studied a wide array of printed materials and met with the following resource speakers:

(titles reflect position held by the resource speakers at the time they met with the committee)

Ghaleb Abdul-Rahman, executive director, Regional Transit Board
Stephen Alderson, transportation policy manager, Metropolitan Council

J. Edward Anderson, executive vice-president, Automated Transportation Systems
Thomas Baerwald, director, geography department, Science Museum of Minnesota
Jim Barton, Metropolitan Council staff, and staff to Governor's Commission on Taxicabs
Steve Bertrand, United Handicapped Federation
Robert Boisclair, president, Boisclair Development Corporation
Frank Boyles, assistant city manager, Plymouth
Gary Brosch, director, Joint Center for Urban Mobility Research, Rice Center, Houston
John Capell, chief administrator, Metropolitan Transit Commission
Dirk DeVries, member, Metropolitan Council
Natalio Diaz, transportation director, Metropolitan Council
Arnie Entzel, president, Transit Local 1005
Dick Graham, executive director, D.A.R.T.S. (Dakota Area Referral and Transportation for Seniors)
Judy Hollander, director of planning and programs, Regional Transit Board
Michael and Mary Hughes, co-administrators, Greater Than Fifty
George Isaacs, member, Transportation Advisory Board
Robert Janecek, president, Transportation Management Inc. (St. Paul Yellow Cab, Suburban Town Taxi, and other transit services)
Paul Joyce, member, Transportation Advisory Board
Greg Kittelsen, assistant director of planning, Office of Physical Planning, University of Minnesota
Ray Kroll, assistant director of transportation services, Minneapolis School District
Todd Lefko, board member, Regional Transit Board
John Lundell, Metro Traffic Control
Bruce Nawrocki, commissioner, Metropolitan Transit Commission
Senator Steven Novak, chair, Senate Transit Subcommittee, MN Senate
Robert Owens, transportation manager, 3M Company
Matthew Peterson, executive director, Suburban Paratransit
Al Pint, traffic forecast engineer, Minnesota Department of Transportation
Craig Robinson, project manager, I-394, Minnesota Department of Transportation
Ferrol Robinson, senior transportation engineer, Strgar-Roscoe-Fausch, Inc., consultants
Congressman Martin Sabo, ranking majority member, Transportation Appropriations subcommittee, U.S. House of Representatives
Bill Schreiber, chair, house tax committee, MN House of Representatives
Clarence Shallbetter, fiscal analyst, Agriculture, Transportation and Semi-state Division of Appropriations, MN House of Representatives
Frank Snowden, chair, Metropolitan Transit Commission
Katie Turnbull, planning manager, Regional Transit Board
Victor Ward, senior planner, Metropolitan Council
Dick Wolsfeld, principal, BRW, Inc.

The Citizens League and its Transit Committee thank these guest speakers for sharing their expertise and lending their time to assist in this study. We are particularly grateful to the staff of the Regional Transit Board, the Metropolitan Transit Commission and the Minnesota Department of Transportation for acknowledging many requests for information.

The committee was assisted in its work by Jody Hauer, Nancy Jones and Joann Latulippe of the League staff.

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Volunteer research committees of League members study policy issues in depth and develop informational reports that propose specific workable solutions to public issues. Recommendations in these reports often become law.

Over the years, League reports have been a reliable source of information for governmental officials, community leaders, and citizens concerned with public policy issues of our area.

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Wayne G. Popham
James R. Pratt
Leonard F. Ramberg
John A. Rollwagen
Charles T. Silverson
Archibald Spencer
Thomas H. Swain
Frank Walters
* John W. Windhorst

* Deceased



Mail to: ☐ Home ☐ Office

MEMBERSHIP APPLICATION

Name _____ Telephone _____

Address _____

City _____ State _____ Zip _____

Employer _____ Telephone _____

Position _____

Employer's Address _____ YES NO
My company has a matching gift program ☐ ☐
My form is enclosed ☐ ☐

Spouse Information

Spouse's Name _____

Spouse's Employer _____

Position _____ Telephone _____

Employer's Address _____

CL Membership suggested by _____

My tax-deductible dues contribution will be:

SUSTAINING \$500 or more. _____

SUPPORTING \$200-499. _____

CONTRIBUTING \$75-199. _____

*FAMILY \$40. _____

INDIVIDUAL \$30. _____

FULL-TIME STUDENT \$20. _____

BUSINESS \$150. _____

*Family Membership Complete Back Side

Includes one-year subscription (\$20) to the
Minnesota Journal, students half price.

Family membership entitled to a second JOURNAL. Please
designate name and address to which it should be sent.

*Through the Citizens League, thousands of metropolitan citizens
and businesses play a constructive role in dealing with the public
issues our community faces.*

RESEARCH and REPORTS

- Citizen committee research and debate develops new policy ideas which often become law
- Experts equip the committees with facts and judgments.
- Comprehensive reports make the rounds, inform the public and frequently shape the debates

PUBLICATIONS

- *Minnesota Journal* — twenty-two issues of engaging public affairs news, analysis and commentary — news you can't find anywhere else.
- *CL Matters* — an update of the League's community activities, meetings and progress on issues.
- *Public Affairs Directory* — a listing of agencies, organizations and officials involved in the making of public policy.

ACTION and IMPLEMENTATION

- Citizens communicate the League's work to the community and public officials, precipitate further work on the issues and get things to happen.

LEADERSHIP BREAKFASTS

- Public officials and community leaders meet with League members in locations throughout the metropolitan area to discuss timely issues

SEMINARS

- Single-evening meetings offer debate and education covering pending public issues — an opportunity to become fully informed about and have an impact on issues that affect you.

INFORMATION RESOURCES

- A clearinghouse for metropolitan public affairs information and a resource of educational materials and speakers for the community.



*Public affairs
research and education
in the Minneapolis-Saint Paul
metropolitan area*

Citizens League

***708 South 3rd Street
Suite 500
Minneapolis, Minnesota 55415***