

CITIZENS LEAGUE REPORT



**BUILDING
INCENTIVES
FOR DRIVERS
TO RIDE**

Recommendations for a program of 'non-capital' improvements in the Twin Cities area to get up to 50 per cent of the trips on transit by 1980!

TO THE READER:

Attached are:

- * The report of the Citizens League Committee on Promoting Transit Ridership
- * A statement by the Board of Directors of the Citizens League, summarizing reports of the League in 1968 and 1971 on matters of governmental structure related to the committee's report.

The committee was charged by the Board of Directors in September 1972 to follow up the specific conclusion of the 1971 report that, with respect to transit, "The Key Thing to Build is Usage." The Board of Directors believes the new report represents a major breakthrough -- with its understanding that, if auto congestion is really to be reduced, 'transit' must be redefined as travel in all multiple-passenger vehicles; and with its innovative proposals to develop meaningful alternatives to the single-passenger vehicle.

The committee was not charged to make recommendations on the larger question of metropolitan governmental structure. In approving the report of the committee for distribution to the community, the Board felt it would be appropriate to indicate the position of the League on the manner in which transportation-decision-making should be structured into the larger framework of metropolitan organization. A statement summarizing the position established in 1968 and reaffirmed in 1971 was adopted by the Board March 26, 1973, and is attached at the back of the committee report.

Citizens League Report

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Recommendations for a program of 'non-capital' improvements in
the Twin Cities area to get up to 50% of the trips on transit by 1980!

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Approved by
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SUMMARY

...OF FINDINGS AND CONCLUSIONS

- * A very expensive, inefficient transportation system, heavily-reliant upon the personal car, has grown up in the Twin Cities area. It has helped create and continues to foster a great deal of urban sprawl.
- * Public and private policies, unconsciously to a great extent, have favored the single-occupant car and discriminated against multi-passenger vehicles, in such areas as traffic control, parking, and zoning and subdivision regulations.
- * Freeways and other highways have been planned on the assumption that individuals' demands for travel must be served, regardless of in what form the demand occurs. Because the predominant form of travel has been the personal car, even though it is filled to one-fourth capacity most of the time, highways have been built unnecessarily large, simply to accommodate under-utilized vehicles.
- * The ability to rely so extensively upon the single-occupant car is likely to diminish substantially in coming years, for reasons of increasing costs, pollution controls, energy limits and others.
- * The Twin Cities metropolitan area, however, has become , reliant upon the personal car, almost to the exclusion of any real alternatives for most people.
- * But alternatives must be found if this region is to maintain its prosperity.
- * So far the metropolitan area has had a very narrow definition of what constitutes an alternative to the single-occupant car. Mainly the definition has been a 40-passenger vehicle operated by the MTC on permanent, regularly-scheduled, published routes.
- * But the metropolitan area has given the MTC a job it can't begin to handle itself, although, without question, MTC-type transit is indispensable as part of the total.
- * A much broader definition of transit is needed, covering all alternatives to the single-occupant car. Transit should mean riding with others, rather than driving alone, regardless of the type of vehicle.
- * Public policy must begin, consciously, to influence the way in which demand for travel occurs, in all vehicles, buses, vans, taxis, rent-a-cars, as well as the privately-owned car itself.

SUMMARY

... OF RECOMMENDATIONS

* The 1973 Legislature should

- Fix responsibility for transportation policy-making in the metropolitan area, replacing the non-statutory Transportation Planning Program.
 - Require that approval of construction of major highway and transit facilities shall be a *second* responsibility of transportation policy-making, to take place only after decisions *first* are made on influencing the extent to which trips are made in single-occupant versus multi-passenger vehicles.
 - Establish a goal of increasing the proportion of persons who ride, rather than drive, in the peak hour from 37% in 1970 to 50% by 1980. A report on progress towards this goal should be submitted to the Legislature in 1974 and every year thereafter, along with recommendations as to further legislative action which might be needed to help achieve the goal.
 - Instruct transportation planners to alter their construction policies so that from now on multi-passenger vehicles will receive preferential access to new and rebuilt freeways and other streets, as possible, and to parkings lots and ramps.
 - Instruct transportation planners to plan routinely for exclusive rights-of-way for multi-passenger vehicles to give them the speed necessary to compete successfully with the personal car.
 - Require provision for multi-passenger transportation be incorporated into the planning for residential, commercial and industrial developments in the region, and for the development of transportation centers which bring together all alternatives to the single-occupant car. Stop further increases in property taxes for county highways so that the personal car assumes more of its own costs directly, rather than passing them on to the general taxpayers.
- * Suppliers of transit service, including the MTC, private bus companies, taxi companies, rent-a-car operations, and providers of van-type and car-pool-type transit should adopt a new approach to reaching customers, by marketing their services at the *destination* where the people are clustered together, rather than at the *origin* where they are more difficult to reach. This means, particularly, marketing transit at the place of employment, in order to capture more work trips.

FINDINGS AND CONCLUSIONS

I. In the absence of conscious public policy favoring transit favoring transit, the Twin Cities area, heavily dependent upon the personal car for transportation, is drifting toward a major problem-- The reasons, in summary:

- * Population density is low, 19th among 20 metropolitan areas.
- * Automobile ownership is high, 1st among 12 metropolitan areas.
- * Transportation expenditures are high, 7th among 18 metropolitan areas.
- * Trip distances are getting longer, doubling from 1958 to 1970.
- * The number of trips per person is increasing.
- * Travel time is likely to increase. Freeways through built-up areas no longer are acceptable.
- * Trip destinations are widely dispersed.
- * More fuel and pollution control problems are likely.

This metropolitan area may be more dependent upon the personal car for transportation than any other metropolitan area in the country, so dependent, in fact, to the exclusion of almost any alternative. *If the ability to rely upon the personal car is diminished in coming years, the area would have no ready alternative. The area must find alternatives, now!*

To a considerable degree, the ability of the Twin Cities metropolitan area to compete with other metropolitan areas throughout the nation depends upon its transportation system. Can people get from their homes to jobs, shopping, educational, recreational and cultural centers quickly and at reasonable cost? If not, the continued prosperity of industries, offices, retail outlets, residential developments and other places which are dependent upon good access would be placed in jeopardy.

The Twin Cities area may not yet generally be regarded as having an "inefficient" transportation system. In some respects the system is thought to be enviable. A 1971 federally-financed report¹ on travel on I-35W south of downtown Minneapolis stated: "In comparison to other major urban areas, congestion on the I-35W corridor is virtually non-existent. In the absence of accidents, rain storms or snowy pavements, traffic seldom comes to a complete stop. Any stoppages are of a few seconds as compared to many minutes in Chicago, Los Angeles or New York. Rather than peak periods of two or three hours, we have only 30 to 45 minutes of peak volumes." But such comments perhaps reinforced by some residents' own impressions of transportation here as compared with elsewhere, must not cloud the seriousness of the situation:

- a. Population density is low-- The Twin Cities metropolitan area ranked 19th in population density among the 20 most populous urbanized areas in the country in 1970, according to the U.S. Census.² The Census Bureau defines an urbanized area as "a central city or cities and surrounding, closely-settled territory..." The Minneapolis-St. Paul urbanized area contains about one-third of the five-county (Anoka, Dakota, Hennepin, Ramsey, and Washington)

Standard Metropolitan Statistical Area (SMSA). According to the Census Bureau, the number of persons per square mile in the Twin Cities area was 2,363. Highest was the New York area, 6,683, and lowest, the Dallas area, 1,986. If only the density of the central cities is considered, Minneapolis and St. Paul, with a combined density of about 7,000 persons per square mile, rank 14th among the 20. About 43% of the population of the Minneapolis-St. Paul urbanized area is located within the central cities.

This region must not permit urban sprawl to be taken for granted. The pattern of growth which exists was stimulated to a large extent by a assumption of freedom of mobility via freeways and personal cars. But such a pattern of growth, requiring persons to take more and more trips for longer and longer distances is leading to higher costs, more inefficiency, and greater vulnerability.

- b. Automobile ownership is high-- The 1972 National Transportation Report,³ prepared by the U.S. Department of Transportation, revealed the Twin Cities area has a smaller percentage of families without cars (12.9%) and a higher percentage of families with two cars (40.6%) than in the 11 other metropolitan areas mentioned: New York, Los Angeles-Long Beach, Chicago, Philadelphia, Detroit, San Francisco-Oakland, Boston, Pittsburgh, St. Louis, Washington, D.C., and Cleveland.
- c. Transportation expenditures are high-- A recent study by the Urban Institute⁴ placed the Twin Cities area 7th highest in transportation cost for a moderate income family of four among the 18 large urban areas in the study. The study, which compared the quality of life in the 18 areas, using a composite of 12 indicators, actually ranked the Twin Cities area first in overall quality of life, despite the problem of transportation cost. In almost every other indicator, the Twin Cities area ranked near the top. A Citizens League estimate (see background) places current annual cost of an automobile, including costs not directly paid by the user, at about \$1,800.
- d. Trip distances are getting longer-- In 1958, the median trip length in the Twin Cities area was 2.2 miles.⁵ In 1970, the average trip length in the area was 4.9 miles, according to the Travel Behavior Inventory,⁶ a transportation survey conducted by the Transportation Planning Program, a joint project of the Metropolitan Council, Metropolitan Transit Commission, Minnesota Highway Department, the seven metropolitan counties and the municipalities in the area.
- e. The number of trips per person is increasing-- More than 5 million trips are taken on a typical work day by people who live in the Twin Cities area, an average of about 2.7 trips per person, according to the Travel Behavior Inventory. In 1949 the figure was 1.4 and the 1958, 2.3. Unless present trends are altered, it is likely the number of trips per person will continue to increase--compounding the transportation problem. Transportation planners have found that as people's incomes rise, they take more trips. One projection by the Transportation Planning Program states that if present trends don't change, the number of trips per person per day could rise to 4.0 by the year 2000. We doubt this region's transportation system can support this degree of mobility.
- f. Travel time is likely to increase-- Travel time actually decreased from 1958- to 1970, the period when most of the new freeways opened in the Twin Cities area. In 1970, the median travel time for a work trip in the area was 22.3 minutes, down from 26.0 minutes in 1958.

But the era of new freeway construction in the heavily-urbanized portion of the region is ending. Transportation planners have deleted from their maps such proposals as the Central Ave., W. Broadway and Cedar Ave. freeways in Minneapolis, and the Cleveland-Prior freeways in St. Paul. Even if these freeways were to be built, the area's transportation problems would not be solved, but only accentuated, in addition producing innumerable detrimental effects on people who would be driven from their homes or who would have to live near a freeway.

While some increased travel in coming years will be accommodated by the remaining committed, yet-to-be-built freeways, no longer will the answer to traffic problems be more freeways. This means the transportation planners will have to talk in terms of satisfying growing travel requirements with a finite amount of streets and freeways.

If the present pattern of low-vehicle-occupancy persists, severe traffic jams, much longer travel times, and, thereby, higher costs of transportation, are inevitable. While the average car traveling in the seven-county area today has 1.5 occupants, according to the Travel Behavior Inventory, occupancy is even lower (1.2) for the trip taken at the time of greatest congestion, the work trip.

The average person who travels on a weekday spends a total of about 37 minutes to do so, according to the Travel Behavior Inventory. It is difficult to attach a price tag to travel time, but more time traveling means less time for other purposes, which is a real cost in terms of time away from work, family, rest and relaxation and the like.

Some idea of the likely increase in congestion at present occupancy levels is evident from projections by the Minnesota Highway Department on future traffic volumes in selected portions of the region. For example, the Department projects that north-south traffic in an area north of downtown Minneapolis (a corridor bounded by Penn Ave. & Stinson Blvd.) will double between 1970 & 1985. The yet-to-be-built, but essentially "committed," I-94 freeway through this area won't begin to handle the projected traffic increases, at present occupancy levels. The freeway will be able to handle a maximum of 135,000 vehicles in a 24-hour period, assuming a maximum rush hour speed of 30 miles an hour, with occasional period when traffic would halt momentarily. But the Department projects that, at present occupancy levels, 195,000 vehicles will be seeking to use the freeway. The Department does not make projections of travel time, but it is obvious that future congestion of this type would lengthen travel time to a degree not imagined in the Twin Cities area today.

- g. Trip destinations are widely dispersed -- The problem of peak-hour capacity is occurring at multiple points around the region. For example, the 1970 Census⁷ showed that no more than one in six workers in the metropolitan area is employed in the central business districts of Minneapolis and St. Paul, with an absolute majority employed outside the city limits of the central cities. Of workers who live in Minneapolis, according to the Census, one in five is employed in the Minneapolis central business district. Of workers who live in St. Paul, one in five is employed in the St. Paul central business district.

According to the Census, about 13.3% of workers who live on the Near North Side of Minneapolis (west of the river to the city limits, and north of the railroad tracks to 26th Ave. N.). work in the Minneapolis central business district.

About 60.4% are employed elsewhere in Minneapolis, and 26.2%, elsewhere in the Metropolitan area. About 2.7% of Roseville workers, and 5.4% of Burnsville workers are employed in the Minneapolis central business district. About 7.2% of Roseville workers and 2.1% of Burnsville workers are employed in the St. Paul central business district.

The Census bureau data, of course, cover all work trips, regardless of the time of day. Unpublished data from the Travel Behavior Inventory⁸ shows location of trip destinations for the 6-9 a.m. peak on a typical work day in 1970. The survey revealed that 8.2% of the 6-9 a.m. trips terminated in downtown Minneapolis and 5.2% in downtown St. Paul. Another 20.1% terminated elsewhere in Minneapolis, and 12.7% elsewhere in St. Paul, leaving a total of 53.8% in the suburbs. Suburbs have some large concentrations, too. For example, the communities along I-494 and Hwy. 100 from Minneapolis-St. Paul International Airport to Golden Valley account for 17.1% of all destinations in the metropolitan area in the 6-9 a.m. peak. The data from the Inventory shows the destinations of all trips which originate in each municipality. For example, about one-half of all 6-9 a.m. trips which originated in Minnetonka terminated in Golden Valley, St. Louis Park and Hopkins. About one-tenth terminated in the central business district of Minneapolis.

A 1970 study of northbound traffic on I-35W⁹ from 6-9 a.m. indicated that one in 10 cars crossing the Minnesota River were bound for the Minneapolis central business district. At the point where I-35W passes over Lake Street, 5,599 cars out of a total of 13,761 were bound for the central business district. I-35W clearly is serving double duty, carrying trips downtown and cross trips which have other destinations.

- h. More fuel and pollution control problems are likely-- It is possible that in coming years use of fuel will be limited in the Twin Cities area. This means that freedom of movement which the single-occupant car enjoys today would be restricted. The seriousness of this possibility is indicated by the fact that the President may be given standby authority to ration gasoline. Transportation accounts for about one-fourth of the total energy demand in the United States, and in 1970, the automobile accounted for 55% of the energy consumed by transportation.¹⁰ While there may be dispute over the degree to which energy sources are limited, there is no question that such limits exist.

Of course, rationing gasoline would itself serve to reduce air pollution. But, in the absence of this step other measures are likely. The Minnesota Pollution Control Agency has found that some reduction in the amount of vehicular travel in certain parts of the downtowns of St. Paul and Minneapolis may be necessary to meet federal air pollution control standards by 1975.¹¹ Consequently, some governmental restrictions may be imposed which limit travel on certain streets.

What all these factors add up to is, simply, the Twin Cities area has a very expensive, inefficient transportation system which is growing more expensive and more inefficient. More and more cars, carrying fewer persons per car, are filling up limited road space at peak hours. *This area cannot afford to perpetuate a system in which an unnecessary number of vehicles, filled only to one-fourth of capacity, overcrowd freeways which were built to their size mainly to serve such under-utilized vehicles.*

If the Twin Cities area had to move immediately, today, to economize on its transportation system--a move which may be inevitable in coming years--it would have no place

to turn. The two-car-family system has been taken for granted, as if it would serve all needs.

The challenge now is to reverse the trend of increasing the proportion of people who are drivers. Instead, the proportion of people who are passengers, rather than drivers, must increase. This means relatively fewer vehicles, which, in turn, will help reduce the problems of congestion, cost of transportation, availability of fuel, pollution control and urban sprawl.

2. Past alternatives have been too limited -- Twin City Lines, Inc., the dominant privately-owned bus company, was purchased by the Metropolitan Transit Commission (MTC) in 1970. Under Twin City Lines, ridership had been declining steadily since the late 1940s, from a high of more than 200 million riders annually, to a point only about one-fourth of that. The MTC inherited an extensive system of routes designed to serve primarily peak-hour work trips to the downtowns of Minneapolis and St. Paul. Because of the service which already exists, and because of the density of employment, downtowns will continue to be major MTC markets. Over 30% of peak-hour trips to the downtowns are by bus riders.¹² But adequate transportation to the downtowns requires a program for building ridership to other destinations as well. This is particularly evident when the role of the major freeways serving the downtowns is considered. Much of the traffic on these freeways today has other destinations, as was noted earlier. Such traffic hinders freedom of movement to the downtowns.

Since it took over Twin City Lines, the MTC has increased bus route mileage by 50%, purchased several hundred new buses, built shelters, started new express service, undertaken a major advertising campaign, eliminated fares for senior citizens during off-peak hours, and started a mini-bus service in the downtowns of St. Paul and Minneapolis, all as part of a major effort to build ridership using its buses on regularly-scheduled, public, permanent routes. The effort has not been in vain. Ridership hit a low of 46 million passengers annually shortly after the MTC took over, and has begun to move up. Major additional improvements involving several hundred million dollars worth of capital improvements are planned for the MTC system by the year 2000.

An estimate by the MTC projects a total of 166 million riders¹³ annually on its system by the year 2000. If projections by the Travel Behavior Inventory of 3.8 trips per person per day in the year 2000 are accepted, the MTC share would be approximately 4.6% of all trips. If a more conservative projection of 2.8 trips per person per day is used, the MTC share would be approximately 6.2% of all trips. The Travel Behavior Inventory revealed a total of 2.7 trips per person per day in 1970, with the MTC share of the market at 3.2%. We must not be misled by the size of these percentages. The MTC is an invaluable lower-cost option for a substantial number of people whose travel requirements coincide with the service offered and for others who, for a variety of reasons (such as income, age and physical condition) would have no other way to get around.

But the central message still comes through: *The metropolitan area has given the MTC a job it cannot be expected to handle by itself.* Transit, as traditionally defined, may mean only the MTC. But a traditional definition of transit is not enough. Only a much broader attack, including the MTC and other efforts, will really be effective in turning the Twin Cities area around from a driver-oriented to a rider-oriented community.

3. The region's definition of "transit" needs to be broadened -- The term transit as generally understood in the community probably encompasses only the transportation of persons in vehicles with a capacity of about 40 passengers each on regularly-scheduled permanent, published routes serving mainly work-hour trips. *This definition is far too*

narrow. If this is to be the only alternative to the single-occupant car, the result is inevitable: this region will never be able to make a really substantial dent in reducing reliance on the single-occupant car.

To really achieve success in reducing reliance upon the car with the driver the only occupant, a broader-than traditional definition of transit is needed, a definition with potential of serving almost all trips. We have concluded that transit means *all ways* of moving people around in vehicles in the metropolitan area *other than the single-occupant car*. It means riding with others, not driving alone. By our definition, transit includes, but is not limited to, vehicles operated by the Metropolitan Transit Commission. It includes buses operated by private companies, buses operated by apartment complexes, school buses, vehicles larger than a private car but smaller than a bus, taxis, and it includes the private car when occupied by more persons than the driver (such as car pools). We do not believe the traditional form of measuring transit ridership is adequate, with this broader definition. Traditionally, people have thought in terms of the relative proportion of persons in cars versus buses. This has extended even into the official transportation planners' lingo, who measure the "modal split", which is their term for the distribution of trips between cars and buses.

Using the language of the transportation planners, the Travel Behavior Inventory revealed that in 1970 the modal split for all trips at all times in the metropolitan area was as follows: 90% automobile, 3.2% public buses, 3.8% school buses, and 3% all other, including trucks, motorcycles, and taxis.

Such an approach is not workable for establishing realistic goals for building transit ridership, under our broader definition. We need a measurement which reveals the proportion of people who ride, rather than drive. And, to be really effective, such a measurement needs to take into consideration the length of trips. The longer the trip, the more important it is to avoid riding alone. Transportation planners could measure, but have not bothered to do so, *the number of passengers per vehicle mile*, a measure which would encompass all kinds of vehicles, all persons who ride, and the distance they travel.

4. Other transit alternatives have not received adequate attention-- Many forms of transit exist in the Twin Cities area, although some in very rudimentary forms. None has reached its full potential. We have concluded that each of the following options--in addition to providing service on regularly-scheduled, permanent, public bus routes--has a potential role to play.

- a. Car pools-- This form of "transit" even though arranged almost exclusively by individuals, with virtually no organized encouragement by public or private bodies, appears to have considerable appeal already. An estimated 137,000 persons rode daily as auto passengers during the 6-9 a.m. peak in the metropolitan area in 1970, according to the Travel Behavior Inventory, more than double the ridership on conventional bus transit during those hours. Also, the Inventory showed that the fastest mode of travel to work is by auto passenger, an average time of 17.7 minutes, which probably reflects the shorter trips of passengers picked up in route.

The University of Minnesota¹⁴ began an effort last fall to stimulate the formation of car pools among students, faculty and civil service employees. About 1,000 persons were matched up with their neighbors with the help of

a computer. Initiative on setting up the car pools rested with the individuals themselves. Exactly how many car pools were formed is not known. But less than one-half of the 15% who responded to a questionnaire said they had participated in a car pool. As far as we could learn no comparable effort has been made at any other major travel destination in the region, even where the hours of potential car-pooling mates would be more likely to coincide than those at the University. Several businessmen in downtown Minneapolis may undertake a travel survey which might lead to such an effort.

Automobile insurance companies have different policies towards car pooling, but two major companies in the Twin Cities area indicated that passengers would be automatically covered for liability and that insurance rates would not increase so long as the driver was not operating, in effect, a commercial enterprise.

A car-pooling program started in 1964 at the National Aeronautics and Space Administration has resulted in an average of 3.85 persons per car, according to a report on car pooling issued by the U.S. Department of Transportation.¹⁵ NASA grants preferential parking privileges to car pools. To assist new or moving employees, NASA maintains a pigeonhole grid map for matching. The report also states that car occupancy went to 2.8 persons per car, double the typical rate, at McDonnell Douglas Corporation, St. Louis, Mo., following an effort similar to that of NASA.

Increasing auto occupancy from 1.2 persons per car (the rush hour rate in the Twin Cities metropolitan area) to 1.5 persons per car would produce a 20% reduction in vehicles on the highway, according to the report from the Department of Transportation.

But car pools won't start automatically. Incentives for people to use them are needed, plus a comprehensive program of matching people with common travel patterns. The Minnesota Highway Department has developed a computer program for matching employees who live near each other. The Department will make this program available to employers.

- b. Worker-driven vans-- The 3M Company in March 1973 was scheduled to begin a unique transportation experiment.¹⁶ Six 12-passenger, air-conditioned vans were being purchased to assist employees in diverse locations to get to work at the 3M Center east of St. Paul. Passengers will pay a daily fare for direct door-to-door, home-to-office service. The driver of each van will be an employee himself, will ride free, have use of the vehicle at other times at a given mileage rate, and as an incentive to attract more riders, will be allowed to keep for himself all fares from more than eight passengers. The project is being designed so that the fares (about \$25 a month per person) will cover the costs of capital, operations, and maintenance. The 3M Company will own the vans. A similar approach was followed by six commuters from Stillwater to downtown Minneapolis who formed a corporation (the Metropolitan Transit Association) and bought a second-hand VW bus to take to and from work each day.¹⁷
- c. "Subscription" transit service-- A Twin Cities area apartment firm has purchased its own fleet of six buses, five of them air-conditioned, to provide specialized service for its tenants between the apartment and hospitals

the University of Minnesota, downtown Minneapolis, and suburban shopping centers. The service is available only to the tenants, with the cost built into the rent, and with the routes and schedules designed for their specific needs.

The 3M Company and the MTC jointly help subsidize a bus route which serves exclusively 3M employees in the North St. Paul area. Undoubtedly many other situations exist throughout the metropolitan area where people live in the same general area, have a relatively common destination but cannot be served by conventional, public bus routes. Such situations represent major potential markets for public and private transportation companies.

- d. School buses-- More people ride school buses in the Twin Cities metropolitan area during the nine-month school year than ride the MTC during the entire year. There are three times as many school buses as MTC buses in the area. But school bus operations have had an extremely limited perspective: serving captive riders, students who have no other choice. The potential of using school buses for other transportation purposes within a school district, such as serving recreation centers, shopping centers, and so forth, after school hours has been virtually ignored. School districts, automatically reimbursed by the state for transporting students more than one mile from school at 80% of transportation costs up to a total of \$80 per pupil, have not had incentive to seek broader markets.

School bus service is a good example of the totally-fragmented approach which has been taken towards transit service in this area, and in other areas throughout the nation. Virtually no coordination exists between the publicly-supported system which moves school children and the publicly-supported system which moves others, on the assumption that they have nothing in common. Considerable potential may well exist for school districts to use the "other" system for some of their transportation needs. If the public is going to be subsidizing transportation, it at least should have the opportunity to insist on an efficient system. Unfortunately, several built-in restrictions exist. For example, federal standards, adopted by the state, preclude a school district from contracting with the MTC if the MTC is to use its regular equipment. These standards require that school buses, among other things, be painted yellow, have eight-inch-high letters identifying the vehicle as a school bus, and have four-way flashing signals front and rear. Safety of children must not be compromised, but traditional school bus design has not been immune from criticism about safety. Standards are the same for rural and urban areas. The standards say nothing about promoting a comfortable ride, meaning that only "captives" are likely to ride a school bus with any degree of regularity and, as a result of the experience, be reluctant to have any interest in transit when they leave school.

An expansion of school bus transportation is imminent in both St. Paul and Minneapolis, where both school districts are contemplating providing service to high school students and for a variety of other educational services purposes. The two districts currently are studying options for the provision of the expanded service.

- e. Taxis-- While taxis by themselves are not an efficient way of increasing the number of passengers per vehicle mile, they represent probably the most tragically misunderstood and ironic part of the entire Twin Cities area transportation system.

The main advantage of the taxi is its flexibility, being able to take a person from where he is to where he wants to go on a moment's notice. Its reliability was supported in a recent consumer survey conducted by the Minneapolis Star, although cab dispatchers themselves admit that at times of inclement weather, when demand is high, reliability goes down. In fact, when a cab is most in demand, it is likely to be least available.

Taxi ridership represents only a small fraction of 1% of all trips taken in the region and, according to the owner of the largest cab company, ridership is not increasing and probably is going down. About 800 cabs are licensed in the metropolitan area.

Despite relatively-higher fares, which is a major drawback, the cab still serves primarily lower-income people who have no other transportation option, according to both cab owners and dispatchers. A dispatcher estimated that 50-60% of cab riders have incomes below \$6,000 a year. Most of them, in Minneapolis, live in the area between 38th St. on the south and Broadway on the north.

One of the biggest problems with the organization of cab service is that it still operates on a municipal basis. Only municipalities license taxis. Every ride must either begin or end in a municipality where the cab is licensed. With the exception of a few suburban cabs which are licensed in two or three suburban communities, no cab has a license for more than one municipality. A Minneapolis cab driver can take a passenger from Minneapolis to St. Paul, but he cannot pick up a passenger in St. Paul unless that passenger's destination is within Minneapolis. Each cab company operates its own dispatching system. There is no single number to call for cab service.

Although legally the same fare applies regardless of the number of passengers with the same origin and destination, cab companies and drivers make little, if any, effort to let people know this fact. Persons who otherwise might be attracted to consider a cab and sharing the fare may well be deterred for fear of having to pay the full fare.

Cab officials characterized their operations as marginal, which, they said, deters them from trying to reach more markets for their service. The exact potential is not known, but certain unique services are possible. For example, the Yellow Cab Company has had a long-standing arrangement to take night-shift Bell Telephone operators home from downtown Minneapolis. Another example: recently the Minneapolis Public Schools, needing specialized transportation service for some 21 youngsters, found it cheaper to hire three cabs than contract for a big school bus.

Although cab business goes up in the late evening hours when the restaurants, bars, and entertainment centers close, it is likely that the potential market here is much greater--particularly if people were encouraged to take a cab rather than their private car to avoid the risk of driving after drinking.

Taxis represent a form of demand-loading transit service, an experimental effort being considered by several bus systems. Cab companies have the biggest reservoir of knowledge about demand-loading. They have an

opportunity, at this time, to provide urgently needed leadership and creative marketing benefit to the community and themselves.

5. Failure to provide off-peak as well as peak service inhibits persons from using transit for work -- The rush-hour work trip merits priority attention for providing an alternative, immediately, to the single-occupant car, because of (1) its regularity in time from day to day, (2) its singular, common purpose, (3) the potential for assembling people with common destinations, (4) the high degree of under-occupancy of vehicles which prevails for the rush-hour work trip now, and (5) the potential involvement of employers in influencing more efficient transportation for workers. But this effort cannot take place in a vacuum.

- a. Off-peak service needs -- Many persons now may drive their own cars to work because they must use them regularly or occasionally for work purposes during the day. As far as we could determine, few employers or others have made much attempt to provide vehicles for employees to use during the day so they can take transit to work. The State of Minnesota maintains a motor pool of vehicles for use by employees on state business. But this service is not advertised as a way for employees to leave their personal cars at home. In fact, in most state offices, if a trip is under 50 miles, an employee can use his personal car and be reimbursed at 10 cents a mile without even checking to see if a state car would be available.

Persons who might need a car for one hour or so during the day might think of checking rent-a-car operations, but rent-a-car service today is primarily offered on an all-day basis at the minimum. Rent-a-car primarily serves out-of-town customers. Another potential rent-a-car market, yet to be tapped, is to encourage people to rent or lease a car for weekend purposes, using transit during the work days.

Perhaps the most intriguing concept in using rent-a-cars as an adjunct to transit exists in the service offered to residents of the new Cedar-Riverside apartment complex. Tenants are given the opportunity to give up rights to a garage and receive, thereby, lower rent, in return for having access to a fleet of cars for their needs. The total number of cars, and parking spaces, for the apartment complex is thereby reduced.

Many businesses provide inter-plant transportation service for their own personal uses, although the exact extent of this service is not known. Nevertheless, a potential for integrating these routes with public routes may exist.

Other potential markets for transit in the off-peak hours include trips for shopping, medical, and recreational purposes.

- b. Off-peak utilization needs -- Off-peak transit service also helps utilize equipment and personnel which are needed for peak-hour demand but which, if allowed to sit idle in the off-peak, can be unnecessarily expensive. Thus, a necessary complement to building ridership at peak hours is to make sure that equipment and personnel are put to use at other times, too. This will tend to increase the total revenue from users, thereby decreasing the extent of any public subsidy. Moreover, an increase in off-peak utilization serves to enhance the prospects of making further improvements during the peak. Serving peak hour demand may be held back if it is not possible to make use of equipment and personnel at other times.

The off-peak problem is particularly acute for the MTC. For example, 607 buses are on the street in the a.m. peak and 630 in the p.m. peak, but only

234 buses at a low off-peak point. In 1972 the MTC paid drivers for 115,000 off-peak hours which were not worked but which, under the MTC's labor contract, had to be paid. Drivers are guaranteed a full eight hours pay each day, whether or not there is work for them. In addition, because of other scheduling problems the MTC in 1972 paid overtime at time-and-a-half for 189,000 hours. It was necessary to take some drivers from their regular shifts to handle the peak load.

One possible approach for improving utilization in the off-peak, although it has potential as peak-hour service, too, is the idea popularly known as dial-a-ride (Ford Motor Company has applied for a copyright to the name "Dial-A-Ride"). The MTC staff prepared a report on dial-a-ride in 1972, recommending an experiment in one area. Dial-a-ride is a demand-responsive transit system that brings a small bus, van, or station wagon to a traveler's door within a few minutes of his telephone call for service. It is possible that dial-a-ride might serve shopping trips in the off-peak.

6. Public and private policy--unconsciously--has discriminated against multi-passenger transportation-- Despite the fact that no official, stated policy may exist on single occupant versus multi-passenger transportation, a policy does, in fact, exist, if unwritten. It is impossible not to have one. Today policies are skewed against multi-passenger transportation:

a. Speed-- Present policies on traffic movement in the metropolitan area relate primarily to movement of vehicles, not movement of people, which, in effect, gives preference to the single-occupant car.

* Special lanes-- It has been very difficult to convince highway planners of the need for exclusive lanes for multi-passenger vehicles. So far the argument for such lanes has been based only on potential bus ridership, which has limited the potential because likely bus ridership in a given corridor is not heavy enough. The question of whether an exclusive lane can be justified, considering likely use by all multi-passenger vehicles, not just buses, has not been raised.

We are intrigued by a possibility under study by the Minneapolis Traffic Department to provide exclusive reverse-direction lanes for buses only on Marquette and 2nd Ave. S. in the central business district. Such a measure would eliminate buses and cars in the same lane and end right-turn conflicts.

* Preferential access-- Access to freeways has been granted to all vehicles alike, regardless of the number of passengers. A major experiment in some modification of this policy will begin in the fall of 1973 on I-35W from downtown Minneapolis south to County Road 42 in Dakota County. Buses will be given preferential access to the freeway during peak hours from ramps constructed exclusively for them.²⁰ Other vehicles, including cars, will be regulated by a computerized traffic signal system in entering the freeway to assure free-flowing movement. Officials responsible for the project said they have not thought about giving other multi-passenger vehicles, in addition to buses, the right to use the preferential access ramps.

* Right-of-way-- Generally a bus with 40 passengers is given no preference over a car with only one passenger. In fact, the bus is penalized in picking up and discharging passengers because it has no right-of-way to get back into the stream of traffic. The problem is more serious at points of greatest congestion, such as the central business districts, where such things as apparently insignificant as a right turn by a car can greatly slow down the movement of a bus.

- b. Parking-- The private sector (employers, retailers, etc.) not the public sector, provides most of the parking space in the metropolitan area. Places for storage of vehicles are as significant as places for movement of vehicles. Thus, the participants in the private sector are major transportation decision-makers.

With the exception of the downtowns of Minneapolis and St. Paul and a very few other locations, a motorist today is assured of free parking wherever he chooses to go in the metropolitan area. Estimated cost (subsidy) of providing free parking is about \$100 million annually.²¹ The car with six occupants takes up no more parking space than a car with one occupant, but preference is rarely, if ever, given to multi-passenger cars for parking places closest to buildings. Employers who provide free parking for employees who drive do not provide any comparable compensation for their other employees who are passengers, either in cars or buses. The Minnesota Highway Department has found that people are very responsive, in their choice of travel mode, to the price of parking.²²

Construction of new parking lots and ramps is undertaken throughout the metropolitan area without review as to their impact upon use of single-occupant versus multiple-occupant vehicles. In fact, the official Transportation Planning Program, the inter-agency body responsible for coordinating the planning of transportation facilities in the metropolitan area, all but ignores parking lots and ramps.

New residential, commercial and industrial developments are routinely planned for the maximum amount of parking--with no review as to the impact such requirements have on furthering the use of the single-occupant car.

We fully recognize that competition between outlying shopping and office areas and the downtowns is a very real factor in the parking policies which localities and businesses adopt. This clearly indicates to us that efforts to bring transit into balance with the single-occupant car by changes in parking policies must treat all parts of the region the same. That is, a parking policy must not discriminate, for example, against a central city shopping or employment area relative to a suburban area.

- c. Zoning and subdivision ordinances-- As far as we could determine, no municipality in the seven-county area makes any provision for transit in approving major residential, commercial and industrial outlets, despite the fact they are major traffic generators. Everything is planned as if the *only* mode of transportation is an individual's personal car. A recent proposal by a St. Paul city councilman to amend the city's zoning code so the apartments and commercial areas would have to provide lighted and heated passenger bus shelters is one of the first indications of a possible change in policy.

Current zoning and subdivision ordinances are, of course, serving to shape development of the region to suit the personal car.

Shopping centers of all sizes can be principal gathering points for a variety of community activities. But not enough attention has been devoted to providing transportation service, besides parking for the personal car, at shopping centers.

If, for relatively short trips, people can use other forms of transportation than driving their own car, this will enable them to reduce use of their car for longer trips as well. Yet most new commercial developments are built so that they can't be reached either by pedestrians or bicyclists. Many people have to use their cars for short trips simply because it is not safe to bike or walk.

- d. Pricing-- Motor vehicle users do not pay the full cost of travel in peak hours, according to the 1972 National Transportation Report.²³ This is the result of the current pricing system whereby a motor vehicle user pays an average out-of-pocket cost irrespective of the time of day or location. Since some portion of highway capacity is constructed solely to carry travel in peak periods, the motor vehicle user does not pay the full cost of such travel.

About one-third of the cost of construction and maintenance of roads in the 7-county metropolitan area is financed through general taxation via the property tax. The proportion has been increasing. In 1965, about one-fourth of the cost was financed from the property tax, and the balance from road user taxes. While it might be agreed that some property taxes to support roads can be justified, because roads are a service to property, we can find no justification to allow more and more property tax funds to be used for construction and maintenance of county highways. The 1971 Legislature attempted to substitute part of the property tax for county highways in the metropolitan area with a wheelage tax. However, five of the seven metropolitan counties used a loophole in the law which enabled them to dodge imposing the wheelage tax and still increase the property tax levy for county highways. This loophole should be closed.

- e. Education-- Because society is so auto-oriented, from the time a child plays with his first toy car, through adulthood (where "success" may be measured by the kind, age and number of cars owned), the job of stressing the virtues of riding rather than driving is difficult. We understand about \$4 billion is spent annually in auto-related promotion, in comparison to only the smallest fraction of that amount being spent to promote transit.

We have not made any systematic review of present educational programs offered for people of all ages; nevertheless, we doubt any major effort is made to assist people in various ways of getting around in the metropolitan area other than via the personal car. The most extensive programs of education in the transportation area undoubtedly are the state-mandated programs of driver education. Did any state ever mandate rider education?

7. Government agencies have been preoccupied with building facilities rather than ridership-- At the federal, state, regional, county and local level, governmental agencies responsible for transportation have concentrated their efforts mainly on supplying and maintaining physical facilities to accommodate demand for travel. It

is as if demand for travel were largely an independent variable, to be accepted without question, regardless of when or in what form the demand occurs. The assumption seems to be that if everyone were to choose to drive, alone, in the peak hour, then they would have to be served, regardless of the inefficiencies.

Such an approach is fundamentally unsound. The way in which demand for travel occurs can--and does--vary, depending upon outside factors. For example, ready availability of a speedy multi-passenger vehicle as an alternative to the personal car will influence an individual in his decision. This, in turn, will affect the number of vehicles needed to satisfy travel demand and, consequently, the extent to which rights-of-way need to be built. Or, to take another example, the way in which demand for travel occurs will vary depending upon whether new urban development contributes to further urban sprawl or counteracts such a trend.

No longer can transportation planning be limited to supplying facilities as demand for travel requires. The way in which demand occurs must become subject to influence.

Unfortunately, the Transportation Planning Program, that body which has responsibility for coordinating the construction of major transportation facilities in the metropolitan area, has been almost exclusively oriented to the *supply* side (providing the physical facilities) with no more than incidental attention to the way in which *demand* occurs (such as the number of trips in single-occupant cars versus multi-passenger vehicles).

The Transportation Planning Program is a non-statutory association which has existed in different forms in the metropolitan area over the past 11 years. Currently it is a joint powers agreement among the Metropolitan Council, Metropolitan Transit Commission, Minnesota Highway Department, counties and municipalities in the seven-county metropolitan area. The establishment of the Program was stimulated by federal regulations calling for a comprehensive, cooperative, continuing planning process in each metropolitan area to qualify that area for federal funds for transportation facilities. It is headed by a five-member Management Committee which includes the chairman of the Metropolitan Council, chairman of the Metropolitan Transit Commission, state Commissioner of Highways, a representative of county governments and a representative of municipal governments. Its core staff is the Transportation Planning staff of the Metropolitan Council. Its annual budget fluctuates from year to year, depending upon the amount of funds its participants contribute. A typical budget is about \$400,000 annually. The largest share of the funds, about one-half, is contributed by the Highway Department as part of its required investment in the planning process. About 40% of the work program involves preparation and refinement of a transportation plan and about 60% in coordination of planning implementation of the plan.

While the Transportation Planning Program has been able to provide a valuable forum for all parties to discuss transportation questions, it has been ineffectual in making decisions. Because it is a joint powers agreement, representatives of the various agencies have insisted on an equal voice, meaning that no one has the final responsibility. The result has been that the Program has been unable to provide leadership in transportation policy. Also, because it is essentially an organization of the building agencies, with the representative of each agency looking out primarily for his own area, it has been difficult for the Program to take an overall perspective on transportation issues.

Metropolitan areas throughout the country have had similar difficulties in making transportation policy. Consequently, federal officials have become increasingly interested in devising ways whereby effective transportation policy-making structures can be set up. In recent years, federal officials have been talking more and more about the need for state legislatures to designate an official policy body for transportation policy in each metropolitan area.²⁴ The Minnesota Legislature has not taken this action to date. We believe it must.

FOOTNOTES TO FINDINGS AND CONCLUSIONS

- 1 I-35W Urban Corridor Demonstration Project: Bus Metered Freeway System, Final Report. Prepared for the Metropolitan Council, St. Paul, 1971.
- 2 1970 Census of Population, U. S. Department of Commerce, Bureau of the Census, Washington, D. C., 1970.
- 3 1972 National Transportation Report, U.S. Department of Transportation, Office of the Secretary, Washington, D. C. 1972.
- 4 A Study of Comparative Urban Indicators: Conditions in 18 Large Metropolitan Areas, Urban Institute, Washington, D. C. 1972.
- 5 Twin Cities Area Transportation Study, State of Minnesota, Department of Highways, St. Paul, 1962.
- 6 1970 Travel Behavior Inventory, Transportation Planning Program, St. Paul, 1973.
- 7 1970 Census of Population
- 8 1970 Travel Behavior Inventory
- 9 I-35W Urban Corridor Demonstration Project, Final Report.
- 10 The Potential for Energy Conservation, Executive Office of the President, Office of Emergency Preparedness, Washington, D. C., 1972.
- 11 "Implementation Plan to Achieve Carbon Monoxide Ambient Air Quality Standards," Pollution Control Agency, Division of Air Quality, Minneapolis, 1973.
- 12 1970 Travel Behavior Inventory
- 13 Transit Development Program, 1973-1990, Metropolitan Transit Commission, 1973.
- 14 Computerized Car Pool System: Fall '72 Analysis, University of Minnesota, Office of Physical Planning, 1973.
- 15 Car and Bus Pool Matching Guide, U. S. Department of Transportation, Federal Highway Administration, Washington, D. C., 1973.
- 16 "Van Pooling Outline," 3M Company, Transportation Department, 1972.
- 17 Minneapolis Star, August 22, 1972.
- 18 "A Proposal to Perform a Study of School Transportation for the Minneapolis and St. Paul School Districts," Aries Corp., 1973.
- 19 Minneapolis Star, September 11, 1972.
- 20 I-35W Urban Corridor Demonstration Project, Final Report
- 21 "Cost of the Automobile," Citizens League staff memorandum, prepared for Transit Ridership Committee, Dec. 28, 1972.
- 22 Twin Cities Modal Split Model, Roger J. Forbord, State of Minnesota, Department of Highways, St. Paul, 1966.
- 23 1972 National Transportation Report
- 24 "The Case for Highway Planning," address by F. C. Turner, Federal Highway Administrator, December 6, 1971.

RECOMMENDATIONS

1. Action by the 1973 Legislature on transportation decision-making-- As necessary first steps in providing alternatives to the system which relies so heavily on the inefficient personal car in the Twin Cities area, we recommend that the 1973 Legislature:

- a. Designate transportation decision-making body by statute-- The Legislature should fix responsibility for transportation decision-making in the Twin Cities area by designating, by statute, a policy body in the metropolitan area to have overall responsibility for transportation planning and policy-making, including the assumption of the functions of the Transportation Planning Program. The Transportation Planning Program is a little-known, but significant non-statutory arrangement which has carried out certain responsibilities in coordination of transportation planning in the metropolitan area in recent years.
- b. Make construction policy emerge from non-capital policy-- The Legislature should require that decisions on construction of major highway and transit facilities shall be a *second* responsibility of transportation policy-making, to take place only after decisions *first* are made in influencing the use of single-occupant versus multi-passenger vehicles. This represents a major shift in emphasis in transportation planning and policy-making. The traditional responsibility has been essentially construction-oriented (mainly building rights-of-way for more rapid vehicle movement). It has not included the matter of influencing the number of trips taken in single-occupant versus multi-passenger vehicles.

The effect of our recommendation would be that henceforth the decisions on construction of major highway and transit facilities would be made only in the context of this process.

In effect, the Legislature would state that transportation policy shall involve tradeoffs between the extent of influencing persons to switch from single-occupant to multi-passenger vehicles and the extent of new construction. So far the Legislature has not explicitly stated transportation policy for the region, but the effect of past actions has been, mainly, to supply facilities to meet demand, without trying to influence the way in which demand occurs. As a result the region has developed a very expensive, inefficient transportation system, contributing to a great deal of urban sprawl.

c. Broaden transportation policy-making to

--Encompass all vehicles carrying multiple passengers-- The Legislature should spell out that automobiles, public buses, private buses, school buses, taxis, rent-a-cars, car pools and other ways used to move people around the metropolitan area shall come within the scope of transportation policy-making. For the first time an integrated approach to all modes would be possible. Our intent here is to highlight for emphasis, not to limit the overall scope of transportation policy-making. For example, all vehicles, including those used for goods movement, rather than passengers, would be included.

--Include parking on the agenda-- Even on the physical side, the Transportation Planning Program has been too limited, by concentrating on making policy for the *movement* of vehicles (rights-of-way) to the exclusion of policy for the *storage* of vehicles (parking lots and ramps). We recommend that the 1973 Legislature broaden the charge for transportation to include planning for parking. All proposed parking facilities of a certain size (say, 50 spaces or more) should be submitted for review as to their impact on advancing the cause of multi-passenger, as against single passenger, transportation.

- d. Establish a goal of increasing the proportion of peak-hour riders to 50% by 1980--We recommend that the Legislature establish a goal to increase the proportion of riders in the 6-9 a.m. peak hour from 37%* in 1970 to 50% by 1980, which, if attained, would approximate the percentage of ridership which prevailed in 1949. The attainment of this goal would require that approximately an additional 100,000 persons who otherwise would drive to work from 6-9 a.m. would ride instead -- on the bus, in car pools, company-owned vans, or what-have-you. The establishment of a goal will more than anything else give transportation management a sense of purpose.
- e. Require progress report in 1974, followed by regular monitoring--The Legislature should call for a first report on the relative proportion of drivers and passengers, in all vehicles, be submitted by the statutory successor to the Transportation Planning Program in January 1974, with, as deemed desirable, recommendations on legislation for moving up the proportion of passengers.

The Legislature should require an annual report on progress towards reaching a goal of 50% passengers by 1980, plus desirable goals for longer periods in the future. We see no reason why, in the long run, the proportion of persons who are passengers rather than drivers in the peak hour cannot approach 75%.

We recommend a program of regular monitoring of ridership in the region, not just surveys once every 10 years or so. We understand that such an effort is feasible through selective sampling, rather than comprehensive surveys.

We recommend at least two methods of measurement: (1) the proportion of trips taken by riders rather than drivers (which can be fairly easily understood) and (2) that number of passengers per vehicle mile (a more technical measurement, but important because it can reflect the distance of trips as well).

2. Change public policies to help build ridership--An improved transit marketing program is unlikely to realize its full potential unless accompanied by changes in public policy. We recommend that the statutory successor to the Transportation Planning Program have the continuing responsibility to develop proposals for the Legislature and other governmental bodies on making public policies consistent with the goal of building ridership. We have identified several areas where the Legislature should act immediately:

- a. Help increase the speed of multi-passenger vehicles by giving preferential treatment--Transit must be rapid to divert present drivers to multi-occupant vehicles, which means getting the vehicles out of mixed traffic.

--Preferential entry--All new or rebuilt limited access roads in the metropolitan area should include separate access ramps, in all directions, for the exclusive use of multi-passenger vehicles. The additional ramps can

* This current percentage covers all types of trips during the 6-9 a.m. peak, including school bus trips. If, on the other hand, only work trips were considered, but including work trips throughout the entire day not only the 6-9 a.m. peak, the 1970 percentage of riders was 25%.

be built at modest cost. Then, in peak hours, as necessary, multi-passenger vehicles can be allowed preferential entry over single-occupant vehicles. We do not have adequate information to recommend a specific number of persons needed in a vehicle to qualify for use of a special access ramp. Perhaps three or four persons would be a desirable minimum, although in certain circumstances the requirements might have to be greater than that, and in others it could even be as few as two persons.

We recommend that access to the preferential ramps now under construction on I-35W from Burnsville to Minneapolis, which now are being planned for buses only, be expanded to include other smaller, multi-passenger vehicles, including, possibly, cars if they have enough passengers. In addition, preferential access should be provided on all ramps, not just those leading in one direction, to reflect the pattern of travel.

Also, parking lots and ramps should be designed so that preferred access and location are given to multi-passenger vehicles (such as, for example, the preferential treatment now given buses in the Metropolitan Stadium parking lot). This will require the cooperation of employers and shopping center owners. To set the pace for private employers, we recommend that the Legislature provide that parking lots for employees at the State Capitol be designed to give preference, both in location and in price, to multi-passenger cars.

--Exclusive lanes--We recommend that exclusive lanes for multi-passenger vehicles be routinely designed for present and new freeways unless it can be demonstrated conclusively that such lanes are unnecessary. Because of design requirements, it might be necessary to limit certain kinds of exclusive lanes to multi-passenger vehicles with professional drivers or with special equipment suitable for use of the lanes.

--Right-of-way to buses--We recommend that state law grant buses an automatic right-of-way over other vehicles when traveling in mixed traffic. This means, for example, that when buses pull away from the curb after having picked up passengers, they would have the absolute right-of-way over other vehicles in getting back into the stream of traffic. Perhaps a flashing stop light at the back of a bus could be activated to notify other vehicles to yield.

b. Treat multi-passenger transportation as a utility that must be provided.

--Transit impact statement--To stimulate an awareness of transit, the owners of proposed new residential, commercial, or industrial developments should be required by law to submit, as a part of whatever information is prepared when any kind of permit, plat approval or rezoning is sought from a government body, a transit impact statement indicating (1) the effect of the proposal on multi-passenger versus single-passenger transportation, (2) the extent to which the proposal serves to enhance multi-passenger transportation, (3) any unavoidable aspects of the proposal which serve to enhance single-passenger transportation. The Legislature should instruct the successor body to the Transportation Planning Program to spell out what shall be covered in such a statement and guidelines as to how large a proposal must be for a transit impact statement to be required. Such a statement would be a natural extension of traffic analysis reports usually required of proposed developments now.

- Attention to bicyclists and pedestrians--The potential market for using transit for longer trips will be helped if people can use other forms of transportation than their own cars for short trips. Proposed residential, commercial and industrial developments should be designed so that pedestrians and bicyclists can reach and move around in the developments without undue safety risk because of the automobile. Many people today use their cars for short trips simply because it is not safe to bike or walk.
- Reducing parking requirements--Developers should be allowed by state law to provide fewer parking places than required by municipal ordinances if they can demonstrate availability of transit service, broadly defined. Thus, for example, an apartment development could reduce its off-street parking spaces if it provided a transit shelter and/or a fleet of cars for tenants to use rather than their own.
- Transit shelters and transportation centers--Shopping centers and large employment centers should be required to provide, as routinely as they now provide parking, indoor heated areas for discharging and picking up passengers from buses and other multi-passenger vehicles. Shopping centers should also be required to demonstrate the provision of an area for integration of a variety of transportation services, such as taxis, rent-a-car operations, bus turn-arounds, park-and-ride lots, and perhaps other related services for people, such as convenient waiting areas with restaurants, newsstands, and places to obtain transportation information. In effect, such transportation service centers would be a visual manifestation of the broad approach to "transit" which we believe is needed.

We also see potential for using portions of parking lots adjacent to regularly scheduled bus routes for off-the-road loading and unloading.

- c. Change pricing policies--Previous Citizens League reports have recommended that (1) the Minnesota Constitution be amended to give the Legislature greater discretion in the use of highway user taxes, and (2) that county road and bridge levies be reduced, with the loss in revenues made up by a wheelage tax. We have identified the following additional, related, issues which should be faced now:

- Property taxes for county highways--Action by the 1971 Legislature allowing counties to impose wheelage taxes did not stop the increase in general taxes for major thoroughfares. We believe that further increases in county property taxes for roads in the metropolitan area are not justified. Additional funding for county roads should come from road user taxes. Therefore, we recommend that the Legislature prohibit any further increase in county road and bridge property tax rates in the metropolitan area above the level of the rates actually levied for 1973. Further, as additional highway user funds are made available for county highways, such as from the county share of an increase in the gasoline tax, county property taxes for roads should be reduced accordingly.
- Peak-hour pricing-- We were unable, in the time available to us, to devise specific recommendations in this area. But it needs to receive high priority attention. We recommend that the Legislature instruct the statutory successor to the Transportation Planning Program to review the question of peak-hour travel costs and pricing, and report to the next Legislature. The investigation would include, but not be limited to:

- * Possible installation of special sensors* in highways to record peak-hour use and bill vehicle owners accordingly.
- * Possible higher fees on the second car in a household, to reflect the fact a second car is usually needed because of the peak-hour work trip; or purchase of special stickers for peak-hour driving.
- * Possible peak-hour parking surtaxes at public and private lots and ramps throughout the metropolitan area.

3. Begin marketing transit at the destination--Transit, as we have defined it, broadly, to mean riding with others rather than driving alone, whatever the vehicle, traditionally has been marketed directly to the individual. But its success has been severely limited because individuals live in such a variety of locations and have trips with such a variety of destinations. To overcome this problem, we believe considerable potential exists for essentially reversing past marketing strategies. This means, for example, in the case of work trips, that transit may be better sold at the *destination* than the *origin*. Such a marketing approach will enable the supplier of transit service (such as the MTC, a private bus company, a taxi company or a rent-a-car firm) to reach large groups of individuals at once--individuals who are known to be concentrated together at one end of their trip and who are likely to have common working hours. The supplier of transit service can focus his marketing efforts on fewer groups, with greater prospect of success. This means, specifically, selling transit to (1) employers, who, in effect, would act as agents for their employees. For example, specialized transit service could be designed to meet the particular travel needs of employees in a single firm or group of firms located near each other. Service would be pre-sold, with the customers signed up before the service is started. It would not be necessary simply to offer a published route, hoping for random pickups. People could "subscribe" for transit service designed specifically for them. (2) apartment complexes or other places where residences are concentrated. Service could be tailored to meet the particular needs of residents of a single apartment area. A developer of a residential complex east of St. Paul told us he is looking for transit suppliers to come forth. (3) commercial centers, which might find it advantageous, for example, to offer demand-loading transit service to their customers as an option to the personal car for transportation.

We recommend the following marketing actions and strategies:

a. To the statutory successor to the Transportation Planning Program

- Continue to refine, in greater detail, travel behavior information so that clusters of people (i.e. potential markets for multi-passenger transportation) can be better identified. This should cover non-peak as well as peak hour travel patterns. Work trip destinations can be identified fairly easily, even without some of the travel behavior information. But much better knowledge about non-peak travel is needed.
- Circulate broadly the travel behavior information already collected. It has been more than two years since the Travel Behavior Inventory was taken but little has been published.
- Undertake market research studies in depth as to what motivates people to prefer the personal car over other forms of transportation and to determine what kind of products need to be marketed and which appeals need to be used

*Similar to automatic car identification in automated railroad yards

to encourage people to prefer other forms of transportation over their personal cars. Coordinate major sales and education programs on multi-passenger transportation. This might include a wide range of advertising and public relations activities.

- Continue to seek other ways of providing viable alternatives to the single-occupant car.
- Monitor the progress and contribution made by the various suppliers of transportation service in the metropolitan area and make recommendations to the Legislature, as deemed desirable, as to needed changes. For example, if it appears as if municipal licensing of taxis is impeding adequate service, recommendations to correct the situation should be made.

b. To the MTC

- Contact major employers and employment centers. Urge employers' cooperation in determining clusters of residences which might be particularly appropriate for subscription service for employees.
- Get in touch with municipalities and find out when every new apartment complex is planned. Contract apartment owners to offer, as an inducement to prospective tenants, specialized transit service under MTC contract to meet their particular travel requirements. Urge apartment owners to survey work destinations of all tenants.
- Get in touch with the Minneapolis and St. Paul School Boards and offer to provide specialized service for transportation of students. To the extent such service can be provided in the off-peak when MTC drivers and equipment now are idle, rates can be adjusted accordingly, so as to be competitive with any other service the School Boards might consider. If certain state regulations inhibit the ability of the MTC to make such contracts, the issue should be brought to the Legislature and resolved.
- Explore, in cooperation with the transit drivers' union, the impact of current policies against hiring any part-time drivers upon the ability of the MTC to substantially expand peak-hour service and, consequently, its revenue base. Explore relating drivers' compensation to extent to which ridership increases. As desirable, make proposals to the Legislature in this regard.
- Review the possibility of contracting the retail stores for the delivery of goods as a form of better utilization of drivers and buses in the off-peak hours. We understand an experiment such as this may be started in Canada.*
- Reduce fares in off-peak hours to stimulate more efficient utilization of its system. Explore different forms of paying for transit, including monthly or weekend passes.
- Continue to carry out its 13-point improvement program, including development of park-and-ride facilities, shelters, and a more equitable fare zoning structure.
- Review the possibility of designing vehicles to give riders a greater sense of privacy, such as providing seats with head rests and personalized lighting.
- Allow free transfer between MTC buses and private bus companies.
- Integrate present services internally by improved coordination of routes and schedules and increased use of existing freeways. Coordinate passenger services with those of other carriers, including inter-city trains and buses, limousines, taxis and private passenger services.

*"An Evaluation of Urban Transport Efficiency in Canada", Norman D. Lea & Associates, 1971

- Take the initiative, perhaps in cooperation with taxi companies, in demand-loading (Dial-A-Ride) service in the region, offering an adjusted fare structure, so that people can be picked up at their homes and taken to their destinations at reasonable rates.

c. To taxi companies

- Move, jointly, to establish a central marketing and taxi dispatching service for the entire metropolitan area.
- Start using taxis to carry more advertising, such as pointing out that all persons with common origin and destinations need pay no more, totally, than a single individual.
- Undertake experimental programs in demand-loading (Dial-A-Ride).
- Offer specialized service, on contract at negotiated rates, to employers to provide transportation service to employees as needed during the day so employees won't have to use their own cars. Work with the MTC in cooperative efforts where the MTC could handle home-to-work trips, with taxis providing service for business-related trips during the day.
- Urge that municipalities discontinue limiting numbers of licenses and that municipalities permit taxis to pick up and discharge passengers anywhere in the metropolitan area.

d. To rent-a-car operations

- Offer to lease fleets of cars to apartment complexes for use by tenants who wish to forego owning and storing a personal car.
- Review the possibility of making rent-a-cars available for short, during-the-day trips in the metropolitan area for people who want to leave their cars at home and take other means of transportation to work.
- Explore the feasibility of leasing fleets of cars to employers for use by their employees for work trips during the day, rather than using their own private cars.
- Begin to encourage individuals to use transit during the week, and lease cars, with the size of car dependent upon the need, for weekend purposes.

e. To distributors of vans and mini-buses

- Urge employers and others to purchase vehicles larger than cars, but smaller than conventional buses, which individuals can lease to provide, in effect, "maxi" car pooling or "mini" busing.
- Urge individuals where residences are concentrated together to jointly purchase such vehicles for commuting purposes.

f. To school districts

- Don't let buses sit idle after the pupils have been taken home from school. Start offering other transportation services, and charge for such services.

This includes setting up regular routes which could help handle the variety of transportation requirements of youth, and others, such as taking them to shopping centers, recreation areas, ice arenas, schools (for extra-curricular purposes), churches and so forth. Where a school district contracts with a private school bus firm, it should also seek bids for after-school service.

--Urge that state regulations not limit their ability to contract with the MTC for transportation service to students.

--Band together with other districts in purchasing school buses and insist, in such joint purchasing, that manufacturers of school buses improve school bus design to make them more appealing for riding. Urge that state and federal standards on school bus design be modified.

--Explore changing school hours so that vehicles which take people to work also can be used to take others to school.

--Make sure such courses as driver training are balanced with information on the costs of driving or riding.

g. To employers

--Devise a method, preferably a common approach throughout the metropolitan area, for matching up employees who live close to each other and who, therefore, are most likely to ride together to work rather than alone. Such information should be continually updated. In the case of a single large employer in an area, only the employees of that firm need to be informed. But where a number of smaller firms are located close to each other, the information should be shared, perhaps with the help of the local Chamber of Commerce. Utilize the Minnesota Highway Department, which has offered to assist, in setting up the system of matching employees.

--Where the employer provides parking for employees, parking policies should be changed so that the most favorable parking spaces--that is, the indoor spaces or the spaces nearest the building entrance--should be reserved first for multi-passenger cars, with single-occupant cars given what is left.

--If an employer provides a fleet of cars for business purposes, such as the Minnesota Highway Department does, allow employees to use such vehicles, with appropriate fees, for personal use.

--Provide comparable compensation, perhaps, for example, through bus tokens, to those employees who don't take cars to work to match the benefit which free parking offers for employees who drive.

--Cooperate with all suppliers of transit service in identifying groups of employees who might be served by a specially designed bus route, a car pool or, perhaps, an employee-operated van.

--Accept the responsibility, in hiring new employees, to help them find ways to get to work other than by the single-occupant car.

--Provide alternative forms of transportation for employees during the work day so they don't have to bring their own cars.

--Undertake campaigns to promote ridership, rather than drivership, encouraging car pools, bus ridership, and other measures, perhaps by giving recognition to groups of employees with the highest percentage of people who ride to work rather than drive.

--Provide indoor heated areas for pickup and discharge of passengers from buses and other vehicles.

h. To retailers and shopping center managers

--Offer to provide space for a variety of transportation services, including buses, cabs, rent-a-cars, and information centers where people who may want answers on mode of transportation can go; in effect, one-stop transportation service centers.

--Build indoor, heated areas where passengers can be picked up and discharged for buses and other vehicles.

--Give preference in parking lots to multi-passenger vehicles, by reserving spaces close to the building. Or charge a fee for parking if a vehicle has only one passenger, allowing free parking for multi-passenger vehicles. This may well be an effective device to forestall the need for additional construction.

--Explore contracting with the MTC for goods delivery in off-peak hours.

--Offer transportation for shoppers to and from their homes.

--Balance programs of validating parking stickers with comparable treatment (e.g. free tokens) for customers who take a bus.

i. To neighborhood organizations

--Urge shopping centers to incorporate transportation service centers in their plans.

--Urge school districts to set up intra-district routes for other transportation purposes after school hours.

--Establish a clearinghouse for employment destinations of people in their respective neighborhoods, and encourage people with common destinations to ride together. As needed, petition the MTC and others to provide service.

DISCUSSION OF RECOMMENDATIONS

In this section a number of questions are addressed which might arise in a reading of the recommendations.

1. The report recommends that public policy should influence the way in which demand for travel occurs. Just what sort of influence over an individual's use of his personal car is contemplated?

Building ridership can best be accomplished, the committee felt, through a series of positive steps favoring multi-passenger vehicles, rather than through punitive measures against the personal car. Measures such as outright prohibition of the automobile in certain parts of the urban area--already a fact of life in some European cities--were rejected by the committee as an unnecessary restriction of freedom in the Twin Cities area at this time.

Our recommendations contain no restrictions on an individual's prerogative to choose his own form of transportation. The committee only wants an individual to pay the full cost, without imposing costs upon others, if he chooses to use his personal car.

The committee considered, but chose not to recommend, that direct charges be imposed upon the personal car for use during peak hours. For example, it was suggested that perhaps a peak-hour fee could be imposed at every parking lot and ramp, both city and suburban, throughout the metropolitan area, to recover some of the extra costs which the personal car imposes. It was felt that even this approach--while consistent with our goal of making the individual pay the full cost of use of the personal car--was not fair because no ready alternative is available for most drivers.

It is not new for public policy to influence the way in which demand for travel occurs. If just never has been explicitly stated in the past. Generally, the effect of public policy has been to favor the personal car. Our recommendations urge that public policy be changed to make multi-passenger transportation an attractive alternative.

And, of course, persons continuing to drive their own personal cars will themselves benefit from a program of promoting multi-passenger ridership, because such a program will stimulate people who can ride with others to do so which, in turn, will reduce congestion for both single-passenger and multi-passenger vehicles.

A successful ridership-building program may reduce the need for, or perhaps eliminate, possible drastic measures--already being advanced--to prohibit automobiles from traveling in certain areas because of the air pollution problem.

2. The report recommends that public policy should influence the various suppliers of transit, including taxi companies, rent-a-car companies, school bus operations, the MTC, and private bus companies. What sort of influence is contemplated?

For the first time all suppliers of transit service would be regarded as part of an integrated system, keeping in mind, of course, that we have defined transit to mean all ways of riding with others rather than driving alone. Proposals could be made for the suppliers to work together in common goals. So far none of the suppliers has fully appreciated the common interest which all of them share in providing alternatives to the personal car. In fact, the exact opposite has more than likely been the case. They have been competing with each other for what has turned out to be an ever-

decreasing share of the total market, as use of the personal car has been increasing.

Suppliers can complement each other. One may handle home-to-work trips best. Another, business trips during the day. Another, shopping trips. All of them will benefit, while still in competition with each other, if overall reliance upon the personal car is reduced.

Our recommendations would enable the identification and opening of new transit markets heretofore ignored, through the detailed information which would be made available on origins and destinations of trips (much of which already exists but has not been widely circulated).

The report makes no recommendations for greater public control over any transit supplier. In certain cases, however, the Legislature might be asked in coming years to intervene where it is not possible to stimulate voluntary actions. For example, municipal licensing of taxis has limitations on providing service throughout the region. If taxi companies are not able to overcome these problems, the Legislature might be asked to change the licensing system to enable better taxi service. Or, if voluntary coordination between school bus and public bus operations does not work out, the Legislature may be asked to step in and provide direction.

3. How does this report relate to the Metropolitan Transit Commission?

The MTC undoubtedly is strongly identified in the public mind as *the* body responsible for transit in the metropolitan area. This report, however, places MTC-type transit in a large context, with all suppliers of alternatives to the single-occupant car. Such an approach in no way diminishes the importance of the MTC. In fact, quite the contrary, it is absolutely essential for improving the MTC's ability to serve.

For too long, transit has been the mode of transportation for "someone else" not "me". But our committee has concluded that adequate transit is now everyone's business. And, with transit redefined to mean riding with others not driving alone, virtually everyone is a potential transit rider.

The full weight of public policy behind a comprehensive approach to providing alternatives to the single-occupant car would vastly increase the potential for all forms of transit, including, to be sure, the MTC, the most experienced "official" transit supplier.

How then does the MTC fit? Is it just another supplier? In a sense, yes, because it and other suppliers are providing a variety of transit services, with none of them having a corner on the market.

From another perspective the MTC is not just another supplier. It occupies a particularly important position because it is providing services which, whatever their shortcomings, cannot be duplicated elsewhere for the same cost. For people who are too young or too old to drive, who can't afford to drive, or who have physical disabilities, the MTC routes system is invaluable. Also, for those who have a choice, it is just about the only workable alternative today. Finally, of course, the MTC is not just another supplier because it is publicly-owned. The public has a real stake in protecting its investment.

The MTC can capitalize on the recommendations in the report, by taking the leadership in beginning to reach a wide variety of potential markets which conventional transit approaches (regularly-scheduled, permanent, published routes) have been unable to reach.

4. What would be the financing requirements for the successor to the Transportation Planning Program?

Currently, the Transportation Planning Program has an annual budget of about \$400,000, with the largest contribution (about one-half) coming from the Minnesota Highway Department, followed by the contribution from the Metropolitan Council (about one-fourth). Contributions from other organizations, such as the MTC, may vary considerably from year to year. Because of the non-statutory nature of the Transportation Planning Program, its funding depends upon how much each agency is willing to provide. The funds are used to finance two general responsibilities of the Transportation Planning Program, (1) preparation and refinement of a transportation plan and (2) coordination of activities of the various transportation agencies and implementation of the plan.

We were not equipped to review in detail the workload of the present Transportation Planning Program, nor were we able to estimate the budgetary requirements for a statutory body with an assignment broader than that now given to the Transportation Planning Program. In the absence of better information on this point, the best approach at this time would be to provide, by statute, a continuation of funding at present levels from the various sources. The decisions on whether additional funding is needed could be made later when the Legislature may be faced with specific requests for additional funds, supported by documented evidence.

5. What are the financing implications of other recommendations in our report?

If our recommendations for increasing the number of passengers per vehicle mile traveled are adopted, we are convinced that the total cost of transportation for citizens of the Twin Cities metropolitan area will be substantially less than if present trends continue.

Some of our recommendations may call for short-term increases in expenditures in certain areas and savings in others. We did not make an effort to see how these balance out. But, in the larger context, savings are inescapable if the region is able to make better utilization of its transportation system.

6. Does a program of building ridership mean that no new construction of facilities is needed?

No, but the recommendations cannot help but have an impact on how much construction, particularly of freeways, would be needed in coming years. An increase in the number of occupants per car from 1.2 to 1.5 in the peak hour would reduce traffic volumes by 20%, a fact which cannot be ignored in light of the problems which additional freeway construction produces in the region.

But, implicit in our recommendations is a considerable amount of construction to provide preference to multi-passenger vehicles, via such measures as exclusive rights-of-way. This is in contrast with past freeway construction which, it might be said, has provided benefit primarily for the personal car.

Alternatives must be provided to reduce reliance upon the personal car. An alternative needs speed if it is to compete effectively. Speed won't be fast enough if vehicles must operate in mixed traffic at all times. This means designation of existing facilities for exclusive rights-of-way, where possible, and construction of exclusive rights-of-way, where necessary, for multi-passenger vehicles.

7. Does building ridership help shape future growth of the Twin Cities area?

Yes. We were deeply concerned about the extent of urban sprawl in the Twin Cities area, undoubtedly fostered by the high degree of reliance upon the single-occupant car. Our recommendations will help arrest this sprawl.

The costs of owning and operating an automobile undoubtedly will be increasing fast in coming years as the costs of fuel and pollution control rise. It will become particularly expensive to own two cars.

The advantages which the personal car has offered over multi-passenger transportation, such as speed and convenience, will diminish if--as we recommend--public policy begins consciously to influence the way in which demand for travel occurs.

For these reasons individuals will be increasingly searching for real alternatives to the personal car, alternatives which they can use for the trips they must take. Conscious that individuals will not be attracted to live in areas where everyone must rely on his personal car for transportation, developers will think twice before building further out where urban sprawl would get worse and where alternatives to the personal car are less likely to be available.

Our report also contains recommendations which are designed to relate directly to the way in which new developments are planned. In the past almost all requirements, from a transportation standpoint, have related to providing service to the personal car. It would not have been any worse if regulations had specifically instructed developers to plan for only one form of transportation, the personal car. If our recommendations are carried out, provision for transit will be routinely incorporated into residential, commercial and industrial developments as is any other utility, telephone, electricity, gas, roads, sewer, water and so forth.

8. How will different parts of the Twin Cities area benefit from our recommendations?

For areas "not now served" our recommendations indicate several ways whereby transit service can be provided quickly and inexpensively. An elaborate system of permanent, published routes won't be necessary. For some forms of transportation, such as car pooling, concentrations of as few as 50 persons at a destination are likely to be sufficient to provide service, according to a recent federal report on car pooling.

Building ridership to serve a wide variety of destinations also will be of considerable assistance to areas which traditionally have been served by MTC-type transit (mainly the cities of Minneapolis and St. Paul and their downtowns). Good, rapid access without excessive numbers of vehicles adding to congestion and pollution is critical for the downtowns. Freeways leading downtown are likely to include as many persons who are traveling to other destinations as who are traveling downtown. If alternatives to the personal car are made available for these other destinations, this will reduce total traffic on freeways and make downtowns more accessible.

Also, it is likely that the continued economic competitiveness of downtown shopping and employment centers will be enhanced by a program of building ridership which enables air pollution levels to drop without having to resort to drastic measures such as banning cars in certain parts of downtowns.

The continued attractiveness of central city neighborhoods as places to live is dependent upon good access to jobs. More and more jobs are located in suburbs today and, with faster reverse-commuting possible, central city neighborhoods are quite well situated for giving residents quick transportation to and from work. Our recommendations provide a way to match up central city residents who have relatively common destinations in suburbs in order that transit service can be provided, whether by specialized bus routes, van service, car pooling or some other method. Such new opportunities in transportation are, of course, particularly important to disadvantaged persons who, for lack of transportation alternatives today, may be denied a broad choice of jobs.

9. What would a transit impact statement entail?

We do not envision that transit impact statements--which would routinely accompany proposed residential, commercial and industrial developments--need be elaborate reports, requiring expensive consultants' time to prepare. Our objective with the impact statement is to stimulate developers to take account of transit in their plans. We understand that many developers now much prepare traffic analysis plans, which go into considerable detail on serving, mainly, the personal car. We would simply be extending this concept to cover transit, too. A transit impact statement can be kept simple, preferably not requiring more than one sheet of paper. A transit impact statement might include such information as (a) estimated number of person-trips to be generated by the development daily, (b) estimated proportion of those trips by transit if no special efforts are made to encourage multi-passenger ridership, (c) approaches which the developer plans to use to encourage multi-passenger ridership, and (d) estimated shifts in ridership as a result of the developer's efforts.

COMMITTEE ASSIGNMENT AND MEMBERSHIP

The Citizens League Board of Directors established the Transit Ridership Committee in the fall of 1972 with the following charge:

"Explore ways to encourage the maximum number of riders to use the transit system, whether it happens to be the present system or any new system in the future. Existing efforts to obtain more riders should be reviewed. Obstacles which currently exist to accomplishing a greater degree of transit ridership should be identified -- including such 'indirect' obstacles as policies which encourage more automobile use. In formulating recommendations, the committee should be free to seek options involving the private sector as well as the public sector."

A total of 20 members participated actively in the work of this committee. Chairman was Peter A. Heegaard, vice president, Northwestern National Bank of Minneapolis. Other members were:

Allen R. Boyce

Wayne H. Olson

Eleanor L. Colborn

R. Alan Oppenheimer

Fred Fischer

Medora Perlman

Versal Furey

Conrad Razidlo

Arthur J. Helland

John Rollwagen

Corbin Kidder

A. Kent Shamblin

Steve McCormick

Marcia Townley

Jim Newland

Gedney Tuttle

Gerald Olafson

Daniel M. Upham

Byron D. Olsen

The committee was assisted by Paul A. Gilje, Citizens League Associate Director; Jon Schroeder, Research Assistant, and Paula Werner of the clerical staff.

The committee held 25 meetings from October 24, 1972 to March 20, 1973, an average of more than one meeting a week. The committee met alternately in St. Paul and Minneapolis for the convenience of committee members and resource persons.

The committee spent its first two weeks with officials of the Metropolitan Transit Commission and ATE Management and Service Company, which has the contract with the MTC to manage the day-to-day operations of the MTC bus system. In these meetings the committee received orientation to current efforts at building ridership.

For several weeks thereafter, until about mid-December, the committee met with other suppliers of transit service, including private and public school bus operators, tax companies, an operator of a special bus service that operates exclusively for some apartment buildings, two housing developers who are contemplating providing transit service for their occupants, the head of an independent suburban bus company, taxi drivers, bus drivers, a rent-a-car firm, organizers of a car-pooling experiment at the University of Minnesota, and the traffic manager for a large corporation which is providing service to employees. The committee also met with the central city and suburban municipal officials who outlined their parking requirements and zoning and subdivision regulations. Other resource persons explained a number of surveys on travel behavior patterns.

Detailed minutes were taken on each meeting, with copies made available to members who could not be present. In addition, a large list of interested persons outside the committee, received minutes so they could follow progress of the committee. A limited number of copies of minutes are on file at the Citizens League office.

A large number of background articles and research reports were made available to the committee, too. Background material assembled for the committee can be reviewed at the League office.

After completion of the "hearing" stage, the committee first reviewed a summary of information presented to the committee. In mid-January, a first draft of findings and conclusions was prepared. After general agreement was reached on this document, the committee began, in early February to explore recommendations. The committee went through at least four drafts of findings, and conclusions and recommendations before completing its work.

The committee received a great deal of background information from officials of ATE Management and Service Company, particularly Harry Springer, general manager; Louis B. Olsen, assistant general manager; Michael H. Setzer, administrative assistant, and Arthur F. Bruss, director of finance and accounting. Others who provided invaluable assistance outside regular committee meetings included Ron Hoffman, transit liaison office, Minnesota Highway Department; Oliver Byrum, director, transportation planning section, Metropolitan Council, and Fred Schaschl, director of marketing and public information, Metropolitan Transit Commission and C.D. Andre, executive director, Metropolitan Transit Commission.

The following persons met with the full committee as resource persons for one or more sessions:

Fred Schaschl, director of marketing and public information, Metropolitan Transit Commission

Louis B. Olsen, assistant general manager, ATE Management and Service Company

Conrad Graff, supervisor of transportation, Interfund Services, Inc.

Iven Hudalla, Columbia Transit Corporation

Robert Larsen, supervisor of school census and pupil transportation, School District 281

George Blin, office of pupil transportation, State Department of Education

Donald Jacobson, director of planning and development, Cedar-Riverside Associates Inc.

Larry Laukka, President, Shelter Homes Corp.

Roy Larson, Travel Behavior Inventory staff, Transportation Planning Program

Jack Daly, general manager, Minneapolis Yellow Cab Company

Robert D. Owens, traffic director, 3M Company

Craig McKee and Charles Risser, dispatchers, Blue & White Cab Company

Barbara Gilbertson and Roger Huss, Office of Physical Planning, University of Minnesota

George Carlton, director, motor pool division, Minnesota Department of Administration

Marvin Johnson, president, Medicine Lake Bus Company

DelRoy Peterson, director of development, city of Minneapolis

Robert Webster, director of community development, city of Bloomington

Charles Ewert, Operation '85, St. Paul

Todd Heglund, Barton-Aschman Associates

Joe Sullivan and Sue Plantikow, National Car Rental System

Frederick J. Beier, Associate professor of transportation, graduate school of business administration, University of Minnesota

Ron Hoffman, transit liaison officer, Minnesota Highway Department

Oliver E. Byrum, director, transportation planning staff, Metropolitan Council

Raymond F. Kroll, director, transportation services, Minneapolis Public Schools

BACKGROUND

I. Ridership in the Twin Cities Area

A. Public Bus and Streetcar Ridership¹

Ridership on public buses and streetcars in Minneapolis and St. Paul grew steadily from the beginning of streetcar service in the 1880s until the mid-1920s. In 1922, ridership reached its peak when over 200 million trips were taken on public buses and streetcars in the Twin Cities area.

Except for a brief spurt during the gas-rationing World War II years, ridership then continually declined to a level below 50 million in 1970. During this same period, population in the region has increased ten-fold and the number of trips taken by each person each day has grown with income and the desire for increased mobility. A complete summary of bus-streetcar ridership and population in the Twin Cities metropolitan area is found in Figure A.

Since the acquisition of the former Twin City Lines by the MTC in September of 1970, however, an increase in public bus ridership has been evident. The following table reflects this increase, both in terms of fares paid and person trips taken on Twin City Lines and MTC buses in 1970-72. The difference between fares and trips reflects the number of persons in each category who moved between fare zones and are counted twice in the fares column. It should be noted that the 1970 and 1971 Adults figures include paying senior citizens.

	<u>1970</u>		<u>1971</u>		<u>1972</u>	
	<u>Fares</u>	<u>Trips</u>	<u>Fares</u>	<u>Trips</u>	<u>Fares</u>	<u>Trips</u>
Adults						
(full fare)	39,730,000	38,694,000	39,611,000	38,583,000	35,940,000	35,105,000
Senior Citizens						
(free)	---	---	---	---	7,021,000*	6,923,000
Students						
(subsidized	5,919,000	5,764,000	6,175,000	6,015,000	6,358,000	6,275,000
Suburban (all						
fare classes)	<u>4,907,000</u>	<u>913,000</u>	<u>5,151,000</u>	<u>916,000</u>	<u>5,528,000</u>	<u>988,000</u>
Totals	50,556,000	45,371,000	50,937,000	45,514,000	54,847,000	49,291,000

B. Suburban Bus Company Ridership²

In addition to the MTC, 7 privately owned bus companies have operations in the Twin Cities area. Their operations are primarily oriented toward serving the suburban parts of the region. Most of the routes have destinations in the central business districts of Minneapolis and St. Paul. Suburban companies experienced an absolute increase in ridership in the period from 1960 to 1972.

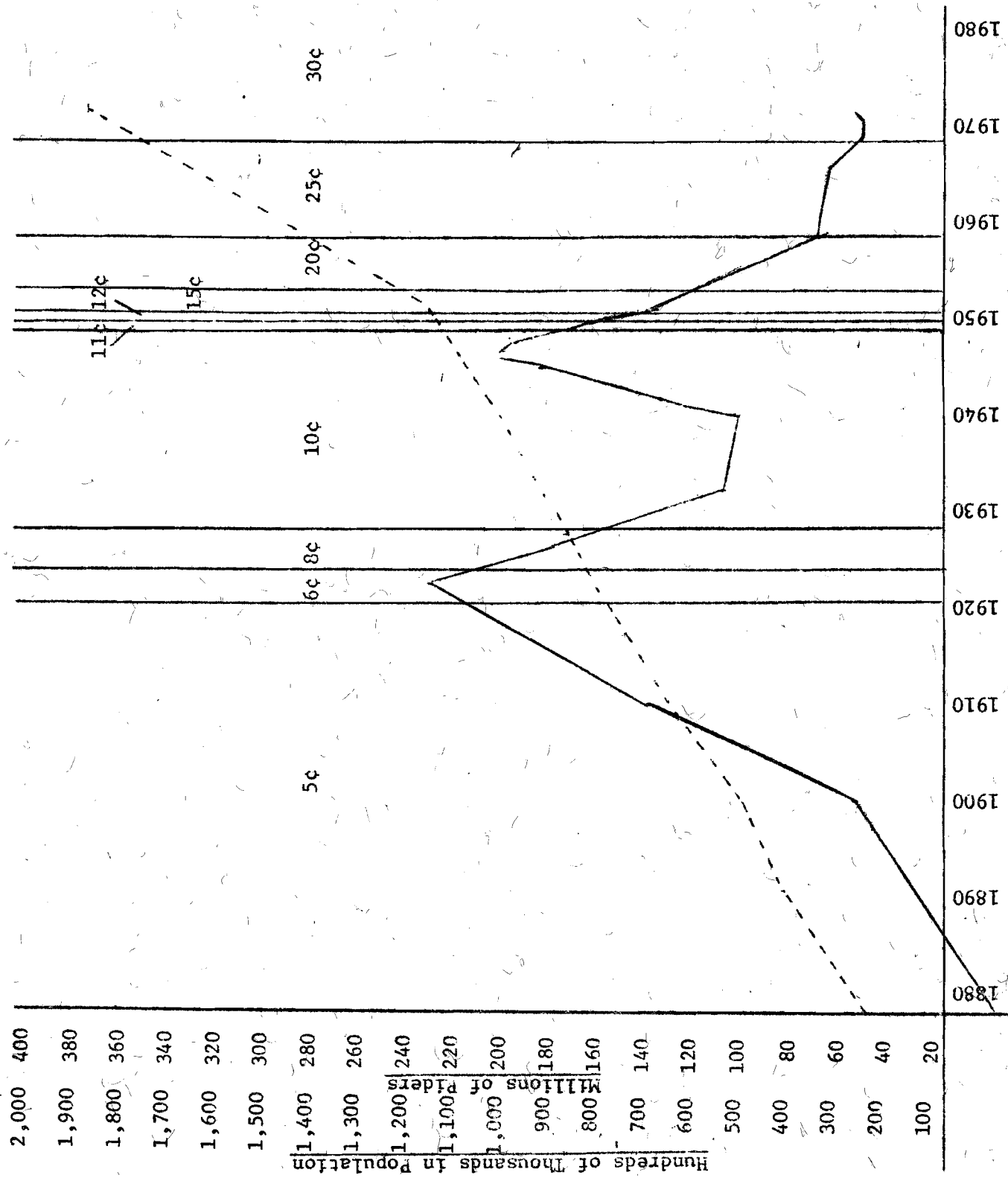
<u>Company</u>	<u>1971</u>	<u>1972 **</u>	<u>Percent Inc.</u>
Bloomington Bus Company	414,796	428,715	3.3
Dickenson Lines	296,496	267,695	-9.7
Excelsior-Mpls. Bus Company	144,297	163,191	13.0
Medicine Lake Bus Company	234,116	271,111	15.8
Rice-Edgerton Bus Company	50,615	67,162	32.6
South & West St. Paul Bus Co.	458,330	506,672	10.5
Valley Transit	24,306	35,590	46.4
Total	1,622,956	1,740,136	11.2

* Fare-equivalent

** Includes free senior citizen-

FIGURE A

TRANSIT RIDERSHIP AND
POPULATION IN THE TWIN
CITIES METROPOLITAN AREA



Key
 5c Fare for a single ride
 — Transit Ridership*
 --- Population
 MTC/Twin City Lines and Predecessor companies only.

Note:
 Comparison of the transit ridership and population curves should be made on the basis of slope and not on relative height.

C. School Bus Ridership (for 1971-72)

A Citizens League staff survey of the 49 school districts with school bus operations in the 7-county metropolitan area reveals the following information on school bus ridership and the size of the school bus operation in general:

District Owned Buses	738	Miles Traveled/Year	
Contracted Buses	1120	To and From School	16,890,260
Total School Buses	1858	Extra Curricular Activities	992,120
		Field Trips	928,153
School Hired Drivers	873	otal Miles/Year	18,810,533
Contracted Drivers	1312		
Total School Bus Drivers	2185	Net Cost/Year	\$12,198,963
District Run Routes	2162	Total Students Transported/Day	239,767
Contracted Routes	2808	Total Trips/Day	479,534
Total School Bus Routes	4970	Total Trips/Year	86,310,120

D. Taxi Ridership

Taxi companies are licensed on a municipal basis and not required to record or report ridership data to any licensing authority. As a result, accurate taxi ridership data is not available. A Citizens League survey of the 17 taxi companies serving the Twin Cities area estimated the ridership for each company, however, basing the estimate on the average number of cabs operating either during the day or night, the estimated average number of trips per cab per day and the average number of persons per trip. This survey estimated more than eleven million trips are taken on taxis in the Twin Cities area per year. In addition to these eleven million trips, the Minnesota Public Service Commission reports that about 350,000 trips per year are taken on airport limousines operated by three companies in the Twin Cities area. A more complete explanation of the Citizens League survey and ridership estimates for the individual companies is available from the League office.

II. Distribution of Work Trip Destinations in the Region

In addition to the 1970 Travel Behavior Inventory (TBI), the 1970 Census of Population shows dramatically the wide distribution of work trip destinations in the Twin Cities area.

Figure B shows this distribution for the Minneapolis-St. Paul Standard Metropolitan Statistical Area (Anoka, Dakota, Hennepin, Ramsey, and Washington Counties) as a whole and for the Near North Side of Minneapolis (Census Tracts 20, 21, 22, 23, 27, 28, 29, 32, 33, 34, 35, 41, and 42). The same information is provided for Burnsville and Roseville in Figure C. In all cases, work trips include only those with destinations inside the SMSA. Ignored were those work trip destinations not reported and those with destinations outside the metropolitan area.

III. Methodology of Measuring Increased Ridership

For reasons explained previously, the committee has recommended a new measurement of increased transit ridership as a calculation of the number of persons per vehicle mile traveled. The committee has suggested the following method could be used for making that calculation:

A. Calculation 1 (for automobiles by trip purpose)

$$\frac{\text{Average number of persons per vehicle}}{\text{Average length of trip}} = \text{Average number of persons per vehicle mile traveled}$$

Example: For all auto trips
(data from 1970 TBI)

$$\frac{1.50}{4.83} = .31 \text{ p/vmt}$$

Using this calculation, either an increase in the average occupancy or a decrease in the average length of trip would result in an increase in the average number of persons per vehicle miles traveled. Logically, both would result from car-pooling since the average occupancy would increase and the number of vehicle trips would decrease. The greatest potential for increasing the average number of persons per vehicle mile traveled would appear to be for the work trip, since 1) work trips are the most adaptable to car-pooling; 2) average occupancy is lowest among auto trip purposes; and c) average trip length is longest among auto trip purposes.

B. Calculation 2 (for other modes of transportation)

$$\frac{\text{Total number of person trips/year, day}}{\text{Total number of vehicle miles traveled/year, day}} = \text{Average number of persons per vehicle mile traveled}$$

Example 1: For MTC buses in 1971
(MTC data)

$$\frac{50,937,000}{18,662,000} = 2.73 \text{ p/vmt}$$

Example 2: For school buses in 1971-72
(Dept. of Education data)

$$\frac{86,300,000}{18,800,000} = 4.59 \text{ p/vmt}$$

Using this calculation, increased ridership is computed in relation to the total number of vehicle miles traveled by buses, an important consideration as bus routes and service are expanded.

C. Calculation 3 (composite for all trips)

From the 1970 TBI, we know that, of all person trips made in cars, public buses, and school buses (97.35% of all person trips), the following relationship exists:

Auto trips	92.75%
Public bus trips	3.28%
School bus trips	3.96%
	100.00

From calculations 1 and 2 above, we also know the following comparative persons per vehicle mile traveled for these three modes.

Auto trips	.31
Public bus trips	2.73
School bus trips	4.59

By then weighting the persons per vehicle mile traveled for each mode by the percentage of total person trips taken on that mode, we are able to compute an average or composite persons per vehicle mile traveled for these three modes for the region for 1970-71 as follows:

.31 x 92.76	=	28.7556
2.73 x 3.28	=	8.9544
4.59 x 3.96	=	18.1764
		55.8864
55.8864 ÷ 100	=	.558864 p/vmt

FIGURE B

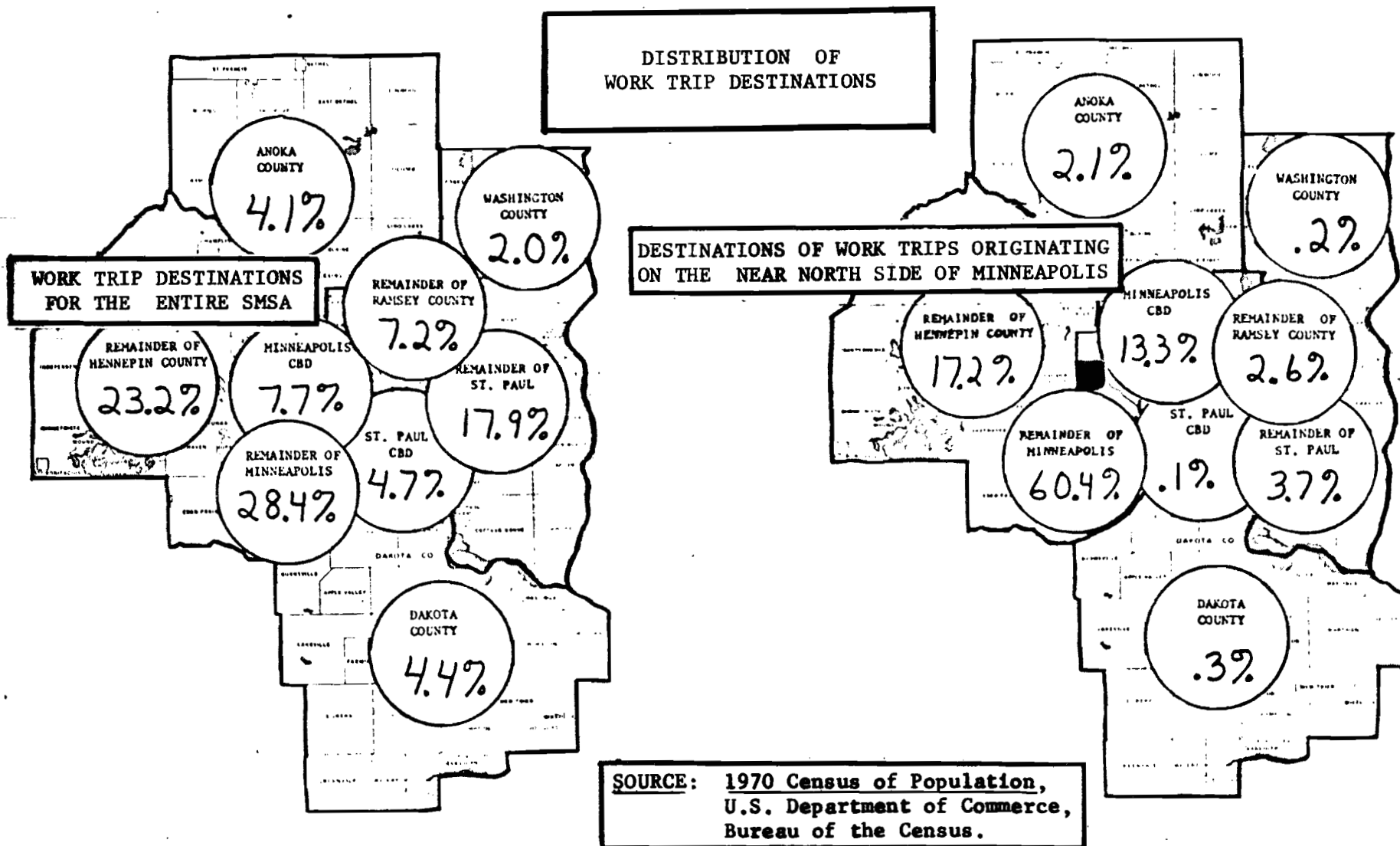
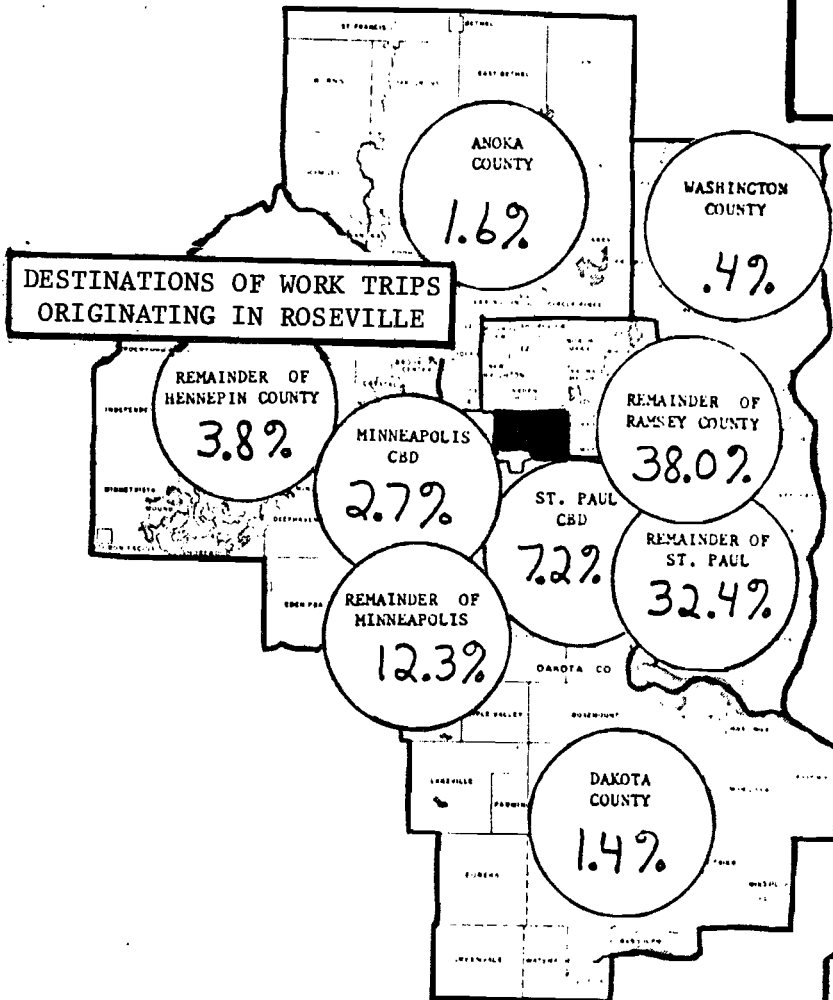
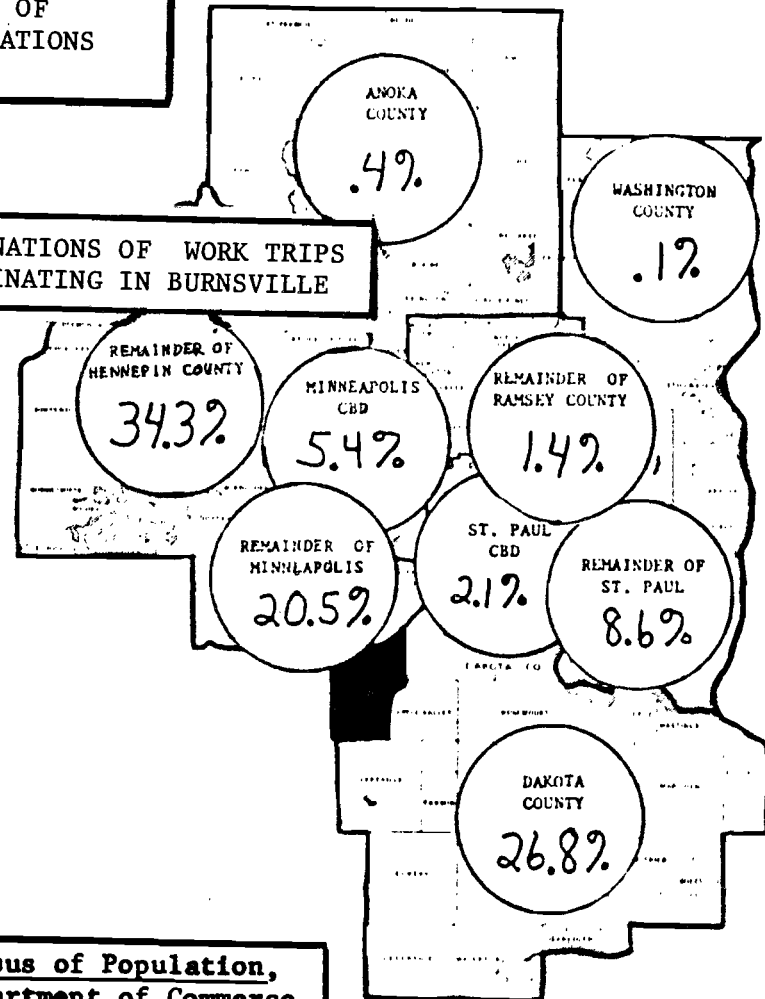


FIGURE C

**DISTRIBUTION OF
WORK TRIP DESTINATIONS**



**DESTINATIONS OF WORK TRIPS
ORIGINATING IN BURNSVILLE**



SOURCE: 1970 Census of Population,
U.S. Department of Commerce,
Bureau of the Census.

IV. Cost of the Auto Mode of Transportation to the Region

In the course of its study, the committee found no researched data on the total cost of the auto mode of transportation to the Twin Cities region. As a result, the committee staff attempted such a gross estimate by investigating a number of auto related costs, some of which had never before been calculated. A more complete explanation of the auto cost research is available from the League office.

A. Normal operation and maintenance of the automobile

The most common method of calculating the cost of auto operation and maintenance is on a per mile basis, adding in such factors as gas, oil, tires, etc. Various public and private agencies have calculated this average cost per mile for businesses and others who pay mileage for their employees. The Citizens League averaged the estimates made by Runzheimer and Company of Rochester, Wisconsin, and the U.S. Department of Transportation. Both estimates were for medium sized 1971 automobiles driven in urban areas for 10,000 miles per year.

Runzheimer Estimate³--15.5¢ per mile

DOT Estimate⁴--13.6¢ per mile

To transform these rates into yearly costs, the Citizens League used a Metropolitan Council staff estimate⁵ of the total number of vehicle miles traveled in the region and took that number times the 14.0 cents per mile figure arrived at above. Using this procedure it is estimated that auto operation and maintenance costs the region approximately 1.4 billion dollars per year.

B. Building and Maintaining Highways and Streets

According to the same Metropolitan Council staff report, approximately 180 million dollars was spent on state and local highway and street maintenance and construction in the Twin Cities area in 1969. Of this amount, approximately two thirds was derived from user sources (gasoline taxes and license fees) and one third was derived from non-user sources (local property taxes).

C. Police and Traffic Control

According to various police departments in the Twin Cities area, approximately 20% of the annual budget of a police department is directly attributable to traffic control and other auto related purposes. For 1970, this would amount to nearly 7 million dollars in cities and villages in the Twin Cities area with a population of 2,500 or more.⁶

Similar estimates by county sheriff's department of the amount of funding required for highway related purposes amounts to an additional 1.4 million dollars for 1972.

D. Emergency Fire and Rescue Costs

Based on interviews with local fire departments, it is estimated that 5% of a municipal fire department's budget is directly attributable to auto fires, emergency rescue at the scene of auto accidents, etc. For 1970, this would amount to just over 1 million dollars for cities and villages in the Twin Cities area with a population of 2,500 or more.⁷

E. Administrative Court Costs

No data is available on the percentage of administrative court costs which are attributable to auto accidents and other cases related to the automobile. It has been estimated, however, that as much as 60% of the civil calendar for the Hennepin County District Court is devoted to personal injury-auto accident cases. This would amount to approximately \$300,000 in administrative court costs for the county, not including payments to jurors.⁸ If, as has also been estimated, Hennepin County District Court handles 40% of the case load for district courts in the 7-county area, \$1 million would probably not be an unreasonable estimate of the total administrative costs to district courts in the 7-county area of auto accident cases.

F. Death, Injury and Property Damage from Auto Accidents

In 1970, Minnesotans were paid approximately \$150 million in auto insurance claims.⁹ A 1970 study by the U.S. Department of Transportation found that only one fourth to one third of all auto death, injury, and property damage costs were actually paid by insurance.¹⁰ If we accept this assumption and also assume that auto accident costs are directly related to the number of passenger miles traveled, traffic accident costs in the Twin Cities metropolitan area in 1970 totaled approximately \$180 million. During the same year, about 120 million dollars was paid in auto insurance premiums by Twin Cities drivers,¹¹ leaving a net cost of auto accidents of about \$60 million per year for the region.

This estimate, of course, does not include certain other "social costs" which result from auto accidents. The same DOT study cited above found, for example, that 14 percent of the traffic victims interviewed had to move to cheaper housing, 30 percent had to draw on savings, 29 percent had to borrow money, 29 percent missed credit payments, and 45 percent had to change their standard of living. Injuries to 22 percent of the victims forced another family member to seek work.

G. Subsidized Parking

Generally speaking, the cost of parking automobiles is either directly subsidized for the user (via free parking at work or while shopping) or indirectly levied (in the cost of goods at a shopping center, in the rent of an apartment, in the cost of a double garage or carport, etc.)

Whenever parking is not directly paid for at the time of usage, the cost of providing that parking space must be added to the total cost of automobile travel to the region. To determine this total annual cost of parking to the region, we must estimate the cost of providing each space and the total number of parking spaces in the Twin Cities area.

The various components of the cost of parking are cost of land, cost of construction, cost of maintenance, and annual property tax. Using these variables, the League staff developed a hypothetical cost of providing one space in a parking lot in this region ranging from about \$60 to \$120. For purposes of this estimate, \$75 per space is being used. (Note: A more extensive background memoranda on the cost of parking is available from the Citizens League office.)

There is no researched estimate available of the total number of parking spaces in the Twin Cities area. We do know, however, that there are approximately 1,000,000 registered motor vehicles in the region.¹² About 500,000 of these vehicles are automobiles that are driven to work every day.¹³ This means that there are at least 500,000 work-related parking spaces plus a space for each car at home (either in a garage or parking lot). In addition to this 1.5 million spaces are parking spaces used by persons using retail, banking, recreational, etc. facilities. For purposes of this calculation, then, the figure of 2 million parking spaces for the region is probably not unreasonable.

From this figure of 2 million parking spaces should be subtracted the approximately 70,000 parking spaces in the downtowns of Minneapolis and St. Paul and another 30,000 spaces for the University of Minnesota, Metropolitan Stadium, and any other parking facilities in the region which are not directly or indirectly subsidized. Taking the remaining 1.9 million spaces times the estimated annual cost per space of \$75 the total cost of directly or indirectly subsidized parking to the region is approximately \$142.5 million.

A certain percentage of these spaces are on-street and have already had their cost computed in the cost of building and maintaining streets and highways in the region. If (arbitrarily) we assume that one-fourth of the parking spaces in the region are on-street, this leaves a net cost of subsidized parking to the region of \$107 million per year.

H. Air Pollution

Perhaps one way to look at the cost of auto-related air pollution is the increasing cost to each driver of air pollution control devices on his or her car. Estimates of the cost of devices needed to meet 1976-77 air quality standards are ranging from \$300 to \$500 per vehicle.

In addition to this one-time cost is an annual maintenance cost to keep pollution abatement devices in working order and subsequent decreases in gas mileage resulting from use of the devices. A recent article in the Wall Street Journal reported that, in states where voluntary emission checks are being made on automobiles, annual maintenance is being required in order to keep cars with pollution abatement devices within the air quality standards.¹⁴ This annual maintenance cost is averaging \$25-50 per vehicle.

If use of the pollution abatement devices, as has been suggested, results in a 30-35% decrease in gas mileage, an addition of about 1¢ per mile to the operation and maintenance cost of driving an automobile will also occur.

Taking all these costs together for the 1 million vehicles in the Twin Cities region the annual cost of air pollution could then be computed as the cost of installing and maintaining pollution abatement devices and the resulting decrease in gas mileage as follows:

Cost of devices (over 10 year life of car)	\$ 35 million
Annual maintenance cost	30 million
Increase in annual operation cost due to increase in fuel consumption	<u>100 million</u>
	\$165 million

I. Total Cost of the Auto*

From these estimates, then, we arrive at the following summary of auto-related costs to the Twin Cities region:

	<u>Total Annual Cost</u>	<u>Net Annual Cost Borne Directly by the User</u>	<u>Net Annual Cost Not Borne Directly by the User</u>
Auto operation and maintenance	\$1,400,000,000	\$1,280,000,000**	\$
Street and highway construction and maintenance	180,000,000	120,000,000	60,000,000
Traffic control and auto-related emergency	10,000,000		10,000,000
Administrative court costs	1,000,000		1,000,000
Death, injury, and property damage	180,000,000		60,000,000***
Air pollution	165,000,000		165,000,000
Subsidized parking	<u>142,000,000</u>		<u>107,000,000****</u>
Totals	\$2,078,500,000	\$1,400,000,000	\$403,000,000

Total Annual Net Cost \$1,803,000 (Approximately \$1,000/capita)

* It should be noted that these figures are drawn from different years from 1969 to 1972. As such, the total cost figures arrived at should not be assigned to any particular year. A portion of the cost of street and highway construction and maintenance, traffic control and auto-related emergency, and death, injury and property damage results from use of other motor vehicles but has not been deducted from these totals. The totals do not reflect, however, other costs which could be related to the auto such as noise pollution, increased time consumption, and increased cost of public services because of urban sprawl.

** User taxes are subtracted since they are included as the net user cost of building and maintaining streets and highways.

*** Insurance premiums paid are subtracted since they are included in the net user cost of auto operation and maintenance.

**** Cost of providing on-street parking is subtracted since it is included in the net cost of street and highway construction and maintenance.

COMPARATIVE POPULATION AND TRANSPORTATION DATA FOR SELECTED METROPOLITAN AREAS

TABLE I
TWO-CAR FAMILIES

<u>MSA</u>	<u>% Families with 2 or More Cars</u>
Minneapolis-St. Paul	40.6
Los Angeles-Long Beach	37.7
Detroit	36.2
Cleveland	33.1
San Francisco-Oakland	32.8
Washington, D.C.	30.9
Philadelphia	27.7
St. Louis	27.5
Boston	23.7
Chicago	21.7
Pittsburgh	19.5
New York	18.4

Source: "Consumer Buying Indicators",
U.S. Department of Commerce,
Bureau of the Census

TABLE II
NO-CAR FAMILIES

<u>MSA</u>	<u>% Families with No Cars</u>
New York	41.2
Pittsburgh	29.1
Boston	28.6
Chicago	28.3
Philadelphia	27.0
St. Louis	24.7
Washington	24.5
San Francisco-Oakland	19.9
Cleveland	19.0
Los Angeles-Long Beach	17.2
Detroit	15.5
Minneapolis-St. Paul	12.9

Source: "Consumer Buying Indicators"
U.S. Department of Commerce,
Bureau of the Census

TABLE III
POPULATION DENSITY

<u>Urbanized Area</u>	<u>Population</u>	<u>Area¹</u>	<u>Density²</u>
New York City	16,206,841 (1)	2425.1 (1)	6683 (1)
Los Angeles-Long Beach	8,351,266 (2)	1571.9 (2)	5313 (3)
Chicago	6,714,578 (3)	1277.2 (3)	5257 (4)
Philadelphia	4,021,066 (4)	751.8 (5)	5349 (2)
Detroit	3,970,584 (5)	872.0 (4)	4553 (7)
San Francisco-Oakland	2,987,850 (6)	681.0 (7)	4387 (8)
Boston	2,652,575 (7)	664.4 (9)	3992 (11)
Washington, D.C.	2,481,489 (8)	494.9 (13)	5018 (5)
Cleveland	1,959,880 (9)	646.1 (10)	3033 (15)
St. Louis	1,882,944 (10)	460.6 (14)	4088 (10)
Pittsburgh	1,846,042 (11)	596.4 (11)	3095 (14)
Minneapolis-St. Paul	1,704,423 (12)	721.4 (6)	2363 (19)
Houston	1,677,863 (13)	538.6 (12)	3115 (13)
Baltimore	1,579,781 (14)	309.6 (19)	5103 (9)
Dallas	1,338,684 (15)	674.2 (8)	1986 (20)
Milwaukee	1,252,457 (16)	456.5 (15)	2744 (17)
Seattle-Everett	1,238,107 (17)	413.1 (17)	2997 (16)
Miami	1,219,661 (18)	258.7 (20)	4715 (6)
San Diego	1,198,323 (19)	380.7 (18)	3148 (12)
Atlanta	1,172,778 (20)	435.0 (16)	2696 (18)

¹ In Square Miles

Note: The numbers in () show rank order.

² In Persons Per Square Mile

Source: 1970 Census of Population, U.S. Department of Commerce, Bureau of the Census.

WORK TRIP DESTINATIONS

	<u>MPLS. CBD</u>	<u>REMAINDER MPLS</u>	<u>REMAINDER HENN. CTY.</u>	<u>ST. PAUL CBD</u>	<u>REMAINDER ST. PAUL</u>	<u>REMAINDER RAMSEY CTY.</u>	<u>ANOKA COUNTY</u>	<u>DAKOTA COUNTY</u>	<u>WASHINGTON COUNTY</u>
Coon Rapids	5.8%	24.0%	15.0%	.6%	5.7%	10.7%	37.1%	.4%	.3%
Fridley	7.7	32.0	13.2	.3	7.1	10.5	27.8	.7	.2
Burnsville	5.4	20.5	34.3	2.1	8.6	1.4	.4	26.8	.1
South St. Paul	.8	5.3	5.3	9.2	24.9	3.8	1.2	45.7	3.5
Bloomington	6.5	23.5	57.0	.8	6.3	1.8	.6	2.6	.4
Brooklyn Center	9.2	35.2	40.4	.5	4.0	3.8	4.7	.9	.2
Crystal	10.1	31.2	50.8	.1	2.7	2.0	22.3	.5	.1
Edina	14.1	28.4	48.4	.5	5.5	2.0	.7	1.1	.2
Minneapolis	15.5	58.0	15.6	.7	4.9	2.4	1.6	.9	.2
Minnetonka	8.0	20.5	67.2	.2	1.8	.8	.6	.4	.2
Richfield	8.4	30.9	49.4	.6	6.2	1.5	.5	1.7	.3
St. Louis Park	12.0	29.2	53.5	.7	2.6	.7	.9	.4	.0
Maplewood	.8	5.0	2.3	13.7	44.4	28.4	1.0	1.6	2.4
Roseville	2.7	12.3	3.8	7.2	32.4	38.0	1.6	1.4	.4
St. Paul	1.2	7.4	4.7	16.4	57.1	8.2	.9	2.6	1.2
Stillwater	.4	5.4	1.4	4.2	15.8	6.1	.3	.6	65.5
MSA	7.7	28.4	23.2	4.7	17.9	7.2	4.1	4.4	2.0

Source: 1970 Census of Population, U.S. Department of Commerce, Bureau of the Census, 1970

BACKGROUND

Footnotes

- 1 Data provided by Metropolitan Transit Commission, also "Transit and the Twins", Stephen A. Kieffer, Twin City Rapid Transit Company, 1958.
- 2 Data provided by Metropolitan Transit Commission.
- 3 "Your Driving Costs", 1971-72 Edition, American Automobile Association, Washington, D.C., 1971.
- 4 "Cost of Operating an Automobile", U.S. Department of Transportation, Federal Highway Administration, Washington, D.C., 1972.
- 5 "Inventory of Transportation Expenditures in the Metropolitan Area", Metropolitan Council, Transportation Planning Staff, 1972.
- 6 "Report of Public Examiner on the Revenues, Expenditures and Debt of Cities and Villages in Minnesota, State of Minnesota, 1971.
- 7 ibid.
- 8 Staff interview with Jack Provo, Hennepin County District Court Administrator.
- 9 "Unpublished Staff Paper", Minnesota Automobile Liability Study Commission, 1972.
- 10 Minneapolis Tribune, June 23, 1970.
- 11 "Unpublished Staff Paper", Minnesota Automobile Liability Study Commission, 1972.
- 12 "Inventory of Transportation Expenditures in the Metropolitan Area", Metropolitan Council, Transportation Planning Staff, 1972.
- 13 1970 Census of Population, U.S. Department of Commerce, Bureau of the Census.
- 14 Wall Street Journal, December 14, 1972.

STATEMENT BY THE BOARD OF DIRECTORS
ON
THE STRUCTURE OF TRANSPORTATION DECISION-MAKING
FOR THE TWIN-CITIES AREA

The Board of Directors of the Citizens League on March 26, 1973 reaffirmed its position that the responsibility for decision-making on transportation within the Twin Cities metropolitan area should be fixed by the Legislature in the Metropolitan Council.

The major elements of this position were established in a series of reports over the last five years, in which we concluded that:

1. The existing non-statutory arrangement for transportation planning -- set up by requirement of the National Highway Act of 1962, as a structure between the Metropolitan Council and the agencies building and operating facilities -- is inadequate as a mechanism for resolving conflict and for taking affirmative action.

The committee which completed the year-long study in December 1968, said in its report, "Highways, Transit & the Metropolitan Council," :

"The Legislature should put an end to fragmentation, overlapping of responsibility, and the lack of overall direction that has characterized policy-making and planning for transportation in the metropolitan area Forced to meet federal requirements (these agencies) have attempted limited coordination for the past six years through a voluntary association known as the Joint Program. Under the circumstances at the time of its creation the Joint Program represented a step forward but it could not make transportation policy for this area. The Legislature should not attempt to perpetuate or breathe new life into the Joint Program, which is an outdated concept for the needs of the Twin Cities area today."

The committee which reported after a year's study in February 1971 said in its report, "Transit: The Key Thing to Build is Usage!":

"The present arrangement for transportation planning, and particularly for the making of major decisions, is not working. The fragmented planning, plus the direct expression of individual builders and of highway and transit interests, has resulted in an organizational arrangement in which the major decisions will be extremely difficult to make."

2. Basic responsibility for decision-making should be fixed by statute in a representative and responsible general policy-making body in the Twin Cities area. This can only be the Metropolitan Council.

The study committee which reported in October 1968 on the overall concept of metropolitan organization (in a report titled "Metropolitan Policy and Metropolitan Development") said:

"We (came) to the general conclusion that highways and mass transit need to be integrated much more closely with each other, and that this whole function of urban transportation needs to be integrated much more closely with the program of metropolitan planning and development. . . . In the Milwaukee area the basic land use/transportation responsibility was assigned to the regional planning agency. . . . A parallel in the Twin Cities

area would be to assign the basic responsibility to the Metropolitan Council, which would then establish a subordinate transportation planning agency. If staffing were provided, such an agency would take on many of the features of a service commission."

Our December 1968 report said:

"The Legislature should designate the Metropolitan Council as the only truly representative body for the Twin Cities area for metropolitan transportation planning and policy-making. Direct and positive involvement of the Metropolitan Council is essential. The Metropolitan Council cannot be 'just another agency' or merely play an advisory role."

Our 1971 report said:

"The Legislature should fix responsibility on the Metropolitan Council to make and carry out essential transportation decisions, and should create, subordinate to the Council, a Transportation Board."

3. The Metropolitan Council should be mandated by the Legislature to create -- for purposes of ongoing planning and management -- a Transportation Board.

Our October 1968 report said:

"Because of the urgency of relating transportation planning to general areawide planning, and of relating the planning of major highways to the planning of mass rapid transit facilities, we recommend that the major elements involved in urban transportation be brought together in a unified program. Such a program should be organized, staffed and appropriately related to the Metropolitan Council."

Our report in December 1968, after recommending the replacement of the Joint Program, proposed the creation of what was then called a Transportation Commission, subordinate to the Metropolitan Council, to undertake the detailed implementation of the Council's transportation program. The lay members of the commission should be appointed by the Metropolitan Council. The area's transportation building agencies should be involved on a continuing basis through an advisory board.

Essentially the same proposal for a subordinate Transportation Board was made by the committee that reported in 1971.

The Transportation Board would be a non-operating board, similar to the Metropolitan Health Board -- which was also created and appointed by the Metropolitan Council to carry out areawide planning and policy-making functions imposed by the requirement of federal law (in this case Public Law 89-749 - the Partnership for Health Act of 1967).

ABOUT THE CITIZENS LEAGUE . . .

The Citizens League, founded in 1952, is an independent, non-partisan educational organization in the Twin Cities area, with some 3,600 members, specializing in questions of government planning, finance and organization.

Citizens League reports, which provide assistance to public officials and others in finding solutions to complex problems of local government, are developed by volunteer research committees, supported by a fulltime professional staff.

Membership is open to the public. The League's annual budget is financed by annual dues of \$10 (\$15 for family memberships) and contributions from more than 500 businesses, foundations, and other organizations.

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