CITIZENS LEAGUE STATEMENT

RIDE-SHARING AND CAPITAL FACILITIES FOR TRANSIT

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STATEMENT OF TRANSPORTATION TASK FORCE ON RIDE-SHARING AND CAPITAL FACILITIES FOR TRANSIT

INTRODUCTION

This statement is the result of a very intensive review we have undertaken over the last three months of our existing positions on transit and transportation and how they relate to the pressing questions of energy supply and price. The statement is being issued in the middle of an exceedingly important debate in the Twin Cities area. We hope the statement can make a contribution by clarifying issues and offering constructive proposals.

Nearly a decade has passed since our report *Transit: The Key Thing To Build Is Usage!*, was issued in 1971. But that message never was more important than it is today, even though it pre-dated the energy crises of the '70s. Our current review not only reaffirms, but also strengthens, that message. Only a strategy which focuses on ridership and on what will induce drivers to ride will bring about a significant reduction in energy usage. A construction stategy can be supportive of ride-sharing by giving priority over driving alone--as we pointed out in our 1973 report *Building Incentives for Drivers to Ride.* But construction of new facilities are not by themselves the solution to energy problems.

In 1974 we challenged conventional thinking about transit construction by urging that fixed-guideway transit should be used to make short-distance trips attractive instead of long-distance trips, thereby reducing the need for travel and the consumption of energy. To make this possible it is necessary to build more medium and high-density housing near and within major employment centers, as contrasted with the prevailing practice of keeping housing segregated from places where people work. Our task force agreed with the 1974 report which supports the use of fixed-guideway transit for internal circulation purposes within major diversified centers, to help modify development patterns.

Today, as in the early 1970s, the Twin Cities area is debating the question of fixed rail as part of the region's transit system. The earlier debate was different in two major respects. In the early 1970s, the proposal involved a more massive, heavy rail system. Today, the debate is over light rail. In the early 1970s, the debate concerned rail or nothing else. Today the debate is more between light and high occupancy vehicle lanes. This report seeks to provide useful insight on the consideration of these alternatives.

Finally, as we have in so many reports in the past, we focus on leadership at the metropolitan level. As in the past, we feel that leadership must center in the Metropolitan Council.

CONCLUSIONS

The concern about an emergency shortage of petroleum in the Twin Cities metropolitan area is having a profound effect on a variety of transportation issues facing this area. An intensive debate now is underway over how best to, prepare for an emergency.

Over the last 15 years, beginning with our report urging that a Metropolitan Transit Commission be established, the Citizens League has been advocating several strategies to increase the efficiency of the area's transportation and land use systems, without restricting individuals' freedom of mobility. In the early '70s, for example, a League report defined transit as riding with others, rather than driving alone, irrespective of the size or ownership of the vehicle. In another major report, we called for a transit construction strategy that emphasizes short trips rather than long trips.

In light of the current intensive energy debate, our task force was assigned to look again at our existing positions. We have tried to sort out those issues which relate directly to coping with any immediate, critical energy shortfall. We have more objectives than only responding to energy issues. We have an objective of holding down the cost of transportation. Another objective is to have a transportation system which supports a more liveable metropolitan area. In our reappraisal, we have reached four major conclusions:

1. The only approach to enable this metropolitan area to save significant amounts of fuel, with minimum financial expense, without denying individuals the opportunity to make necessary trips, is a large-scale mobilization of sharing rides in cars and other vehicles throughout the seven-county metropolitan area.

2. The critical strategic importance of ride-sharing requires that these organized vehicle systems be supported by improvements in capital facilities, so that vehicles carrying people will be given priority over vehicles occupied by their driver alone. The Metropolitan Council should therefore lift the prohibition currently in its Transportation Policy Plan against exclusive rights-of-way for *transit* vehicles.

3. One fundamental element of the strategy for improving the efficiency of the system must also be to reshape the urban region. Fixed-guideway transit should be introduced increasingly within major centers of employment, shopping and recreational/ institutional activity, so as to attract higher-density housing. Gradually, this will mean that more housing units will be located only a short distance from work, shopping and entertainment, thereby reducing the length of trips and, for some trips, eliminating automobile travel.

4. It is essential that the Metropolitan Council make sure that its Transportation Policy Plan is implemented. This means that the Council needs to be precise, early, about the specific actions which operating agencies would undertake to implement the plan.

These positions are fully consistent with previous Citizens League reports. The only change is one of emphasis. Previously, we had not fully realized the importance of ride-sharing. In this statement, we are saying that ride-sharing is *the* central strategy for an efficient transportation system serving the entire metropolitan area.

I. The only approach to enable this metropolitan area to save significant amounts of fuel, with minimum financial expense, without denying individuals the opportunity to make necessary trips, is a large-scale mobilization of sharing rides in cars and other vehicles throughout the seven-county metropolitan area.

Ride-sharing is the only permanent solution, short-term and long-term, for large parts of the metropolitan area where homes and jobs are widely dispersed. Perhaps 50 percent or more of the population of the metropolitan area is in this category.

Ride-sharing is good for everyone in the metropolitan area. short-term and long-term, and even where public transportation is available, for those trips which can't be taken on public transportation.

Ride-sharing is essential as the strategy to cope with any immediate emergency shortage of petroleum in the Twin

Cities metropolitan area.

If just two out of five persons driving alone to work each day in the metropolitan area formed two-person carpools, the regions's daily use of gasoline in cars would drop by ten percent.

Ride-sharing offers more than just energy savings. It affords the opportunity for two-car households to become one-car households, thereby multiplying the potential dollar savings to individuals.

Ride-sharing can take many forms, from ad-hoc, unorganized arrangements which individuals make with their friends and neighbors every day, to arrangements which are permanent, highly organized, regular and charge fees.

Ride-sharing involves new concepts about ownership of vehicles. It implies greater use of motor pools, so people don't have to use their own personal cars for work-regulated trips, including multi-employer motor pools, perhaps initiated by car-leasing companies.

Ride-sharing involves new concepts about whose responsibility it is to bring individuals to their destinations. For example, at least one suburban bank now offers a van to pick up customers and bring them to the bank to conduct their business. Similar services may be offered in coming years by stores, theaters, restaurants, and other destinations, perhaps even cooperatively among them.

A successful ride-sharing program will involve many participants, mainly private, since the vehicles and the drivers are private. Government will perform mainly a supportive role.

How efficient the automobile *runs* is being handled by the Environmental Protection Agency (EPA) through its regulations requiring that engines be manufactured with higher gas mileage.

How efficient the automobile is *used* is going to be largely the product of voluntary efforts of hundreds of thousands of private citizens and businesses, and other organizations. Here the government is playing a limited role. For example, all firms which employ more than 100 persons are now required by the federal Department of Energy to adopt plans to reduce work-related travel by employees in the event of an energy emergency.

Here are some key elements of a ride-sharing strategy:

a. Employers and employee associations. In the past, the main factor in the assignment of employee working hours has been the efficiency of the *work system.* An awareness now is building that the efficiency of the *transportation system* also must be considered. (By way of analogy, school systems for years have coordinated the hours that school begins and ends in different buildings with the efficient operation of school bus schedules.) An example of this awareness is the activity of the Energy Task Force of the Minnesota Business Partnership, Inc., which is giving top priority to the issue of getting people to work.

There are several steps that employers can take:

- Giving preferential treatment in parking lots to ride-sharing vehicles.
- Eliminating special treatment for persons who drive alone, such as free or reduced-price parking.
- Providing a pool of vehicles for during-the-work-day travel, so individuals don't have to drive alone.
- Permitting adjustments in working hours to make ride-sharing possible, because, as the degree of fragmentation of working hours increases, it become more difficult to match employees for ride-sharing.
- Establishing an ongoing system to match employees with each other for ride-sharing.

Ride-sharing is of such importance that it should be actively promoted and supported at the highest policy levels of corporations.

b. Private transportation suppliers. Car-leasing firms, taxi companies, charter bus companies and perhaps others can play a role simply through promotion of the advantages of ride-sharing.

c. Neighborhood residents. This possibility should not be overlooked, because neighborhood residents have a particular ability in matching themselves for common-destination trips. Many of them have been operating carpools for years—to get children to music lessons, athletic contests, religious instruction, or what-have-you. So far, such ride-sharing has been heavily a matter of convenience. In the future, the resources of the neighborhood may need to be mobilized for energy-saving ride-sharing.

d. City governments. While employers need to consider the impact of fragmentation of working hours on ride-sharing, city governments need to consider the fragmentation of geographic space. To the extent that city councils permit employment locations to be scattered across the landscape, rather than be clustered together, it will not be possible for ride-sharing to reach its potential. Thus, zoning

codes need to be closely examined for their transportation impact. City governments also should reduce the amount of parking they require of businesses which offer preferential parking for shared-ride vehicles.

e. State or regional government. As with city governments, their roles should consist primarily of eliminating obstacles and providing incentives for ride-sharing, including the following:

- Providing financial assistance for research and development programs, including experimentation with new kinds of organized ride-sharing efforts, involving, for example, more imaginative use of taxis.

- Providing tax credits to employers for expenses they may incur in matching employees with each other.

- Providing technical assistance on request to employers and other groups wishing to establish ride-sharing programs.

- Providing a continuing, intensive promotional effort, pointing out the waste and expense of single-occupant driving.

- Monitoring vehicle occupancy, petroleum consumption, number and length of trips on an annual basis, with a breakdown by geographic region within the metropolitan area. The most recent data in the Twin Cities area now is ten years old. By contrast, for example, the Washington, DC Council of Governments publishes a comprehensive annual summary, by location, of person movements, automobile count and occupancy, and transit counts.

- Modifying licensing and insurance requirements which may limit ride-sharing, such as services provided by taxis.

II. The critical strategic importance of ride-sharing requires that these organized vehicle systems be supported by improvements in capital facilities, so that vehicles carrying people will be given priority over vehicles operated by their driver alone. The Metropolitan Council should therefore lift the prohibition presently in its Transportation Policy Plan against exclusive rights-of-way for *transit* vehicles.

The policy now provides that—except in major high activity centers, where transit vehicles could be given their own right-of-way—transit vehicles will operate in mixed traffic. This means that vehicles carrying numbers of riders cannot move any faster than the general stream of truck and automobile traffic. This denies to the transit and ride-sharing system the advantage of greater speeds, and reduced travel time, that would be so important in encouraging additional numbers of people to switch from driving to riding. The most that has been done, to date, is to give transit vehicles priority access *to* the freeway main line in certain corridors—most important, Interstate 35W from the Minneapolis downtown south into Dakota County.

The next, and critical, dimension of transit improvement must be to give vehicles carrying riders this additional competitive advantage of faster speed, relative to driving alone. At critical places in the transportation network, therefore, where movement is congested and the general stream of traffic is slowed, the effort should be to develop a *clear channel* in which the high-occupancy vehicle can speed through, or around, the congested section. Such a section might be as small as a river crossing, where automobiles jam up trying to cross the bridge. Or a bypass on Interstate 35W between 46th Street and 66th Street, that would give buses and other such vehicles a bypass around the congested *joint section* with County Road 62, the Crosstown Highway. Or it might be as long as a busway from the edge of the Saint Paul or Minneapolis central area, through the fully-developed portions of the metropolitan area.

This kind of priority for vehicles carrying riders should extend to capital facilities in which vehicles are *stored,* as well as facilities on which vehicles are moving. In parking lots and parking ramps, ride-sharing strategies can be importantly supportive by physical improvements and regulations that give priority locations to high-occupancy vehicles.

There are both examples and opportunities, of such efforts to develop capital facilities that differentiate between those that use the limited space in a transportation corridor efficiently, and those that do not. Some of these examples are found in the Washington, DC and New York metropolitan areas, where lanes specially set aside, or constructed, now move buses and other high-occupancy vehicles past the standing lines of automobiles, and over the bridges, or into the tunnels leading into the center of the city. In the Pittsburgh area, busways laid along rail corridors now move buses for several miles out of the congested part of the city, before dispersing them onto the surface streets to proceed to particular neighborhoods and subdivisions. In the Chicago metropolitan area, a lane has been physically set aside in one of the freeways, and specialized for vehicles bound for a particular *destination:* that is, O'Hare airport.

In the Twin Cities area, similar opportunities exist, as a number of major transportation corridors are reconstructed

in coming years. Most immediately, in the corridor running west from the Minneapolis downtown (Highway 12 or Interstate 394), the Minnesota Department of Transportation is presently proposing two high-occupancy vehicle (HOV) lanes, along with two lanes each direction for other vehicles. The results would be dramatic, in establishing the needed time-advantage for transit: In the high-occupancy vehicle lanes, buses, carpools and vanpools would be able to travel at 50 miles an hour. In the other lanes, beside them, the travel speeds for vehicles with driver alone would average about 25 miles an hour. The US Department of Transportation now requires that all federally-funded freeways in urban areas include provision for high-occupancy vehicle lanes unless it can be demonstrated conclusively that such lanes are not needed. Similar opportunities present themselves in the reconstruction of the Highway 55 corridor (Hiawatha Avenue) southeast of the Minneapolis downtown. And, somewhat further out in time, in the reconstruction being discussed for the Interstate 35 corridor south from central Minneapolis. And, also, in the development of the Interstate 35E corridor southwest from the Saint Paul downtown. And, perhaps, for others.

This kind of effort, to develop a *hardware* dimension additional to the *software* dimension of the ride-sharing strategy has a dimension of attractiveness that runs beyond simply higher *vehicle* speeds. It provides, as well, for an improvement in overall *trip* speeds. Buses, vanpools and cars operating as carpools are able to move flexibly and freely from a reserved right-of-way lane onto surface streets, without stop and without transfer. These systems, in other words, offer non-stop service from the point of origin to the point of destination: literally, in the case of carpools, to the doorstep; and within a block or two of home, in the case of many buses. This advantage in speed and convenience will work in support of the economic cost advantages already established by ride-sharing systems.

In the last several months, in the Twin Cities area, there has revived the discussion also of a different strategy for carrying passengers along a trunk-line corridor. This is the discussion about *light rail transit* (LRT). This is, presently, also prohibited, under the existing Transportation Policy Plan of the Metropolitan Council. In moving, as we recommend, to lift this existing prohibition, the Council would be open, not only to the consideration of exclusive right-of-way for buses and other similar vehicles, but also to the consideration of an exclusive right-of-way in which an LRT vehicle would run on its track.

Because of the interest and discussion about this idea, we gave considerable attention to it in the course of our review of the issues. We think it can be one of the alternatives studied in the Metropolitan Council review. Our analysis also revealed several quite different concepts of application for LRT, with some important differences between and among them. These differences will form, and should form, a large part of the agenda of questions to be explored in the Council's study and review.

It is really quite a different concept; involving, as it does, the idea of the rider transferring to another vehicle for the central, trunk-line portion of the ride. This vehicle would be an electrified, steel-wheeled vehicle (perhaps in short trains) which, captive to its guideway, would shuttle up and down the exclusive right-of-way provided within its corridor. In a situation where relatively few people lived immediately along the transportation corridor, this would require some other vehicle to get the rider to the guideway. This might be a personal car, parked at the station. Or it might be a collector bus, or car/vanpool vehicle. The LRT vehicle would run along the trunk-line, picking up passengers at the stations. The system is a *lighter* (less expensive, less rapid) variation of the rail-transit proposal advanced in the early 1970s. The alternative to it is the HOV lane–the *hardware* component of the ride-sharing system discussed in the Metropolitan Council in 1972 in the form of the *busway*. In this system, riders would begin their trip, from home, in the transit vehicle. At the trunk-line. the HOVehicle would enter the reserved lane at designated points, without stopping, and proceed at something like 50 mph.

The best use of LRT, then, might not lie in the application of this technology to the trunkline portion of home-to-work trips. There are, however, some other applications which appear in our analysis to be conceivable as uses for this system. One would involve LRT in a corridor where large numbers of transit riders *do* presently live along the route. In this area, currently, the corridor with the heaviest bus use is the Nicollet/Chicago Avenue corridor south from the Minneapolis downtown. One application of LRT, which might be studied by the Metropolitan Council on a high priority basis, would be the conversion of that corridor to LRT (or, to an intermediate form, such as the electrified trolley bus).

A second application of LRT, that we find conceivable, would be in a corridor along which a substantial area of open land represents a major opportunity for a new kind of total development. It would be interesting and useful for the Metropolitan Council to examine corridors where the introduction of LRT could be accompanied by the kind of mixed uses and higher densities that would logically accompany it, and would provide patronage for it. This could include both stores and other shopping facilities; offices and other places of work; and higher density housing. The

service would be local service, which is consistent and compatible with the capability of vehicles, which is in the range of 30 mph speeds. This would depend critically, of course, on the ability of the local governments to obtain the consent of the people living in and along these corridors to the kinds of zoning changes and higher-density development that would be involved.

All of these possibilities remain to be explored by the study to be undertaken by the Metropolitan Council. The study should analyze a variety of corridors, and a number of different factors. Among the latter would be the following: (a) energy savings, (b) tax dollars required for construction and operating expense, (c) express vs. local service, (d) ability to have an impact on land use, (e) whether to install the systems in corridors that now have transit patronage, (f) convenient speed and attractiveness to persons who would otherwise be driving alone, (g) the way in which the trunk-line system would interface with the system for distributing passengers arriving in and around a downtown, (h) the question of alternative fuels for the transit vehicles: the availability of liquid fuels, oil-based or coal-based; the allocation priorities assigned to transit fuel, in an emergency; and the appropriate priority given to fixed vs. mobile energy uses for liquid fuel supplies. The study should examine all three of the principal vehicle systems: LRT, electrified trolley buses, and buses/vanpools/carpools running free of the guideway.

III. One fundamental element of the strategy, for improving the efficiency of the system, must also be to reshape the urban region. Fixed-guideway transit should be introduced increasingly within major centers of employment, shopping and recreational/institutional activity, so as to attract higher-density housing. Gradually, this will mean that more housing units will be located only a short distance from work, shopping and entertainment, thereby reducing the length of trips and, for some trips, eliminating automobile travel.

We give a high priority to this, while recognizing that it can be accomplished only very slowly. Indeed, it is the difficulty of accomplishing this rearrangement of land uses that drives us to urge that this effort be started immediately! It is only things that can be accomplished quickly that can safely be left until later.

And it *will* be a slow process. We must be realistic about that. Most of our urban region was built in the automobile era, during a period when the prevailing philosophy of planning was to move away from the old mixed uses of the 19th century city, into new arrangements where people would live in one area and work in another area, and shop in still a third. Clearly, this maximized the amount of travel required in the system. But this was our policy for many years. Indeed, before the freeways came, it was transit that was used to accomplish this separation between place of work and place of residence; enabling people to work in a central area and yet to live where there was light and air in the suburbs. In many cities, the early transit lines were built by the promoters of housing subdivisions, on the fringe of the city. Later, of course, this job was taken over, and vastly expanded, by the automobile/highway system. It is only in very recent years that we have come to see the need for restraining and reversing this growing decentralization and dispersal. But, practically, we can work only with the future. The development that is here is fixed. We cannot move and physically rearrange the buildings in which people now live and work and shop. This is why so large a part of the total effort must concentrate, as we have indicated above, on efforts to handle this travel more efficiently.

But we can do things differently in the future. We are not obliged to continue to make it more and more convenient to live at longer distances from where we work. Quite the opposite: The strategy today, we think most people will agree, must be to find ways to arrange the development of industry, commerce, housing and commercial facilities with an eye to minimizing the total volume of travel. As a practical matter, the principal opportunity is to begin to add higher-density housing in, and close around, the concentrations of shopping and commercial facilities that have been developed in our region so far.

Importantly, in recent years, this has begun to happen—first and most substantially, in and around the central areas of both Minneapolis and Saint Paul; (and, in the major center around Southdale). This is the concept of the *metropolitan center* embodied in the planning concepts used both by the Metropolitan Council and by the central cities. It is more than just the *downtown* or central business district. It is the central business district (CBD), surrounded by the nearby and related activities.

In the case of Saint Paul, it means the downtown plus the government center on capitol hill, plus the nearby educational institutions such as the Vocational-Technical Institute, plus the nearby hospitals, plus the civic center/auditorium complex, plus the proposed higher-density residential area in Lowertown, plus the recreational facilities along the river bank.

In the case of Minneapolis, it is the downtown, and the nearby University, and the high-density housing in Cedar-Riverside, and the stadium, and the hospital complex of Metropolitan Medical Center/Hennepin County General

Hospital, and the auditorium/convention center, and the rapidly developing housing in the Loring Park area, and the cultural complex at the Walker/Guthrie, and the proposed high-density housing along the river both on the site of the old Union Station and, now, across the river near St. Anthony Main.

There must be a transportation program that both serves and further shapes these metro centers, where increasingly it will be possible (and necessary!) to live and to move around without an automobile. We have here, in fact, a real opportunity to build something quite comparable with the higher-density, mixed-use areas at the center of most of the world's great cities. That is, areas where people live at night, as well as come to work and shop during the day.

At the moment, as became clear during our review, these central areas have been depending for their circulation on improvements of conventional vehicles on surface streets. Computerized traffic signals, the removing of parking, and the addition of bus service have all been critical to relieving the severe congestion that existed as late as the 1950s. But, the cities have been doing more than this. Most importantly, currently they have been through the 1960s and 1970s continuing to install and to expand the system of skyways. This is a transportation system, even if not a vehicular system. They are extraordinarily effective. Nothing could be simpler, more economical, and more reliable than people walking through skyways. (They are, however, expensive: a quarter million dollars or more simply to cross the street.) These are proposed to expand still further, both within the Saint Paul and the Minneapolis downtowns.

The next step, and the next problem, is to connect the downtown, as the central business district, with the other related elements of the metro center. Almost certainly this will involve more than extensions of the walking, skyway system. As this is discussed, bus travel is proposed. But there is considerable interest, at the same time, in exploring arrangements that permit people to travel indoors in a climate-controlled environment, in some kind of vehicle system. Essentially, to travel horizontally within buildings, in much the manner they now travel vertically within buildings. Saint Paul is furthest along in this discussion, with the proposal for the *Downtown People Mover* or *shuttle transit* The discussion is less advanced in Minneapolis, although such a *horizontal elevator* system was laid out, both in a study sponsored by the Metropolitan Transit Commission in the early 1970s, and in the small-vehicle study sponsored by the Legislature in 1974-75. The latter involved a double circulator, with the common sides running together in a subway, east-west, under Sixth Street.

We were intrigued, in our analysis and in our discussions, with the way in which the essential ideas seem to be coming together. One way to make this clear is to see that, in a variety of proposals, there is the common idea of beginning in the center of the central area, with some new fixed-guideway system running out at some distance. At some point it would terminate, at some kind of transfer or interchange facility, at which also will be located a substantial amount of parking. There, people will get into their cars and into other non-fixed-guideway transit vehicles. Put this way, a simple question emerges: Would it be better to build those transfer/parking facilities four, five or more miles down the line, where they would probably be an intrusion into the neighborhood; or at the edge of the metro center, where there is parking capacity, and could provide multiple-use service for the employment, commercial, recreational, cultural and other activities that go on within the center? In our analysis, the latter strategy comes to the top, as importantly related to the whole effort to build and develop those areas—those points of *centrality*—within the region, within which activities can be concentrated and travel therefore reduced.

These areas, these major centers, are—it is important to note—not only the regional centers in the two central cities of Minneapolis and Saint Paul. There is an opportunity to develop other kinds of similar areas of *centrality* at a variety of points around the Twin Cities area. We have noted already the way in which high-rise housing has begun to come into the major center in the Southdale/494 complex. Similar things may be done, and could be done, at the other sub-regional centers of shopping/ office/recreational/ institutional development around the area. Also, in a report in early 1976, the Citizens League advocated the coherent drawing together of major elements of development in the sub-regions east of Saint Paul. Again: The Metropolitan Transit Commission had undertaken studies of this possibility, in the Southdale/494 complex as long ago as 1972. It seems likely, however, that the introduction of fixed-guideway systems in and around these centers will be preceded by a period in which the internal circulation is handled by ride-sharing systems—perhaps owned and run by the owners/operators of the shopping centers or commercial buildings themselves.

Similar fixed-guideway systems are beginning to appear in other activity centers, even within our own metropolitan area. An advanced type of transit system is in operation at the Minnesota Zoological Garden. And, we understand an internal circulator/people mover to be a part of the plan for the Minneapolis/Saint Paul International Airport at the point at which the expansion of the green and gold concourses is complete, and the next stage of development—which involves a new terminal northwest across the runway from the present terminal—begins. Such systems are, of

course, already in operation at a number of airports around the country: as, for example, Seattle/Tacoma.

Finally, and importantly, these internal circulator systems make it increasingly less necessary to bring the trunk-line vehicle into the heart of the metro center, and into downtown. There is some concern, currently, about the congestion on surface streets that results from the need (in the absence of a circulator) to bring the buses, which are today our line haul vehicle, into the heart of downtown. And, beyond this, there is concern also about the thought of bringing LRT vehicles–should any be built–into the center of the business district: concern, that is, that if brought in at grade, those large vehicles could significantly disrupt traffic; and concern that if brought in below grade, the cost would rise to an unacceptable level.

There is a significant difference between the long-distance line haul service, and the internal circulator service. This reflects itself in a difference in vehicle types. Typically, the former involves larger vehicles that can travel at higher speeds and carry more persons, on less frequent schedule. The latter involves smaller vehicles, more esthetically acceptable, and economically less costly in the congested area, which individually carry fewer persons, and operate on more frequent schedules. In addition, of course, the internal circulator presents an opportunity for the Twin Cities area–almost literally ahead of any other urban region in the nation–to break through into a new advanced transit technology, in which the vehicle systems for horizontal movement within an area can be, at last, automated.

IV. It is essential that the Metropolitan Council make sure that its Transportation Policy Plan is implemented. This means that the Council needs to be precise early about the specific actions which operating agencies would undertake to implement the plan.

Part of the difficulty the Twin Cities area now is facing in its debate over transit is that various transportation projects don't emerge coherently from the Transportation Policy Plan of the Metropolitan Council. Instead, each of the agencies responsible for implementation makes proposals from its own perspective. The proposed projects are assembled in one document, called a transportation development program, but there is no assurance these will, in total, serve affirmatively to carry out the Policy Plan.

We believe that the Metropolitan Council should outline the specific studies that the operating agencies should undertake in implementing the policy plan, covering capital projects and non-capital projects such as ride-sharing. This should give greater assurance that the activities of the operating agencies will be consistent with the plan, and will implement it completely.

The Council should then assign the Transportation Advisory Board to monitor progress in implementing the policy plan and to assemble and coordinate the projects of the operating agencies, (cities, counties, MTC, Minnesota Department of Transportation) into a transportation development program for consideration by the Metropolitan Council.

This is consistent with our position taken in 1971 and elaborated on in 1974 that there be a non-operating Transportation Board under the Metropolitan Council. Such a Board has been in existence on an advisory basis since the early 1960s, as part of the federal government's requirement for continuing, cooperative, comprehensive transportation planning in metropolitan areas. The name of this group now is the Transportation Advisory Board, a 30-member body with five citizen appointees by the Metropolitan Council, four citizens appointees by the MTC, and the remaining 21 representing cities, counties and transportation agencies. Our proposal is that a Transportation Board should include equal citizens and government/agency representation.

The relationship between the Metropolitan Council, the Board, and the implementing agencies would be similar to the situation which prevails in metropolitan parks. A non-operating Parks and Open Space Commission has responsibility for initiating and assembling the development program for regional parks, which is carried out, operationally, by counties and some cities.

The Metropolitan Transit Commission now has statutory responsibility for assembling a comprehensive transportation development program, encompassing highways and transit facilities. However, the MTC's activities are concentrated heavily in the operational aspects of the bus system. Furthermore, placement of the responsibility in the MTC occurred as a by-product of uncertainty in the 1974 Legislature over whether the MTC should have been transformed into a *transportation* commission. That transformation was proposed in early drafts of legislation, but then was deleted. However, the responsibility for preparing the development program was not deleted.

BACKGROUND

1. Nature of travel within the seven-county Twin Cities area

On the average, a resident of the seven-county Twin Cities area takes about twenty trips a week by car, taxi, bus or truck, according to the Travel Behavior Inventory (TBI) of the Metropolitan Council. An average trip is about five miles long. Work trips are longer, about seven miles on the average, according to the TBI.

Four out of five trips, 80 percent, involve the home either as an origin or a destination.

About two out of five trips, 40 percent, are by persons going to or from work.

Most trips are made in cars. In 1978, according to the Minnesota Department of Public Safety, approximately 1,000,000 cars were registered in the seven-county area. In 1970, about 850,000 cars were registered in the area. By comparison, population was about 1,988,000 in 1978, up from 1,874,000 in 1970. Thus, more cars than people were added to the metropolitan area during the first eight years of the decade.

On a 24-hour basis, every ten cars are carrying about fifteen persons, which means car occupancy is 1.5 persons per car.

For work trips only, every ten cars are carrying about twelve persons, which means car occupancy for work trips is about 1.2 persons per car.

During the 6-9 a.m. peak period, of those trips taken in cars, vans and buses, about 57 percent are by persons driving alone, another 36 percent are in carpools and vanpools, and another seven percent are in buses, according to the TBI.

For trips to downtown Minneapolis only during the 6-9 a.m. peak, 42 percent are by persons driving alone, 32 percent are in carpools or vanpools, and 26 percent are in buses. For downtown Saint Paul trips: 47 percent, alone; 33 percent, carpools or vanpools; and 20 percent, bus.

The TBI is the result of in-home interviews conducted in 1970. Officials of the Metropolitan Council say that exact percentages are likely to be different today, but that nothing fundamental has occurred in the past decade to produce any major changes in the TBI figures.

2. Location of jobs and residences

According to the TBI, about 17.3 percent of the jobs were located in the central business districts of Saint Paul and Minneapolis combined. Another 37.3 percent were located elsewhere in the central cities, outside the downtowns, and the remaining 45.4 percent were located in the suburbs.

About 39 percent of all housing units in the Twin Cities metropolitan area were located in the Minneapolis and Saint Paul combined in 1978, according to the Metropolitan Council. Another 25 percent were located in fully-developed suburbs around the central cities, and the remaining 36 percent were in the remainder of the metropolitan area. In 1970, only 28 percent of the housing units were in the remainder of the metropolitan area (outside the central cities and the fully-developed suburbs).

More and more land continues to be taken for residential purposes. Between 1970 and 1975, acres actually used for residential purposes increased 14.5 percent in the region. Meanwhile population was increasing only 4.3 percent.

Between 1970 and 1978 the number of housing units in the metropolitan area grew from 594,000 to 721,000. Thus, the number of housing units grew faster than population during that time.

3. Energy consumption

About 25 percent of the state's total energy usage is in transportation, according to the Minnesota Energy Agency. About 53 percent of transportation energy (or 13 percent of total energy usage in the state) is in private cars.

On a typical day in the Twin Cities area, about .6 of a gallon of petroleum fuel per capita is consumed in cars. This calculation is based on the assumption that there are about 3,500,000 auto trips in the area each day, with each trip averaging five miles, with average mileage at 15 mpg, which works out to about 1,166,000 gallons consumed in cars. MTC buses consume 35,000 gallons of diesel fuel a day. Total petroleum consumed in the metropolitan area, including trucks, taxis and vehicles passing through the area is about 1,800,000 gallons a day, according to the Metropolitan Council.

To obtain a better understanding of possible ways to save fuel, we developed a chart which illustrates the impact of various options to cut automobile fuel consumption in the Twin Cities area by about ten percent (or by about 110,000 gallons a day):

OPTIONS FOR CUTTING AUTO FUEL USE BY 10% IN METRO AREA

Strategy	Change Required
1. Increase fuel efficiency of autos	15 mpg to 16.5 mpg
2. Reduce length of auto trips	5-mile average to 4.5 mile average
3. Reduce number of trips	Decrease of two trips a week by each person
4. Increase vehicle occupancy generally	1.5 persons/car to 1.65 persons/car
5. Increase transit ridership	Triple bus ridership while holding auto occupancy at 1.5
6. Increase carpooling for commuting specifically	40% of persons now driving alone to work would form 2-person carpools
7. Divert all downtown-bound trips from single-occupant-cars to buses	Would require twice as many diversions as there are single-occupant cars going to work in both downtowns combined
8. Electrify the bus system, totally, in Twin Cities area	Would save 2.9% of daily petroleum fuel consumed by autos and MTC. Bus system would have to be more than three times its present size to accomplish a 10% reduction in fuel
9. Divert all peak period I-394 traffic to LRT	Would save 1% of daily petroleum fuel consumed by autos and MTC. Diverting downtown traffic only would save .4%, HOV, downtown only, .2%.

4. Proposals before the 1980 Legislature

A variety of proposals relating to the issues in this statement were pending in the 1980 Legislature at the time the statement was issued, including:

- A bill authorizing a fixed-guideway internal circulator transit system serving downtown Saint Paul and the immediate surrounding governmental, civic and residential development, including the state capitol complex.

- A recommendation by Governor Albert H. Quie that the Metropolitan Council be appropriated $150,000 for a study of major transportation movement corridors. The Governor recommended that the Council "assess the need for exclusive transit rights-of-way in some of the corridors for light rail transit, buses, vanpools and carpools. The study will determine the relative energy savings of different mode options and their economic implications, as well as their impact on local communities."

- A proposal from Representative Ray Pleasant for a Metropolitan Fixed-Guideway Design and Construction Board that would design an electric-powered fixed-guideway transit system in eight specific corridors. Financing would be provided by a one percent sales tax.

- A proposal from Representative Sally Olsen to prohibit the construction of high-occupancy-vehicle (HOV) lanes

in the proposed reconstruction of Hwy. 12 west of Minneapolis to I-394, and for the Commissioner of Transportation to study potential transit routes between I-494 and downtown Minneapolis.

- A recommendation from Governor Quie for a 15 percent employer tax credit for vanpooling expense and an additional appropriation for rides-haring.

5. Relevant Citizens League Reports

This statement is a follow-up to existing positions of the Citizens League as detailed in the following reports:

Transit: The Key Thing to Build is Usage!, February 17, 1971.
Building Incentives for Drivers to Ride, March 21, 1973.
Growth Without Sprawl, September 19, 1973.
Transit: Redirect Priorities Toward a Small-Vehicle System and Shorter Trips, January 21, 1974.
Balancing the New Use and Re-Use of Land, January 26, 1974.
Needed: A Policy for Parking, January 18, 1978.

Two previously-prepared statements also are related:

A Fresh Look at a New Direction in Transportation Planning, January 28, 1974.
Downtown People Mover in Saint Paul, March 21, 1979.

Single copies of these reports and statements are available on request from the Citizens League, as supplies permit.

6. Assignment to the Transportation Task Force

It became obvious in the fall of 1979 that a major community debate was developing again over transportation strategy, particularly capital facilities for transit, in the Twin Cities metropolitan area. Partly this was a result of concern over energy prices and shortage. Partly it was related to the upcoming review by the Metropolitan Council of its Transportation Policy Plan.

The Transportation Task Force of the Citizens League is one of four standing task forces responsible for overseeing implementation of Citizens League reports in various areas. The Task Force felt that in light of new developments it was important for the Citizens League to be prepared with a current position, instead of relying exclusively on past reports.

On November 14 the Task Force received authorization from the Citizens League Board of Directors to conduct a three-month inquiry to encompass the following: "(a) a review of the present patterns of travel; (b) an examination of the problems arising within the present system, involving energy, congestion, service, cost, development impact, safety, neighborhood compatibility and pollution; (c) an examination of proposals for capital facilities for transit, especially light rail and high-occupancy-vehicle lanes, to assess their potential for solving these problems; and (d) a look at non-transportation actions which might address these problems, such as adjustments in the pattern of land development or in the timing of work hours."

7. Task Force membership

Persons who articipated actively in the work of the task force on this assignment were:

Wayne H. Olson, chairman
Allan R. Boyce
Peter Brown
John Costello
John Crosby
Richard M. Erdall
Dean Fenner
Peter Heegaard
Robert C. King
James Lande
Paul Magnuson
Arthur Naftalin
Robert D. Owens
William Pearce
Beverly Propes
John Rollwagen
Clarence Shallbetter
Gordon Shepard
Ellen Temple
Carol Trusz
James Werntz

8. Task Force activity

The task force began work on this assignment December 14, 1979, and completed its report February 26, 1980. During this 2½-month period, the task force met fourteen times. During the final three weeks of activity, the task force held twice-weekly meetings to complete its work by the end of February.

Detailed minutes were taken of all meetings and were distributed regularly to state, metropolitan and local governmental officials and persons in the private sector interested in transportation. Some of them attended task force meetings. Minutes are on file in the Citizens League office. Copies are available on request as long as they are available.

The task force began its work by receiving orientation to demographic patterns, travel, and energy usage in the Twin Cities metropolitan area. The task force moved on to consideration of problems in selected locations, including suburbs, the downtowns, the University of Minnesota, and

heavily-traveled corridors. It also received testimony from persons advocating light-rail transit and high-occupancy-vehicle lanes. Summaries of previous Citizens League reports on transit and transportation were made available.

Resource persons who met with the task force were:

Steve Alderson, transportation planning staff, Metropolitan Council

J. Edward Anderson, professor of mechanical engineering, University of Minnesota

Richard Borson, preliminary design engineer, district 5, Minnesota Department of Transportation

Phillip Braum, director, new systems development, Metropolitan Transit Commission

Richard P. Braun, commissioner, Minnesota Department of Transportation

Larry Dallam, director, Transportation Planning, Metropolitan Council

Dirk deVries, chairman, Transportation Subcommittee, Metropolitan Council

Max Goldberg, project manager, Hiawatha Avenue Study, city of Minneapolis

David Hozza, member, Saint Paul City Council

Greg Kittelsen, transportation planner, University of Minnesota

David Koski, traffic engineer, city of Minneapolis

Michael Munson, program manager, research, Metropolitan Council

Michael Murphy, assistant director and manager, energy project, Upper Midwest Council

Ann Norris, staff coordinator, city of Hopkins transit project

State Representative Sally Olsen

Glenn Olson, chairman, Spring Hill conference on light rail transit

Richard Sand, chairman, White Bear Area Transit Commission

Richard Schnarr, public systems chief, city of Saint Paul

Julie Sparks, transportation controller, Minnesota Pollution Control Agency

Thomas A. Thompson, former city coordinator, city of Minneapolis

Robert VanHoef, Operation 85, Saint Paul

John Ynvge, chairman, Metropolitan Transit Commission

The task force is deeply grateful for the cooperation it received from these individuals.

APPENDIX

Several specific suggestions to support ride-sharing were presented to the task force. We are not taking a position on any of these specific suggestions, but we are listing them here for informational purposes.

1. Provide a tax credit to employers equal to the amount spent by the firm or $15 per employee per year, whichever is less, for the promotion and operation of a ride-sharing program for their employees. This credit would be available whenever the firm certifies that the percentage of employees riding to work rather than driving alone has increased by more than five percent over the previous year or exceeds fifty percent of their total employment.

2. Permit cities, counties, school districts, and special purpose districts to spend up to $15 per employee per year for the sponsorship, purchase or direct operation of a ride-sharing program for their employees.

3. Provide that employer financial incentives paid to employees for carpooling, vanpooling or monthly bus passes are not to be considered personal income to the recipient and that such payments can qualify for the employer ride-sharing tax credit.

4. Provide for a 20 percent state investment tax credit to corporations which own vans that are utilized in commuter vanpooling at least 75 percent of the time. The credit would be available to the firm that purchases vans, but if the purchase is a firm which subsequently leases vans, the value of the investment tax credit must be passed on to the lessor in the lease agreement.

5. Create a 25-member ride-sharing advisory committee to the governor. At least two-thirds of the members should be representatives of employers who are providing or indicate intent to provide ride-sharing services for their employees. Purpose of this committee is to establish state ride-sharing goals, and to propose a program to achieve them, involving both the public and private sectors, and a way of monitoring progress.

6. Designate the position of state ride-sharing coordinator and have the governor appoint a person to this position. This position would be the staff to the advisory committee and be responsible for liaison with federal, state, regional and local agencies and employers.

7. Permit and encourage municipalities to utilize revenue from publicly-owned parking facilities and meters to reduce monthly parking charges for registered vanpools and larger carpools in both public and private parking facilities below the rates normally charged.

8. Require state agencies, counties, cities, school districts and special purpose districts by December 31, 1980, to calculate the cost of purchasing, owning, leasing, improving and operating parking spaces for their employees and establish parking charges whenever these costs, including the taxes these facilities (including land) would pay if not publicly owned, exceed $5 per month.

9. Authorize MnDOT to use state highway trust funds or appropriated paratransit funds for the purchase, or delivery, of a ride-sharing promotional and technical assistance program.

10. Permit counties and cities to use county state aid funds and municipal state aid funds for the purchase of ride-sharing programs or to match federal or state funds available for ride-sharing services.

11. Establish a vanpool license plate to be used by all vehicles involved in commuter vanpooling at a cost not to exceed $15 per year.

12. Permit the state of Minnesota to lease vans or purchase a vanpool program for state employees.

13. Authorize state agencies to provide for payroll deduction of monthly bus passes.

14. Require the regional development commissions and the Metropolitan Council to prepare one-mile grid maps for all urbanized areas with more than 15,000 population and annually update the street dictionary and grid-coded maps

To illustrate the concept of internal circulators we are reproducing two proposals.

On the right is the current proposed alignment of a shuttle transit system for Saint Paul. Below is a possible alignment, prepared in 1975, of a shuttle transit system for Minneapolis.

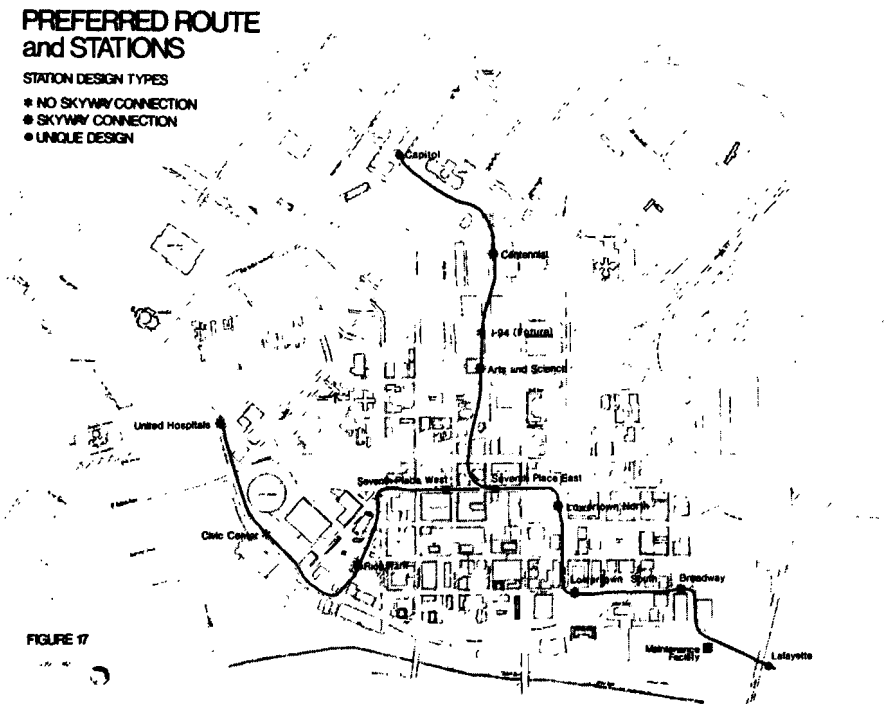
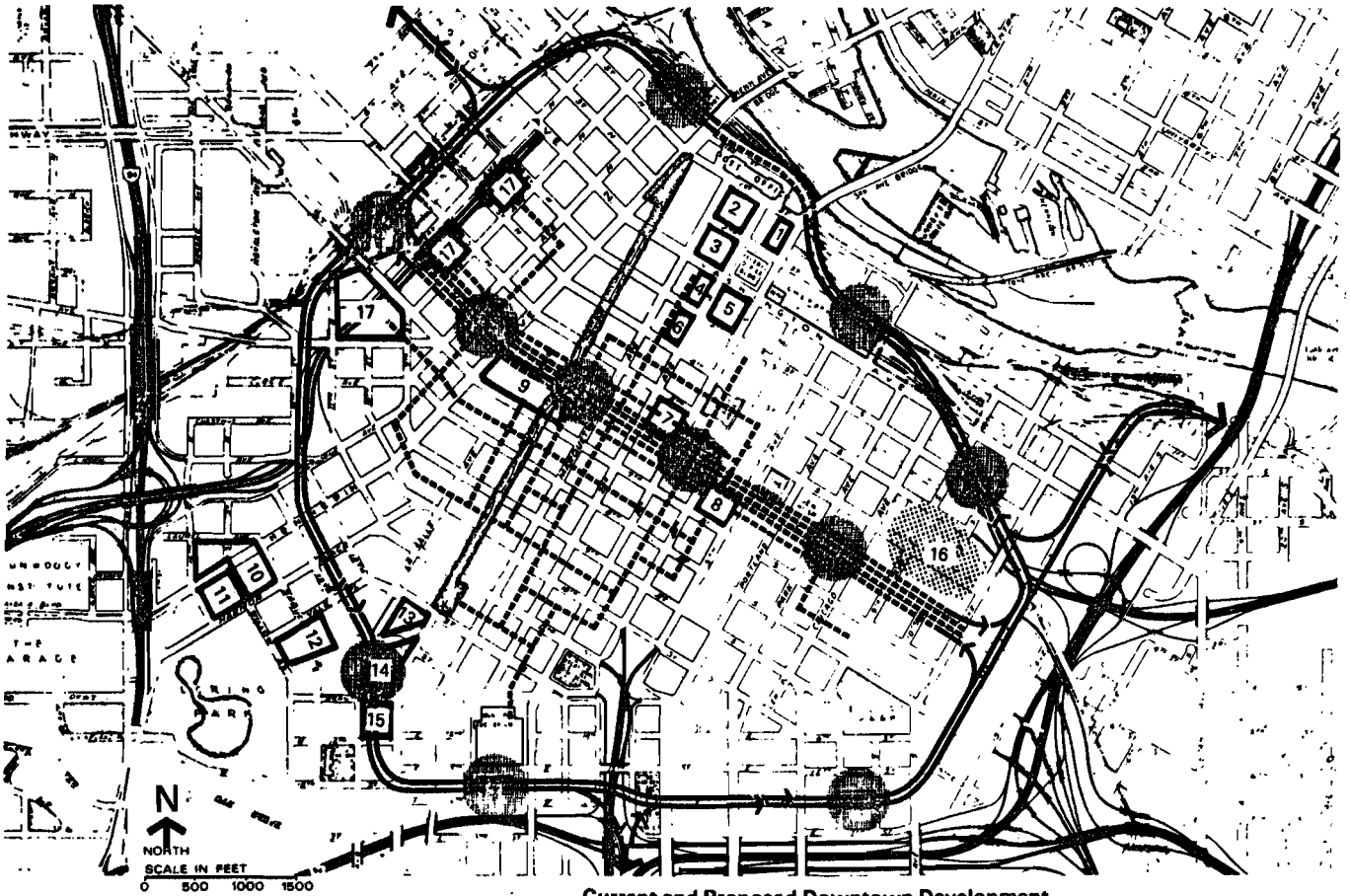


FIGURE 17



Current and Proposed Downtown Development

1 Bridge Place (commercial/residential)
2 Pioneer Square/Gateway (residential)
3 Northwestern National Life Insurance (commercial)
4 Washington Place (commercial/residential)
5 Northwestern National Bank (commercial)
6 Galaxy (commercial)
7 Pillsbury/Hines Building (commercial)
8 Lutheran Brotherhood Life Insurance (commercial)
9 City Center (commercial)
10 Minneapolis Area Vocational/Technical Institute (educational)
11 Metropolitan Community College (educational)
12 Loring Gables (residential)
13 1200 on the Mall (residential)
14 Hyatt Hotel and Convention Center (commercial)
15 Volunteers of America (residential)
16 Stadium site
17 3rd Ave. N. parking ramps

Sources: Transit route map from the "Automated Small Vehicle Fixed Guideway Systems Study," done for the Metropolitan Transit Commission in 1975. Information on new development from the Minneapolis City Planning Department

Citizens League non-partisan public affairs research and education in the St. Paul-Minneapolis metropolitan area. **84 S. Sixth St., Minneapolis, Mn. 55402**