Minnesota Regional Transit Board: Records.

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Version 3
August 20, 2018

REGIONAL TRANSIT BOARD

Mears Park Centre
230 East Fifth Street, St. Paul, Minnesota 55101
292-8789

DATE: March 21, 1994

TO: Chair and Members of the Regional Transit Board

FROM: Gregory L. Andrews, Executive Director

SUBJECT: Metro Mobility Ombudsperson

SUMMARY

This memorandum requests board approval for the executive director to enter into a contract with the Mediation Center to provide ombudsperson services for the Metro Mobility system.

DISCUSSION

The settlement agreement reached between the Regional Transit Board, ATE Management and Service Company, Inc, and Metro Mobility users has a provision requiring the Regional Transit Board to hire an ombudsperson as an independent contractor to resolve concerns/disputes between Metro Mobility riders and RTB/ATE. This ombudsperson would review and resolve complaints from riders arising from service provided from Metro Mobility which were not able to be resolved satisfactorily through the normal complaint resolution process established at the Metro Mobility Service Center.

The RTB solicited a proposal from the Mediation Center to provide this service. The Mediation Center is a non-profit corporation established in 1982 by the Hennepin County Bar Association to promote, facilitate, and train in the use of mediation to resolve disputes. The Mediation Center proposes to hire a full-time ombudsperson, to work under the direction of the Mediation Center, for a 14 week period, commencing March 28 and ending July 1. Ombudsperson services will be provided by a current staff member of the Mediation Center until the position is filled. The cost for this 14 week period is projected to be no more than $19,903. This figure is based on the ombudsperson being a full-time position. In the event that the caseload is significantly less than anticipated, the budget will be reviewed as to actual hours worked and adjusted accordingly.

Attached is the proposal from the Mediation Center for the Ombudsperson for Metro Mobility. This proposal has been reviewed and approved by the plaintiff's attorney.

RECOMMENDATION

That the Regional Transit Board authorize the executive director to execute a contract with the Mediation Center to provide Ombudsperson services for Metro Mobility, for the time period of March 28, 1994 through July 1, 1994 at a cost not to exceed $19,903.

MEDIATION CENTER

210 Spruce Tree Centre
1600 University Avenue
St. Paul, MN 55104-3825

(612) 644-1453
FAX (612) 649-3158

18 March 1994

Project Proposal: Ombudsperson

Term: 14 weeks, March 28 - July 1, 1994

Project Summary:

1) To review and resolve complaints from riders arising from service provided by Metro Mobility which are not settled satisfactorily through the complaint resolution process established by the Metro Mobility Service Center, providing telephone conciliation, mediation, referral and other means of resolving disputes between riders and provider.

2) To provide information and data regarding complaints to RTB.

Mediation Center proposes to hire one full-time Ombudsperson, under the direction of a Project Director, to aid in the resolution of concerns raised by riders of Metro Mobility transportation services.

Complaints will be received, in the first instance, by telephone as they are referred by the Customer Service Department at Metro Mobility. Metro Mobility Customer Service will continue to serve as a "clearing house" to determine which complaints can best be handled by Metro Mobility internally and will refer those cases which cannot be resolved by the Customer Service department.

Based on MMSC Customer Service Phone Statistics for January 1994, the volume of calls expected to be referred to the Ombudsperson is about 350 per month. Calls will come directly to the Ombudsperson, who will be available during regular business hours. The Center will provide back-up telephone coverage.

The Ombudsperson will:

- Interview complainants and log the complaint, documenting and reviewing all pertinent data
- Investigate complaints to ascertain facts
- Work with Linda Rother of Metro Mobility to negotiate resolution of the problem
- Work with Dave Jacobson of RTB to negotiate resolution of the problem
- Arrange, in consultation with Project Manager and Judy Hollander of RTB, for mediation of selected conflicts
- Follow up on all referrals and monitor actions taken by ATE and/or RTB to ensure that complaints are resolved in a timely fashion

Each complaint ("case") will be documented as to intake, information collected and action taken pursuant to the above-outlined Complaint Handling Procedure. The **Center** will develop intake forms and case tracking procedures appropriate to the Ombudsperson program.

The **Center** will create a computerized data storage and retrieval system for the purpose of providing RTB with a bi-weekly report documenting case load and information relevant to trends in types of complaints received.

All client data and files will be maintained pursuant to the requirements of the Minnesota Data Practices Act.

In the event it is agreed that mediation is appropriate to resolve a conflict between ATE and a rider, RTB will be billed for mediation services as provided. Mediators will be selected by the **Center** from a roster of qualified mediators who have received special training in disability issues.

BUDGET FOR OMBUDSPERSON PROJECT

Personnel and benefits	$11,679
Consultants	1,500
Equipment and services	2,754
Office supplies, space, phone, etc.	3,970
Total	$19,903

In the event that mediation services are requested, Mediation Center suggests an in-house training for its mediators regarding special issues affecting persons with disabilities. Estimated cost--$750

Also, in the event that mediation services are requested, Mediation Center will charge a fee of $150 per hour for the mediator's time spent preparing for and conducting mediation sessions.

486/budget/ombuds.bud

JOB DESCRIPTION

RTB/ATE OMBUDSMAN

Temporary, full-time position handling complaints brought by users of Metro Mobility services. Duties include hearing complaints, problem-solving, mediating, negotiating with service providers and record-keeping.

Qualifications

Knowledge of disability issues
Experience in dealing with persons with disabilities
Experience and/or training in advocacy and problem-solving
Excellent negotiating skills
Excellent telephone skills
Organized record-keeping skills
Computer experience

INDIVIDUALS WITH PHYSICAL DISABILITIES ARE ENCOURAGED TO APPLY.

handout 3/21

DRAFT

METRO MOBILITY 120-DAY WORK PROGRAM

MARCH 17, 1994

PURPOSE OF WORK PROGRAM

The purpose of this work program is to set forth the activities and responsibilities associated with identifying, selecting and transitioning a new Metro Mobility Service Coordinator.

BACKGROUND

On October 2, 1994, the Metro Mobility program, the primary public transportation service for persons with disabilities, was restructured. Rather than calling one of several providers as they had done previously, users now request trips from a centralized Metro Mobility Service Center. The Metro Mobility Service Center is currently operated by a private management company known as ATE.

The transition to the restructured service has been challenging. Users have experienced a number of service problems including late rides, circuitous trips resulting in long vehicle ride times, and busy phone lines. A class action lawsuit was filed by three individuals in November, 1993, in an effort to seek money damages and equitable relief from the RTB and ATE. This lawsuit was resolved through a settlement agreement, which among other things, sets forth that ATE will terminate its service as the MMSC contractor within 120 days.

APPROACH

In preparing this work program , the RTB staff has acknowledged and/or adopted certain realities and principles:

- It will be extremely challenging to hire a new service coordinator within 120 days. Typically, a RFP process for a new provider can take 29-33 weeks. Thus, it is critical to devote as many resources as possible to making this happen within this time frame and to streamline the process wherever possible, without sacrificing quality. If it appears that we are not able to achieve a successful transition, we will take steps necessary to flex the scheduled implementation.

- It is critical that our efforts in selecting a new service coordinator succeed. It is our highest priority to ensure that Metro Mobility service is provided efficiently, effectively and responsive to users' needs. Even though the schedule is tight, we are attempting to conduct the highest quality work.

- Part of ensuring that we succeed is determining what needs to be done differently but also what needs to be retained as part of this provider selection process. Therefore, a key component of our work program is the conduct of a critical analysis whereby we are meeting with all stakeholders to discuss recommended changes to the service structure and procedures.

- Metro Mobility users are concerned about what happens and would like to have a voice in changes made and who is selected as the provider. We are attempting to create a variety of means by which users can be involved including involvement of the Transportation Accessibility Advisory Committee (TAAC), conducting user public forums, meeting with individual groups, conducting a user surveyand reinstating a customer comment telephone line.

- Metro Mobility operates within a fixed budget/state appropriation approved by the legislature. The RTB needs to be conscious of controlling costs and operating within this budget. We are carefully monitoring the existing situation to determine if funding overruns may occur. We are also very concerned that costs could increase as a result of hiring a new contractor. Paratransit service is expensive to operate--10 times as expensive as fixed route service (on a cost per passenger basis).

- It appears that potential contractors will be extremely concerned about their liability, given what has happened since October 2. This may dissuade some potential contractors or inflate proposal costs. RTB staff is exploring a variety of organizational and policy options to minimize these potential negative impacts upon the program.

WORK PROGRAM

A. TAKE STEPS NECESSARY TO IMPLEMENT SETTLEMENT AGREEMENT

1. Hire ombudsperson
   a. Develop job description
   b. Have plaintiffs' attorney review and approve job description
   c. Recruit/advertise/contact potential contractors
   d. Determine selection process
   e. Hire contractor to perform ombudsperson functions for 120 days
2. Explore and make arrangements for back-up service
3. Print free ride coupons; establish process for distribution

B. CONDUCT CRITICAL ANALYSIS

1. Meet with various stakeholders for assessment of strengths and weaknesses of previous selection process and structure of existing program.
   a. Providers' meetings with Mayflower, Handicab and Metro-Ride
   b. Meetings with TAAC chair and TAAC
   c. Management team brainstorm meeting
   d. Internal staff team brainstorm meeting
   e. ATE
      1. Hibbert (many times)
      2. Other ATE staff
      3. Corporate staff
   f. Board members
   g. County transit programs meetings
   h. Phoenix training organization

2. Determine what program characteristics/provider selection process elements need to be saved

3. Determine what program characteristics/provider selection process elements need to be changed.

4. Determine if structural changes need to be made to reduce liability and risk of potential coordinator contractors.

5. Determine how program and process elements need to be addressed in order to ensure a smooth transition.
   a. Staffing--attempt to retain existing ATE staff?
   b. Leases, agreements--what are terms?

C. DEVELOP REQUEST FOR PROPOSAL

1. Conduct legal research to determine what options exist for conducting selection process of new MMSC provider, especially related to emergency procurement.

2. Explore and determine how MMSC functions might be structured
   a. Status quo
   b. Minor modifications
   c. Significant changes
      1. Separate vehicles for ambulatory passengers (vans or sedans)
      2. Maintain centralized functions? some or all? providers do scheduling/and dispatching?
      3. New computer system depending on structural arrangements?
      4. Separate out complaint function?
      5. Separate out certification function?
      6. Coordinate with county programs, especially transfers
      7. Public ownership of capital assets (tax exempt status--savings)
      8. Reassign public relations and legislative functions--develop a program spokesperson

D. CONDUCT PROCESS FOR SELECTION OF MMSC PROVIDER

1. Develop RFP based on findings of critical analysis
2. Advertise request for proposals
3. Conduct pre-bid conference
4. Establish selection advisory committee ; develop and weight selection criteria
   a. Determine who should serve on panel
5. Receive and evaluate proposals
6. Recommend board approval of new MMSC contractor
7. Negotiate and execute contract
8. Issue notice to proceed (do we have to do this?)

E. CONSUMER RESEARCH

1. Contract with Department of Administration--Division of Management Analysis to conduct consumer research activities

2. Conduct user public forums

F. MAINTAIN METRO MOBILITY SYSTEM INTEGRITY DURING ATE PHASE-OUT

1. Monitor performance; assess liquidated damages where applicable
2. Continue to scrutinize regular monthly billings
   a. Decide how to handle administrative overcharges
3. Establish means by which to validate MMSC data

G. IMPLEMENTATION/TRANSITION

1. Develop ATE phase-out plan

a. RTB representative meets with ATE employees; explore and develop incentives for retaining MMSC and driver work force.
b. Review leases, agreements, etc. to determine if cancellation, extensions, or new agreements are appropriate
c. Develop position on retention of ATE management staff

2. Negotiate terms of any ATE services provided after 120-day period expires including software support on longer-term basis
3. Develop new MMSC provider phase-in plan with overlap period to begin by June 13, 1994 and complete take-over of responsibilities by July 5, 1994.
4. Transfer vehicles
5. Transfer leases
6. Transfer assets
7. Determine who is going to contract for installation of auxilliary heaters
8. Institute free ride voucher process

H. COMMUNICATIONS

1. Internal

a. Provide regular updates to:
   a. Policy Committee
   b. TAAC
b. Make presentations to Metro Council/Mn/DOT staffs
c. Internal weekly team meetings
d. Internal weekly management team updates
e. Provide weekly updates to Chair

B. External

a. Provide updates to media/legislators/local officials
b. Send Metro Mobility "Messenger" section and new insert to 20,000 riders and disability advocates
c. Continue sending monthly "Metro Mobility News" newsletter to riders
d. Provide news update flyers to riders on vehicles
e. Hold public meetings

I. ROLES AND RESPONSIBILITIES

A. Staff Roles & Responsibilities
   1. Determine and assign roles and responsibilities (see Figure __)
B TAAC

C. Plaintiffs' role
   1. Plaintiffs' attorneys pprove ombudsperson's job description

D. Paratransit Operations Consultant Assistance
   1. Determine need for paratransit operations consulting assistance

2. Determine how to procure assistance

E. Department of Administration
   1. Review proposal for conducting consumer research activities
   2. Negotiate final terms for conducting consumer research activities

DRAFT

SCHEDULE

March 7	Approve settlement; approve Metro Mobility Service Coordinator Transition Action Plan
March 23	TAAC meeting
March 7 --28	Conduct critical analysis; update and revise RFP using critical analysis
March 14	A&F Committee: approve Department of Administration proposal
March 21	RTB: approve Department of Administration proposal
March 28	Policy Committee: MM update
Week of March 28	Conduct public forums
April 4	Advertise Request for Proposals
April 6	TAAC Meeting
Week of April 18	Conduct pre-bid conference
Week of April 25	Establish selection advisory committee and develop selection criteria
April 25	Policy Committee: MM update
Week of May 2	Receive and evaluate proposals
May 4	TAAC Meeting
May 9	A & F Committee: approve selection of MMSC provider (if staff is able to go directly to board or reschedule this meeting later in the week, valuable time could be bought to allow more review time and opportunity to conduct interviews)
May 16	RTB: approve selection of MMSC provider; subsequently negotiate and execute contract
May 23	Policy Committee: Metro Mobility update
June 13	Initiate overlap period
July 4	New MMSC provider takes over system

Handout 3/24

REGIONAL TRANSIT BOARD

Mears Park Centre
230 East Fifth Street, St. Paul, Minnesota 55101
292-8789

DATE: March 21, 1994 **REVISED**

TO: Chair & Regional Transit Board Members

FROM: Bob LaShomb

SUBJECT: Update on Legislative Activities

1. Senator Keith Langseth introduced S.F. 2097, which indexes the gasoline excise tax using 1988 as the base, and appropriates 16% of the motor vehicle excise tax for transit. The latter action would provide an additional $19.2 million dollars for transit. Langseth is proposing to meet RTB's request of $11.35 million if his bill passes. If his bill does not pass, there will be no supplemental budget bill for transit. However, I have been told the Senate leadership is ready to support the governor's supplemental budget request if S.F. 2097 fails.

2. House Transportation and Public Transit Committee is working on an omnibus transportation policy and funding bill that will probably include everyone's budget requests for transit. The bill will also include almost all of the transportation bills the committee has heard. It could include a gas tax increase. The bill will probably be heard next week. The question is whether or not it's too comprehensive. I-R legislators are very cool to a gasoline tax.

3. The governor's supplemental budget request for transit will be heard Thursday, March 24 at 8:00 a.m. in Representative Jim Rice's, Economic Development, Infrastructure & Regulation Finance Committee. We are working with the fiscal analyst on the rationale for our request. If the House Transportation and Public Transit Committee bill fails, this could be our back up bill.

4. The Senate Elections Committee reported S.F. 2015 to the Senate Floor without the elected Met Council provision. Senator Flynn, however, is still supporting the election approach so expect additional amendments.

5. Representative Myron Orfield's bill H.F. 2276, has been referred to the House Transportation and Public Transit Committee where it may face a hard road. In addition, there seems to be a growing resentment among some house members that this bill is being "railroaded" by leadership. One senior member has privately suggested the bill may never make it to the floor. The question is what might replace it. There are other bills relating to governance which might begin to move, and riders to other government operations bills could be adopted if H.F. 2276 begins to falter.

6. Both Mike Beard and Morgan Grant are working to amend S.F. 2015 and H.F. 2276 to extend the life of the RTB until at least January 1, 1995, so the board can properly transition Metro Mobility. This amendment will be offered to the

authors first. If they decline, the amendment will be offered on the floor and in the House committee.

7. George Bentley's effort to remove the restrictions on the use of bond proceeds will be heard on Wednesday, March 23 in House Transportation and Public Committee, and next week in the comparable senate committee. In the house it will probably be rolled into the larger bill.

8. The LRT Bonding Authorization bill was heard in Representative Rice's House Economic Development, Infrastructure & Regulation Committee on Friday, March 18. The bill was approved as part of the committee's jurisdiction for state bonding.

Below is a schedule of pertinent committee hearings for next week. **March 25, is the deadline for policy bills.**

* * * *

Tuesday, March 22

Senate Transportation and Public Transit Committee Finance Div, Sen. Langseth, Chair
8:00 a.m., Room 112 Capitol
* S. F. 2097 (Lagseth's bill)

Wednesday, March 23

Senate Transportation and Public Transit Committee Finance Div, Sen. Langseth, Chair
8:00 a.m., Room 112 Capitol
* S. F. 2097 (Langseth's Bill)
* Bentley's bill

House Transportation and Transit Committee - Rep. Osthoff, Chair
12:30 p.m., Room 10 State Office Building
* Omnibus Transit Bill
* Bentley's Bill

House Transportation and Transit Committee
6:30 -10:00 p.m., Room 10 State Office Building
* Omnibus Transit Bill

Thursday, March 24

House Econ. Dev., Infrastructure & Regulation Finance, Committee - Rep. Rice, Chair
8:00 a.m., Room 300N State Office Building
* RTB Supplemental Budget Request

Thursday, March 24 (Cont.)

House Transportation and Transit Committee
6:30 - 10:00 p.m., Room 10 State Office Building
* Omnibus Transit Bill

Friday, March 25

Senate Transportation and Public Transit Committee Finance Div, Sen. Langseth, Chair
8:00 a.m., Room 112 Capitol
* S. F. 2097 (Langseth's Bill)

House Transportation and Transit Committee
10:00 - 11:45 a.m., Room 10 State Office Building
* Omnibus Transit Bill

REGIONAL TRANSIT BOARD
Mears Park Centre, 230 East 5th Street
St. Paul, Minnesota 55101
229-2700

Meeting of the REGIONAL TRANSIT BOARD
Mears Park Centre Chambers
March 21, 1994
4:00 p.m.

AMENDED AGENDA

1. CALL TO ORDER AND ROLL CALL
2. APPROVAL OF THE AGENDA
3. APPROVAL OF MINUTES
   - A. Administration and Finance Committee Meeting, February 14, 1994
   - B. Regional Transit Board Meeting, February 22, 1994
   - C. Policy Committee Meeting, February 28, 1994
4. CHAIR'S REPORT
5. MEMBERS' REPORTS
6. EXECUTIVE DIRECTOR'S REPORT
   - A. Approval of Department of Administration Contract to Conduct Metro Mobility Consumer Research
   - B. Metro Mobility Update: 120-Day Plan
   - C. Intermodal Surface Transportation Efficiency Act (ISTEA) Funding Applications
   - D. Personal Rapid Transit Presentation by Mike Moore
   - E. Presentation on Automated Parking Ramp by William Sternad

7. REPORT OF THE ADMINISTRATION AND FINANCE COMMITTEE
(Ruth Franklin, Chair)

A. December Financial Statements

B. Approval of Metropolitan Transit Commission Application for Federal Transit Administration Section 10 Funding

C. Approval of the 1994 Travel Demand Management Contract and Management Plan for Services from Minnesota Rideshare

D. Metropolitan Transit Education Plan Implementation

8. OTHER BUSINESS

A. Legislative Update

9. PUBLIC COMMENT

Sally Evert
Chair

mff
March 21, 1994

REGIONAL TRANSIT BOARD

ROLL CALL AND ATTENDANCE SHEET

DATE: 3/21

Member Name	Present	Vote	Vote	Vote	Vote	Vote	Vote	Vote	Vote
ISSUE									
Michael Beard - A									
Sharon Feess - A	✓								
Ruth Franklin, Chair - A	✓								
Morgan Grant - P	✓								
Val M. Higgins, Chair - P	✓								
James Hovland - P	✓								
Gary Humphrey - P									
Ruby Hunt - P	✓								
Harry Mares A	✓								
District D - A									
Sally Evert	✓								

Dede Wolfson

Visitors

Fred Gani DOH

L Rocker + Dan Hibbert

W Sternd

K Lyon

T Moye

mff Annie Cantzal

Mike Moore

U of M Zo...

I Santer

E Maddox

Staff

vr, fh, sh, c

mf, R.L., PJ +

REGIONAL TRANSIT BOARD
Mears Park Centre, 230 East 5th Street
St. Paul, Minnesota 55101
229-2700

Meeting of the
REGIONAL TRANSIT BOARD
Mears Park Centre Chambers
March 21, 1994
4:00 p.m.

AGENDA

1. CALL TO ORDER AND ROLL CALL

2. APPROVAL OF THE AGENDA

3. APPROVAL OF MINUTES

   A. Administration and Finance Committee Meeting, February 14, 1994

   B. Regional Transit Board Meeting, February 22, 1994

   C. Policy Committee Meeting, February 28, 1994

4. CHAIR'S REPORT

5. MEMBERS' REPORTS

6. EXECUTIVE DIRECTOR'S REPORT

   A. Personal Rapid Transit Presentation by Mike Moore

   B. Presentation on Automated Parking Ramp by William Sternad

7 REPORT OF THE ADMINISTRATION AND FINANCE COMMITTEE
(Ruth Franklin, Chair)

   A. December Financial Statements

   B. Reduction to University of Minnesota Route 52 Service for the Spring Quarter, 1994

   C. Approval of Metropolitan Transit Commission Application for Federal Transit Administration Section 10 Funding

D. Approval of the 1994 Travel Demand Management Contract and Management Plan for Services from Minnesota Rideshare

E. Metropolitan Transit Education Plan Implementation

F. Per Diem Payments

G. Approval of Metro Mobility Consumer Research Contract

8. OTHER BUSINESS

9. PUBLIC COMMENT

Sally Evert
Chair

mff
March 15, 1994

REGIONAL TRANSIT BOARD
Mears Park Centre, 230 East 5th Street
St. Paul, Minnesota 55101

Minutes of the REGIONAL TRANSIT BOARD March 21, 1994

MEMBERS PRESENT: Sally Evert, Chair; Sharon Feess; Ruth Franklin; Morgan Grant; Val Higgins; James Hovland; Gary Humphrey; Ruby Hunt; Harry Mares

MEMBERS EXCUSED: Michael Beard

OTHERS PRESENT: DeDe Wolfson, Metropolitan Council Member; Fred Grimm, Department of Administration; Gregory Korstad, legal counsel; Dan Hibbert and Linda Rother, ATE; Arnie Entzel, Amalgamated Transit Union Local 1005; William Sternad; Karen Lyons, Metropolitan Council; Mike Moore, University of Minnesota Office of Technology; Tom Sather, Trish Moga, Metropolitan Transit Commission; Eddie Maddox; Bill Blom, Transportation Accessibility Advisory Committee; Judy Hollander, Randy Rosvold, Suzanne Hanson, Clarence Shallbetter, Mark Fuhrman, Bob LaShomb, Dave Jacobson, Mary Fitzgerald, RTB staff

CALL TO ORDER

The chair called the board meeting to order at 4:00 p.m. in Chambers at the above address and roll was taken.

APPROVAL OF THE AGENDA

An amended agenda had been distributed. The chair recommended that the agenda be further amended to change the order of business under "Executive Director's Report." Grant so moved and Hovland seconded. The motion carried unanimously. (Humphrey not present)

APPROVAL OF MINUTES

Franklin moved and Feess seconded:

> That the Regional Transit Board approve the following minutes:
>
> Administration and Finance Committee Meeting, February 14, 1994
> Regional Transit Board Meeting, February 22, 1994
> Policy Committee Meeting, February 28, 1994

The motion was unanimously approved (Humphrey not present)

CHAIR'S REPORT

The chair explained that she had placed the Automated Parking Ramp and Personal Rapid Transit presentations on the board's agenda in order to inform the entire board of the possibilities of the new technology. No commitments have been made.

The three public hearings on Metro Mobility eligibility criteria were held the week of March 14 and went fairly well although there was some difficulty in covering other issues. She thanked members of the board and members of the Transportation Accessibility Advisory Committee for their participation at the hearings. She has been meeting with staff to discuss the structure of the public forums the week of March 28. Rather than personal anecdotes, she will solicit constructive suggestions on changes in service coordination. She encouraged members to call with their suggestions on how meetings should be conducted.

Franklin commended the staff who designed and wrote the Metro Mobility insert in the RTB newsletter. Evert asked Suzanne Hanson to pass that on; a supplement to that piece is being written.

EXECUTIVE DIRECTOR'S REPORT

MINNESOTA DEPARTMENT OF ADMINISTRATION PROPOSAL TO CONDUCT METRO MOBILITY CONSUMER RESEARCH

Evert said this item was moved forward on the agenda because Mr. Grimm has another meeting to attend. This research will provide the board with a process to measure customer satisfaction with the system that can be used into the future. Evert said RTB has already established a relationship with the Department of Administration and Mr. Grimm will help work through the transition to a new provider. Hovland moved and Mares seconded:

> That the Regional Transit Board authorize the executive director to negotiate and execute a sole source contract with the Management Analysis Division of the Minnesota Department of Administration to provide Metro Mobility consumer research activities in an amount not to exceed $29,700.

The motion carried unanimously. (Humphrey not present) Fred Grimm, Director of the Department of Administration's Division of Management Analysis, explained the operations of the division, which functions as a private firm. The division has served over 300 extremely diverse clients. Three staff people will be dedicated to this project. They will assist in determining what criteria should be used to hire a new service center manager and prepare a written client survey, which will generate a base line measurement of the vendor's performance.

METRO MOBILITY UPDATE: 120-DAY PLAN

Hollander reviewed the draft program, dated March 17. The common theme is that some functions of the service center could be decentralized in order to

increase accountability of the providers and give them better control of their operations. Staff is not ready to make that recommendation at this time. Next week reactions will be received from the Transportation Accessibility Advisory Committee (TAAC). Suggestions from the public will be solicited at the public forums that will be held from March 28 through March 31. (Humphrey arrived.)

Hunt said the computer system has been part of the problem; she asked where it fits in with the new provider, will they take over the computer and its software? Hollander said the software is the property of ATE, but another provider can continue to use it. Hunt asked if the new provider would have to pay ATE for use of the software. Hollander said staff will look into the question. If the decision is made to decentralize, the computer could be used for order-taking with each provider scheduling and dispatching its own trips. Hunt asked if that will be fleshed out before RTB goes out for bids so the applicants know what the costs will be? Hollander said that information has to be available so it is important that the board decide shortly what the configuration will be. Hunt asked if it is an option that the new provider come in with their own computer system. Hollander said experience indicates that it would be advantageous to operate both systems at the same time. We have to work through these issues. If the providers do their own scheduling and dispatching, Grant asked how that would work if ATE is taking the orders--how would information be shared? Hollander said staff has talked about either dividing the metro area into zones or continuing with the service center and routing the calls in a certain way. Grant said it would take a great deal to persuade him to stay with this current scheduling system. He is pleased RTB is looking at other options because routing has been a major problem.

Wolfson said the system was restructured to do computer scheduling and eliminate duplication and unnecessary crossing of rides. She asked if the whole structure would change if the providers themselves take over those functions. The question she still has is what really went wrong. Hollander said one reason the program was restructured was to centralize functions. Everyone is disappointed that this has not worked. The technology may not be as far along as we had been promised. There are some things we have done that will continue to serve us well. Evert said she did not find a smoking gun and that ATE has worked very well with RTB to continue service. We learned some things and will achieve many of our goals. Wolfson said there is a great deal of confusion about what broke down. Evert said information will be put together for an update on Metro Mobility.

Responding to Hovland, Hollander said staff will present recommendations for the system configuration at the meeting on Monday, March 28. Mares said he is glad staff is looking at what needs to be done differently and what should be retained. He asked what the board can do to assure a successful transition; can the board play at bigger role? Hollander said she would like to ask members to attend special meetings. There may be very little notice for requested action.

Evert urged that as many board and TAAC members as possible attend the Metro Mobility public forums next week. Higgins said he is worried about the central dispatch function in the immediate future. The multiple dispatching was a

very bad system and one of the factors in the failure of the system. The problems may be with administration rather than the basic concept. Grant said the old system had 13 providers where the current one has three. With the proposed system we would have greater efficiency if drivers can talk directly to their people. Higgins said it is unrealistic to assume that all central dispatch systems per se will suffer the same problems. Grant said this is a temporary situation to get through a difficult period. In the future a full centralized approach might work, but until we find a better computer system, this will get us back on track.

The chair said no formal motion is necessary, but staff is asking for board direction. Hunt asked if the board is going to adopt some policy direction at some point on what the RFP will include on central dispatching. Hollander said staff will make recommendations on a conceptual basis next Monday. After the public forums the board will have to approve the release of the RFP on April 4.

Evert said she met with the Chair of the Metropolitan Council last week. Everyone wants to ensure this transition is as smooth as possible. We will not go back to what we had before; we don't have the time and we want to keep current providers in place. We are making changes, but remain committed to a centralized system.

PERSONAL RAPID TRANSIT PRESENTATION

Mike Moore reviewed the involvement of the University of Minnesota with personal rapid transit and showed a video tape on it. Hovland asked what the anticipated public subsidy would be. Moore said that will depend upon the level of involvement of corporations in the urban area. Ed Anderson believes it will attract a great deal of private development money.

PRESENTATION ON AUTOMATED PARKING RAMP

William Sternad distributed additional information on the system and showed slides on how the automated ramp would operate. He is seeking RTB's sponsorship by April 1 to test the system. Joel Ettinger, the Regional Administrator of the Federal Transit Administration in Chicago, is interested and will approve transferring money into the project.

Grant said the handicapped parking spaces at the I-394 garage are used very little because there are no lift-equipped buses on that route. Evert said the board would be happy to look at this in the future, but cannot commit to becoming a sponsor in time for an April 1 submittal to the Transportation Advisory Board. One of the obligations of sponsorship is providing a 20-percent local match funds. It would be impossible to take this through the public process of this board and that of the ISTEA. Grant said it would be more realistic to approach the Legislature next year, which is the budget session, and get in line with the other proposals. The 20-percent match would have to be found.

Responding to questions, Sternad said there would be no need for buses on that route during the commute period and 100 vehicles would be taken off the road.

Fifty cars could be parked immediately and drivers would pay the equivalent of bus fare, which would operate and sustain the model. Users would get into a van on a random basis and use the HOV lane. Sternad is working on this as a private individual. Mares said it is unfair to ask the board to endorse this project with this time line and encouraged Sternad to pursue it, but at this time he could not vote for or against it. Hunt cautioned against raising false expectations. This project would have to be adopted by a larger group. Hovland said the TDM aspects of the project do not indicate much demand. He would want that resolved before embarking on this kind of project.

INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT (ISTEA) FUNDING

Hollander reviewed the March 21 staff report. Hanson reviewed the transit education aspect. Franklin said it is an interesting project, but the ISTEA Committee of TAB will prioritize projects and they will require much more detail. She asked what the amount of the request for education will be. Hanson said $80,000 is requested for development and implementation. Franklin moved and Grant seconded:

> That the Regional Transit Board approve applications to the Transportation Advisory Board for ISTEA funding for the Northtown Transit Hub and the Travel Demand Management program.

The motion was unanimously approved.

REPORT OF THE ADMINISTRATION AND FINANCE COMMITTEE

Committee Chair Franklin reported on the recommendations approved by the committee at its meeting of March 14, 1994.

DECEMBER FINANCIAL STATEMENTS

Franklin moved and Mares seconded:

> That the Regional Transit Board receive the December 1993 unaudited financial statements and direct that they be placed on file.

The motion was unanimously approved.

APPROVAL OF METROPOLITAN TRANSIT COMMISSION APPLICATION FOR FEDERAL TRANSIT ADMINISTRATION SECTION 10 FUNDING

Franklin moved and Higgins seconded:

> That the Regional Transit Board approve the Metropolitan Transit Commission's grant application for $75,000 in funding from the Federal Transit Administration Section 10 grant program.

The motion was unanimously approved.

APPROVAL OF THE 1994 TRAVEL DEMAND MANAGEMENT CONTRACT AND MANAGEMENT PLAN FOR SERVICES FROM MINNESOTA RIDESHARE

Franklin moved and Hovland seconded:

> That the Regional Transit Board authorize its executive director to enter into a contract for calendar year 1994 with the Metropolitan Transit Commission to provide rideshare services through Minnesota Rideshare in an amount not to exceed $649,906.

The motion was unanimously approved.

METROPOLITAN TRANSIT EDUCATION PLAN IMPLEMENTATION (PLAN FOR DEVELOPING SCHOOL EDUCATION)

Franklin moved and Grant seconded:

> That the Regional Transit Board authorize the executive director to enter into a contract with Thomas Learning Consultants for an amount not to exceed $12,500 for the development of a comprehensive plan for developing transit curricula.

The motion was unanimously approved.

OTHER BUSINESS

LEGISLATIVE UPDATE

LaShomb distributed his memorandum, dated March 21, on legislative activities.

There being no other business, Hunt moved and Grant seconded that the meeting be adjourned. The motion carried unanimously and the meeting was adjourned at 6:10 p.m.

I hereby certify that the foregoing constitutes a true and accurate record of the Regional Transit Board's meeting of March 21, 1994.

Respectfully submitted,

Mary Fitzgerald
Secretary of the Board

Approved by the Regional Transit Board on the fourth day of April 1994.

William A. Sternad, M.E., P.E.
Consulting Engineer
P.O. Box 8, Wayzata, Minnesota 55391

Controlled Systems

(612) 473-4700

(18) REASONS WHY

AN OWNER SHOULD CHOOSE AUTOMATIC MECHANICAL PARKING (as opposed to a conventional concrete ramp structure)

1. TWICE AS MANY STALLS ON A PROPERTY - 10x as many as on on a surface lot.
2. almost 100% SAFETY FROM CRIME & ACCIDENT
3. essentially 100% SECURITY FOR VEHICLES
4. MORE ATTRACTIVE and CONVENIENT for USERS
5. REDUCE INSURANCE COSTS
6. " OPERATING "
7. " MAINTENANCE "
8. " CAPITAL "
9. " ENERGY CONSUMPTION
10. ELIMINATE POLLUTION
11. " MONEY HANDLING
12. " CORROSION
13. SUPERIOR FIRE PROTECTION
14. GREATER ARCHITECTURAL DESIGN FREEDOM
15. " TRAFFIC PATTERN " "
16. FASTER VEHICLE INPUT / RETRIEVAL / THRUPUT
17. " CONSTRUCTION TIMETABLE
18. SUPERIOR EARTHQUAKE PERFORMANCE

The future belongs to the efficient

United States Patent [19]

Sternad

[11] **Patent Number: 5,018,926**

[45] **Date of Patent: May 28, 1991**

[54] **AUTOMATIC STORAGE AND RETRIEVAL APPARATUS**

[76] Inventor: William A. Sternad, 18415 N. 30th Pl., Plymouth, Minn. 55447

[21] Appl. No.: 348,552

[22] Filed: May 8, 1989

[51] Int. Cl.[5] E04H 6/06

[52] U.S. Cl. 414/253; 414/234; 414/236; 414/240; 414/239; 414/232; 414/252; 414/264; 414/255

[58] Field of Search 414/236, 237, 239, 240, 414/241, 234, 233, 231, 232, 227, 244, 245, 246, 247, 249, 252, 253, 255, 256, 257, 259, 260, 261, 262, 264, 273

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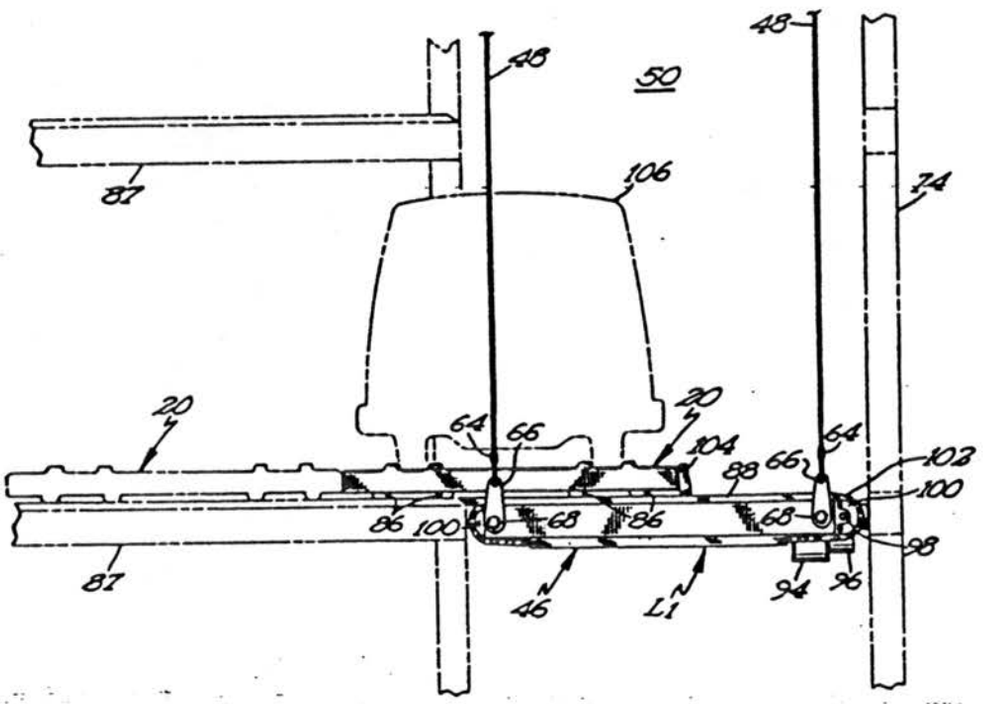
904832	8/1962	United Kingdom	414/256

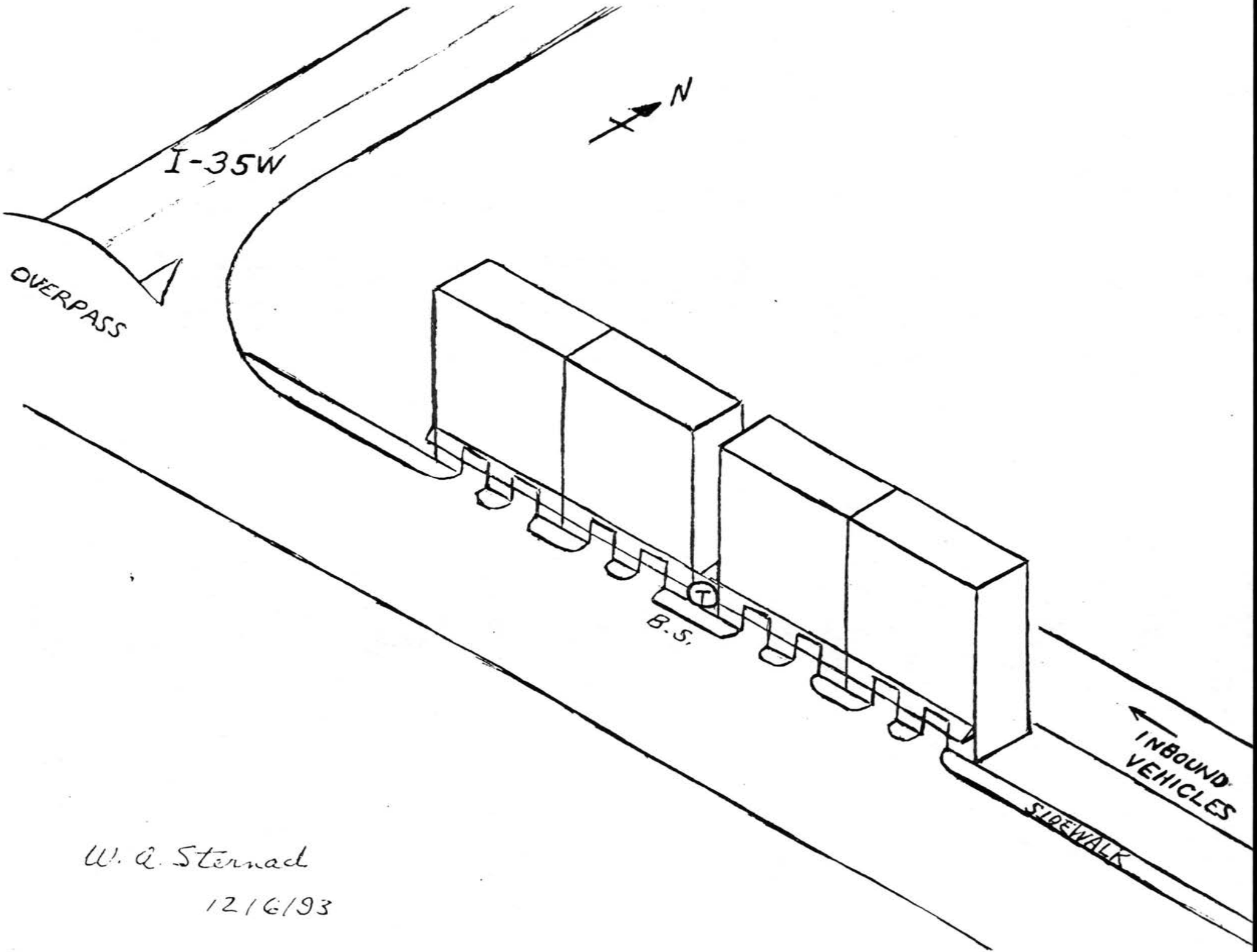
Primary Examiner—Frank E. Werner
Attorney, Agent, or Firm—Moore & Hansen

[57] ABSTRACT

Storage and retrieval apparatus and method using pallets for storing vehicles and other loads. A number of storage levels aligned vertically are reached by a pair of lifts in shafts which bracket the levels. A transfer mechanism can push a pallet and automobile from either lift onto any level. Each level is always filled with pallets and sized to exactly hold an integral number of pallets. When a pallet is pushed into a level from one lift the intermediate pallets are pushed laterally to the opposite lift, resulting in the farthest pallet being ejected onto the opposite lift located at the same level. Separate loading stations are provided on ground level for each lift. An automobile can be driven on or off a pallet or a load placed on or off a pallet at the loading station. A loading station mechanism can move a pallet with a load to be stored from the loading station onto a lift. The lift transfer mechanism can transfer a pallet with a load being retrieved from the lift onto the loading station mechanism adjacent the lift, and the loading station mechanism can move the pallet from there to the loading station. A computer having input apparatus, input sensors, output apparatus and displays, utilizes a program to control and optimize the operation. Input identifiers for each automobile, or other load, and pallet are entered into the computer upon storage to permit ready retrieval.

20 Claims, 9 Drawing Sheets





W. A. Sternad

12/6/93

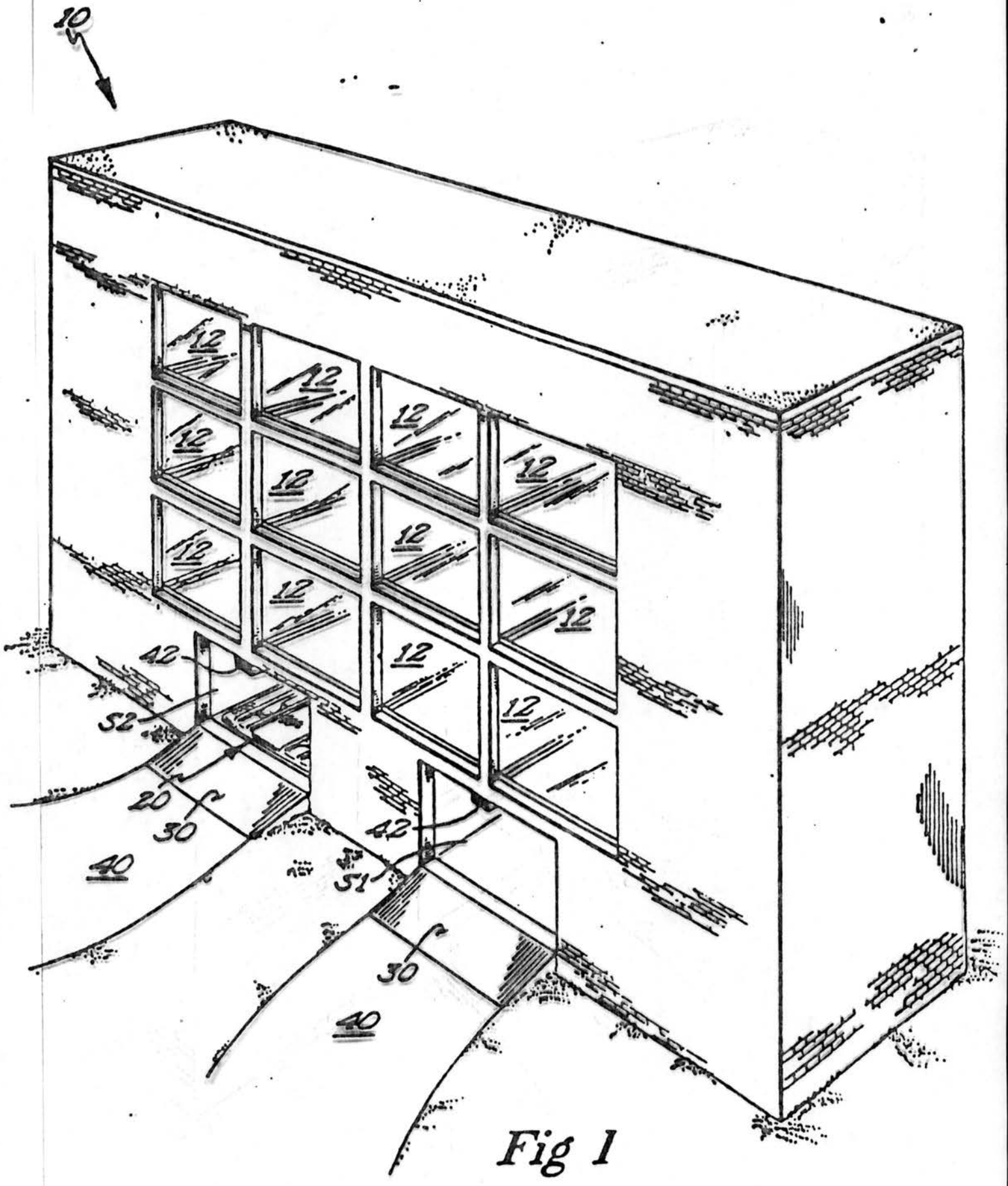
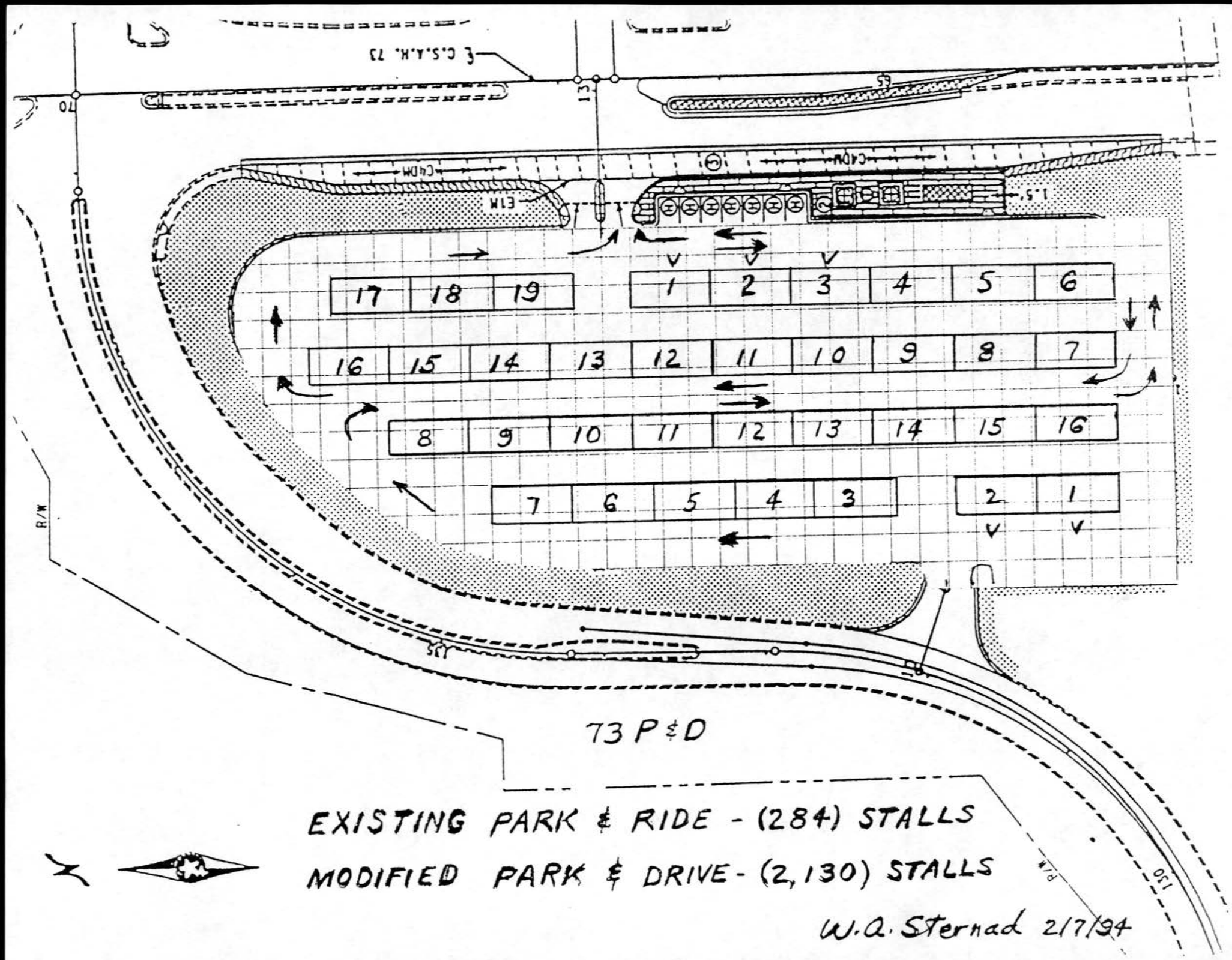


Fig 1


17 18 19
1 2 3 4 5 6
16 15 14 13 12 11 10 9 8 7
8 9 10 11 12 13 14 15 16
7 6 5 4 3
2 1
R/W
73 P&D
EXISTING PARK & RIDE - (284) STALLS
MODIFIED PARK & DRIVE - (2,130) STALLS
W.A. Sternad 2/7/94

< $10,000/stall

2,130 ≈ $20,M

(200) VAN → 5M

$25M

$150M

$85/mo.

2,130

≈ $1.55M ←

16 mi × 20¢ =

$90

REGIONAL TRANSIT BOARD
Mears Park Centre, 230 East 5th Street
St. Paul, Minnesota 55101
229-2700

REPORT OF THE ADMINISTRATION AND FINANCE COMMITTEE

At its meeting of March 14, 1994, the Administration and Finance Committee approved the following recommendations:

DECEMBER FINANCIAL STATEMENTS

That the Regional Transit Board receive the December 1993 unaudited financial statements and direct that they be placed on file.

APPROVAL OF METROPOLITAN TRANSIT COMMISSION APPLICATION FOR FEDERAL TRANSIT ADMINISTRATION SECTION 10 FUNDING

That the Regional Transit Board approve the Metropolitan Transit Commission's grant application for $75,000 in funding from the Federal Transit Administration Section 10 grant program.

APPROVAL OF THE 1994 TRAVEL DEMAND MANAGEMENT CONTRACT AND MANAGEMENT PLAN FOR SERVICES FROM MINNESOTA RIDESHARE

That the Regional Transit Board authorize its executive director to enter into a contract for calendar year 1994 with the Metropolitan Transit Commission to provide rideshare services through Minnesota Rideshare in an amount not to exceed $649,906.

METROPOLITAN TRANSIT EDUCATION PLAN IMPLEMENTATION (PLAN FOR DEVELOPING SCHOOL EDUCATION)

That the Regional Transit Board authorize the executive director to enter into a contract with Thomas Learning Consultants for an amount not to exceed $12,500 for the development of a comprehensive plan for developing transit curricula.

MINNESOTA DEPARTMENT OF ADMINISTRATION PROPOSAL TO CONDUCT METRO MOBILITY CONSUMER RESEARCH

That the Regional Transit Board authorize the executive director to negotiate and execute a sole source contract with the Management Analysis Division of the Minnesota Department of Administration to provide Metro Mobility consumer research activities in an amount not to exceed $29,700.

Ruth Franklin
Chair

mff
3/14/94

CLOSE ASSOCIATES

ARCHITECTURE THAT ENDURES

ANNIVERSARY

3101 East
Franklin Avenue
Minneapolis
Minnesota 55406
612.339.0979

August 20, 1993

William A. Sternad
President
Automated Parking, Inc.
PO Box 8
Wayzata, Minnesota 55391

Dear Bill:

Close Associates has been recognized locally and nationally for its dedication to innovative, humane, architectural design since it was founded in 1938 by Elizabeth Scheu and Winston Close. We have designed hospitals, offices, research institutes, schools and are well known for the design of over 500 custom homes throughout the country.

Our interest in automated parking, as proposed by you, is borne of our evaluation of its strong potential of not only a new, more humane visual expression of parking facilities, but on the positive impact on our urban environment. We are particularly intrigued by the safety, security and high-density nature of the system and by the ability it brings us to closely integrate parking with future building designs.

We look forward to the opportunity to work with you and the organization you propose to produce this mechanical equipment.

Sincerely,

Jens Henry Vange

Jens Henry Vange AIA
Vice President

REGIONAL TRANSIT BOARD
Mears Park Centre, 230 East 5th Street
St. Paul, Minnesota 55101
612/229-2701

Minutes of the Meeting of the ADMINISTRATION AND FINANCE COMMITTEE February 14, 1994

MEMBERS PRESENT: Ruth Franklin, Chair; Michael Beard; Sharon Feess; Harry Mares

MEMBERS EXCUSED: Sally Evert

OTHERS PRESENT: James Hovland and Morgan Grant, Regional Transit Board; Bill Blom, Transportation Accessibility Advisory Committee; Arnie Entzel, Amalgamated Transit Union; Jim Lasher; Bev Miller, Minnesota Valley Transit Authority; Diane Harberts, Southwest Metro Transit Commission, Don Ahern; Pioneer Press; Eddie Maddox; Bill Sternud; Bob LaShomb, Gregory L. Andrews, Judy Hollander, Mark Fuhrmann, Howard Blin, Dale Ulrich, Dave Jacobson, Mary Fitzgerald

CALL TO ORDER AND ROLL CALL

Chair Franklin called the meeting to order at 4:10 p.m. and roll was taken.

APPROVAL OF AGENDA

The chair said there was a request to move Item 5, Metro Mobility Vehicle Heating, to the top of the agenda. Mares and Feess moved and seconded that the agenda be approved with that amendment. The motion carried unanimously.

METRO MOBILITY REAR HEATER VEHICLE INSTALLATION

Jacobson reviewed the staff report dated February 14, 1994. He clarified the last paragraph on the first page: at an outside temperature of zero degrees, the heat output was in the mid-90 degree range at the heater grill. The drivers cannot keep the doors closed long enough and the temperature has been too low for the passengers' health and comfort.

Grant said the heaters are in the front of the vehicles at the roof line so very little heat gets to the rear of a 24-foot vehicle. It is a terribly poor design for Minnesota's cliomate. Franklin said this is the first fleet in the nation that is fully compliant with the Americans with Disabilities Act (ADA). Jacobson said ADA does not address these issues. Responding to Feess, Jacobson said he received good reports on the one vehicle that was retrofitted.

Members discussed the recommended September 1, 1994 deadline for completing the installation of rear heaters. Grant said he would like to expedite

the work and have the heaters installed before spring. The air conditioning should be checked before we get into 100-degree temperatures. Franklin said it will be the end of March before the bid can be let and winter will be over. Jacobson said September 1 was recommended because even on an emergency basis the work cannot be completed before the end of March or April; therefore, staff believes ATE should ask for bids to get a competitive price. Grant said these vehicles were built in 90 days and it seems possible that heaters could be installed before the end of March.

Feess asked, since the funds would come from the provider's portion of the Metro Mobility budget, what would be lost. Jacobson said the cost of the additional heaters equates to approximately 5,800 trips, assuming a subsidy of $11.50 per passenger. Mares said the work has to be done, but he disagrees about the time limit because it should be done right. He moved and Beard seconded:

That the Regional Transit:

1. Instruct ATE Management Company, Inc. to competitively procure installation of 149 rear heaters for the Metro Mobility program's demand vehicles with completion of installation no later than September 1, 1994; and

2. Allocate an amount not to exceed $67,050 from the provider portion of the Metro Mobility budget to complete the installation of the rear heaters for the 149 Metro Mobility demand vehicles.

The motion was unanimously approved. Beard asked when we are obliged to go out for bids. Franklin said ATE is exempt from those rules and regulations. Hunt asked if they would go through a bidding process similar to that of the public agencies.

MINNESOTA VALLEY TRANSIT AUTHORITY (MVTA) CAPITAL FUNDING REQUEST FOR CONSTRUCTION OF BURNSVILLE TRANSIT HUB

Blin reviewed the staff report dated February 8, 1994. Feess asked for more information about the dollars for MVTA office space. She questioned whether that is appropriate use of funds and the reference to excess right-of-way. Blin said there is a ditch which the Department of Transportation will allow MVTA to encroach upon, which expands the site and allows more flexibility in site design. MVTA is currently leasing space in Apple Valley. If they own their space they will no longer carry the cost of leasing.

Miller and Lasher reviewed the site design. A transit hub is the beginning of understanding by suburban riders of transit use and it is a community outreach effort. This is the first facility of its kind dedicated to transit in the entire 35W corridor. It is hoped that the synergistic use of the site will generate revenue for MVTA. Initially MVTA will not be paying rent for its space but the land leases have not been worked out yet. Their net gain is in offsetting the cost of maintaining a facility of this size. Hunt said it is an excellent idea to locate MVTA at the hub and asked if there is any applicable precedent. Miller said there is

discussion between bond counsels but they are learning that there is no real definition of "transit hub." Hunt asked who will pay the operating costs of the office. Miller said MVTA will bear those expenses. Ulrich said other opt-outs have similar costs but the new element is authorizing use of bond funds to construct office space. The implementation plan may have to be amended. Franklin said the MTC's Heywood office and garage was built largely with federal funds. The local match was 25 percent. Beard moved and Mares seconded:

> That the Regional Transit authorize the executive director to execute a funding agreement with the Minnesota Valley Transit Authority to provide RTB capital funds in an amount not to exceed $2,850,000 for construction of the Burnsville Transit Hub.

The motion was unanimously approved.

CHAIR'S BENEFITS

Andrews distributed a memorandum, dated February 10, comparing the benefits for other metro agency chairs. Mares said he is comfortable with the MWCC precedent giving their chair full health benefits. He would prefer deleting sick and vacation leave. Franklin clarified that parking would be included. Feess said she had been concerned about justifying John Riley's termination package, which was passed on the basis that savings would be created by going to a part-time chair. The Governor's Office and the public are very sensitive to these issues. She does not favor vacation and sick leave accrual. Andrews said the chair has been working much more than half time; last week she worked 60 hours.

Hunt said another alternative is to treat the chair the same as other employees with half-time vacation and sick leave and at least a 75-percent contribution to health insurance. That would not be subject to criticism. Even though the position is half-time, the expense allowance should be at the same level as a full-time chair because a part-time chair is expected to attend the same events as a full-time person. Responding to Franklin's question, Ulrich said the former chairs were allotted $1,500 for expenses, which is only permission to spend RTB funds. There are very few expenses charged to the account that are not already permissible under RTB rules. The money is not paid personally to the chair as a separate benefit. The account was used to allocate some uncertain expenditures such as special printing costs, but the allowance cannot be used for any purpose that is otherwise prohibited. Under state law there is some question about buying lunch for visiting congressmen. In 1993 nothing was charged against the fund.

Regarding vacation and sick leave, Andrews said the Personnel Code gives credit for the number of years of service. If a part-time employee comes on he would be eligible for half of that, based on past service.

Beard said he has no problem with giving medical benefits and agrees with Hunt on using the rules for part-time employees. Andrews said he recommended full-time benefits because the payroll system. Since the chair works a varied number of hours each week, she would like the benefit set at a given rate. The chair is most interested in the health insurance. Mares moved Feess seconded:

That the Regional Transit establish the chair's benefits as follows:

- Medical and Dental Insurance: the Regional Transit Board will contribute to the cost of this coverage at the level of a full-time employee.

- Vacation and sick leave will be accrued at the same rate as other part-time employees.

- Expense allowance not to exceed $750 per year.

Hunt said the board should deal with the issue of compensatory time for the chair so that when she puts in a lot of time she can take off another time without losing vacation. Andrews said that can be handled. The motion was unanimously approved.

OTHER BUSINESS

Ulrich explained the work done for the board by the auditing firm. The policy allows the executive director to spend a certain amount of money without seeking board approval. Last fall the auditor for the next three years was selected. The contract will be issued at a cost of $2,000 more than the amount authorized because we are purchasing an extra service, assistance in preparation of an expanded version of the comprehensive annual financial report with specific and technical requirements.

There being no public comment or other business, Beard moved and Feess seconded that the meeting be adjourned. The motion was unanimously approved and the meeting was adjourned at 5:10 p.m.

I hereby certify that the foregoing constitutes a true and accurate record of the Regional Transit Board's Administration and Finance Committee meeting of February 14, 1994.

Respectfully submitted,

Mary Fitzgerald
Secretary of the Board

Approved by the Regional Transit Board on this 21st day of March 1994.

REGIONAL TRANSIT BOARD
Mears Park Centre, 230 East 5th Street
St. Paul, Minnesota 55101

Minutes of the REGIONAL TRANSIT BOARD February 22, 1994

MEMBERS PRESENT: Sally Evert, Chair; Sharon Feess; Ruth Franklin; Morgan Grant; Val Higgins; James Hovland; Gary Humphrey; Ruby Hunt; Harry Mares

OTHERS PRESENT: Gregory Korstad, legal counsel; Arnie Entzel, Amalgamated Transit Union Local 1005; Beverley Miller, Minnesota Valley Transit Authority; Karen Lyons, Metropolitan Council; Kathy DeSpeigelaere, Ramsey County Regional Railroad Authority; Carl Rauer; Diane Harberts, Southwest Metro Transit Commission; Gregory L. Andrews, Judy Hollander, Howard Blin, Bob LaShomb, Mary Fitzgerald, RTB staff

CALL TO ORDER

The chair called the board meeting to order at 4:00 p.m. in Room 2A at the above address and roll was taken. At 2:00 p.m. the members had received a briefing on light rail transit and the Alternatives Analysis/Draft Environmental Impact Statement on the Central Corridor.

APPROVAL OF THE AGENDA

The chair asked that the order of the amended agenda items be revised , moving "Public Comment" to the top of the agenda and scheduling an executive session to discuss Metro Mobility litigation. Franklin so moved and Hovland seconded. The motion carried unanimously (Grant not present).

APPROVAL OF MINUTES

Hunt moved and Feess seconded:

> That the Regional Transit Board approve the following minutes:
>
> Legislative Committee Meeting, January 24, 1994
> Regional Transit Board Meeting, January 24, 1994
> Public Hearing, January 24, 1994
> Regional Transit Board Meeting, February 7, 1994

The motion was unanimously approved (Grant not present).

CHAIR'S REPORT

The chair reminded members of the legislative transportation reception at the St. Paul Radisson on February 23. She has scheduled a number of personal visits with legislators over the next few weeks.

EXECUTIVE DIRECTOR'S REPORT

Andrews reviewed the schedule of upcoming legislative meetings and distributed a draft of the bill on metro governance.

REPORT OF THE ADMINISTRATION AND FINANCE COMMITTEE

MINNESOTA VALLEY TRANSIT AUTHORITY CAPITAL FUNDING REQUEST FOR CONSTRUCTION OF BURNSVILLE TRANSIT HUB

Franklin moved and Feess seconded:

> That the Regional Transit Board authorize the executive director to execute a funding agreement with the Minnesota Valley Transit Authority to provide RTB capital funds in an amount not to exceed $2,850,000 for construction of the Burnsville Transit Hub.

The motion was unanimously approved (Grant not present).

CHAIR'S BENEFITS

Franklin moved and Mares seconded:

> That the Regional Transit Board establish the chair's benefits as follows:
>
> - Medical and Dental Insurance: the Regional Transit Board will contribute to the cost of this coverage at the level of a full-time employee.
>
> - Vacation and Sick Leave will be accrued at the same rate as other part-time employees.
>
> - Expense allowance not to exceed $750 per year.

The motion was unanimously approved (Grant not present).

METRO MOBILITY REAR HEATER VEHICLE INSTALLATION

Franklin moved and Feess seconded:

> That the Regional Transit Board:
>
> 1. Instruct ATE Management Company, Inc. to competitively procure installation of 149 rear heaters for the Metro Mobility programs demand vehicles with completion of installation no later than September 1, 1994; and

2. Allocate an amount not to exceed $67,050 from the provider portion of the Metro Mobility budget to complete the installation of the rear heaters for the 149 Metro Mobility demand vehicles.

The motion was unanimously approved (Grant not present).

OTHER BUSINESS

CENTRAL CORRIDOR ALTERNATIVES ANALYSIS/DRAFT ENVIRONMENTAL IMPACT STATEMENT

Evert confirmed that the Minnesota Department of Transportation agreed to extend the deadline and accept the board's comments. Higgins moved and Hunt seconded:

> That the Regional Transit Board forward the findings recommended in the staff memorandum of January 19, 1994 to the Joint Lead Agencies.

Hovland said a few months ago he doubted the wisdom of this, but now believes there are many non-quantifiable factors that should be considered; he now favors the project. It cannot stand alone. Grant said he remains skeptical of the data, particularly the cost/benefit figures and the ridership statistics. Evert said the earlier meeting might have resolved some of those doubts. Humphrey said he, like Hovland, had severe reservations, but now feels members should look at the overall picture. This project is not merely intended to move people; the associated economic development should be considered. The motion was unanimously approved.

PERSONAL RAPID TRANSIT

Evert said Maddox asked the board to consider sending members and staff to Chicago. Maddox said the board should look at the economic benefit of developing the technology and putting it on the world market.

METRO MOBILITY UPDATE

The February 22 status report by Judith Hollander was distributed. Because of the lawsuit, there are some restrictions on communication. She reviewed the steps that staff believes could be taken at this point. Feess said she is concerned about customer satisfaction. The survey might not get at that because people are afraid that they will be penalized. She would like something to address that. Evert said we will continue on this path with the understanding that timing is not resolved.

Entzel asked Andrews if there will be a discussion of the NBA service. Andrews said staff can contact MTC and get the information. Entzel said there had been much discussion on whether the public sector should be involved in providing service for the NBA All-Star Weekend. The private sector did not live up to the promises. On Friday, three vehicles from Lorenz were not furnished and MTC had to cover it. On Saturday, six vehicles from Minnesota Coaches and two from

Ready did not appear and MTC provided eight vehicles. Medicine Lake Lines did not cover 10 of the promised 35 vehicles. On Sunday, Medicine Lake Lines did not provide five promised vehicles and MTC covered it. RTB always comes back to the public sector to pull its chestnuts out of the fire. It should be noted that when ATE first started paratransit service here, others had to pick up much the service.

PUBLIC COMMENT

Carl Rauer commented that a friend called and said he had a Metro Mobility ride scheduled to a dance. In the meantime the event was moved across the parking lot. When he called to change the ride, the passenger was told he had to get a new pick-up time. Rauer said he received a letter about two vehicles scheduled to pick up riders at the same time and place. ATE's letter did not respond to his question about the two vehicles taking two people from the same location to the same address.

Rauer asked if RTB has established an Appeals Board in the event someone is not certified under the new eligibility process. Grant said the Transportation Accessibility Advisory Committee discussed that and will probably recommend some kind of peer review committee for that purpose. Evert said the board may wish to consider that in its action plan.

There being no other comment, Grant moved and Humphrey seconded that the board go into executive session. The motion carried unanimously and the meeting was recessed to order to go to executive session. At the conclusion of the closed session, the meeting was adjourned.

I hereby certify that the foregoing constitutes a true and accurate record of the Regional Transit Board's meeting of February 22, 1994.

Respectfully submitted,

Mary Fitzgerald
Secretary of the Board

Approved by the Regional Transit Board on this 21st day of March 1994.

REGIONAL TRANSIT BOARD
Mears Park Centre, 230 East 5th Street
St. Paul, Minnesota 55101

Minutes of the
POLICY COMMITTEE
Mears Park Centre Chambers
February 28, 1994

MEMBERS PRESENT: Val Higgins, Chair; Morgan Grant; James Hovland; Ruby Hunt

MEMBERS EXCUSED: Gary Humphrey

OTHERS PRESENT: Sally Evert, Chair, RTB; Greg Korstad, legal counsel; Melanie Benson, Amalgamated Transit Union Local 1005; Karen Lyons, Metropolitan Council; Bill Sternad; Diane Harberts; Greg Korstad, RTB legal counsel; Mark Hoisser, DARTS; Bill Blom, Transportation Accessibility Advisory Committee; Lynn Moraski, Office of Planning, Dakota County; Gregory L. Andrews, Howard Blin, Randy Rosvold, Elaine Bauer, Mary Fitzgerald, RTB staff

CALL TO ORDER

The chair called the hearing to order at 4:00 p.m., and roll was taken.

APPROVAL OF AGENDA

Hovland moved and Hunt seconded approval of the agenda; the motion carried unanimously.

OUTLINE AND TIMELINE FOR THE FIVE-YEAR TRANSIT PLAN

Blin reviewed the February 22, 1994 staff memorandum. After board approval, the final version will be submitted to the Metropolitan Council in August 1994. This is an opportunity to shift priorities. Bauer reviewed the outline and timeline.

Evert asked if public hearings have been scheduled on this process. Bauer said the plan will be presented in May to the communities for their reaction and comments and then a presentation will be made to this board and the Metropolitan Council. There will be a 30-day comment period. Evert asked how staff plans to obtain comment. Blin said there will be several forums for city and county officials. It is difficult to get the public interested in these things. Evert asked if we will go to them.

Grant said sometime ago someone questioned why the board does not explore using cable access channels to conduct live hearings with call-in participation by the public. That approach would be extremely helpful for people with disabilities, provided we let them know in advance. Hunt said she would support it because the general public would be able to take part or observe the hearing. Hearings could be held in various city council chambers that are equipped with cable facilities and it would be easy to arrange telephone call-ins. Evert said many local governments are doing this. Higgins agreed that this is a golden opportunity to reach members of the disability community.

DRAFT PHASE II DAKOTA COUNTY NEEDS ASSESSMENT

Rosvold reviewed the process followed in accumulating data, the indicators that were studied and groups of people involved in developing the service needs assessment. Members asked questions on reverse commute figures and the transit mode split for work trips. Hoisser thanked the board for this that will be helpful to DARTS in providing service.

PUBLIC COMMENT

Bill Sternad, representing himself, said he has been attending the board's meetings for several months and has observed the traffic congestion and the economic losses due to the congestion of I-394. The board should have a one-year plan along with its Five-Year Plan. The board is familiar with Ed Anderson; PRT is one of the technologies put forward. The Chicago Transit Authority has invested $18 million in a demonstration project. Sternad is asking for $1 million to set up a demonstration project along I-394. Joel Ettinger of the Federal Transit Administration has stated he would be happy to approve a transfer of funds from any of the existing formula grant programs. Sternad described the project, which would allow people to park in a heated, secure facility, board a 12-person van in the parking facility and go downtown. For $25 million the same number of riders would be served as would be served by building another lane at a cost of $150 million. He asked the board to seriously consider this project.

Hovland asked who would be liable if a driver turned over a van with ten riders. He asked what kind of driver's license would be required for the van drivers and who would assure that the drivers are properly licensed. Sternad said Ford in Southern California has a computer program through which they lease the vehicles and pay all of the insurance. Minnesota may want to qualify people beyond the "C" driver's license. Perhaps a third of the riders would be qualified. The program would cost the same as a monthly MTC passes and be self-sustaining. Responding to Grant's questions, he said when he approached legislators they said the MTC and RTB should advance the project.

Grant asked that staff put together some kind of proposal, check on the experience in California and perhaps next session we would have a proposal for the legislature. Hunt said this idea came to her attention 20 years ago; it does not seem to have advanced very much. What Grant is asking for is a major

commitment of time. RTB is operating under a charge from the Legislature and totake this on without direction from the Legislature would be inappropriate. This would consume an enormous amount of staff time. It is a whole new kind of transit development.

This is a distinctly different project from the demonstration project in Chicago, Sternad said. This society has a hard time accepting new technology. As a taxpayer, it is very frustrating. Hollander said it would not be difficult to get information on the projects in California and in Chicago, but going beyond that would be a major undertaking. Blin said Chicago is considering personal rapid transit while Mr. Sternad is advocating a new kid of parking garage. Members encouraged Sternad to provide staff and the board with written material, but cautioned that the board is not in a position to authority a study at this point. Evert said she has had a presentation on the automated parking ramp. Sternad said the intention is to make transit more acceptable to the general public. This is a whole new concept for transit that makes seamless transit available to the riders. The passenger would be in a heated environment from start to finish. We have a fabulous transit system in our skyways. This system would make the HOV lanes more effective. Higgins asked Sternad to work with Howard Blin. The matter may be put on a board agenda.

There being no other business, Hovland moved and Grant seconded that the meeting be adjourned. The motion was unanimously approved and the meeting was adjourned at 5:05 p.m.

I hereby certify that the foregoing constitutes a true and accurate record of the Regional Transit Board's Policy Committee meeting of February 28, 1994.

Respectfully submitted,

Mary Fitzgerald
Secretary of the Board

Approved by the Regional Transit Board on this 21st day of March 1994.

REGIONAL TRANSIT BOARD
Mears Park Centre, 230 East 5th Street
St. Paul, Minnesota 55101

Minutes of the REGIONAL TRANSIT BOARD March 7, 1994

MEMBERS PRESENT: Sally Evert, Chair; Sharon Feess; Morgan Grant; Val Higgins; James Hovland; Gary Humphrey; Harry Mares

MEMBERS EXCUSED: Ruth Franklin and Ruby Hunt

OTHERS PRESENT: DeDe Wolfson, Metropolitan Council Member; Gregory Korstad, legal counsel; Dan Hibberts and Linda Rother, ATE; Arnie Entzel, Amalgamated Transit Union Local 1005; John Walsh, Metropolitan Center for Independent Living; Robert Mairs and Allyson Hartle, Metropolitan Transit Commission (MTC) Members; Bill Sternad; Tom Sather, MTC; Bill Blom, Transportation Accessibility Advisory Committee; Gregory L. Andrews, Judy Hollander, Dale Ulrich, Jane Fitz, Clete Luberts, Mary Fitzgerald, RTB staff

CALL TO ORDER

The chair called the board meeting to order at 4:00 p.m. in Chambers at the above address and roll was taken.

Evert announced the former RTB Chair, John Riley, died on Sunday and expressed the board and staff's sympathy to his family and friends.

APPROVAL OF THE AGENDA

The chair recommended that the agenda be amended to include an executive session with legal counsel and board members to discuss the Metro Mobility litigation. Higgins so moved and Grant seconded. The motion carried unanimously.

APPROVAL OF MINUTES

The chair noted that she attended the January 31 meeting of the Legislative Committee. With that correction, Hovland moved and Feess seconded:

> That the Regional Transit Board approve the following minutes:
>
> Policy Committee Meeting, January 24, 1994
> Legislative Committee Meeting, January 31, 1994

Committee of the Whole Meeting, February 4, 1994
Legislative Committee Meeting, February 7, 1994
Legislative Committee Meeting, February 14, 1994

The motion was unanimously approved.

CHAIR'S REPORT

The chair updated members on current activity at the Legislature. Confirmation hearings were held last week, but three board members were unable to attend. Staff will follow-up to determine when hearings will be held again.

Ulrich said the 1994 agency budget was handed out before the start of this meeting. It was prepared with a new format with the goal of expanding it to make it eligible for the award program Government Finance Officials Association (GFOA). The financial information is nearly equivalent to the past, but there is more text, an index, more graphics, and tables. The work was done by Clete Luberts and Jane Fitz, who assisted in developing the format. Evert said she expects the report will qualify for an award since it is very readable.

EXECUTIVE DIRECTOR'S REPORT

NBA UPDATE

Blin reviewed the memorandum, dated March 1, 1994, from the Metropolitan Transit Commission regarding the results of the NBA weekend. All of the MTC costs will be covered. Sather said that until the February statements are complete near the end of March, the results are estimates, but MTC expects to realize the $40,000 profit they had projected. Referring to earlier discussion on who would provide service, Mares said Higgins had made the point that RTB should have criteria on who will handle service and what will have to be done before the event in order to forestall questions on who the service providers should be. Evert said there was also a question on whether the Convention Bureau has comprehensive information. To accomplish what Mares suggested will require cooperation from a number of forces: the Department of Transportation, the Transportation Regulation Board, the City of Minneapolis, the Attorney General, and Minnesota Charter Bus Operators all have an interest and would cooperate. He offered to put staff in touch with the appropriate interests. There must be some clarification of what kind of service is to be provided.

Responding to Wolfson's questions, Evert said the problem seems to be that the work for the NBA event began so late. Sather said hugh masses of people located at six or seven hubs throughout the metropolitan area present special problems. Originally MTC expected to provide very little service for the NBA, but as the time drew near the private providers were not planning to provide as much service as had been planned. It requires a lot of work to change all the work schedules.

Higgins said these events are booked years in advance, but NBA entered the picture about ten days before the game. It begs the issue to say it was the private operators' fault because they had the same ten-day preparation time. In order to operate charter service, MTC needs a waiver from the federal government and the RTB.

METRO MOBILITY SERVICE COORDINATOR TRANSITION ACTION PLAN

The chair said she would like to hear from legal counsel on the ramifications of proposed settlement. Hovland moved and Higgins seconded that the meeting be closed in order to allow the members to discuss pending litigation with legal counsel. The motion was unanimously approved and the meeting was closed at 4:15 p.m. At 5:05 p.m. Mares moved and Feess seconded that the board return to the open portion of the meeting. The motion was unanimously approved.

The chair announced that the board had discussed the proposed settlement agreement. Korstad said the last of several conferences was held on Friday at Judge Lebedoff's chambers and an agreement was accepted by ATE and the plaintiffs. He outlined the agreement and asked the board to authorize the executive director to enter into a settlement. The fine-tuning of language will take place this week, but given the time frame it is important to approve the main points: the agreement would be effective immediately. ATE agreed to remain beyond the 120-day period if RTB wants them to do so. During the 120-day period RTB will conduct a procurement process similar to that done last spring when ATE was awarded the contract. The contracts with providers will remain intact. With respect to monetary damages, $1.15 million will be placed in a settlement fund. In addition, RTB will make $200,000 in free rides available: $150,000 for the period October 2 through March 6, 1994, and $50,000 to people whose trips are not timely during the 120-day period beginning March 7. The settlement would be binding for those people eligible to use the system on October 2 and who suffered losses. It excepts people who suffered injury and excepts out people who opted not to be part of the class. If more than three-percent of the total eligible exercise the option to get out of the class it would give RTB and ATE the right to reconsider whether to be bound by the settlement agreement. As part of the injunctive relief, RTB is committed to providing an ombudsperson for the system that would be deployed to aid in resolving problems and mediating between riders, the providers, and the service center. Counsel will be drafting a written agreement within the next ten days with these provisions to the satisfaction of all parties. It will include language where all parties agree to cooperate in good faith and without disparaging other parties. Korstad asked the board to approve the agreement and authorize the executive director to proceed.

Fuhrmann presented an action plan and timeline for the transition (March 7 memorandum). He noted that the schedule is very aggressive and staff is committed to doing whatever is within our power to meet the timelines. Grant said he is happy to see implementation of a phase-in plan. The current system fell down in that area.

Hovland said that during the interim 120-day period the existing contract with ATE will remain in effect. If there are differences, there is still an enforcement mechanism to enforce compliance. Mares recommended that the board support the tentative agreement in principle. Hovland moved and Grant seconded:

> That the Regional Transit Board authorize the executive director to enter into a written settlement agreement of the Metro Mobility class action suit under the conditions set forth by legal counsel.

Humphrey offered a friendly amendment calling for the chair to sign the settlement as well. Mover and seconder accepted the friendly amendment.

> That the Regional Transit Board authorize the chair and executive director to enter into a written settlement agreement of the Metro Mobility class action suit under the conditions set forth by legal counsel.

Evert said that in the short time she has been here, the board and chair have worked very hard and been ham-strung by the litigation. This will allow everyone to move forward. The action plan calls for continued improvement of service includes steps to avoid any disruption of service.

Hovland said he and several other members served on the Litigation Committee that was established for quick reaction on the lawsuit. This is a new board; most members were appointed in March of last year. The Twin Cities metro area is the first community in the country to comply with the Americans with Disabilities Act (ADA). There are difficulties in being on that cutting edge. The board wants to provide the kind of service people with disabilities deserve and hopes these steps will result in the best system in America. That will happen eventually. The motion was unanimously approved. Hovland moved and Mares seconded:

> That the Regional Transit Board approve outline and corresponding timeline for the Transition Action Plan to procure a Metro Mobility Service Coordinator.
>
> The board further authorizes the executive director to issue a Request for Proposal for a new Metro Mobility Service Coordinator.

The motion was unanimously approved. Evert asked staff to continue its contingency planning in case any of the present contracts are violated.

REPORT OF THE POLICY COMMITTEE

Higgins reviewed the committee report of the February 28 committee meeting. No action was requested.

PUBLIC COMMENT

John Walsh recognized the board for its efforts over the past five months. This has been difficult for everyone. He expressed his desire to work together in the future to develop the best paratransit system in the country.

There being no other business, Mares moved and Hovland seconded that the meeting be adjourned. The motion carried unanimously and the meeting was adjourned at 5:30 p.m.

I hereby certify that the foregoing constitutes a true and accurate record of the Regional Transit Board's meeting of March 7, 1994.

Respectfully submitted,

Mary Fitzgerald
Secretary of the Board

Approved by the Regional Transit Board on the fourth day of April 1994.

12/23/92

Thirty Five Questions and Answers About the *Taxi 2000* Personal Rapid Transit System

1. Is PRT "reinventing the automobile?" No! PRT is a public transit system. It cannot replace the automobile, but its service characteristics are such that it can be expected to attract many more people than conventional transit systems, and it can do so using a tiny fraction of the land required for the automobile. While roughly half the population either cannot or should not be driving automobiles, ***Taxi 2000*** is accessible to everyone. It will be the environmentalist's dream because of its markedly improved energy efficiency, lack of air pollution, and land savings. We normally recommend guideways spaced not less than a quarter to a half mile apart. They do not replace streets.

The lead article of the July 1969 issue of *Scientific American* is still a most useful introduction to PRT and its profound differences from today's means of urban transportation.

2. Can small cars move the large numbers of people who would use general mass transit? Today, automobiles averaging 1.5 people per vehicle carry more than 97 percent of the urban passenger-miles in the United States. Uninterrupted flow is the key to capacity, not vehicle size. As an example, 60-passenger buses coming two minutes apart, a very high flow rate for an American bus system, provide the same number of capacity units per hour as 3-passenger PRT vehicles coming every six seconds. One ***Taxi 2000*** line can serve more than six times this capacity, more passengers per hour than come into downtown Boston during the morning rush period via a three-lane highway bridge that merges U.S. Highway 1 and I-93 traffic.

The line capacity of ***Taxi 2000*** is high because of automatic control, an in-vehicle switch, and electromagnetic propulsion and braking. Automatic control is safer and more reliable than human drivers, permitting vehicles to be separated by small distances. In-vehicle switches work faster and more reliably than moving-track switches, again permitting vehicles to be closely spaced on the guideway. Linear electromagnetic braking is reliable in wet and icy weather that forces systems using rotary motors and wheel braking to spread vehicles far apart because of skidding concerns in emergency stops.

3. Won't stations get bogged down with all the small vehicles? Station throughput is determined by the number of station berths, which can be set to meet the demand of any particular station. In general, station throughput is high relative to conventional mass transit because:

- Only vehicles that actually need to stop at a station will enter the station. All other vehicles pass by, thus reducing station traffic relative to conventional systems where all vehicles stop in each station regardless of where passengers are going.

- PRT stations are closely spaced, often within a quarter mile of each other. This is convenient to patrons, who walk only short distances, and results in smaller, less crowded stations.

- The loading time for each vehicle is relatively short, often completed in less than

five seconds. As people become accustomed to PRT systems, they will enter and exit vehicles as quickly as cars, increasing station throughput and minimizing trip time.

4. Won't the problems of reliability make the operation of a large fleet of small vehicles undependable? Actually, because a PRT system will have a large number of small vehicles, rather than a relatively small number of large vehicles, your chances of becoming involved in a failure will reduce in proportion to vehicle size if the reliability of each vehicle is the same. But, because of the use of checked redundancy and advanced failure-management strategies possible within the confines of a PRT system, and the benign environment within a ***Taxi 2000*** guideway, the reliability of ***Taxi 2000*** will be substantially higher than a conventional transit system. It has been shown that the requirements for dependability in a PRT system are independent of system size.

5. What happens if a PRT vehicle stops on an elevated guideway between stations? Questions of reliability, safety, evacuation and rescue are fundamental to the design of any elevated transit system including PRT. Each ***Taxi 2000*** vehicle has two motors and two controllers, modern failure-monitoring systems, fault-tolerance and fail-safe features. The system has alternative power sources so that a power failure will not leave passengers stranded.

There are roughly 50 elevated automated transit systems operating in the world today that prove that a vehicle stopping when not intended is a very rare event. If a vehicle does stop between stations, Central Control will talk with the passengers through an intercom system and guide the rescue operation. The vehicle behind will soft engage and push the disables vehicle to the nearest station. In the very unlikely event that the vehicle can't be moved, a rescue team will come with a ladder and help the passengers out of the vehicle.

6. What if there is a power failure? ***Taxi 2000*** vehicles receive their power from 600-volt DC power rails located inside the guideway. There will always be an alternative power source. One way is to power the system from gas turbine-generator sets and to use utility power as emergency backup. Another way, depending on circumstances, is to power the vehicles from wayside batteries, which can be charged at night when the power rate is low. During a municipal power failure, vehicles would still receive battery power, so they would simply slow down to conserve energy, finish their trips, and strand no passengers.

7. What if a truck hits a post? If the guideway runs down the center of an arterial street or on the edge of such a street, highway barriers can be placed to protect the posts or they can be placed on concrete pedestals so that it is not possible for vehicles to hit the posts. The posts are, however, substantial enough so that it would take a high speed collision of a large truck to shear off a post. If a post were sheared, the guideway will remain intact and the vehicles will remain in the guideway.

8. Will the visual impact of PRT be acceptable? Visual impact is important in all transit systems. Many rail transit systems are placed underground because a ground-level system requires destruction of too much existing property and an elevated system is too massive and noisy. A ***Taxi 2000*** guideway has less than five percent of the cross sectional area of a rapid rail

system, will generate almost no noise, and has an external appearance that can be varied to suit any specific community. According to one famous sculptor, ***Taxi 2000*** adds excitement and grandeur to the urban scene, both for what it is and what it does.

People accept elevated structures if they see them as a practical means to a desired end. In the early 1970s, when conventional heavy rail systems were being promoted, officials argued that elevated structures were acceptable. The People Movers proposed in the late 1970s had massive structures (witness the Detroit and Miami People Movers) but local authorities considered them acceptable because they were believed to fulfilled a need. ***Taxi 2000*** will have much smaller visual impact and will provide much better service at lower cost.

9. How does a person use *Taxi 2000*? At each station, there will be several conveniently located ticket machines and a map of the system. The patron, or small group of patrons who want to ride together, determine their destination number from the map and go to the ticket machine to punch in the destination. The machine verifies the destination and displays the fare, which may be paid by cash or by prepaid ticket and is per vehicle rather than per person. The machine then dispenses a magnetically coded ticket.

The patron takes the ticket to a stanchion in front of the first empty vehicle in a line of vehicles and inserts it into a slot. This act transfers the memory of the destination to a microprocessor aboard the vehicle, causes the door to open, and assures the patron that he or she is getting on a vehicle headed to his or her station.

The patron or patrons walk into the vehicle, sit down and press a go-button, whereupon the door closes automatically, the control system waits for an opening in the traffic bypassing the station and commands the vehicle to accelerate to line speed. When the vehicle reaches the destination station, it pulls into a berth and opens the door automatically. The patron(s) exit the vehicle and leave the station.

If the patron is regularly going between a certain station pair, he or she can purchase a pass in advance, bypass the ticket machine and go directly to the stanchion in front of the first empty vehicle. ***TAXI 2000*** doesn't need turnstiles since a valid ticket is necessary to gain access to a vehicle.

10. Is it possible to stop before the end of the ordered trip? Yes. Each vehicle contains a stop button, which if pressed stops the vehicle at the next station.

11. What about access for the handicapped? ***Taxi 2000*** will be fully accessible to handicapped patrons and will comply with the Americans With Disabilities Act. Elevators will be provided in elevated stations and the ticket machines and stanchions will include intercoms and Braille plaques to insure ease of use by all patrons. The vehicle accommodates wheelchairs easily, with an open seat for one traveling companion. The platform is level with the vehicle floor to prevent wheelchair bumps and is textured at the edge to assist the blind.

Taxi 2000 is designed to be easily accessible to all people, whether handicapped, young, old, carrying heavy bags, traveling with a bicycle, or have any other special need. It has been praised and promoted by groups

representing the needs of the handicapped.

12. How much time does a person have to board a PRT vehicle? As much time as is necessary. The vehicle will not move until the passengers have entered and the door is closed and locked. Loading or unloading time is a statistical variable, which varies from a minimum of about two seconds to a maximum of 15 to 20 seconds.

13. Will you have to ride with strangers? No! ***Taxi 2000*** is a *Personal* Rapid Transit system. Each vehicle is occupied by passengers riding alone or together by choice. If someone tries to force his way into a vehicle, a button can be pushed inside the vehicle to alert the police.

14. Can a PRT vehicle be entered from either side? Yes. It is not in general practical to design a PRT network in such a way that all stations are on one side of the guideway. Therefore the cars are designed with doors on both sides, but only the door on the station side opens when the vehicle stops.

15. How serious a problem is vandalism? In ***Taxi 2000***, vandalism is minimized in the following ways:

By **Surveillance**. The stations will be television monitored with two-way voice communication. They are small areas that can be surveyed easily, and infrared detectors will be used to detect the presence of people so that the operator, in slack times, need not constantly view the screen.

By **Identification**. A means will be provided to permit a boarding passenger to reject a vandalized vehicle. An alarm signal will then be sent to the nearest control room where a human operator is alerted to roll back a video memory unit and make a permanent record of the last passenger to egress from the vandalized vehicle, and to command the vehicle to the nearest maintenance shop. Normal police methods will then be used to apprehend the vandal. Experience at the Morgantown automated people mover system has shown that knowledge of such a procedure, not possible in conventional transit, will by itself deter most vandalism.

By **Psychology**. In public places, vandalism has been greatly reduced by the application of human psychology (see *Psychology Today*, September 1982). Plain walls that look like writing tablets invite being written on. Textured walls and walls with diagonal lines or protrusions markedly reduce graffiti. Appropriate colors, music, architectural design, and plants reduces vandalism. Frequently cleaned public places are not as subject to vandalism as dirty ones.

By use of **Attendants**. In large stations or in stations unusually prone to vandalism it is not unreasonable economically to use attendants, and they may be used if other methods fail.

16. Won't Personal Security be a serious problem in PRT? Personal security is less of a problem than in conventional mass transit, and even sometimes less than in automobiles, for the following reasons:

- The ride is nonstop, direct to the destination, and alone or with one or two other people of choice. One never rides with strangers.

- Computer simulations have shown that in

a well-designed system in the rush period about 60 percent of the passengers will wait less than 30 seconds and 90 percent less than three minutes. During off-peak periods there is no waiting at all. Thus there is little time for commission of acts of aggression.

• Television monitors and two-way voice-communication systems will be placed in the stations to survey the platform, stairways and vehicles. To insure that the screens will be watched, infrared sensors will be placed in the stations to alert the monitoring personal of activity in each station.

• The station platform is typically no longer that 20 to 40 feet and about 12 feet wide, and is easy to watch—much easier than a large, multi-story parking structure. Care in station design will eliminate areas in which a potential assailant can hide.

• A stop button in the vehicle permits the passenger to order the vehicle to stop at the next station for any reason.

• A voice communications system will be installed in each vehicle to be used to call for help in any emergency.

17. Won't the issues of safety make it difficult to insure a PRT system? The insurance rate for the first operational ***Taxi 2000*** system will be based on the insurer's estimate of the frequency and severity of bodily injury sustained while riding, attending to, or being in proximity of the system. In today's litigious society, it would not do to rush such a system to completion and to permit the public to ride before it was thoroughly tested. Every reasonable practical precaution must be taken in the design of a new PRT system to assure safety, and there will be an adequate period of testing before opening the system for public use.

An extensive series of design features are incorporated into ***Taxi 2000*** both to minimize the probability of failures that may cause injury, and to minimize the consequences of any failure. A remarkable characteristic of PRT is that, because the vehicles are small and light, it is practical to design to assure that no combination of failures can cause injury. The developers of ***Taxi 2000*** believe that its system will provide a substantial improvement in both safety and personal security.

Obtaining a reasonable insurance rate for a ***Taxi 2000*** system depends not only on the design features but also on the program of development and testing undertaken before the public can ride. Before building a demonstration for public use, a half-mile oval test system with one off-line station and four prototype vehicles will be tested. Based on the results of the test program, the first real people-moving demonstration will be constructed, tested, and certified for public use before the public will be permitted to ride. Potential insurers will be invited to monitor the test program in sufficient detail to establish the insurance rate.

18. Isn't there an economy of scale in transit systems, i. e., to carry a given traffic level, won't a system of many small vehicles cost more than a system of a few large vehicles? The basic features of PRT follow logically as features that minimize the total cost per passenger-mile. These features permit true minimization of guideway cost, vehicle-fleet cost, and operating cost while maximizing service.

• Data shows that transit vehicles cost about

the same per unit of capacity no matter how large or small they are. Contrary to intuition, there is no economy of scale. By using nonstop trips, possible with off-line stations, the average trip time of a PRT system is two to three times less than in a conventional transit system, which means that the fleet capacity (number of vehicles × capacity per vehicle) and therefore fleet cost needed to serve a given number of trips is less by the same factor.

• Vehicles of the size required to hold up to three seated adults have a much smaller cross section and weigh substantially less per unit of length than large standing-passenger vehicles, and, because of much lower dynamic loading, lead to lower guideway weight (15 times lower) and lower cost.

• To compare operating and maintenance (O&M) costs, we define a quantity called a "place-mile." The number of place-miles of travel in a transit system consisting of vehicles or trains of any size is the number of vehicle-miles of travel multiplied by vehicle capacity. A vehicle-mile is one vehicle traveling one mile. Because PRT vehicles move only when service is demanded, the total number of place-miles per day required to serve a given level of passenger demand is only about a third as much as in a conventional scheduled transit system. Examination of data on O&M costs shows that the O&M cost per place-mile is nearly the same regardless of the type of transit system. Thus the O&M cost of a transit system that carries a given number of people per day is proportional to the number of place-miles per day of travel.

The remarkable result of this kind of systems-economic analysis is a transit system in which the features required to minimize both capital and operating costs are exactly those that provide maximum service, i. e., on-demand, alone or with one or two friends, in seated comfort, any time of day or night, at a predictable average speed two to three times that possible with conventional transit. The only reason for using large vehicles in urban transportation is to amortize the wages of drivers over as many fare-paying riders as possible. Automation permits relaxation of system characteristics toward a true optimum.

19. How much will a ride cost? Transit fares are normally set as a matter of public policy, and are as high as the public will bear without significantly reducing ridership. In most conventional systems, the fare covers only about 30% of the operating cost and capital cost is never recovered. Thus, present transit systems require large state and federal subsidies.

Because of its low capital and operating costs, ***Taxi 2000*** systems will charge fares that are comparable to conventional mass transit, yet will require little or no subsidy. This will permit systems to be installed in communities that need transit but don't have access to large state and federal subsidies.

20. Why three-passenger vehicles? On a strictly economic basis, one-person vehicles minimize capital cost, but they do not serve obvious social needs. Two-person vehicles are too small for a small family, for taking luggage, or for a wheelchair plus attendant. Also, if a party of three wants to travel together, one of them would have to ride alone if the vehicles hold only two persons, which may be socially awkward. So the vehicle should have at least three seats side-by side. If, on the other hand, four-seat vehicles are specified, designers try to

reduce cost by placing two back seats forward and two forward seats backward in a socially pleasant and minimum-cost configuration. Such a vehicle is, however, longer by the length of a seated person, which increases station length and cost.

From the viewpoint of ultimate safety, a passenger can be protected in a sudden stop if he or she is behind a padded dashboard. The above four-passenger configuration has a much longer throw distance and therefore greater probability of injury in the unlikely event of a sudden stop. Also, about 95 percent of the trips in an urban area are taken by one, two or three persons travelling together, so a system of four-passenger vehicles results in more dead weight of vehicle per person carried and higher capital and energy cost.

We see that the factors that must be considered in picking vehicle capacity are not the same in PRT as in a family automobile. A PRT trip is generally quite short and a group larger than can fit into one vehicle can take two vehicles, which leave the origin station seconds apart and arrive at the destination seconds apart. ***Taxi 2000*** is designed to carry a total load of 750 lbs. It can hold a family of four on a 57-inch-wide bench seat if the total weight is less than 750 lbs.

21. Why are the vehicles mounted above the guideway rather than below. There are several reasons: 1) There must be a certain clearance for trucks to pass below. If the vehicles hang, the guideway must be seven or eight feet higher than if the guideway is below the vehicles. Also, with hanging vehicles, the posts must be along the side of the vehicles and cantilevered at the top. Wind load is one of the major loads on the system. The combination of wind load and cantilevered vehicle load gives a bending moment at the foundation about twice as high with hanging vehicles as with vehicles supported from below, thus the foundation must be twice as large with hanging vehicles.

2) The cantilevered guideway mount cannot provide as rigid a connection to the support post as a bottom-mounted system in which the guideway is rigidly connected to the posts by means of a moment-carrying bracket. Thus, if the two systems are to have the same ride comfort, the guideway of a hanging-vehicle system will have to be stiffer and more costly.

3) Switching wheeled hanging vehicles requires that the wheels pass over the slot in the guideway required for the vehicle's support rods. This has always been a difficult problem.

4) We believe a majority of people would prefer to have the comfort of seeing the guideway beneath them.

22. Why are the moving switch parts in the vehicle rather than in the guideway? There are five reasons an in-vehicle switch is superior to a moving-track switch.

Reliability. The simplicity of the in-vehicle switch makes it inherently more reliable than the in-track switch, and an in-vehicle switch can easily be made bi-stable by means of a spring. The worst that can happen with a well-designed in-vehicle switch is that one small vehicle will be misdirected, whereas if an in-track switch fails, it ties up a whole line of traffic, thus delaying many people. The result is that the required reliability is far beyond that needed

in PRT if the switch is in the track, but is easily attained if the switch is in the vehicle.

Capacity. Because of the time required 1) to move an in-track switch, 2) to verify that it is locked in position, and 3) to be able to stop before the vehicle reaches the switch if verification is not obtained, the minimum time headway will be too long to be of use in a PRT system. An in-vehicle switch completely removes this barrier to high capacity.

Ride Comfort. In-track switches often consist of a series of articulated straight pieces of guideway that swing back and forth. Passengers will feel such a strong lateral jerk each time the vehicle passes one of the joints that the vehicle will have to slow down for every passage, and there can be four or five straight pieces in each switch. An in-vehicle switch permits guideway branch points to be made with simple smooth curves, maximizing passenger comfort and minimizing jerk loads on the undercarriage of the vehicle.

Visual Impact. Articulated in-track switches increase the visual impact of a switch section greatly. Beyond simply being much larger than a simple branch section, in-track switches have a track leading into empty space, which is a discomforting view for passengers as well as passers by.

Cost. The ***Taxi 2000*** patented in-vehicle switch has very few moving parts and is very simple and inexpensive to build. An in-track switch is much larger, often consisting of several articulated track sections that move back and forth, and contains many large parts which increase cost significantly.

23. Are one-way guideways practical? Because of ***Taxi 2000***'s very small guideway and in-vehicle switching, one-way guideways are *an option*, but *not a necessity*. If the guideways are one-way, for a given investment, twice as much land area can be placed within walking distance of stations as with two-way systems. If planners want two-way systems, they are easily provided. We have analyzed the problem of extra trip circuity with one-way guideways and find that, with a reasonable layout, the extra travel time going nonstop from origin to destination is so small that the cost per passenger-mile is most often less with a one-way system.

24. Will magnetic levitation help PRT? Not at urban speeds. Comparisons of systems levitated by magnetic fields, air cushions, and wheels shows that, by using low-rolling-resistance tires, there is no advantage of either magnetic or air suspension over wheels at urban speeds, and indeed several serious disadvantages.

25. Where are vehicles stored when not in use? In an n-berth station, n vehicles can be stored when there are no demands for service. During the night when demand is low or zero, the bulk of the vehicles will be stored at special storage barns strategically located in the network, usually at the same locations as cleaning and routine maintenance facilities. Because it is not necessary to get a specific vehicle out of storage before the others, the volume of storage facilities per mile of guideway is usually not more than would be required to store about four or five automobiles in a multistory parking structure.

26. What will be the cruising speed? The first demonstration of ***Taxi 2000*** will have a maximum cruising speed of 30 mph because

this is sufficient in major activity centers. To span metropolitan distances, higher speeds are necessary, and the cruising speed is determined by ride comfort and motor power. ***Taxi 2000*** has been designed so that growth to speeds in the range of 50 to 60 mph appear practical.

27. How is ride comfort assured? ***Taxi 2000*** differs from other automated guideway transit systems in that the running surfaces are adjustable with respect to the basic guideway frame, which is built to normal structural tolerances. Before service is started, ride comfort is tested, adjustments are made and the running surfaces are firmly bolted in place. (In other systems, it is virtually impossible to correct any misalignment once the guideway is installed.) The vehicles run on smooth synthetic rubber tires of stiffness needed to meet ride-comfort criteria. Since the running surfaces are smooth and adjustable, secondary suspension is not needed.

28. How do we keep snow, ice or debris from interfering with operations? The ***Taxi 2000*** guideway is a truss structure with covers over the sides and part of the top and bottom. There is a six-inch-wide slot at the top for the vehicle's vertical chassis to pass through, and an eight-inch-wide slot at the bottom to permit ice, snow, rain, or debris to fall through. A pair of 7.5-inch-wide running surfaces (angle sections) inside the guideway near the bottom support the main wheels and are spaced six inches apart to permit anything that may drop in the top to pass through.

Running vehicles continuously during snow or ice storms will usually be sufficient to clear the running surfaces; but we have designed and tested a plow that, if necessary, will be installed on vehicles to deflect anything that lands on one of the running surfaces down into the slot between. A maintenance vehicle will occasionally inspect the interior of the guideway with a television camera and will be equipped to remove any foreign material.

29. What about energy use? Because of frequent stopping and starting, about two thirds of the operating energy used by today's transit vehicles or automobiles in an urban area is kinetic energy lost in heat as the vehicle is braked to a stop. Therefore, elimination of the intermediate stops by itself almost triples energy efficiency.

Careful attention to vehicle-weight minimization, streamlining, lowering of road resistance by careful selection of tire parameters, and use of electric propulsion that eliminates idling energy add to efficiency put PRT in a class by itself in terms of energy efficiency. The electrical energy use will be about 150 watt-hours per vehicle-mile. The power will peak at about 20 kw per vehicle and will average about 4 kw per vehicle.

30. What about air pollution? ***Taxi 2000*** vehicles run on 600 volt DC electricity that can be supplied from wayside batteries that can be charged by any electrical energy source including renewable energy such as wind, solar, or biomass. Thus the system produces air pollution only in the processes of manufacture and at the power plant, both of which can be closely controlled.

31. How quiet is the operation of a PRT vehicle? Movement of ***Taxi 2000*** vehicles will be much quieter than automobiles. They are propelled and braked through linear induction motors, which are driven by variable-frequency drives. Such drives may

produce a humming sound, which is minimized by careful design and by sound insulation. Since there is no braking or traction through the wheels, the tires are smooth and they run on smooth surfaces, so the tire noise will be substantially less than produced by an automobile. There are no other noise-producing elements.

32. Will the use of electric and magnetic components adversely affect the health of riders? Because ***Taxi 2000*** vehicles weigh a small fraction of conventional rail transit vehicles, the electric current required is correspondingly less and any magnetic field in the cabin will be proportional to the current. While there are at present no generally accepted safety standards that limit human exposure to magnetic fields, care has been exercised in the design of the ***Taxi 2000*** vehicles to minimize the exposure of passengers to AC magnetic fields.

Taxi 2000 motors are designed to constrain the magnetic fields to their immediate vicinity and are located remotely from the passenger compartment, which also desirably lowers the center of gravity of the vehicle. Residents living or working near a ***Taxi 2000*** guideway will not be exposed to any significant increase in AC magnetic fields since the power to the vehicles is provided from 600-volt DC power rails inside the guideway. Harmful effects of DC transmission lines have been reported only when the lines carry several hundred thousand volts.

33. Will PRT guideways withstand earthquakes and high winds? The ***Taxi 2000*** elevated guideway is designed to the local code for maximum accelerations during earthquakes and the maximum expected wind load. The guideway is a small, light-weight, flexible, steel structure with thermal expansion joints in every span, a configuration well suited to surviving earthquakes and high winds. The possibility of aeroelastic coupling such as caused the collapse of the Tacoma Narrows bridge has been studied, and it was found that features that prevent such catastrophes are exactly those selected for the ***Taxi 2000*** guideway for other reasons.

34. Why has it taken so long to get true PRT into operation? The PRT concept germinated in the early 1950s and received enough attention by the mid 1960s to be the subject of government-funded analysis. By the early 1970s, there were many competing ideas on how to design automated transit systems, but there was no theory of PRT and there were insufficient funds to explore the dozens of alternative design features. This "Tower of Babel" discouraged decision makers, caused government funding to dry up, and left the continued search for an optimum configuration up to a few people.

A major reason it was possible in the 1980s to carry PRT research and development far enough to regain the attention of major transit decision makers was emergence of the personal computer and associated software. Finding the optimum transit configuration and proving it required sophisticated and data-intensive engineering and economic calculations, detailed simulations of control and vehicle dynamics, and a great deal of data processing, which during the 1970s was much slower and required large resources, generally funded only by governments. The PC enabled engineers of ordinary means to purchase enough computer power to develop the optimum system and element designs. In parallel, the development of powerful fault-tolerant microprocessors and software

elements have placed the control requirements of PRT well within the current state-of-art.

While many new ideas have emerged from institutional research during this century, new ideas in previous centuries generally emerged only when the individuals who discovered and developed them could do so without anyone else's approval. Development of PRT required understanding of engineering sciences and sophisticated technology of the 20th century melded with the individual initiative of earlier centuries, a marriage made possible by the low-cost, high-performance personal computer.

The PC and the microcomputer, coupled with the development of the necessary transit systems theory, test and operational experience with a wide variety of automated transit systems, the realization that conventional rail transit systems cannot solve the problems of congestion in cities, and the steady worsening of congestion and air pollution have made it possible for the idea of PRT to reemerge.

Careful research over decades has shown no flaw that will or should stop the development of PRT, but rather that PRT is a badly needed solution to a variety of transit problems. It is a new configuration of now very ordinary parts well within the current state-of-art.

Development of new concepts in public transportation differs from development of many other emerging concepts in that the resources needed to prove a concept are large, many people are involved in deciding to take a positive step, the level of credibility must be unusually high, and the "fear factor" that drove military programs is not present. In such circumstances, it is not surprising that several decades have been required to bring the concept of PRT to maturity.

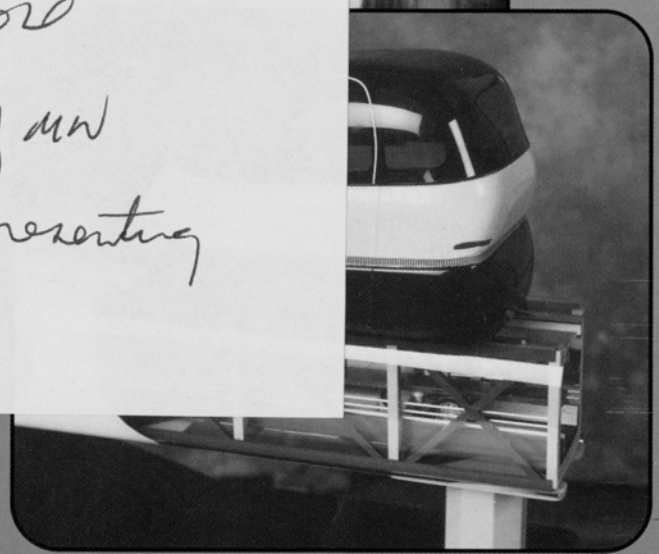
35. When? This has been the one real concern about PRT. We have been fortunate to be able to continue to work with a growing number of colleagues and organizations, and are finding interest in more and more cities and countries. We are confident that PRT will be a reality in a few years. The possibilities are exciting. Many people have given of their free time because they have seen in ***Taxi 2000*** a means for a profound improvement in the functioning of urban areas. Those willing to listen, study and compare are seeing that in greater and greater numbers. A critical mass of interest is developing. ★

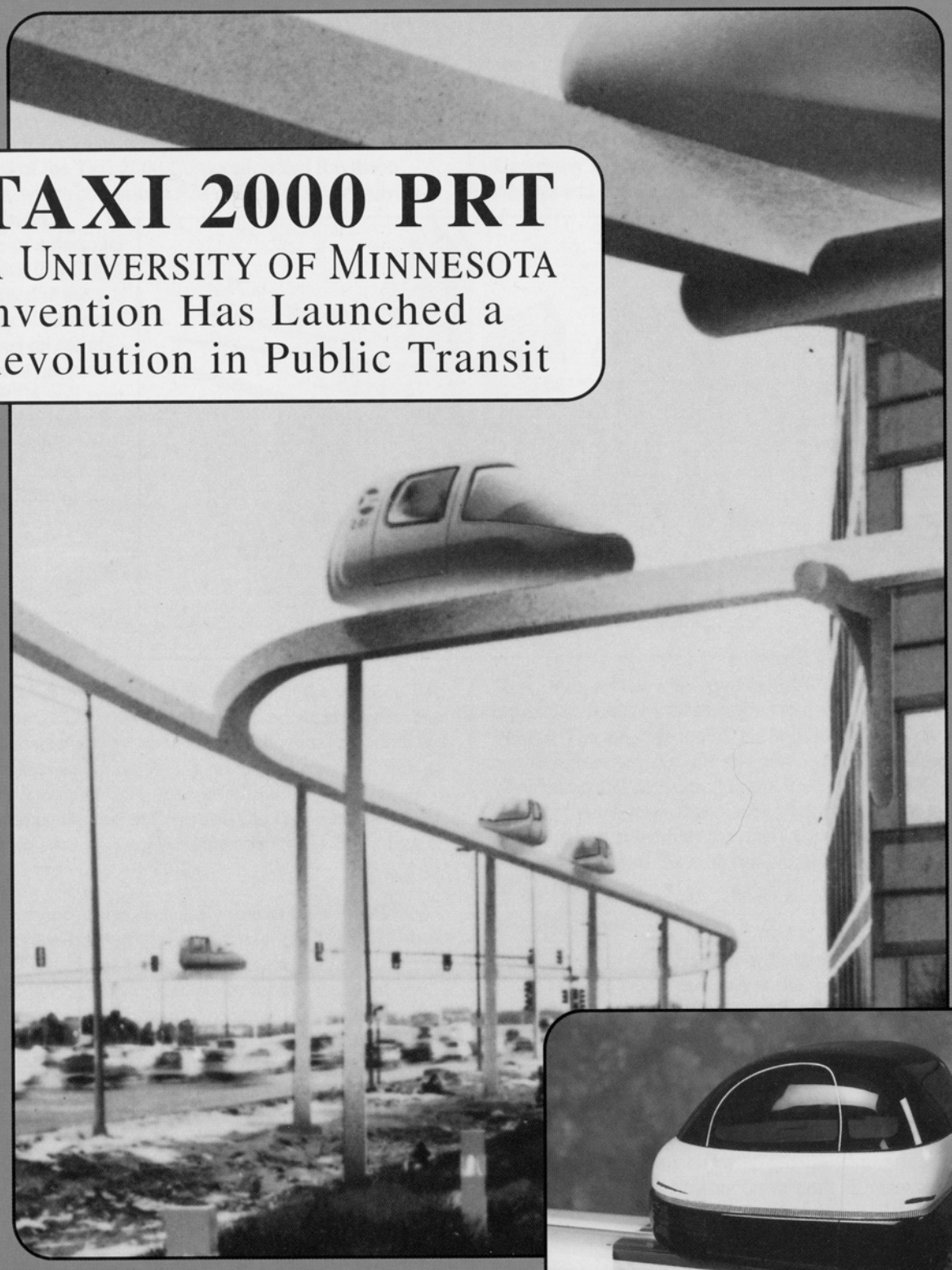
TAXI 2000 PRT

A UNIVERSITY OF MINNESOTA Invention Has Launched a Revolution in Public Transit

Mary Brien to Natty
Please send a pamphlet and copy of Q & A to board

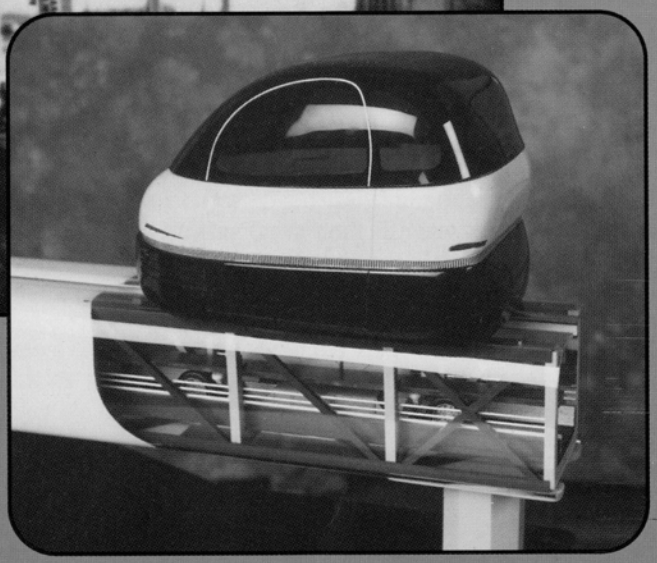
Michael Moore
University of MN
will be presenting





TAXI 2000 PRT

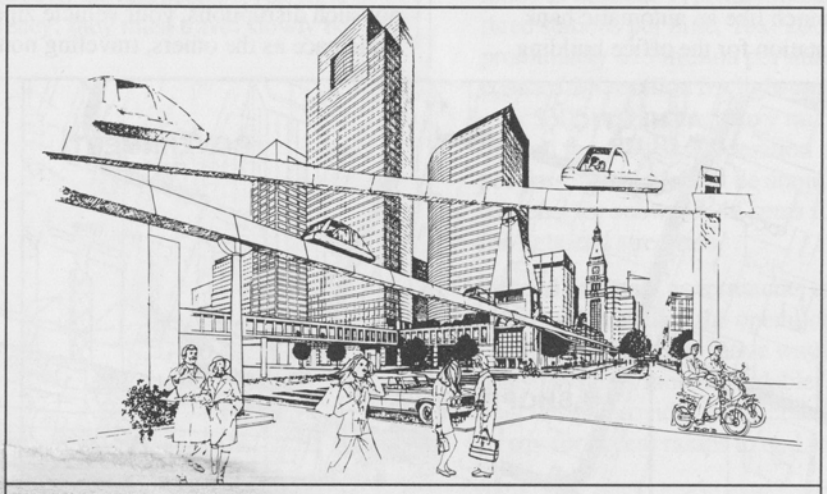
A University of Minnesota Invention Has Launched a Revolution in Public Transit



TAXI 2000

A Transportation Revolution in the Making

On June 3, 1993, the Regional Transportation Authority (RTA) for Northeastern Illinois voted to do what its chairman, Gayle Franzen called "one of the most courageous and revolutionary things I have seen in government in a long time." The RTA voted to award up to $18 million to a team comprised of the Taxi 2000 Corporation and Raytheon Company, which committed $20 million in related investments to build a prototype of a personal rapid transit (PRT) system invented at the University of Minnesota. Based on results of the prototype project, the RTA will vote on whether to build a three-mile public system in the Chicago suburb of Rosemont.



Artist's rendering of Taxi 2000 personal rapid transit system invented by former U of M professor of mechanical engineering, J. Edward Anderson.

"This is a pivotal day for public transportation in our region," Franzen said. "It will not be the absolute answer to suburban congestion, but we believe it can be part of the solution. We recognize that PRT is an experiment. And we recognize that it is a risk, especially when dealing with taxpayers' dollars in tight financial times. But it is our public responsibility to explore new technologies and we believe it is a necessary risk. If actions like this had been taken years ago, we might not be confronted with some of the current crises we face today."

That last sentence rings especially true to those familiar with the decade-long struggle to transfer the Taxi 2000 technology to industry and the public from the University of Minnesota, where it was invented by former mechanical engineering professor J. Edward Anderson. And based on the rollercoaster ride of past public and private discussions about commercializing Taxi 2000, no one is likely to celebrate until public officials take their first ride on the innovative system and leave speaking of a revolution in urban transit.

By Michael P. Moore

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Raytheon's backing and the RTA's decision vindicate Anderson's 25 years of research, teaching, and educating the public about personal rapid transit. He cofounded Automated Transportation Systems, Inc., the predecessor of Taxi 2000 Corp., in 1984 with four individuals and with help from the University's Office of Patents and Licensing. The University granted Anderson's company an exclusive worldwide license to commercialize the personal rapid transit (PRT) technology, which is protected by U.S. and foreign patents financed by and issued to the University. The University received equity in Taxi 2000 Corp. and a royalty for each vehicle and mile of guideway built by the company or sublicensees.

Anderson's PRT system was originally called Alpha, then Taxi 2000. It is now referred to as PRT-2000 by Raytheon, which has sublicensed the rights to commercialize the technology. The information in this booklet is based on Anderson's engineering designs and patents, and on his decades of research and consulting in the field of urban transportation. Refinements will undoubtedly be made as Raytheon develops and assembles the many components and tests the prototype system. Because this booklet refers to Anderson's work, the system will be referred to as Taxi 2000.

Small is Beautiful

The Taxi 2000 system is like a personalized monorail. Instead of large trains, passengers ride in small, computer-controlled vehicles traveling on a network of lightweight, elevated guideways. Carrying from one to four passengers, the electric vehicles enter and exit the main guideway via ramps to off-line stations. This design enables passengers to purchase a ticket for any station in the network and then travel to that station without stopping. The vehicles' small size lets passengers travel in privacy or in small groups, while making the system efficient to run and less costly to build than transit systems based on larger train-like vehicles.

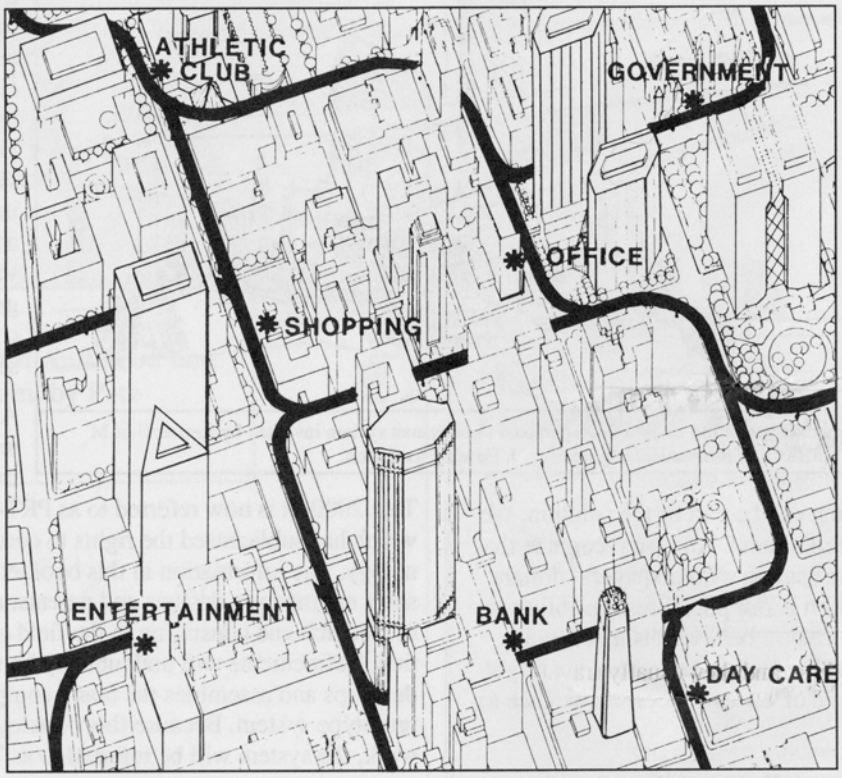
What most confuses people about the Taxi 2000 system is the vehicles' small size. Anderson explains that vehicle and passenger weight must be kept low in order for guideway

{Continued On Page 3}

TAXI!

As a passenger on the Taxi 2000 system, here's how a typical home-to-office commute might unfold:

You walk to a Taxi 2000 station a few blocks from your home. You see that a neighbor you've been wanting to talk to is just entering the elevator, so you hurry ahead and take the steps two at a time to the second-story ticketing area. He greets you and asks if you want to share the ride into the city, so you give him half the fare. He inserts it into the ticketing computer, which is much like an automatic bank teller, and punches in the station for the office building where you both work. The computer issues a magnetically encoded ticket and signals the system computer to send an empty vehicle to the station if one is not already waiting.



The vehicle arrives less than three minutes later. You insert your ticket into a reader that opens the door and programs the onboard computer to take you to your destination. You and your friend step inside and seat yourselves on the two forward-facing seats. There is plenty of legroom, and the vehicle could also accommodate a person in a wheelchair or two other passengers. The door slides shut, and you're off.

Each station is off-line from the main guideway, so your vehicle travels on a short entrance track while the computer merges it into the stream of vehicles heading into the city. Because you are traveling from a suburb to the city, your vehicle accelerates to match the 45 mile-per-hour pace of the other vehicles. They are spaced at safe distances by the system computer. The vehicle's hydraulic bumpers would reduce damage and injuries if a collision did occur.

As the onboard computer reports the estimated time of arrival at your office, you remove your coat and relax in the air-conditioned vehicle. After chatting with your neighbor, you each sit back to read the paper as your vehicle glides smoothly along the guideway. Rush-hour traffic is heavy on the system but is running freely because each guideway has a capacity of 7,200 vehicles per hour, about the same as a four-lane highway. You remember the days of white-knuckled freeway driving, with cars cutting in and out of lanes, alternately speeding up and slamming on the brakes, and the rubberneck traffic jams for every minor accident. Without such disruptions, your vehicle zips boringly along at the same pace as the others, traveling non-stop toward your destination.

Downtown soon looms on the horizon, and your vehicle is automatically switched to a local network track and gently slowed to match the 20 mph pace of the vehicles on this section. Minutes later your vehicle is again switched to an off-ramp and glides quietly to a stop in the station designed into the lobby of your office building. As you exit your vehicle and wish your neighbor a good day, your boss and her young son arrive, having traveled with her husband to his office and then on to her office and the daycare center in the building. You're both relaxed and ready for your morning staff meeting.

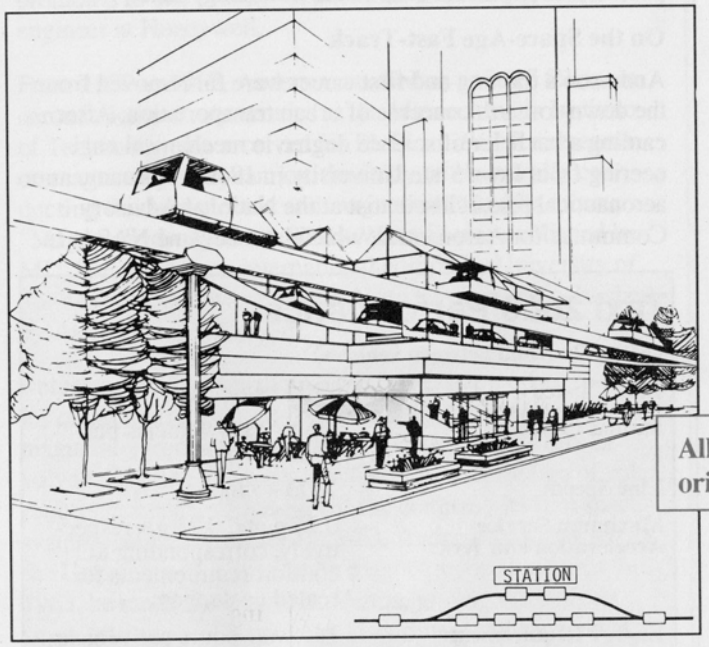
The meeting grows boring, and your mind starts to wander to the subject of lunch. You choose the restaurant and stores you will visit, knowing that the Taxi 2000 network can get you there and back in five minutes, leaving plenty of time to eat and shop. At the end of the day, you'll finish up some last-minute paperwork on the ride home.

Then, bring on the weekend! You and the family will zip across town for the big game, stop for dinner and cocktails, and then ride the Taxi 2000 system safely home, thanks to a revolutionary transportation technology that has finally arrived.

(Continued From Page 1)

and support posts to be less imposing and less costly, and for the system to use energy most efficiently. Conventional thinking is that to have enough capacity to make a system worthwhile, each vehicle must accommodate at least 15 passengers. "That's intuitive, and what I've found in this kind of design is that raw intuition is worthless; you really have to go through careful analysis of the optimal features for the system," Anderson says.

Anderson calls automated systems with larger vehicles "group rapid transit," not PRT. He has been proven right about their lack of efficiency: they must travel slowly because passengers are standing, and they usually travel mostly empty. Unfortunately, the high cost and low efficiency of the two existing automated group transit systems, one at the University of West Virginia in Morgantown (20 passengers per vehicle), and one at Duke University Hospital in Durham, North Carolina (22 passengers per vehicle), have been used by critics to argue against investments in PRT.

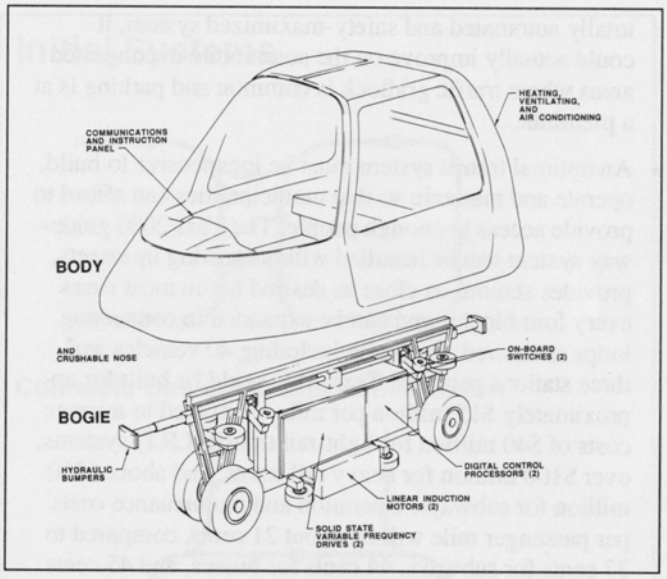


All stations are off-line, which permits non-stop origin-to-destination travel.

Years of analysis brought Anderson to these arguments explaining how the Taxi 2000 system meets fundamental urban transit needs:

- An optimal transit system must compare favorably to the convenience of the automobile before enough people will leave their cars at home in favor of public transit. The Taxi 2000 guideway system with off-line stations has many car-like features: it lets a person travel in private or with one to three others if desired, in a comfortable vehicle that is either waiting at the station or arrives in less than three minutes, and that takes people directly from where they buy a ticket to their destination without stopping to let others on or off. As a totally automated and safety-maximized system, it could actually improve on the automobile in congested areas where traffic gridlock is common and parking is at a premium.
- An optimal transit system must be inexpensive to build, operate and maintain so that municipalities can afford to provide access to enough people. The Taxi 2000 guideway system can be installed without tearing up streets, provides stations as close as desired but in most cases every four blocks, and can be expanded in connecting loops as desired. Typically including 40 vehicles and three stations per mile, Taxi 2000 could be built for approximately $15 million per mile, compared to average costs of $40 million for light-rail transit (LRT) systems, over $100 million for heavy rail trains, and about $300 million for subways. Operation and maintenance costs per passenger mile will be about 21 cents, compared to 37 cents for subways, 44 cents for busses, and 45 cents for light-rail streetcars.
- Federal and state governments cannot afford to construct and subsidize the operation of all the public's transit needs, so innovative ways must be found to make transit systems more affordable. The Taxi 2000 guideway design provides an incentive to private developers to pay for access ramps to and from their office or housing development, hotel, shopping center, restaurant, or entertainment facility as a way of attracting customers and improving real-estate value, while reducing the need for parking. And during off-peak hours, the Taxi 2000 guideway could generate revenue by carrying freight in special vehicles with the same carrying capacity (750 pounds) as the passenger vehicles.
- An optimal transit system must be environmentally friendly in terms of air emissions, noise, visual impact, and land usage. Taxi 2000 vehicles are powered by electric linear induction motors controlled by variable-frequency, solid-state drives that receive their power from 600 volt d.c. power rails mounted inside the guideway. The electromagnetic force generated between the guideway and motors is used to accelerate and decelerate the vehicles. Energy efficiency is comparable to cars that get 70 miles per gallon with no emissions. Initial systems will draw electricity from local utilities, but eventually system batteries could be charged by wind or solar power.

Taxi 2000 passenger compartments are attached over a mechanical cart, or "bogey," that carries two linear induction motors, two solid-state variable-frequency drives, two digital control processors, two on-board switches, and front and



back hydraulic bumpers. The bogey rides inside the guideway on high-pressure tires that roll on smooth, adjustable, steel rails, producing very little noise.

The Taxi 2000 guideway is about 42 inches wide by 42 inches deep, and is held 16 feet in the air by two-foot diameter steel posts spaced every 60 feet, or hung by brackets from buildings. To keep out snow and ice, the guideway will be covered by a thin sheet of steel or plastic, with a slot in the center where the vehicle connects to the bogey. A wider slot in the bottom of the guideway would let rain, snow, ice, and debris fall through or be pushed out by the bogey.

Stations would have from one to twelve vehicle berths, with stairs and an elevator to take riders to the automatic ticketing machine and the vehicles. A three-berth station would be 16 feet wide and 33 feet long, and would have a capacity of about 650 vehicles per hour. Larger stations with capacities of 2,000 vehicles per hour would be placed in downtown areas, airports, and shopping and entertainment centers. By providing easy access 24 hours a day to any site within a downtown or other densely built area, the Taxi 2000 system could drastically reduce the need for parking ramps and streets in these areas.

Countering Skepticism

"Ed Anderson deserves a great deal of credit for carrying this technology forward. He has survived much skepticism and many highs and lows when we thought we had a deal with a company or developer," says Tony Potami, the University's associate vice president for research and technology transfer. Potami served on the Taxi 2000 Corp. board of directors until 1989, when he was replaced by Tony Strauss, assistant director of the University's Office of Patents and Licensing. Both men have assisted Anderson in discussing licensing terms with corporations and construction contracts with public and private developers. Most groups were deterred by the need to spend about $30 million to build a prototype and test the technology thoroughly before a public system could be built.

"We would have preferred to have a Minnesota company build the prototype and demonstration system here in the Twin Cities, perhaps connecting the University's St. Paul and Minneapolis campus or at a high-visibility site such as the airport-494-Mall of America area in Bloomington," Strauss says. "But we did all we could to make that happen and it didn't work out, so we're pleased for Ed and everyone else involved that Raytheon and Chicago's RTA are going ahead. We'll continue to work with Ed and Raytheon to provide information to Twin Cities developers and the public about potential uses of the technology here."

On the Space-Age Fast-Track

Anderson's training and first career were far removed from the down-to-earth concerns of urban transportation. After earning a bachelor of science degree in mechanical engineering from Iowa State University in 1949, he became an aeronautical research scientist at the National Advisory Committee for Aeronautics, which later became NASA. In

Taxi 2000 Performance

(with 1/2 second between vehicles)

Line Capacity:	– 7200 vehicles per hour
Station Capacity:	– Up to 2000 vehicles per hour
Line Speed:	– 20 to 45 mph
Maximum Service Acceleration and Jerk:	– 0.25 g and 0.23 g/s respectively, corresponding to comfort requirements for seated passengers
Energy Requirement:	– 145 watt-hours per vehicle-mile at 25 mph
Maximum Grade:	– Elevation change of 30 feet at 10%
Minimum Curve Radius:	– 36 feet
Maximum Winds:	– Normal operation in winds up to 45 mph. Degraded performance in gusts up to 55 mph
Weather Operation	– Normal operation in rain, heavy snow, ice storms, freezing rain and moderate hail
Availability:	– 24 hours a day, on demand
Accessibility:	– To all including wheelchair passengers
Station Wait:	– Off-peak hours — no wait. Peak hours — 80% of people typically wait less than 30 seconds, 99% percent less than three minutes
Service:	– On demand and private with one's own traveling companions in seated comfort with no intermediate stops.

1951 he moved to Honeywell's Aeronautical Division in the Twin Cities. Working for three years as a development engineer, he invented a fuel-gauge sensor that was retrofitted into Boeing 720 B-47 aircraft, giving Honeywell a dominant position in the market. He also moonlighted as a graduate student in the University's Department of Mechanical Engineering, receiving his master's in 1955.

Anderson's work at Honeywell then turned to navigation systems, first coordinating work on autopilot systems and then inventing and leading development of the gimballess inertial navigation system, which became the standard guidance system for commercial aircraft. In 1957, he was promoted to one of only 12 positions as principal research engineer at Honeywell.

From 1959 to 1962, Anderson studied as an MIT fellow in aeronautics and astronautics at the Massachusetts Institute of Technology. He received his Ph.D. in 1962 for research on magnetohydrodynamics, the study of electrically conducting fluids in electric and magnetic fields. His thesis, "Magnetohydrodynamic Shock Waves," was published by MIT Press and in an international edition by University of Tokyo Press, and was translated into Russian and published by Atomizdat, Moscow, in 1968.

Returning to Honeywell in 1962, Anderson worked in studies on laser effects, high-powered laser, laser gyro, and magnetohydrodynamics. His final Honeywell project involved directing 25 engineers in preliminary design of solar probe spacecraft, which earned the company its first space-systems contract. During 1962-63, Anderson also served at the University as a lecturer on magnetohydrodynamics. In 1963, he made the leap to academia, joining the University's Institute of Technology, Department of Mechanical Engineering, as an associate professor.

Applying his expertise to teaching, research, and industry consulting, Anderson remained for four years with the fields he had explored in his industrial career. Then, in 1967-68, he went to the Soviet Union as a National Academy of Sciences exchange professor in the Institute of Heat and Heat Transfer, in Minsk.

"I had a lot of time to read and think about my career," Anderson says. "I went through it objectively and concluded that what I was doing wasn't what I wanted for my career. My real love was systems engineering, working on large interdisciplinary problems. But I wanted to get involved in something where the social need was strong, not something with a concocted need." Anderson explained that his last job at Honeywell was to manage a team designing a solar probe spacecraft to orbit Mercury and gather data on particle fields around the sun. "I wrote the report in some vague way saying that the mission would provide data for studies of the origin of the solar system. The hardest part of the job was to justify the mission."

One of the books Anderson read and thought deeply about while in Minsk was an 800-page volume of the writings of Thomas Jefferson. "The most overriding impression I got was that Jefferson was always talking about first-rank problems, not about trivial, second-rank issues. I thought, why not figure out how to get into something really important?"

With these misgivings in mind, Anderson wrote a letter to his departmental chairman, Richard C. Jordan (now retired), saying that he wasn't sure if he could find what he wanted at a university, that he might look for a problem involving

". . . I wanted to get involved in something where the social need was strong, not something with a concocted need."
— J. Edward Anderson

systems engineering in industry or at NASA. "He wrote me back a letter saying, 'Don't quit, I think we've got something here that could be just what you're looking for.' When I got back he showed me a copy of a federal request for proposals to study the application of new technologies for urban transportation through interdisciplinary projects at universities. That looked like just what I was looking for."

The timing of that request for proposals was perfect in terms of laying out the course of Anderson's second career. If it had come a year earlier or later, he points out, he probably would not have gotten involved in transportation research.

A New Focus

In 1968 Anderson launched into a program of teaching and research of new concepts in urban transportation. He chaired a multidisciplinary task force on new concepts in urban transportation, with representatives from the University's engineering, architecture, sociology, urban and regional affairs, and psychology programs, as well as members from the League of Women Voters, Citizens League, and Metropolitan Transit Commission. He also became interested in environmental issues, helping to organize and chairing the "Radioactive Daisies Symposium," a three-day conference about nuclear waste, nuclear war, and environmental problems. He then was invited by the University Honors Program to lead a CLA honors seminar titled "Technology, Man and the Future" in the fall of 1969.

"As a result, I spent the summer of 1969 studying environmental issues, because I was going to be facing some of the University's brightest students and I wanted to be sure I knew what I was talking about," Anderson says. That seminar led him to collaborate with history Professor Hyman Berman to develop an interdisciplinary course called "Ecol-

ogy, Technology, and Society," which Anderson first coordinated in 1970 and was taken by over 3,600 students.

Anderson's environmental interests fit perfectly with the concept of personal rapid transit. "I saw that PRT was a way to answer urban environmental problems; everything kind of just fell together," he remembers. "I decided in the spring of 1970 that I was going to take on the problem of figuring out how to implement PRT; that was my long-range objective."

Anderson says he made a deliberate decision at that time not to try to invent his own concept of PRT. "First of all, I

In 1976, Raytheon estimated a multi-billion dollar potential worldwide PRT market.

didn't know enough, and second, I saw some of the [weird] systems some people have designed when they're starting without enough background. I decided that I wanted to try to figure out how to optimize PRT."

Stimulated by research funding included in the 1965 Urban Mass Transportation Act (UMTA), nine PRT systems were in various stages of design or development in the early 1970s. Unfortunately, because UMTA provided multimillion dollar subsidies for the installation of heavy rail systems like San Francisco's Bay Area Rapid Transit system, there was little interest among politicians or conventional transit planners in implementing PRT.

Therefore, Anderson set out to study the basics of transportation systems engineering, and to analyze existing PRT systems to see which offered the most efficient and affordable solutions to the problems of urban traffic congestion. He started by organizing, with the help of Gordon Amundson in the University's Department of Professional Development and Conference Services, the first International Conference on Personal Rapid Transit, held in 1971 and repeated in 1973 and 1975. "These conferences put me in a premier position to know everyone in the world who was doing PRT," Anderson says. They also led to extensive travel; from 1973 to 1981 he traveled throughout the United States and gave lectures and inspected transit projects in Singapore, Switzerland, England, Sweden, France, Germany, Japan and Romania. He also wrote a textbook, *Transit Systems Theory*, (Lexington Books, 1978) which established his expertise among transportation planners and engineers.

Anderson took two leaves of absence during the 1970s to consult on U.S. transit analyses. In 1974-75 he served for eight months as technical advisor to the Colorado Regional Transportation District during a large-scale analysis of transit alternatives for the Denver metropolitan area. And in 1975-76 he served as a consultant to Raytheon Company Transportation Systems Group, which was evaluating the feasibility of bringing a German-designed PRT system to the United States. Raytheon had determined that PRT was one of very few technologies that could occupy its Missile Systems Division if defense contracts decreased significantly. The company estimated the potential worldwide PRT market to be in the billions of dollars.

It was the German PRT system, called Cabintaxi, which Anderson analyzed most closely and which eventually convinced him that a new approach was necessary. A Cabintaxi prototype was built and implementation planned for Hamburg in 1980. But because of severe economic problems, the project fell to the budget axe of Chancellor Helmut Schmidt. In 1981, Indianapolis city planners became convinced that a PRT system would improve their city's transit, and they hired Anderson and Raymond MacDonald, a transportation planning engineer, to analyze the cost and feasibility of building a Cabintaxi system in downtown Indianapolis.

When Anderson and MacDonald crunched the numbers, costs came out much higher than they had expected, leading them to advise the Indianapolis developers to wait until a better PRT system was available. "We found that the [Cabintaxi] guideway switch was shockingly expensive. We always knew that it was a structural monstrosity, but it really hit us how expensive that switch was. We always thought that given a chance, we could improve on Cabintaxi, but that was the final straw that got us, in the spring of 1981, to say 'Let's start a new design.'"

By April of 1982, Anderson had made so much progress that he decided to form a corporation to design, develop, manufacture and market his new PRT system. In a memo to then-IT Dean Roger W. Staehle and Professor Richard J. Goldstein, head of the Department of Mechanical Engineering, Anderson reported his decision to incorporate and the progress he had made at the University: "We have a design that is substantially simpler, lighter weight and easier to produce than the best of other systems." Besides the planned PRT system in Indianapolis, Anderson had also received a request from a group in Los Angeles, asking him to supply a system for the 1984 Summer Olympics, which he noted in the memo "unfortunately is a bit soon."

In the mid-1980s, the University received five U.S. patents for components of Anderson's PRT design: two for the guideway design and method of construction, two for the on-board switching device that allows vehicles to be quickly and automatically switched to connecting guideways and ramps, and one for the method and apparatus for controlling the vehicles; similar patent coverage is pending internationally.

Keeping Taxi 2000 Personal Rapid Transit on Track

Commercialization rights to the Taxi 2000 technology were originally licensed by the University to Automated Transportation Systems, Inc. (ATS), the predecessor of Taxi 2000 Corp. Anderson founded ATS in 1983 with four other individuals: Roger W. Staehle, former dean of the University's Institute of Technology; Joseph M. Shuster, founder and CEO of Minnesota Valley Engineering and later Teltech Resource Network; John C. McNulty, senior partner in the Twin Cities law firm of McNulty and Wallace; and Richard Gehring, former president of Sperry Univac. The ATS board of directors was soon joined by Tony Potami, then assistant vice president for research and technology transfer at the University, and Robert M. Fox, former chairman and CEO of Amhoist.

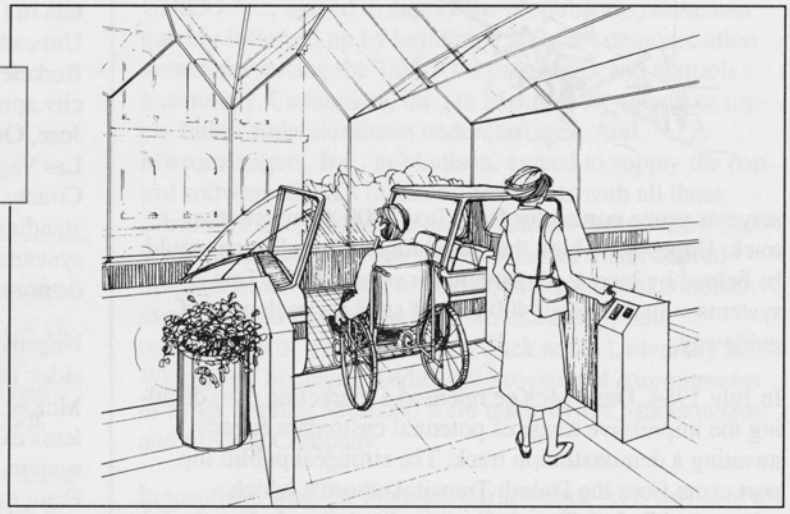
ATS was the first company started with the University as an active participant. And it was the first major technology transfer decision faced by Potami, who just that year had been given authority over the University's Office of Patents and Licensing. "It was obvious that quite a bit of engineering and marketing work was necessary before the technology could attract the interest of the large corporations needed to commercialize it," Potami says. "So we provided a patent development grant of $100,000, which enabled Ed Anderson and two graduate students [Paul Hoffman and Robert Sells] to prepare engineering plans and cost analyses. And we helped start a new company, with some of the best industrial and business experts in Minnesota as co-founders and directors. We wanted the technology to be developed in Minnesota, and we hoped it would grow into a major industry here."

Access is easy for all; the elderly, the young, the disabled, and those with luggage or packages.

For three years, ATS management and directors tried to pull together the range of private and public partners needed to develop and implement the Taxi 2000 technology (then called Alpha). In 1984, ATS and the University's Office of Patents and Licensing agreed on a license agreement for the patents and know-how involved. The University received equity in ATS and a future royalty based on miles of guideway and number of vehicles sold. The license gave ATS exclusive worldwide rights to the proprietary technology, enabling discussions with corporations and public officials interested in sublicensing the technology or purchasing systems.

The University also made land at its Rosemount Research Center available as a site for a demonstration track. In confirming this arrangement, then University president C. Peter Magrath wrote: "I am particularly pleased to support the development of the PRT technology since it was conceived and developed at the University of Minnesota. Moreover, I understand that the potential for job creation and economic benefit that might accrue from this technology could have an important impact on the State's economy, on the University of Minnesota, and on transportation problems worldwide. We are all very excited about the PRT technology and we hope that the Rosemount site will ultimately become the leading international center for this technology."

The potential for a major new industry in Minnesota was an early thrust of ATS marketing efforts. Anderson was quoted in a May 1983 *Corporate Report* article as saying, "That's what's exciting about this project for Minnesota business. All of the technology is right here, and we've talked to a number of companies that could fill our contracts out of their excess capacity. In effect, we're selling and managing an idea."

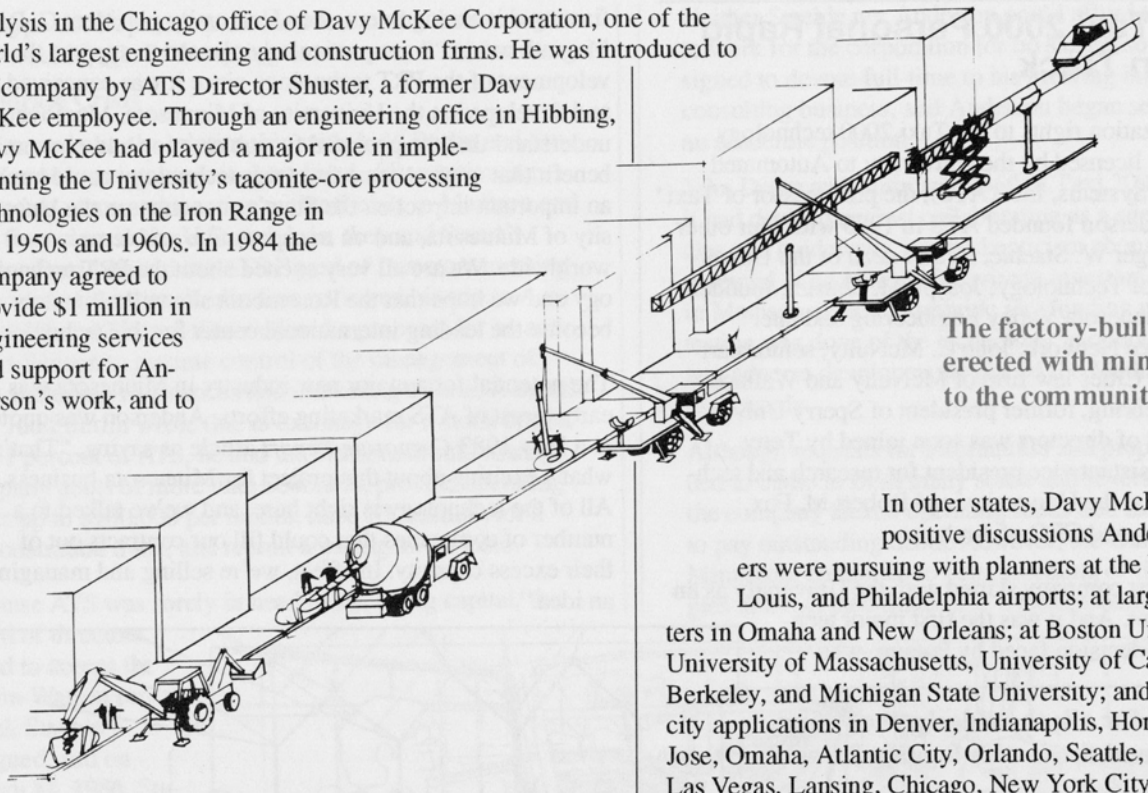


Pursuing that economic development strategy, ATS presented a proposal requesting political and financial support for a demonstration track to then-Governor Rudy Perpich on February 13, 1984. Attending the meeting were Minneapolis Mayor Don Fraser, St. Paul Mayor George Latimer, and several metropolitan transit officials. ATS suggested three possible locations for the track: (1) connecting the University's St. Paul and Minneapolis campuses, with a later link to the Minnesota Technology Corridor near downtown Minneapolis; (2) connecting the state government building tunnel system to the downtown St. Paul skyways, with later lines between the two downtowns; and, (3) a state fairgrounds circulator system that would be a functional attraction drawing people from all over the world.

Turning Taconite Into Guideways

After completing work under the University's patent development grant, Anderson took an unpaid leave of absence to spend a year in 1984-85 completing additional design and

analysis in the Chicago office of Davy McKee Corporation, one of the world's largest engineering and construction firms. He was introduced to the company by ATS Director Shuster, a former Davy McKee employee. Through an engineering office in Hibbing, Davy McKee had played a major role in implementing the University's taconite-ore processing technologies on the Iron Range in the 1950s and 1960s. In 1984 the company agreed to provide $1 million in engineering services and support for Anderson's work, and to serve as prime contractor for a Taxi 2000 demonstration track. Hopes were high that the slumping Iron Range would be helped by increased demand for steel to build Taxi 2000 systems—an estimated 400 tons of steel for each mile of guideway.



The factory-built guideway can be erected with minimum disruption to the community.

In July 1984, Davy McKee released a marketing plan detailing the impressive range of potential customers eagerly awaiting a demonstration track. The strongest public support came from the Duluth Transit Authority, which released a "Duluth Transit Corridor Study" including the following recommendation: "The PRT network alternative, with its guideway located in the central Duluth area, appears to be an excellent downtown support system. By locating the network in major activity centers such as the University of Minnesota-Duluth, the hospitals area and the central business area, PRT ridership is estimated to be 30 percent higher than that of the existing bus system."

Also in Davy McKee's plan were descriptions of potential sites in the Twin Cities. These included the University's St. Paul to Minneapolis campus transit corridor then in the early planning stages, loops around the two downtowns to transfer people from the planned light-rail transit (LRT) lines at a fraction of the cost of subways, and a system in Bloomington to connect the airport and I-494 corridor. Also, a plan was developed for a system at 3M's corporate headquarters and research campus in the St. Paul suburb of Maplewood. And in late 1985, plans were developed to link the St. Anthony Main shopping and entertainment site with downtown Minneapolis.

In other states, Davy McKee cited very positive discussions Anderson and others were pursuing with planners at the Denver, St. Louis, and Philadelphia airports; at large medical centers in Omaha and New Orleans; at Boston University, the University of Massachusetts, University of California at Berkeley, and Michigan State University; and for central city applications in Denver, Indianapolis, Honolulu, San Jose, Omaha, Atlantic City, Orlando, Seattle, Los Angeles, Las Vegas, Lansing, Chicago, New York City, and Fairfax County, Virginia. All of these contacts indicated good understanding of PRT characteristics and a willingness to include systems in their plans as soon as the technology could be demonstrated.

Negative influences on the willingness of planners to consider Taxi 2000 technologies were also identified by Davy McKee. Chief among them were the control-system problems experienced by the world's first automated transit system, the Bay Area Rapid Transit (BART) system in San Francisco, and the cost overruns of a system installed at the University of West Virginia in Morgantown. Both projects received huge federal subsidies and were rushed into operation before engineers had a chance to understand and correct problems with the new technologies involved.

In the Twin Cities, considerable mistrust and misunderstanding were spawned in the mid-1970s by the proposed St. Paul People Mover. It was originally conceived as having small vehicles on slim guideways. But as happened with the Morgantown system, conventional transit planners inflated it into a massive 27-foot-wide elevated guideway totally out of scale for downtown St. Paul. Snow-melting alone would have required twice as much energy each year as would have been used to propel the vehicles. Amid considerable media derision, the State Legislature turned down requests to co-fund the St. Paul People Mover as required to obtain federal funding.

In concluding its report, Davy McKee noted that Anderson's 16-year study of automated transit systems had

enabled him to design a system that avoided previous design flaws while maximizing system cost-effectiveness and rider convenience. His many transportation contacts throughout the world had supplied ATS founders with "long lists of planners, transportation consultants, public officials, developers, and others who, over the years, have maintained interest in the PRT concept and are waiting to place orders."

However, because of the public and professional suspicion surrounding new transit technologies, Davy McKee commented in its 1984 report that "these orders can not at present develop from paper designs and specifications. The [Taxi 2000] hardware must first be proven and demonstrated in a test environment to permit placing of orders. Hence the first assembly of the hardware will be at the Rosemount Research Center of the University of Minnesota. This demonstration and test facility has been designed with attention not only to engineering detail, but to the physical appearance of all components—guideways, vehicles and stations—and to human factors in the design of all points of interface with the public. The existence of the Rosemount facility along with well-documented cost and performance data is [Taxi 2000's] central marketing tool."

The Minnesota Legislature, state agencies, and the Regional Transportation Board expressed interest at times, but then committed to funding the planning of a light-rail trolley system.

After ATS discussed funding needs with several investment firms, it became obvious that the $20 million needed for a demonstration track could not be raised through venture capital sources. The most likely sources were large corporations involved in transportation or other heavy manufacturing industries. During 1985, Anderson, Staehle, and some of the ATS directors spent part of nearly every week discussing collaborative relationships with the likes of General Electric, Shell, Greyhound, Xerox, Ford, General Motors, FMC, and Mitsubishi. In each case, interest was strong among corporate engineers, but management eventually declined to become involved because of concerns about the public's ability to understand and accept PRT.

Ironically, strong public interest was at the same time being expressed by several state economic development groups seeking to have ATS locate corporate headquarters and build the demonstration track in their state. Groups from Arizona, Illinois, Virginia, Florida, Texas, and Wisconsin presented various types of public-private partnership proposals to lure ATS and the Taxi 2000 technology. In Minnesota, the most interest came from the Metropolitan Airport Commission and developers of the parking and terminal expansions, but financing for the demonstration track was not available from public or private sources. Likewise, the Minnesota Legislature, state agencies, and the Regional Transportation Board expressed interest at times, but then committed to funding the planning of a light-rail system.

The Madison Project

In the summer and fall of 1985, Madison, Wisconsin became the most likely site for the demonstration track. Thanks to introductions provided by Phil Lewis, professor of landscape architecture at the University of Wisconsin, Madison, ATS attracted an impressive consortium of industrial suppliers, venture capital firms, and public support from the city level up to then-Governor Tony Earl.

Participants in the Madison project met during November 1985. John Deere and Company expressed interest in bolstering its slumping farm machinery business by building the vehicles and guideway. A robotics company in Racine, UNICO Inc., agreed to supply the propulsion system, and quickly followed up by building a 100-foot demonstration system for testing the Taxi 2000 propulsion and controls technology. Consumers, Inc., in Manitowoc, agreed to supply lightweight aluminum undercarriages. And Micromanagers, Inc., in Madison, agreed to supply the control software. If ATS reached agreements with all these subcontractors, a Madison-based venture capital firm, Carley Capital Group, committed to consider major capital investment in ATS, and to help obtain additional commitments to fund development of the technology and construction of a demonstration track at the University of Wisconsin, Madison. Additional provisional commitments of funds totaling $500,000 were made by the Madison Gas and Electric Company.

In meetings with the Madison participants, ATS was able to provide Davy McKee's guarantee of the performance of systems on which it served as prime contractor. Davy McKee representatives also advised that based on the company's engineering analyses and expertise, the key elements of the technology were well within the state-of-the-art and that any problems could be resolved through the demonstration system.

Everything seemed ready to come together nicely, so much so that ATS management began focusing most of their efforts on raising funds to continue corporate operations and to construct the Madison project. A breakthrough appeared in December 1985, when Lee Berlin, president and CEO of LecTec, Inc, in Minneapolis, announced that his son Judd Berlin and Stuart H. Watson, a grandson of the founder of IBM, were interested in ATS. They offered the possibility of investing $1.5 million in ATS, including immediate funding needed to pay company debts and large personal advances made by Roger Staehle as CEO. It appeared that

prototype development and construction of a demonstration track would begin in the spring or summer of 1986.

Corporate Crisis

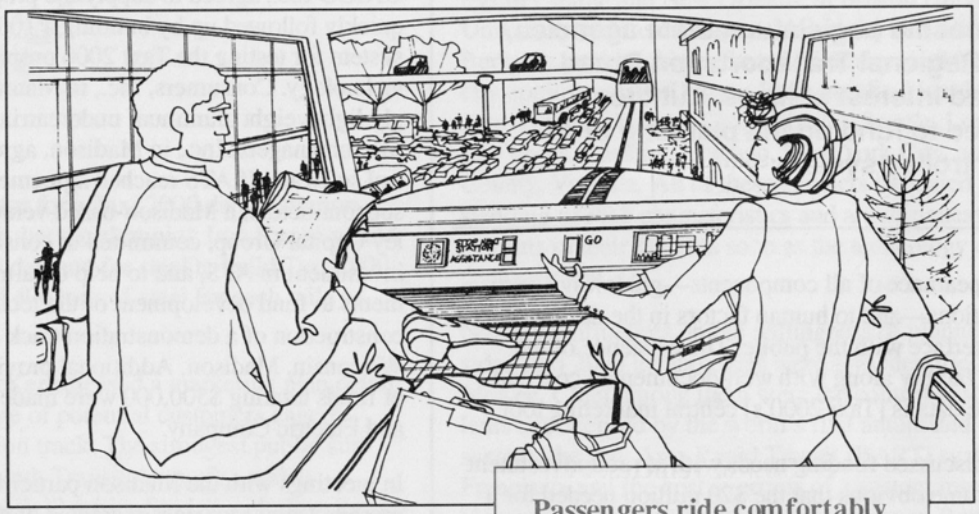
As it turned out, the relationship with Judd Berlin and Stuart Watson was intense but short-lived. After reviewing marketing plans and meeting with officials in Madison and with financiers in the U.S. and Asia, they and Stuart's brother David visited the ATS Board of Directors meeting at the end of January. Berlin first reviewed his trip to Asia on behalf of ATS, and then outlined a proposal for he and Stuart Watson to assume control of the management of ATS, including its finances and marketing efforts. A month later Judd Berlin wrote that in exchange for a stock option for 51 percent of ATS, he and the Watsons would manage company debts of more than $600,000, provide operating funds up to $100,000 per month, raise $30 million for a demonstration track, and recruit a management team.

Because ATS was sorely in need of operating capital, the board of directors voted to accept the Berlin-Watson proposal. Staehle resigned, and on March 11, 1986, Stuart Watson was elected chairman and Judd Berlin president and CEO of Taxi 2000 Corporation, the new name they had suggested for ATS.

But just three months later, Watson and Berlin resigned. They proposed that the company reassume its former name, and that ATS then sublicense rights to the technology to a new company they would form, named Taxi 2000 Corporation. They explained that investors felt the old corporation was too encumbered with debt and personal obligations, making a new entity necessary to attract venture capital. After meeting with Watson and Berlin's investment banking firm and considering the proposal, the board of directors decided that such an arrangement would not be in the best interests of protecting the University's and Anderson's rights in the technology. Nor would it protect the financial interests of those who had invested in the start-up company financially and through commitments of professional services.

Keeping the name Taxi 2000 Corporation, and electing Anderson chairman, president, and CEO, the board of directors set out to rescue the corporation. The challenge was daunting, with several immediate issues vying for their attention:

- Neither Staehle nor Anderson could afford to continue to work for the corporation for no salary, so Staehle resigned to devote full-time to his growing independent consulting business, and Anderson began searching for an academic position.
- John Deere and Company notified Taxi 2000 Corp. that it had decided against collaborating as a supplier of vehicles and guideways, citing skepticism about the market potential. And none of the private investors approached in Madison agreed to provide any funding until more testing was done of the technology in operation. These two adverse developments placed the Madison project in jeopardy.
- Although requests for information and proposals continued to come in from many states and several countries, the company lacked operating funds and the resources to pay outstanding debts. However, the University of Minnesota continued to fund patenting of the technologies in the United States and internationally, providing the company with valuable tangible assets for continuing negotiations with all interested parties.



Passengers ride comfortably in locked vehicles that roll along non-stop under automatic control, unhindered by rush-hour delays.

In August 1986, Anderson announced that he had accepted a position as professor of aerospace and mechanical engineering at Boston University, following talks about the Taxi 2000 technology with BU President John R. Silber. With him to Boston went the corporate office of Taxi 2000 Corporation, possibly extinguishing any hope that the technology would be developed and commercialized in Minnesota.

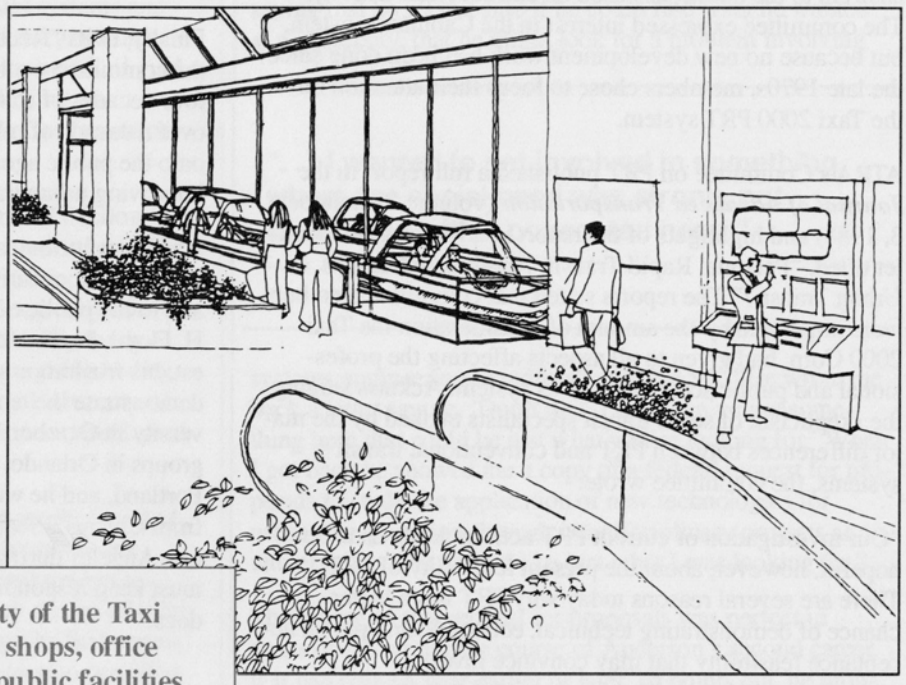
Taxi 2000 Heads East

By the mid-1980s it had become apparent to Anderson, the Taxi 2000 Corporation directors, and their many backers that designing, patenting, and painstaking analysis of the engineering systems involved was not enough to get Taxi 2000 PRT systems onto the market. While engineers were convinced that the technology was feasible, politicians and private developers needed something they could kick the tires of and take a ride on before they spent millions on an application for their pet project. When Anderson explained that constructing and adequately testing a prototype system required at least $20 million, interest turned quickly to existing transit systems, even though the costs of their construction, operation and maintenance were many times those projected for Taxi 2000 systems.

Professor J. Edward Anderson returned to academia in the fall of 1986, moving to Boston University to teach a course on transit systems theory and to continue his efforts to finance and develop prototype systems.

Tantalizing projects and partners continued to appear almost monthly over the next two years, including an international business center development near Orlando, Florida; a ski resort project at Loon Mountain, New Hampshire; a transit system for an airport community development, the City of SeaTac, near the Seattle-Tacoma airport; and a similar development near Schiphol Airport in Amsterdam, the Netherlands. Anderson also had hundreds of meetings with supportive public groups and private developers in Chicago, Las Vegas, Denver, Aspen, Madison, Milwaukee, Norfolk, Phoenix, Honolulu, Charleston, Atlanta, Boston, and the Twin Cities. All discussions seemed to end with the same question, Anderson says: "How soon can we see the technology operating so we can order a system?"

So the problem remained the same: who would fund a demonstration of the technology?



The accessibility of the Taxi 2000 system to shops, office buildings and public facilities will stimulate its use. Stations can be added to main guideways without inhibiting the flow of vehicles. Private developers will have an incentive to pay for stations and guideways connecting their sites to the main network.

ATRA Boosts Respect

One of the problems Anderson and Taxi 2000 Corporation faced in Minnesota and other states was that few people were familiar with PRT. Engineers and some transportation planners understood the concept and were impressed by the extensive planning and analysis done by Anderson and others. But when it came time to expand awareness and understanding to the public and government officials, PRT inevitably drew labels such as "Buck Rogers technology" or "just like the Jetsons." Despite testimony to the contrary from major engineering corporations, PRT seemed too far in the future to warrant respect and serious consideration for investment of today's transit dollars.

Anderson attributes a major role in gaining widespread respect for PRT to the Advanced Transit Association (ATRA), which in late 1987 convened a Committee on Personal Rapid Transit. Composed of 13 transportation engineers and consultants, the committee was asked to assess the feasibility and development status of current PRT systems, and to present findings and conclusions about PRT's prospects for serving urban areas. The committee began by requesting information from all developers of PRT systems as defined by the following characteristics:

- fully automated vehicles;
- small vehicles available for exclusive use by an individual or small group on a 24-hour, on-demand, non-scheduled basis;
- small guideways that can be located aboveground, at or near ground level, or underground;

- vehicles able to use all guideways and stations on a fully connected PRT network; and,
- direct, non-stop, origin-to-destination service.

Only two companies responded: Cabintaxi Corporation, based in Detroit, which provided a German-language document and videotape showing the status of its system in 1979; and Taxi 2000 Corp., which provided written and oral answers to the questions based on current R&D activity. The committee expressed interest in the Cabintaxi system, but because no new development work had been done since the late 1970s, members chose to focus their attention on the Taxi 2000 PRT system.

ATRA's Committee on PRT published a full report in the ***Journal of Advanced Transportation*** (volume 22, number 3, 1988) and highlights of the report in a March 1989 booklet titled, "Personal Rapid Transit: Another Option for Urban Transit?" The reports stated that committee members were impressed by the amount of consideration the Taxi 2000 Corp. had given to all aspects affecting the professional and public acceptance of its system. Acknowledging the skepticism of some transit specialists evoked by the major differences between PRT and conventional transit systems, the committee wrote:

"Our investigation of current PRT activity leads us to be hopeful, however, about the present feasibility of PRT. There are several reasons today why PRT has a better chance of demonstrating technical, economic and public acceptance feasibility that may convince investors and customers that it should be brought to the market."

As for technical feasibility, the committee wrote: "It would appear that a PRT system could be brought to the urban market within a reasonable time (depending upon the resources committed to further development), using state-of-the-art technology, often off-the-shelf, for each required component of the system—technology that does not require further research."

In addressing economic feasibility, the committee wrote: "The cost data presented by Taxi 2000 Corp. indicate, if their PRT development program is successful, that the cost-effectiveness of guideway transit would take a large step forward, measured in life-cycle cost per passenger mile or by other measures common to the transit industry. It would be feasible to build and operate a guideway transit system that would furnish a quality of service significantly better than is provided today by guideway transit, and accomplish this at a lower annualized cost."

Public acceptance was the area in which the committee issued the most advice to Taxi 2000 and other PRT advocates. The committee wrote that it was "optimistic about the public acceptance feasibility of PRT," citing the detailed attention paid to environmental impact, safety, and security issues in the Taxi 2000 system design. It cautioned that developers pay careful attention to answering public questions and concerns in early phases of discussion and implementation, rather than after misconceptions arose and spread.

Finally, in its "Recommendations for Advancing Transit," the committee wrote: Personal Rapid Transit, after about four decades of study and some development, including over a decade of relative neglect, should be moved back onto the public agenda as one of the promising options for improving urban transit."

Anderson attributes a regeneration of interest and support for PRT that occurred in the late 1980s to the ATRA report, and to the public education efforts of its chairman, Thomas H. Floyd, Jr., now deceased. Yet despite widespread interest, his frustration grew at not having funding to demonstrate the technology. In a progress report to the University in October 1988, Anderson described contacts with groups in Orlando, Denver, Albuquerque, Madison, and Portland, and he wrote: "I have also gotten calls of inquiry from Chicago, Seattle, Phoenix, Las Vegas, New York, and Los Angeles during the past few weeks, and believe that I must keep responding even if it keeps me broke, which it does."

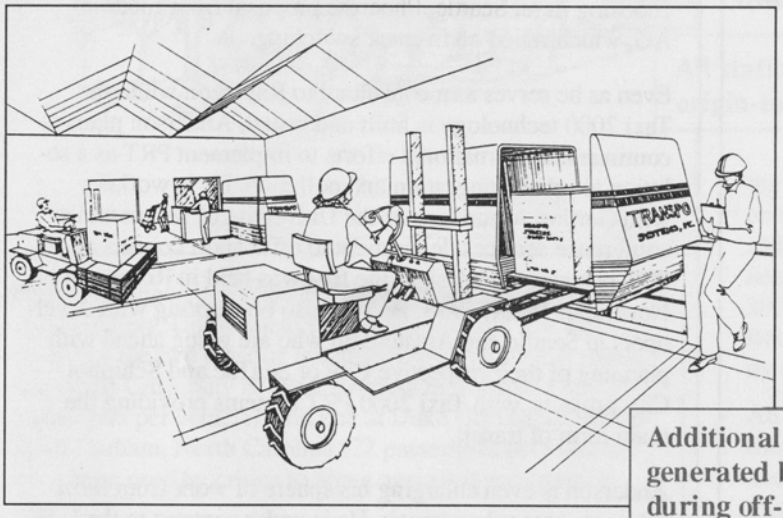
In 1989, J. Edward Anderson (second from left) was honored as an outstanding American inventor of the year by the Intellectual Property Owners Foundation. With Anderson at the award ceremony were, from left, John Thuente, former director, Office of Patents and Licensing; Tony Potami, associate vice president for research and technology transfer; and Tony Strauss, assistant director, patents and licensing.

Turn Out the Lights?

A light appeared at the end of Anderson's PRT tunnel shortly after that report, when Raytheon expressed renewed interest in PRT as a hedge against declining defense contracts. Located in Lexington, Massachusetts, Raytheon is a $9 billion company with sales in four business segments: electronics, aircraft products, energy and environmental, and major appliances. The Taxi 2000 board of directors had been joined in 1986 by Richard Daly, a senior Raytheon executive who kept the company informed about the technology. Daly became Anderson's right-hand man in keeping the Taxi 2000 Corporation functioning, and in keeping hope alive as prospects flickered from bright to dim.

After a year of engineering and cost analyses, Raytheon's Equipment Division reported to corporate management in 1990 that the Taxi 2000 technology was both feasible and cost-effective compared to all other transit systems, and that Raytheon should undertake a major initiative to build a test system. All indications were that Raytheon management would agree, so when the decision came back negative, the Taxi 2000 lights almost went out.

But prospects brightened again in the fall of 1990, when the Regional Transit Authority (RTA) for Northeastern Illinois voted to award $1.5 million each to two groups for phase one planning studies of PRT in a suburb of Chicago. Taxi 2000 partnered with the Stone & Webster Engineering Corporation and three other companies to win one of the contracts; the other went to Intamin AG, a Swiss firm that has constructed monorail systems for amusement parks in the United States and Europe. The Taxi 2000-Stone & Webster consortium offered technology more suited to the RTA's request for a true PRT system, but lacked the matching money the RTA was requesting for phase two of the project.



Additional revenue can be generated by carrying freight during off-peak hours on the same guideway as is used to carry passengers.

A Complex Transfer

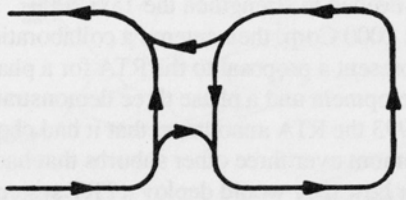
In September 1992, Raytheon management reassessed the project and re-entered the picture, bringing the additional expertise and capital needed to strengthen the Taxi 2000 proposal. The Taxi 2000 Corp. then entered a collaboration with Raytheon to present a proposal to the RTA for a phase two prototype development and a phase three demonstration system. In April 1993 the RTA announced that it had chosen the suburb of Rosemont over three other suburbs that had submitted plans for how they would deploy a PRT system. After comparing the Raytheon proposal to the one from Intamin AG, the RTA board selected the Taxi 2000-Raytheon consortium. That decision sent Tony Strauss of the University's Office of Patents and Licensing back to the negotiating table, to help work out a three-way deal involving the University, Taxi 2000 Corp., and Raytheon.

The resulting four-party agreement, signed on August 18, 1993, highlights the many complexities of university-to-industry technology transfer: A major U.S. corporation (Raytheon) signed a sublicense agreement with a university-assisted start-up company (Taxi 2000 Corp.) for rights to develop and commercialize technology invented at and patented by a university (University of Minnesota) and licensed to the start-up company. Waiting in the wings was a public agency of a major U.S. city (Chicago) that was offering up to $18 million to the corporation to build and test a prototype of the technology, and possibly $40 million or more to construct a system for public use. And it all started with a modest federal grant supporting an academic multidisciplinary study of new technologies for urban transportation.

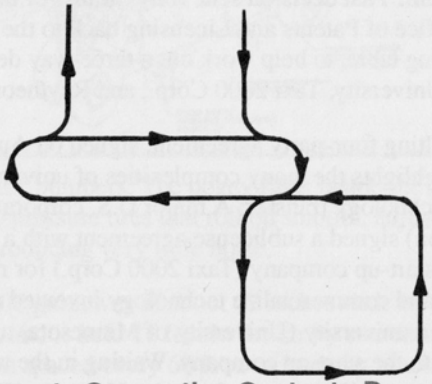
The sublicense with Raytheon brought Anderson full circle from a consultantship he served with the company's Transportation Systems Group in 1975-76. Then his task had been to help evaluate the feasibility of bringing a German-designed PRT system to the United States. His analysis of the serious drawbacks of the system, called Cabintaxi, convinced Anderson that a new design was needed. Raytheon management likewise concluded that, although the potential worldwide PRT market was huge, they would have to wait until the right technology became available to meet that need.

Anderson invented the "right technology," but he is quick to point out that the major reason it is doable now is because of advances in computer technology. There is no way the

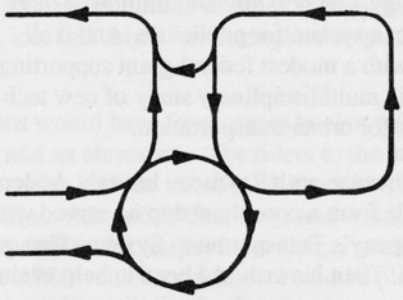
Initial Systems



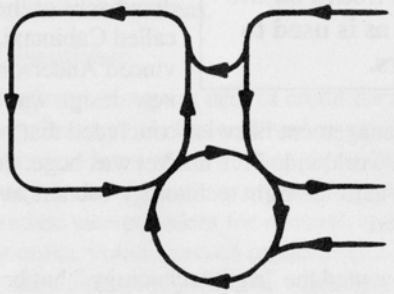
Connects Cheap Parking to Downtown



Connects Convention Center to Downtown



Shopping Center and Office Complex



Airport, Rental Cars, Parking, Hotels

computer technology of the 1970s and early 1980s could have controlled a Taxi 2000 network of hundreds of vehicles, each with an onboard computer communicating with computers at stations and system operating centers. But with advances in miniaturization, processing speed, and computer networking, the time is right for Taxi 2000 personal rapid transit.

Anderson and Raytheon engineers expect it to take three years to build and test the Taxi 2000 hardware and software components, and then three to four years to build and test the system in Rosemont before it can be opened to the public. "Engineering is an error-correcting process, and we want to be sure we work out all the bugs before we open the system to the public," Anderson says.

In Rosemont, a three-mile PRT guideway is planned to connect the O'Hare Expo Center and surrounding hotels with the train and bus stations serving downtown Chicago. RTA board members said they chose Rosemont's site in April over competing bids from Schaumburg, Deerfield, and Lisle, because of high ridership projections related to O'Hare Airport and the suburb's many hotels and local businesses. Consultants projected 7,400 trips a day if rides were free, and 4,800 trips if the cost were as high as $2. RTA officials said Taxi 2000's in-vehicle switch was a key factor in choosing its technology over the proposal from Intamin AG, which relied on in-track switching.

Even as he serves as a consultant to Raytheon while the Taxi 2000 technology is built and tested, Anderson plans to continue his international efforts to implement PRT as a solution to urban congestion and pollution. He is working with Gordon Amundson of the University of Minnesota's conference services department to offer short courses on PRT planning and design; the first was held in Rosemont on November 19-21, 1993. He will also be working with developers in Seattle and Amsterdam who are going ahead with planning of their respective City of SeaTac and Schiphol City projects, with Taxi 2000 PRT systems providing the main form of transit.

Anderson is even enlarging his sphere of work from *intra*-urban to *inter*-urban transit. He is under contract to the U.S. Department of Transportation to consult on MAGLEV rail projects funded through the federal Intermodal Surface Transportation Efficiency Act. With somewhat larger vehicles, Anderson believes that PRT concepts such as elevated guideways, connected networks, and off-line stations could improve long-distance transit efficiency and convenience.

Although he just turned 66, there's little doubt in the minds of those who know him that Ed Anderson will carry out his mission to see PRT implemented all over the world. "He's amazing," Strauss says. "I just spoke to him and he's as fired up now as he was when we first started working with his patents back in 1982."

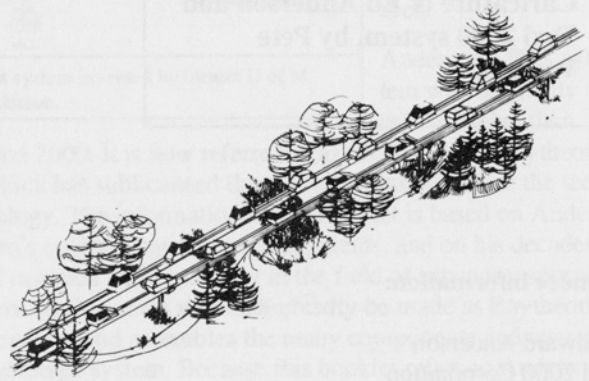
Rail Transit Systems Cost Comparison

	Installed Cost Per Mile of Two-Way Track (M = millions)	Operation and Maintenance Cost Per Passenger Mile
Subways	~$300M	$0.37
Elevated Train	~$100M	$0.37
LRT (existing)	$30M	$0.47
LRT (proposed for Twin Cities)	$30-43M	$0.45
PRT (projected) *	$20-25M **	$0.21

*** Includes 40 vehicles and three stations per mile, plus all other storage, maintenance, operations and administration facilities, plus installation costs.**

**** Most PRT systems would use one-way loops, costing about $15M per mile, to cover more area than side-by-side, two-way, tracks (see page 14).**

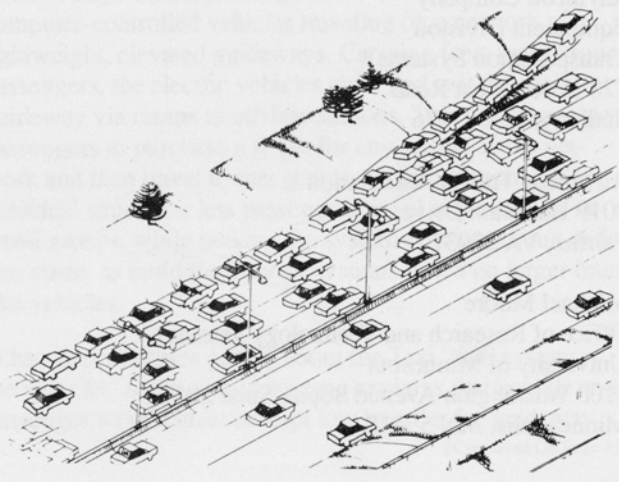
Guideway has capacity comparable to a four-lane highway . . .

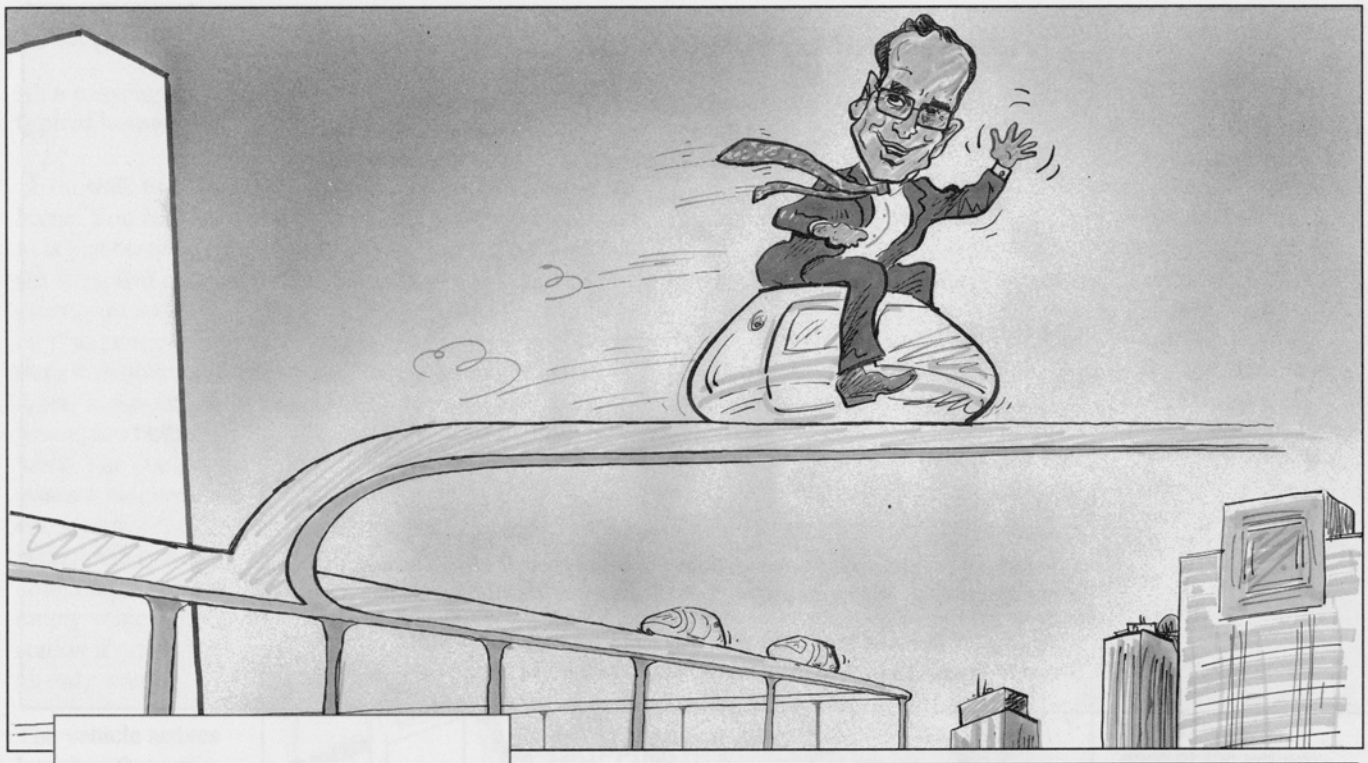


Anderson admits to becoming frustrated with those who refuse to bring an open mind to consider PRT, as have many of the light-rail transit (LRT) advocates in the Twin Cities. Characteristically, he maintains on his personal computer a question and answer document to address frequently voiced arguments against PRT; it's at 37 questions and still growing. The document echoes the philosophy Anderson communicated to a University of Minnesota PRT Steering Committee ten years ago:

"As our program gains visibility, there will be others who, based on some past experience, will insist with very logical-sounding statements that we cannot possibly succeed. We must listen to the arguments and be sure that we can answer them. If the arguments really require us to modify our approach, we must be realists and do that. If you hear of a plausible argument, please let's discuss it. It has been a long time since I have heard a new one, but I must know if there are any. Experience has shown that the dynamics of opposition to this new idea are subtle and abide by no rules. Yet, there is plenty of evidence that we can succeed."

. . . with significantly less land use





Caricature of Ed Anderson and Taxi 2000 system, by Pete Wagner.

For more information:

J. Edward Anderson
Taxi 2000 Corporation
40 Salem Street
Lynnfield, MA 01940

Richard Tauber
Raytheon Company
Equipment Division
Transportation Systems
528 Boston Post Road
Sudbury, MA 01776

Advanced Transit Association
9019 Hamilton Drive
Fairfax, VA 22031

Michael Moore
Office of Research and Technology Transfer
University of Minnesota
1100 Washington Avenue South, Suite 201
Minneapolis, MN 55415

Raytheon Timetable for Development of Personal Rapid Transit based on Taxi 2000

1994	– Systems and engineering development.
1995	– Demonstration in Massachusetts of engineering model consisting of a 420-foot section of guideway with a branch section and one operational vehicle.
1996	– Demonstration in Massachusetts of prototype model consisting of a one-half mile closed loop guideway with three vehicles and one off-line station.
1997-98	– Construction in Rosemont, Illinois, of a three-mile configuration linking the O'Hare Expo Center, hotels, office buildings, stores, parking areas, and a Chicago Transit Authority station.
1999	– Rosemont system open for public service.

In the Twin Cities, a group of Anderson's former graduate students and colleagues from Honeywell and the University have established a non-profit organization called Citizens for PRT. For more information, contact Citizens for PRT, PO Box 39692, Edina, MN 55439-0692; 612/335-1025.

TAXI 2000 Personal Rapid Transit (PRT)
is a revolutionary new technology invented at and patented by the **University of Minnesota.**
Now a multi-million dollar prototype is being built and tested by a major U.S. corporation, with financial assistance from a public transportation agency. This is the story of how our urban community nightmares could be replaced by a public transit system that:

- Operates 24 hours a day;
- Has vehicles available at every station within three minutes;
- Lets you travel in privacy and safety;
- Takes you non-stop from origin to destination;
- Runs quietly and without air emissions;
- Is cost-effective in construction and operation; and,
- **Turns transportation dreams into reality!**

Produced by: Office of Research and Technology Transfer, University of Minnesota.

Cover art: Photo illustration (top) courtesy of Regional Transportation Authority of Northern Illinois.

Photo (bottom) of scale model vehicle and guideway courtesy of Raytheon Company.

Inside art: All system illustrations courtesy of Taxi 2000 Corporation.

MISSION STATEMENT

Management Analysis Division

Minnesota Department of Administration

The mission of the Management Analysis Division is to increase the capacity of government to manage resources and to create and implement strategies that improve the quality and cost effectiveness of public services.

We provide consultant services to state agencies, the governor, the legislature, and local governments.

We provide a continuum of management services ranging from analytical studies to design and implementation of change strategies. Our services include diagnosis, analysis, project management, operational and strategic planning, and organization development. Services are provided to individual agencies as well as on a state-government-wide basis.

We offer distinctive competences that ensure professional, objective, thorough and innovative services specific to the client's needs:

- Comprehensive knowledge of and broad experience in state government operations.
- A disciplined team approach combining staff expertise.
- A track record of sensitive, yet tough-minded, work and a bipartisan reputation for integrity.

We operate with a specific set of values:

- Responsiveness: We design each consultation to focus on areas that have the most potential for significant impact on the organizational challenges of our clients.
- Involvement: We include in the diagnostic and decision processes the people who will implement decisions.
- Regard for employees: We consider an organization's employees to be its most important resource, and we treat them with fairness and respect.
- Objective viewpoint: We strive to maintain a fair, neutral, comprehensive perspective that is apolitical and sensitive to both management and employee needs.
- Inherent respect for public service: We support the mission of state and local government, believe in the dedication and competence of public-sector managers and employees, and support continuous improvement of government services.

– July 1991

Management Consultation Services

The Management Analysis Division offers a variety of consulting services, working with the client to determine the approaches that will work best for the client agency. Each service is then custom designed to meet the specific needs of that agency.

Comprehensive Study -- An in-depth assessment of an agency to identify areas where change will increase effectiveness or reduce costs, and sometimes both. Perhaps a client just wants an outside opinion of how well the agency is operating. Recommendations will vary from minor adjustments to major reorganizations, depending on what we find.

Diagnostic Overview -- A brief review of the operations of an agency. Our objective look will quickly identify trouble spots, and we will outline what needs fixing and how you might make the repairs.

Organization Development -- Objective, outside guidance of you and your staff to help you determine and prepare for the future. Perhaps the organization's mission statement needs updating, or goals need to be refocused, or operations should be streamlined. We work directly with the affected employees to guide them in making meaningful decisions. We offer one-on-one coaching of managers needing special guidance, and also can give and evaluate the Myers-Briggs Type Indicator.

Legislative Study -- Comprehensive research and analysis, set forth in a written report of findings, conclusions and recommendations, for studies ordered by the legislature. We will perform the entire study for your agency, or produce parts of it, according to your agency's needs. We will also provide follow-up legislative testimony when requested.

Management Training -- The Effective Leadership Course teaches a dynamic leadership style to managers, supervisors, team leaders and committee chairs. Participants learn how to facilitate an effective meeting. Their oral and written presentation skills are polished, and they are taught how to organize everything from an interview to a five-year work plan. State-of-the-art techniques are applied in an informal environment, with the emphasis on practical methods. This course is approved for supervisory credit by the Department of Employee Relations.

Strategic Planning -- Facilitation of group sessions in which you and your staff design long-range plans, including meaningful mission and goal statements.

Operational Planning -- Guidance of you and your staff to apply your agency's strategic plan to its daily operations.

Organizational Structure Design -- Analysis and recommendations for an agency's organizational structure, including recommendations on authorities and responsibilities, and position description writing.

Customer Relations Analysis -- A review with recommendations on improving your customers' satisfaction. Implementation services can include customer surveys and other strategies of effective service delivery.

Work Flow Simplification -- Analysis and recommendations for eliminating duplication, unnecessary steps and confusion in your agency's work processes.

Cost-benefit Analysis -- A study to determine the costs of a process compared with the value of its results.

Information Management -- A review, analysis and recommendations for implementation or refinement of information systems to give your agency the data it needs to do its job.

Strategic Information Planning -- A comprehensive assessment of your organizational information systems and a plan for future systems development, to support your organization's strategic and operational plans.

Communications Analysis -- An assessment of your agency's internal and external communications systems, including customer information and education materials, policy and procedures manuals and inter-office information-sharing.

The STEP Program -- The nationally recognized program promoting innovation and productivity in government through projects led by agency personnel and guided by Management Analysis staff. The projects are designed to improve the quantity, quality or cost-effectiveness of service delivery.

Implementation -- Step-by-step guidance by our consultants to help you and your staff implement the changes in your organization resulting from our consultations.

Management Analysis: The Better Option

Selecting the Management Analysis Division as your agency's management consultant will provide you with:

- A consulting staff composed of state employees with hands-on knowledge of Minnesota state government, a broad and varied base of expertise, and a clear focus on the management of Minnesota government
- A custom-designed consultation
- An approach that actively involves all affected employees, as well as managers and supervisors
- Consultants who are available after the job's done, to provide formal and informal consultation and assistance
- A consulting staff knowledgeable in state-of-the-art productivity and quality improvement methods
- Workable, innovative solutions
- Consulting fees highly competitive with those charged in the private sector

Management Consultation Procedures

Management Analysis' consultation services are available on a project basis or on retainer, where we become part of your agency's management team. Clients are offered a variety of services at the contracting point of the relationship with Management Analysis. Options range from an agency-wide study to analysis of a small unit. We can offer a comprehensive diagnosis of an agency's operations, or a one-day facilitation of problem-solving sessions. Everything from systems analysis to operational planning is available.

If we're consulting with a state agency, a simple interagency agreement is all that's necessary -- no bidding, minimum paperwork and no delays. The interagency agreement, or contract, outlines details of the project work plan, the products, the project team members, the work schedule, time estimates and total project costs.

Active client involvement

We make sure that our clients are involved throughout the project. Our team-based, cooperative work style brings integrity, objectivity and innovative perspectives to every consultation. We build on our clients' resources and experiences, fitting our information-gathering, recommendations and implementation to the needs and environment of each client agency. Our clients become co-managers of the project with us.

The work products are reviewed by Management Analysis management and, as needed, by an internal review panel before presentation to clients. Some products are offered to the client at the end of each phase, while others are offered at the end of the project. The client always reviews drafts of written products before the final report is produced. Follow-up interviews with clients are held to assess the quality of our work.

Management Analysis' recommendations are being implemented throughout Minnesota government -- through STEP projects, organization studies, group leadership and manager counseling. We offer high consulting value for the money. Our customer orientation serves as a role model for government. It's what we do best.

Management Consultations

The Management Analysis Division's professional consultants provide quality management consultation services to Minnesota government agencies. Our consulting work is designed to improve the quality and cost-effectiveness of government services through improved government management, whether agencies are facing budget curtailment or adding responsibilities.

Management Analysis consultants are problem-solvers. We understand the needs of government, because we're part of government and know the management and organizational problems unique to government. We're well acquainted with the limited resources and austere budgets of government agencies, and share our clients' value in responsible government in the public interest.

Customized consultations

We provide customized consultations ranging from a full-agency study of operations to specialized technical services. We can look at your agency and identify its problems, and we can lead you and your staff through the complex process of planning and managing an organizational change.

Since a client's day-to-day responsibilities come first, we try to fit our work into an organization's work life to minimize disruptions. The amount of time we spend with your agency is your decision: you may hire our services for a three-hour meeting facilitation or for an in-depth study over several months.

We can help your agency increase its productivity, effectiveness and innovation. We can assist in a crisis, and we can advise your agency on organizing to avoid problems. We're skilled in transition management and offer a variety of services dealing with management in a changing environment. Everything we do is handled confidentially and with sensitivity.

Examples of our consulting techniques include personal and group interviews to gain an understanding of issues, personal testing tools such as the Management Skills Profile and the Myers-Briggs Type Indicator to provide insight into employees' work styles and abilities, research of records, applicable laws and literature in the field to provide the best available information for advising, group leadership to help employees participate in determining the future of their organization, and retreats and off-site sessions to strengthen a group's working relationship.

For the record

We don't expect anyone to hire our services on blind faith. They don't have to. We have an impressive record of successful consultations. We have helped an often-reorganized state department repair long-term damage and bring its management and staff together, using personalized guidance and direction in planning sessions. We have helped a major state department receive additional positions from the legislature, using the facts and recommendations reported from a study we performed for them. We have helped a large department review its internal security system to assess its effectiveness in preventing fraud. There's a list of our past clients on another fact sheet in this packet; use it to check our references, if you like.

Representative Division Consultations

Administration/Administrative Services	Strategic planning
Administration/Building Codes	Task force facilitation
Administration/Central Mail	Work flow analysis
Administration/Commissioner's Office	Day care feasibility study
Administration/Commissioner's Office	Set-aside purchasing study
Administration/Information Policy Office	Organization structure design
Administration/InterTechnologies Group	Work flow analysis
Administration/Print Communications	Organization development
Administration/Property Management	Cost-benefit analysis
Administration/Property Management	Survey design and analysis
Board of Vocational-Technical Education/ Student Organizations	Comprehensive management study
Bureau of Mediation Services	Comprehensive management study
Charitable Gambling Control Board	Comprehensive management study
Corrections/Administrative Services	Comprehensive management study
Employee Relations	Hiring/firing practices study
Ethical Practices Board	Strategic planning
Faribault Academies for the Deaf and Blind	Comprehensive management study
Finance	Diagnostic management review
Health/Administrative Services	Diagnostic management review
Health/Health Facilities Complaint Unit	Comprehensive management study
Human Services	Cost-benefit analysis
Human Services	Work flow analysis
Human Services/Accounting Division	Strategic planning
Jobs and Training/ Administrative and Technical Services Division	Comprehensive management study
Jobs and Training/Administrative Services	Comprehensive management study
Jobs and Training/Commissioner's Office	Systems feasibility study

Jobs and Training/Jobs Office	Task force facilitation
Jobs and Training/Job, Training and Community Services	Comprehensive management study
Jobs and Training/Unemployment Insurance and Fraud Investigation units	Comprehensive management study
Metropolitan Council/Administration	Customer service design
Military Affairs/Architects and Engineers Office	Comprehensive management study
Minnesota Fire Council	Meeting facilitation
Minnesota Veterans Homes	Comprehensive management study
Minnesota Veterans Homes	Feasibility study for additional homes
Minnesota Zoological Gardens	Comprehensive management study
Natural Resources/Business Offices	Comprehensive management study
Natural Resources/Field Operations	Comprehensive management study
Natural Resources/Game and Fish Fund	Comprehensive financial study
Northwest Regional Development Commission	Organization development
Pollution Control Agency/Hazardous Waste Regulation	Comprehensive management study
Public Employees Retirement Association	Organization development
Public Utilities Commission	Comprehensive management study
Public Utilities Commission	Organization development
Revenue	Meeting facilitation
Trade and Economic Development	Strategic planning and organization development
Trade and Economic Development/ Minnesota Trade Office	Organization development
Trade and Economic Development/ Office of Tourism	Organization development
Transportation/Maintenance Operations	Comprehensive management study
Transportation/Highway Construction Program	Staffing needs analysis

REGIONAL TRANSIT BOARD

Mears Park Centre
230 East Fifth Street, St. Paul, Minnesota 55101
292-8789

DATE: March 21, 1994

TO: Regional Transit Board

FROM: Judith Hollander, Director of Planning and Programs
Howard Blin, Planning Manager

SUBJECT: ISTEA Applications

SUMMARY

Action is requested to approve applications for federal ISTEA funding to be submitted to the Transportation Advisory Board. The applications are for $2.5 million in funding for the proposed Northtown Transit Hub and an additional amount, to be developed, for RTB Travel Demand Management activities.

BACKGROUND

The Transportation Advisory Board solicited applications from metropolitan area units of government for funding from Title I on the federal Intermodal Surface Transportation Efficiency Act (ISTEA). These are flexible highway funds which may be used for either highway or transit projects.

In this solicitation, funding is available for federal fiscal years 1995-1997 from the following ISTEA programs:

	Estimated Funding Available Federal Fiscal Years 1995-97
• Surface Transportation Program (STP)	- $55 million
• Congestion Mitigation and Air Quality Program (CMAQ)	- $14 million
• Transportation Enhancement Program	- $13 million

The next solicitation for funding from these programs is not expected until calendar year 1996.

DISCUSSION

RTB applications are proposed for the following two projects:

- Northtown Transit Hub

  This would be a joint application for STP funds by Anoka County and the RTB, which are currently conducting preliminary engineering on the project. This preliminary cost estimate for transit hub and necessary roadway improvements is $2.5 million.

  If a grant is awarded, a local match of 20 percent, or $500,000, would be necessary. The RTB share of this match would be $285,000. This corresponds to the portion of costs associated with transit hub improvements. Anoka County would be responsible for the remaining local share of $215,000.

- Travel Demand Management

  In 1993 and 1994, the RTB received a total of $1,542,000 CMAQ funding for travel demand management programs, including funding for the Minnesota Rideshare program. This application would fund travel demand management costs for the period 1995-1997. The total amount of funding to be sought over the next three years is currently being developed, but is likely to exceed $3 million.

  If successful in obtaining CMAQ funding, the RTB can apply other typical agency expenditures for the matching amount.

RECOMMENDATION

That the Regional Transit Board approve applications to the Transportation Advisory Board for ISTEA funding for the Northtown Transit Hub and the Travel Demand Management program.

1994 SOLICITATION FOR
FEDERAL FUNDING

CMAQ PROGRAM

Thank you for your invitation to present this innovative program to you today. I was surprised and pleased to see my billing after Jim Moore. I heard this presentation to the Senate Transportation and Transit Committee several weeks ago. Ed Anderson and I have been on parallel paths for many years. In 1979 he and I travelled together to attend a Transportation Fair in Hamburg, Germany. Unfortunately their demonstration project is much larger and complex than my PARKING MODULE, but when they are operational I expect they will similarily have a world attractive facility. My system will be an interface with any mode - this PRT, LRT, bus or VAN - to provide a complete TRANSIT SYSTEM.

My mission before you today is to seek your approval to SPONSOR this project. As this SOLICITATION indicates, April 1st is the deadline. MTC and MPCA personnel have endorsed this proposal for its value to integrate with the bus system and release resources to more needed services. Within 6 to 8 months, to get (100) SOV's off I-394 during commuter periods, and potentially within 2-years, remove (2,130) SOV's would impressively impact improved Air Quality. While energy conservation is not a current concern, it will return - as a crisis.

With the present P & R lot at C.A.S.H.73 and I-394 converted from (284) surface stalls to an enclosed, heated structure for (2,100) stalls, the effect is equivalent to an additional lane of traffic in the rush hour, the following reduced fuel consumption is realized:

	SOV	BUS	VAN
PEOPLE	2,100	2,100	2,100
TRIPS PER DAY	4,200	250	380
MILES PER DAY	33,600	2,000	3,000
MILES PER YEAR	8.4 M	500 K	750 K
MILES PER GAL.	20	3	10
GAL. PER YEAR	420 K	170 K	75 K
RATIO	5.6	2.3	1

The VANS will be parked in the garages that were built for this purpose, connected with the SKYWAY SYSTEM. (190) VANS will be used. (63) BUSES on the downtown streets would measurably add to traffic gridlock. All HANDICAP patrons will have lift vehicles. Travel from one's garage to downtown would, in essence, be seamless, with less than a minute or two transferring from their personal vehicle into a VAN.

Five (5) questions must be addressed:

1. What is Park & Drive of MN, Inc.?
2. Will it hurt the MTC bus operation?
3. Isn't it experimental?
4. Shouldn't Sternad be seeking Venture Capital?
5. Will it be patronized?

1. P&D of MN will be a non-profit corporation to operate the facility and maintain the VAN fleet, in perpetuity. The first phase demonstration will not employ VANS because a critical mass size is needed as will be with the second phase. In this period, the (50) individuals who park their car here will pay the bus fare - $3.50 and save the cost of driving downtown. The (50) other drivers, now have an express lane trip downtown. Because it is random operation, the need for tight individual scheduling, as with Ride Share, is obviated. In a sense, this is the ultimate in RIDE SHARE.

2. In non-commuter hours, the bus will still service this hub. It will, however, release the MTC to use its resources to more fertile routes serving the city.

3. NO. Every component will be commonly employed industrial equipment, simply reconfigured to accomplish this job.

4. First, this is precisely the intent of ISTEA - to advance new technology to improve transit and address CMAQ. Secondly, no private enterprise has been able to compete with public transportation. This program will permit an un-subsidized transit operation on a non-profit basis, but that would not satisfy investment money. Incidentally, personnel could well be drawn from the ranks of your Agency or the MTC.

5. Almost without question, (100) people can readily be found to participate in this first demonstration phase. When the reality of it is in place, a realistic market determination can be made. The second phase size can then be reasonably determined. With decreasing facility size, departure headway of vans would increase. But using 7-passenger VANS in an installation of (250) stalls on a piece of land of only 20' x 200', VANS would depart approximately every 3-minutes.

Another interesting consideration is that this system can very well adapt to electric vehicles as soon as they become commercial.

Not many projects offer the innovation of this proposal. Both in the short-term and long-term the potential payback is unique. Further, the value to other more congested areas in our country is inestimable.

I urge you, the RTB board, to vote to sponsor this proposal and direct staff to assist me with preparation of the application to the TAB by the April 1st deadline. Thank you.

William A. Sternad, M.E., P.E.

Consulting Engineer

P.O. Box 8, Wayzata, Minnesota 55391

Controlled Systems **(612) 473-4700**

March 7, 1994

Mr. Allan E. Pint, P.E.
Assistant Division Engineer
MINNESOTA DEPARTMENT of TRANSPORTATION
Metropolitan Division - Waters Edge
1500 West County Road B-2
Roseville, MN 55113

Dear Al:

Thank you for your approval for me to construct a demonstration AUTOMATIC MECHANICAL PARKING MODULE in the Park & Ride lot on the north side of I-394 at the intersection of County Road 73. In the space now occupied by the seven (7) Handicap stalls (95'x 20' adjacent to the bus stop) we will build a structure that will accomomdate (50) vehicles. This will be the equivalent of reducing (100) vehicles from I-394's mixed lanes during the peak hours.

I will pursue gaining the necessary funding either through public or private sources. If the public money is available we will form a non-profit corporation and be able to bring to the commuters the greatest cost benefit. If private investment is used, obviously a for-profit corporation will be utilized to implement the project. The objective will be the same, however, to bring to the community a most efficient, minimum air polluting and energy conserving transit system.

As you agreed, Al, the present economic loss due to personal delay is probably $7 to $10 million a year without considering the value of reduced air pollution, opportunity for accidents and road wear. Following this demonstration a full (2,130) stall installation for $25 million will be the equivalent of the addition of an additional lane in each direction that would cost $150 million. Future similar expansion would also be possible in other lots.

Close Associates, a most prestigious local architect will design an attractive structure. We look forward to an exciting relationship with the City of Minnetonka and their Director of Engineering, David J. Sonnenberg, P.E.. As I have suggested to Dave, I believe this project will bring considerable national attention to their community. I anticipate the pleasure of working cooperatively with all interested parties, as copied by this letter.

Sincerely,

Bill Sternad

William A. Sternad
copy:
see page 2

The future belongs to the efficient

copy:

MNDOT - James N. Denn, Commissioner
Dave O'Connell, Chief of Staff
Darryl E. Durgin, Assistant Commissioner
Gene Ofstead, Assistant Commissioner

MET COUNCIL - Dottie Rietow, Chair
Carl Ohrn, Principal Planner
Emil L. Brandt, Transportation Coordinator, TAB
James E. Barton, Senior Transportation Planner
David B. Engstrom, P.E., Principal Engineer
Karen M. Lyons, Transportation Planner

RTB - Sally Evert, Chair
Gregory L. Andrews, Executive Director
Judith G. Hollander, Director of Planning & Programs
Howard Blin, Planning Manager

MTC - Tom Sather, Chief Administrator
Bev Auld, Assistant Chief Administrator / Administration
Jerrold S. Olson, Assistant Chief Administrator, Transit Operations

CITY of MINNETONKA -
David M. Childs, City Manager
David J. Sonnenberg, P.E., Director of Engineering
Virgil E. Herrman, Project Engineer
Ann Perry, Planning Director
Ronald S. Rankin, Community Development Director

MINNESOTA POLLUTION CONTROL AGENCY -
Charles W. Williams, Commissioner
Susanne Pelly Spitzer, Program Development & Air Analysis

PUBLIC / PRIVATE PARTNERSHIP
proposal for an
INNOVATIVE TRANSIT SYSTEM
on HIGHWAY I-394

The present Park & Ride lot at I-394 & C.S.A.H. 73 has (284) stalls.

This proposed 2-phase project would install (2,130), indoor, heated, secure and safe stalls in this same space. MNDOT, owner of the land, and FTA officials approve the project. SPONSORSHIP IS SOUGHT BY A TRANSIT AGENCY.

A NON-PROFIT, MINNESOTA CORPORATION, WILL BE ESTABLISHED TO BUILD & OPERATE THE FACILITY. For the cost of a monthly MTC bus pass, it is projected that this system will be self-sustaining, i.e., without requiring any subsidy. It will integrate with the MTC bus system.

1st PHASE - WE WILL BUILD ONE (1) AUTOMATIC MECHANICAL MODULE TO DEMONSTRATE THE MECHANICS OF THE EQUIPMENT & MARKET ACCEPTABILITY TO RIDERSHIP. Current experience is that the P & R lots are not being fully used. The innovative nature of this installation will permit a "SEAMLESS TRIP" from one's garage into the downtown skyway system.
COST OF THIS DEMONSTRATION - $1 million. TIME: 6 to 8 months.

(50) vehicles will be stored in the space currently occupied by (7) HANDICAP STALLS (every stall is ADA compliant.) (100) vehicles will thus be vacated from the mixed use lanes of I-394.

2nd PHASE - FULL PROPERTY INSTALLATION WILL BE A BUILDING INCLUDING (35) MODULES WITH THE CAPACITY TO STORE (2,130) VEHICLES. (200) 12-PASSENGER VANS WILL BE STORED OVERNIGHT. PATRONS WILL PARK THEIR VEHICLES AND BOARD THE VANS--THE FIRST PERSON BECOMES THE DRIVER. THE FULLY LOADED VAN PROCEEDS TO THE 7th STREET GARAGE WHERE IT IS PARKED ALL DAY. PATRONS ARE NOW WITHIN THE SKYWAY SYSTEM. THE PROCESS IS REVERSED IN THE EVENING. FULL PERSONAL SECURITY & SAFETY IS UNDER COMPUTERIZED SURVEILLANCE.
COST OF THIS INSTALLATION - $25 million. TIME: Appx. 1-year.

This facility will be attractive to patrons. It will vacate (2,130) vehicles from the mixed use lanes of the highway. This is the equivalent of constructing another lane in each direction, which would cost $150 million, if it could be done - but, there's no room. Vans will have full provision for Handicap persons.

THE AIR QUALITY AND CONGESTION MITIGATION IMPACT OF THIS PROGRAM IS SINGULARLY INNOVATIVE. THE POTENTIAL VALUE TO THE ECONOMIC VITALITY OF THE REGION IS UNIQUE. THE POSSIBILITY TO ACHIEVE THE BENEFITS WITHIN 2-YEARS IS THE ABILITY A PUBLIC / PRIVATE PARTNERSHIP OFFERS.

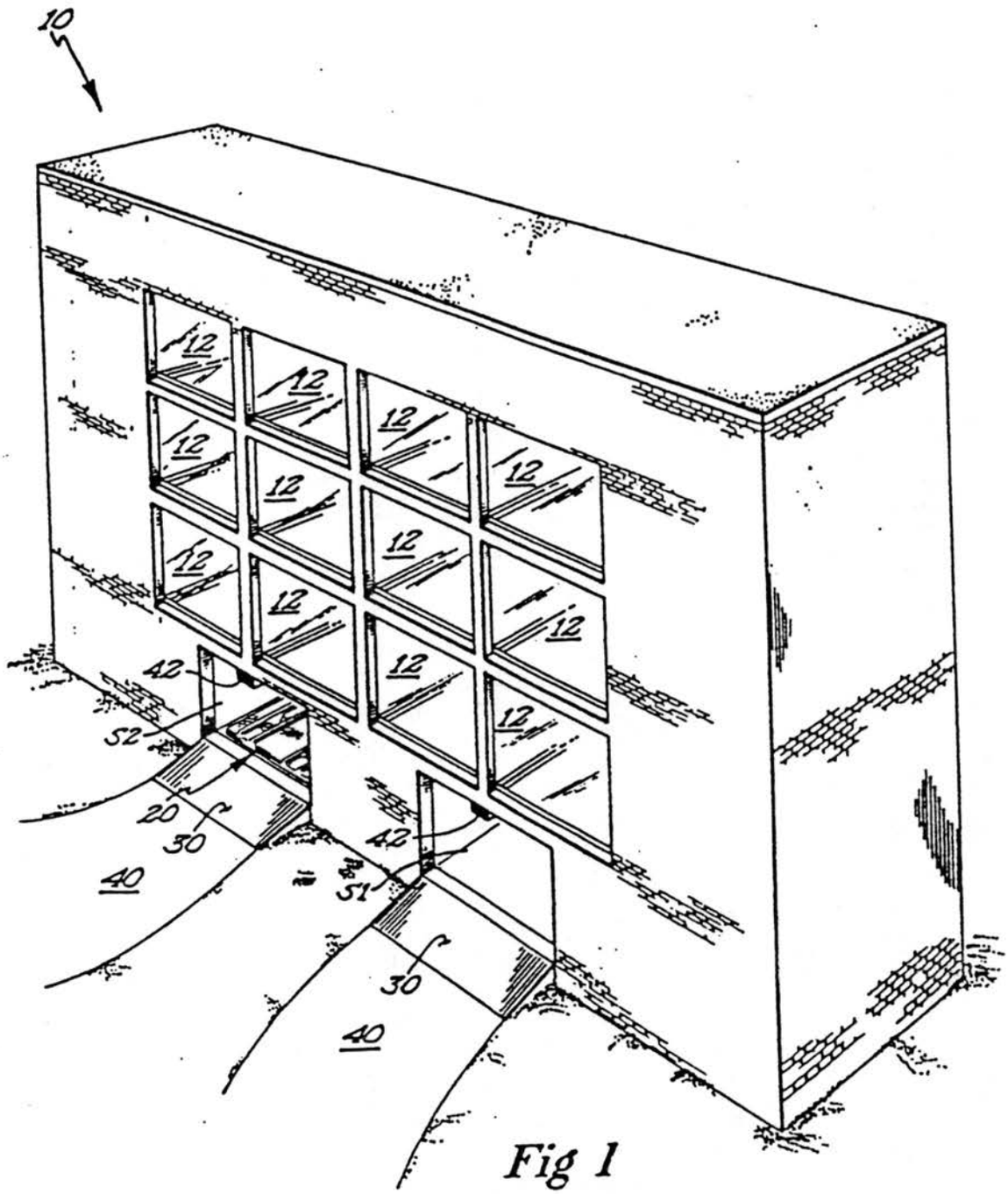


Fig 1

PUBLIC / PRIVATE PARTNERSNIP

ECONOMICS

The ultimate RIDE SHARE PROGRAM is one in which every vehicle is 100% occupied--a true HOV.

This tabulation indicates how a 3P, NON-PROFIT CORPORATION, will be able to, in perpetuity, provide self-sustaining, non-subsidized COMMUTER TRANSIT. It is proposed to be an adjunct to the MTC just as is the current RIDE SHARE PROGRAM. Members of the MTC and RTB will be on the Board of Directors and will, if desired, even be management.

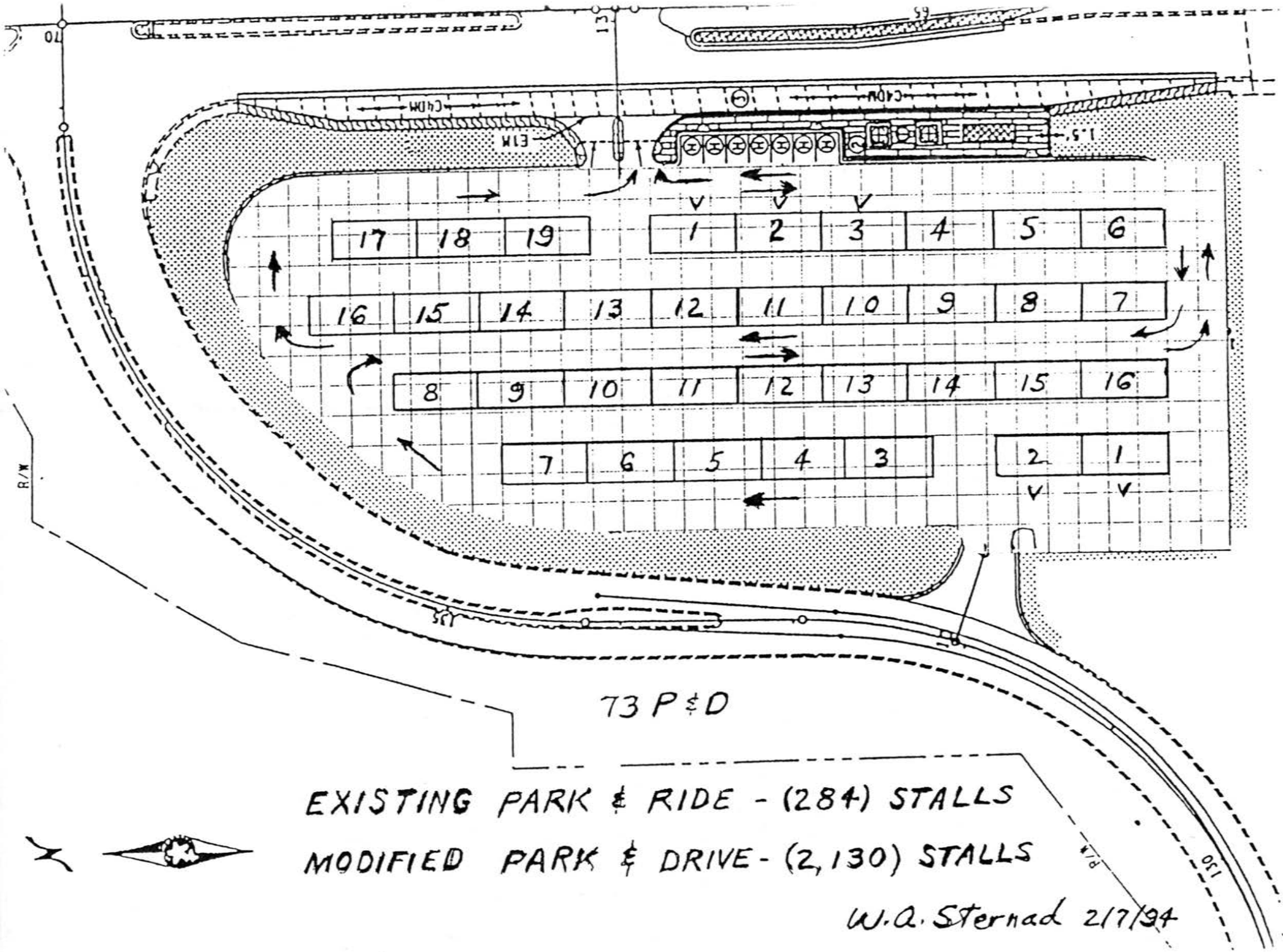
Because a significant opportunity to demonstrate CMAQ advantages will be shown, this installation will attract national interest. FTA personnel have expressed interest and are prepared to approve this project.

Unlike regular route bus service, commuter service starts out as 50% efficient because one leg of a trip is "deadhead." Coupled with the experienced occupancy, the efficiency is close to 35%. Presently, the fare box funds operating cost about 35%. This is a universal characteristic of transit systems. The capital cost of equipment is approximately $5,000. per seat and will go higher with the need for lift equipment on each vehicle.

With a 2-phased program, it is proposed to make an installation of a building that will provide a totally new concept for interface of people from SOV's into fully occupied 12-passenger vans. The initial cost of the facility will be $20 million and the cost of (200) vans will be $5 million. With revenue equal to the present cost of a monthly bus pass, this operation will be self-sustaining, including amortization for replacement of the vehicles in the future. The downtown garages, which were designed to accommodate such vehicles, will become most efficiently employed.

$65 x 12 months x 1940* = $1.5 million / year income.
* the driver gets a free ride, and for estimating purposes, vans are assumed with (11) occupants.

Facility cost of operation, labor and energy ------	$ 750 K
Vehicle replacement (10) per year ---------- vehicles travel 4,000 miles per year	250 K
Vehicle maintenance (200 x $500.) ----------	100 K
Van downtown parking fee and fuel ----------	150 K
Insurance ----------	250 K
	$1.5 million



EXISTING PARK & RIDE - (284) STALLS

MODIFIED PARK & DRIVE - (2,130) STALLS

W.A. Sternad 2/7/94

METROPOLITAN TRANSIT COMMISSION
560-6th Avenue North, Minneapolis, Minnesota 55411-4398 612/349-7400

C

cc Board

March 21, 1994

Mr. William A. Sternad
P. O. Box 8
Wayzata, Minnesota 55091

Dear Mr. Sternad:

Thank you for sharing the Automatic Mechanical Parking Module with our chairman, Frank Snowden and me last Friday. As you requested, I will share some of our thoughts with you.

First, I do not believe that the I-394 Corridor represents a good opportunity to demonstrate your Automatic Mechanical Parking Module. I say this because our commuter survey data suggests that only three percent of the commuters would consider TDM in place of their current habits.

Secondly, the expenditure of public funds to "demonstrate" this project is not prudent in my view. A working model has not been constructed and the software technology, albeit simple, does not exist in a format that would allow for it to be demonstrated.

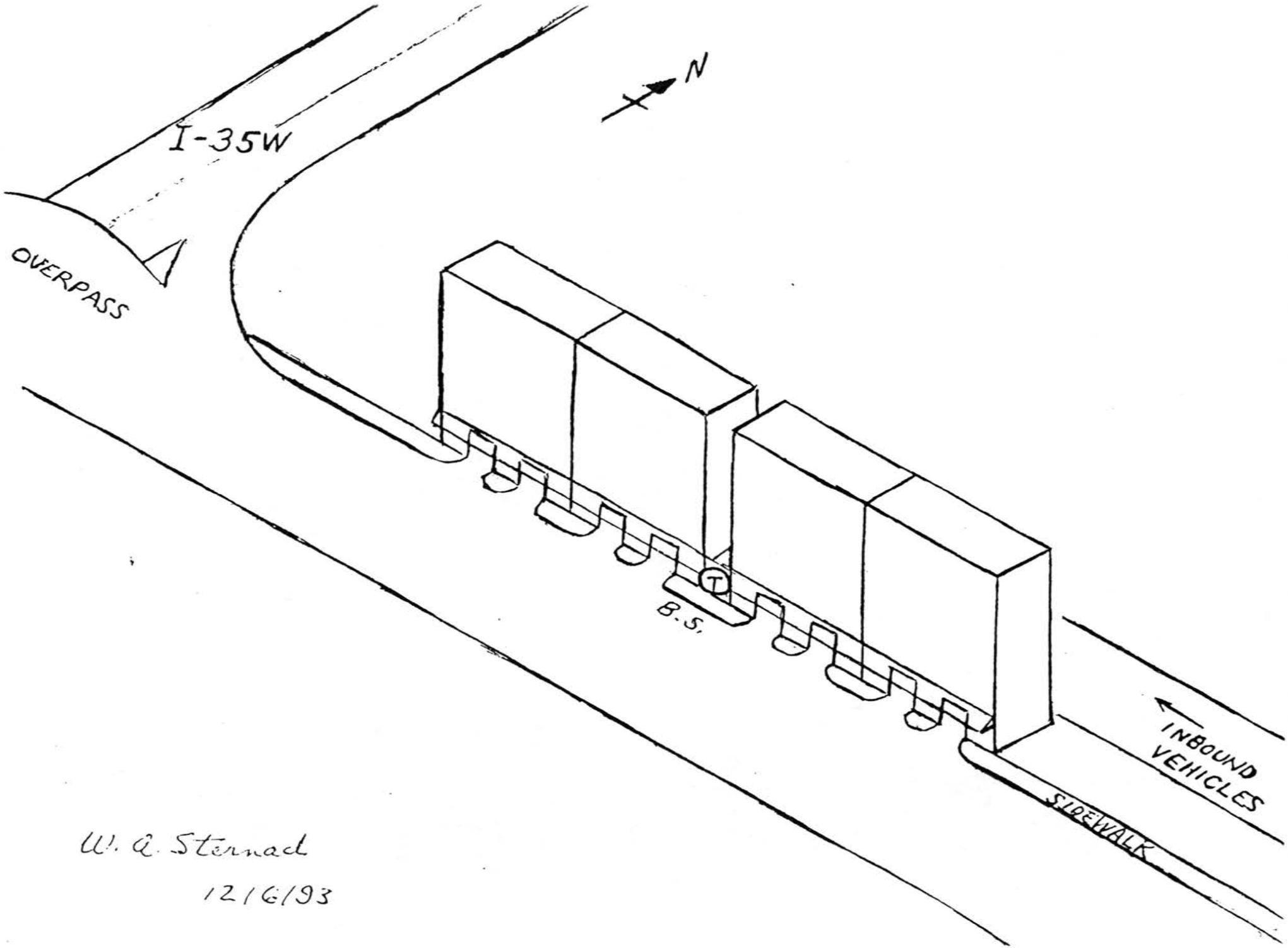
Thirdly, I believe that there is an opportunity to build the demonstration models with the help of venture capital. I'm certain that this option has some inherent risk for you, but it is the only way in which the MTC could minimize its exposure to building a parking facility for demonstration purposes.

Finally, Bill, the MTC has limited capital and operating resources. As planners, we have programmed the funding available to us from state and federal sources for the next two to three years. It is unlikely that the Automatic Mechanical Parking Module (as currently proposed) would displace anything to which we have already committed funds.

Sincerely,

Thomas R. Sather
Chief Administrator

TRS/dmk



W. A. Sternad

12/6/93

REGIONAL TRANSIT BOARD
Mears Park Centre, 230 East 5th Street
St. Paul, Minnesota 55101
229-2700

REPORT OF THE ADMINISTRATION AND FINANCE COMMITTEE

At its meeting of March 14, 1994, the Administration and Finance Committee approved the following recommendations:

DECEMBER FINANCIAL STATEMENTS

That the Regional Transit Board receive the December 1993 unaudited financial statements and direct that they be placed on file.

APPROVAL OF METROPOLITAN TRANSIT COMMISSION APPLICATION FOR FEDERAL TRANSIT ADMINISTRATION SECTION 10 FUNDING

That the Regional Transit Board approve the Metropolitan Transit Commission's grant application for $75,000 in funding from the Federal Transit Administration Section 10 grant program.

APPROVAL OF THE 1994 TRAVEL DEMAND MANAGEMENT CONTRACT AND MANAGEMENT PLAN FOR SERVICES FROM MINNESOTA RIDESHARE

That the Regional Transit Board authorize its executive director to enter into a contract for calendar year 1994 with the Metropolitan Transit Commission to provide rideshare services through Minnesota Rideshare in an amount not to exceed $649,906.

METROPOLITAN TRANSIT EDUCATION PLAN IMPLEMENTATION (PLAN FOR DEVELOPING SCHOOL EDUCATION)

That the Regional Transit Board authorize the executive director to enter into a contract with Thomas Learning Consultants for an amount not to exceed $12,500 for the development of a comprehensive plan for developing transit curricula.

MINNESOTA DEPARTMENT OF ADMINISTRATION PROPOSAL TO CONDUCT METRO MOBILITY CONSUMER RESEARCH

That the Regional Transit Board authorize the executive director to negotiate and execute a sole source contract with the Management Analysis Division of the Minnesota Department of Administration to provide Metro Mobility consumer research activities in an amount not to exceed $29,700.

Ruth Franklin
Chair

mff
3/14/94

REGIONAL TRANSIT BOARD

MEARS PARK CENTRE
230 EAST FIFTH STREET, ST. PAUL, MINNESOTA 55101
292-8789

DATE: March 14, 1994

TO: Chair and Members of the Administration and Finance Committee

FROM: Gerri Sutton, Accountant

SUBJECT: Financial Statements -December 1993

SUMMARY

The Administration and Finance Committee is asked to review the December 1993, financial statements. These financial statements have been prepared on the modified accrual basis and in accordance with generally accepted accounting principles.

DISCUSSION

These financial statements for year ending December 31, 1993 have not been audited and are therefore "preliminary."

The preliminary statements show the year ending with a total fund balance of $4.8 million, exceeding the budgeted level of $4.2 million. The general fund shows a savings compared to budget of $982,000. Special Revenue funds show a $339,000 greater spending deficit than anticipated.

The savings in several Special Revenue funds is more than offset by the drop in fund balance for the Regular Route fund. The unanticipated drop in Regular Route can be attributed to an excessive cancellation and abatement level for current taxes receivable. The write-off increased from $279,000 in 1992 to $854,000 in 1993. MTC operating subsidy ended 1993 within the amended MTC budget and was not a contributing factor to the negative variance in the Regular Route fund.

RECOMMENDATIONS

That the Regional Transit Board receive the December 1993, financial statements and direct that they be placed on file.

Attachment
GS/me

REGIONAL TRANSIT BOARD
FINANCIAL STATEMENTS
Ending December, 1993

REGIONAL TRANSIT BOARD
COMBINED BALANCE SHEET–ALL FUND TYPES and ACCOUNT GROUPS
AS OF DECEMBER 31, 1993

	GENERAL FUND	SPECIAL REV FUNDS	AGENCY FUND	FIXED ASSETS	TOTAL ALL FUNDS	DEC 1992 ALL FUNDS	CHANGE
ASSETS							
CASH	$0	$0	$0		$0	$653,276	($653,276)
INVESTMENTS	$20,656,971	$0	$8,813,796		$29,470,767	$26,498,558	$2,972,209
TAXES RECEIVABLE	$0	$3,010,292	$481,858		$3,492,151	$4,400,869	($908,719)
ACCRUED INTEREST RECEIVABLE	$22,106	$0	$0		$22,106	$40,418	($18,312)
DUE FROM OTHER FUNDS	$0	$17,216,599	$0		$17,216,599	$19,768,889	($2,552,290)
DUE FROM OTHER GOVERNMENTAL UNITS	$0	$0	$0		$0	$100	($100)
STATE OF MINNESOTA RECEIVABLE	$1,123,000	$2,273,000	$0		$3,396,000	$0	$3,396,000
FEDERAL GOVERNMENT RECEIVABLE	$117,509	$17,354	$0		$134,863	$219,377	($84,513)
OTHER ASSETS	$9,818	$925,606	$1,604,617	$578,851	$3,118,893	$2,797,757	$321,136
TOTAL ASSETS	$21,929,405	$23,442,852	$10,900,272	$578,851	$56,851,379	$54,379,244	$2,472,135
LIABILITIES							
ACCOUNTS PAYABLE	$253,363	$952	$0		$254,315	$356,734	($102,419)
ACCRUED PAYROLL LIABILITIES	$136,095	$0			$136,095	$165,393	($29,297)
DUE TO OTHER GOVERNMENTAL UNITS	$61,371	$0	$1,300,073		$1,361,444	$1,440,829	($79,385)
MTC PAYABLE	$0	$15,400,698	$282,108		$15,682,807	$16,372,862	($690,055)
TRANSIT PROVIDERS PAYABLE	$0	$4,176,726	$8,682,727		$12,859,453	$5,614,952	$7,244,501
DUE TO OTHER FUNDS	$18,345,620	$0	$31,849		$18,377,469	$20,666,895	($2,289,427)
DEFERRED REVENUE	$0	$2,159,338			$2,159,338	$3,931,585	($1,772,248)
OTHER LIABILITIES	$8,093	$11,900	$159,766		$179,759	$12,084	$167,675
DEFERRED COMP HELD	$0		$443,748		$443,748	$394,208	$49,540
TOTAL LIABILITIES	$18,804,541	$21,749,614	$10,900,272	$0	$51,454,427	$48,955,543	$2,498,884
FUND EQUITY							
INVESTMENTS IN FIXED ASSETS				$578,851	$578,851	$575,782	$3,069
DESIGNATED FOR NEW SERVICES	$473,020				$473,020	$973,020	($500,000)
DESIGNATED FOR POL INSURANCE	$213,021		$0		$213,021	$158,021	$55,000
UNRESERVED / UNDESIGNATED	$2,438,823	$1,693,238	$0	$0	$4,132,061	$3,716,878	$415,183
TOTAL FUND EQUITY	$3,124,864	$1,693,238	$0	$578,851	$5,396,953	$5,423,701	($26,748)
TOTAL LIABILITIES & FUND EQUITY	$21,929,405	$23,442,852	$10,900,272	$578,851	$56,851,379	$54,379,244	$2,472,135

REGIONAL TRANSIT BOARD
COMBINED STATEMENT OF REVENUE, EXPENDITURES AND CHANGES IN FUND BALANCE–GENERAL AND SPECIAL REVENUE FUND TYPES–FOR TWELVE MONTHS ENDED DECEMBER 31, 1993

		GENERAL FUND	SPECIAL REVENUE FUNDS	TOTAL ALL FUNDS	TOTAL BUDGET ALL FUNDS	ACTUAL BUDGET VARIANCE FAV/(UNFAV)
	BEGINNING FUND BALANCE	$2,975,973	$1,871,946	$4,847,919	$4,847,919	$0
REVENUE	PROPERTY TAX		$63,305,470	$63,305,470	$64,282,675	($977,205)
	STATE APPROPRIATIONS	$2,429,000	$27,532,000	$29,961,000	$29,961,000	$0
	FEDERAL GRANTS	$457,024	$1,026,072	$1,483,096	$1,886,800	($403,704)
	INTEREST	$331,395	$0	$331,395	$380,000	($48,605)
	AGENCY REIMBURSEMENT	$0	$369,905	$369,905	$382,000	($12,095)
	MISCELLANEOUS	$17,322	$0	$17,322	$3,000	$14,322
	TOTAL REVENUE	$3,234,741	$92,233,447	$95,468,188	$96,895,475	($1,427,287)
EXPENDITURES	SALARIES & BENEFITS	$1,570,724	$48,335	$1,619,059	$1,773,460	$154,401
	MEMBER PER DIEMS	$28,100		$28,100	$40,000	$11,900
	CONSULTING	$81,235	$0	$81,235	$135,000	$53,765
	LEGAL FEES	$92,549		$92,549	$130,000	$37,451
	PROFESSIONAL SERVICES	$75,289	$0	$75,289	$408,750	$333,461
	MET COUNCIL CHARGEBACKS	$187,556		$187,556	$187,600	$44
	LOCAL TRAVEL	$29,991	$450	$30,442	$51,050	$20,608
	NON–LOCAL TRAVEL	$23,538	$0	$23,538	$47,000	$23,462
	MATERIALS & SUPPLIES	$24,614	$227	$24,841	$38,550	$13,709
	OCCUPANCY/TELEPHONE	$213,167		$213,167	$216,285	$3,118
	PUBLIC COMMUNICATIONS	$116,572	$42	$116,614	$165,900	$49,286
	EQUIP RENTAL/MAINTENANCE	$25,080	$0	$25,080	$34,600	$9,520
	INSURANCE	$9,218		$9,218	$64,200	$54,982
	CAPITAL EXPENDITURES	$48,671	$0	$48,671	$50,000	$1,329
	EMPLOYEE RECRUITMENT/DEVELOPMENT	$34,405	$80	$34,485	$26,500	($7,985)
	TRANSIT PROGRAMS/GRANTS	$40,141	$92,838,643	$92,878,784	$94,190,189	$1,311,405
	TOTAL EXPENDITURES	$2,600,850	$92,887,777	$95,488,627	$97,559,084	$2,070,457
	EXCESS/(DEFICIENCY) REV OVER EXP	$633,891	($654,330)	($20,439)	($663,609)	$643,170
FUND BALANCE	TRANSFERS					
	PRIOR PERIOD ADJUSTMENTS	$0	($9,379)	($9,379)	$0	$9,379
	BOARD AUTHORIZATIONS	($485,000)	$485,000	$0	$0	$0
	COST ALLOCATIONS	$0	$0	$0	$0	$0
	NET TRANSFERS	($485,000)	$475,621	($9,379)	$0	$9,379
	ENDING FUND BALANCE	$3,124,864	$1,693,238	$4,818,102	$4,184,310	$652,549

REGIONAL TRANSIT BOARD
COMBINED STATEMENT OF REVENUE, EXPENDITURES AND CHANGES IN FUND BALANCE–
ALL SPECIAL REVENUE FUNDS–FOR THE TWELVE MONTHS ENDED DECEMBER 31, 1993

		REGULAR ROUTE 012	METRO MOBILITY 013	OPT OUT 014	RURAL SM/URB 015	LRT 016	TOTAL SPECIAL FUNDS	BUDGET SPECIAL FUNDS	ACT/BUDG VARIANCE FAV/(UNFAV)
	BEGINNING FUND BALANCE	1,116,237	156,574	0	387,976	211,159	1,871,946	1,871,946	0
REVENUE	PROPERTY TAX	54,372,194	0	8,363,854	569,422		63,305,470	64,282,675	(977,205)
	STATE APPROPRIATIONS	12,998,000	13,234,000	0	1,300,000	0	27,532,000	27,532,000	0
	FEDERAL GRANTS	329,225				696,847	1,026,072	1,570,000	(543,928)
	INTEREST	0	0	0	0	0	0	0	0
	AGENCY REIMBURSEMENT		369,905		0		369,905	382,000	(12,095)
	MISCELLANEOUS	0	0	0	0	0	0	0	0
	TOTAL REVENUE	67,699,419	13,603,905	8,363,854	1,869,422	696,847	92,233,447	93,766,675	(1,533,228)
EXPENDITURES	MTC OPERATING SUBSIDY	66,403,786					66,403,786	66,357,091	(46,695)
	MTC RIDESHARE	398,230					398,230	599,928	201,698
	MTC JOBSEEKERS	379,053					379,053	430,660	51,607
	MTC MMAC		524,938				524,938	628,028	103,091
	ATE MMSC		964,236				964,236	$800,000	(164,236)
	NON–MTC FIXED ROUTE	2,835,532					2,835,532	2,953,249	117,717
	OPT OUT			6,383,462			6,383,462	7,012,625	629,163
	RURAL SYSTEMS				1,709,557		1,709,557	1,740,262	30,705
	SMALL URBAN				432,039		432,039	434,374	2,335
	METRO MOBILITY PROVIDERS		12,110,964				12,110,964	12,053,972	(56,992)
	LIGHT RAIL TRANSIT					49,134	49,134	1,071,690	1,022,556
	OTHER						0	0	0
	PROVIDER CAPITAL EXP	0	0	0	0	0	0	0	0
	TRANSIT PROGRAMS/GRANTS	0	0	0	0	696,847	696,847	0	(696,847)
	TOTAL EXPENDITURES	70,016,601	13,600,138	6,383,462	2,141,596	745,981	92,887,777	94,081,879	1,194,102
	EXCESS/(DEFICIENCY) REVENUE OVER EXPENDITURE	(2,317,182)	3,767	1,980,391	(272,173)	(49,134)	(654,330)	(315,204)	(339,126)
	TRANSFERS								
FUND BALANCE	PRIOR PERIOD ADJUSTMENTS	(9,282)	0	0	(96)	0	(9,379)	0	(9,379)
	BOARD AUTHORIZATIONS	(15,000)	0	0	500,000	0	485,000	485,000	(0)
	COST ALLOCATION	0	0	0	0	0	0	0	0
	NET TRANSFERS	(24,283)	0	0	499,904	0	475,621	485,000	(9,379)
	ENDING FUND BALANCE	(1,225,226)	160,341	1,980,391	615,707	162,026	1,693,237	2,041,742	(348,505)

REGIONAL TRANSIT BOARD
PROGRAM STATUS REPORT DECEMBER 1993
100% OF FISCAL YEAR

#	PROGRAM	1993 BUDGET	EXPENSE THRU PERIOD END DATE	UNEXPENDED BUDGET	EXPENSE AS % OF BUDGET
93-01	RTB Chair's Office	$344,880	$223,040	$121,840	64.67%
93-02	Executive Director's Office	$246,820	$235,059	$11,761	95.24%
93-03	Programs/Planning Admin	$205,976	$139,647	$66,329	67.80%
93-04	Transportation Planning Process	$124,298	$119,087	$5,211	95.81%
93-10	Elderly and Disabled	$254,161	$160,151	$94,010	63.01%
93-11	Rideshare Planning	$306,743	$110,520	$196,223	36.03%
93-13	Transit System Planning & Impl.	$323,590	$240,062	$83,528	74.19%
93-14	Transit Programs and Admin.	$93,360,775	$92,381,425	$979,350	98.95%
93-15	Administrative Services	$482,597	$400,823	$81,774	83.06%
93-16	Financial Management	$279,740	$264,106	$15,634	94.41%
93-17	Personnel Administration	$63,772	$69,603	($5,831)	109.14%
93-19	Public Information	$294,883	$271,764	$23,119	92.16%
93-22	Competitive Transit Services	$0	$6,019	($6,019)	0.00%
93-23	Light Rail Transit	$1,071,690	$746,183	$325,507	69.63%
93-26	Transit Test Mktg of New Serv.	$91,523	$48,997	$42,526	53.54%
93-27	Community Relations	$57,636	$55,544	$2,092	96.37%
93-XX		$0	$0	$0	0.00%
	Sub-Total	$97,509,084	$95,472,031	$2,037,053	97.91%
93-20	Capital Expenditure Program	$50,000	$48,671	$1,329	97.34%
	Total Programs and Capital Expenditures	$97,559,084	$95,520,702	$2,038,382	97.91%

SPECIAL REVENUE FUNDS
SCHEDULE OF EXPENDITURES
as of December 31, 1993
100.00% of Year

	Current Contract	1993 Budget	12 months Expense	Unexpended Budget	Expense % Of Budget
REGULAR ROUTE					
North Suburban	827,818	827,818	839,496	(11,678)	101.41%
U Of M – Route #52	1,035,611	583,766	547,421	36,345	93.77%
Valley Transit	110,117	108,000	110,581	(2,581)	102.39%
Roseville Circulator	2,236,716	580,000	583,327	(3,327)	100.57%
BE Line	859,147	590,000	496,496	93,504	84.15%
Western Suburbs–Rte 55	2,826,945	263,665	277,183	(13,517)	105.13%
Regular Route Expense	**7,896,354**	**2,953,249**	**2,854,504**	**98,745**	96.66%
North Suburban–Audit Adj.			(16,055)		
Valley Transit–Audit Adj.			(2,918)		
Adj. Regular Route Expense	**7,896,354**	**2,953,249**	**2,835,531**	**98,745**	96.01%
MTC–Western Suburbs	361,667	361,667	356,755	4,911	98.64%
MTC–Rideshare	599,928	599,928	398,230	201,698	66.38%
MTC–Jobseekers	430,660	430,660	379,053	51,607	88.02%
MTC–Regular Route	65,995,424	65,995,424	66,047,031	(51,607)	100.08%
MTC–Regular Route Expense	**67,387,679**	**67,387,679**	**67,181,069**	**206,609**	99.69%
Total Regular Route Expense	**75,284,033**	**70,340,928**	**70,016,601**	**305,354**	99.54%
METRO MOBILITY					
National	0	0	269,183	0	N/A
Yellow Taxi	0	0	1,114,582	0	N/A
Wilder	0	0	292,226	0	N/A
United Services	0	0	236,633	0	N/A
Metro Ride	0	0	1,210,052	0	N/A
H.T.S.	0	0	76,121	0	N/A
H.S.I.	0	0	150,237	0	N/A
Handicabs	0	0	2,262,482	0	N/A
Ebenezer	0	0	1,232,760	0	N/A
Diamond Cab	0	0	409,953	0	N/A
DARTS	0	0	374,961	0	N/A
City Wide	0	0	307,626	0	N/A
Contemporary Transportation	0	0	124,086	0	N/A
Metropolitan Area Transit	0	0	82,282	0	N/A
Safe Ride	0	0	20,480	0	N/A
Triad Transportation	0	0	19,106	0	N/A
Comfort Bus	0	0	78,169	0	N/A
Blue & White Cab	0	0	1,392	0	N/A
Fox Four	0	0	18,054	0	N/A
Special Kare	0	0	21,776	0	N/A
Senior Resources	0	0	8,181	0	N/A
Metro Mobility Expense	**12,197,672**	**8,610,000**	**8,310,340**	**299,660**	96.52%
MTC–MMAC	753,628	628,028	524,938	103,091	83.59%
ATE–MMSC–Administrative	1,825,889	800,000	964,236	(164,236)	120.53%
ATE–MMSC–Operating	0	3,443,972	3,808,508	(364,536)	110.58%
Total Metro Mobility Expense	**14,777,189**	**13,482,000**	**13,608,022**	**(126,022)**	100.93%
Morley–'86–'87 Audit Adj.			(7,884)		
Adj. Total Metro Mobility Exp.	**14,777,189**	**13,482,000**	**13,600,138**	**(126,022)**	

SPECIAL REVENUE FUNDS
SCHEDULE OF EXPENDITURES
as of December 31, 1993
100.00% of Year

	Current Contract	1993 Budget	12 months Expense	Unexpended Budget	Expense % Of Budget
OPT–OUT					
City Of Plymouth	1,348,763	1,348,763	910,536	438,227	67.51%
City Of Shakopee	248,712	248,712	196,161	52,551	78.87%
Southwest Metro	1,474,226	1,639,226	1,622,172	17,054	98.96%
MN Valley Transit	3,202,402	3,202,402	3,102,025	100,377	96.87%
Maple Grove	573,522	573,522	563,905	9,617	98.32%
Opt Out Expense	**6,847,625**	**7,012,625**	**6,394,800**	**617,825**	91.19%
MN Valley Transit–Prior Yr Adj.			(15,293)		
Shakopee–Prior Yr Adj.			17,058		
MN Valley Transit–Audit Adj.			(13,102)		
Adj. Opt Out Expense	**6,847,625**	**7,012,625**	**6,383,462**	**617,825**	91.03%
SMALL URBAN					
Columbia Heights	83,000	83,000	83,000	0	100.00%
Hastings	82,172	82,172	81,263	909	98.89%
Hopkins	34,752	34,752	27,260	7,492	78.44%
NEST	111,434	111,434	92,765	18,669	83.25%
STEP	10,880	10,880	10,880	0	100.00%
White Bear	149,412	112,136	136,872	(24,736)	122.06%
Small Urban Expense	**471,650**	**434,374**	**432,039**	**2,335**	99.46%
RURAL					
Westonka	31,715	31,715	31,715	0	100.00%
Senior Transportation	27,217	24,179	27,217	(3,038)	112.56%
Delano Transportation	48,520	48,521	48,520	1	100.00%
Scott County	119,519	119,519	119,519	0	100.00%
H.S.I.	227,047	324,384	302,442	21,942	93.24%
DARTS	393,912	501,241	501,241	0	100.00%
Carver County	124,332	124,332	124,332	0	100.00%
Anoka County Volunteer	23,500	23,500	23,500	0	100.00%
Anoka County Linwood	15,796	15,796	15,582	214	98.64%
Anoka County Traveler	444,824	499,565	487,978	11,587	97.68%
Lakeville	27,510	27,510	27,510	0	100.00%
Rural Expense	**1,483,892**	**1,740,262**	**1,709,557**	**30,705**	98.24%
Total Rural/Small Urban Exp.	**1,955,542**	**2,174,636**	**2,141,596**	**33,040**	98.48%
NON–PROVIDER EXPENDITURES		0	0	0	N/A
LIGHT RAIL TRANSIT		1,071,690	745,981	325,709	69.61%
Grand Total	**98,864,389**	**94,081,879**	**92,887,777**	**1,155,908**	98.73%

REGIONAL TRANSIT BOARD
INVESTMENT SUMMARY BY FUND
FOR MONTH ENDED DECEMBER 1993

PURCHASE DATE	MATURITY DATE	DESCRIPTION	PURCHASE PRICE	BROKER	YIELD
GENERAL FUND-					
		Beginning balance	$1,750,000		
		sold	($1,750,000)		
2-Dec-93	6-Dec-93	CP-Smith Barney Shearson	$6,747,713	Smith Barney	3.051
	6-Dec-93	sold	($6,750,000)		
2-Dec-93	13-Dec-93	CP-Rockefeller-LC Daichi	$1,500,000	First Bank	3.003
	13-Dec-93	sold	($1,501,376)		
2-Dec-93	20-Dec-93	CP-Bank One Corp	$3,494,575	Merrill Lynch	3.105
	20-Dec-93	sold	($3,500,000)		
2-Dec-93	27-Dec-93	CP-Student Loan Finance As	$2,554,613	Dain Bosworth	3.036
	27-Dec-93	sold	($2,560,000)		
3-Dec-93	20-Dec-93	CP- University Support	$1,997,101	Smith Barney	2.882
	20-Dec-93	sold	($2,000,000)		
3-Dec-93	3-Jan-94	CP- Financial Asset Securi	$1,594,346	Merrill Lynch	3.390
3-Dec-93	3-Jan-94	CP-Red Bud Funding	$1,500,555	Merrill Lynch	3.440
3-Dec-93	3-Jan-94	CP-Con Agra Financing	$3,702,129	Merrill Lynch	3.410
6-Dec-93	13-Dec-93	CP- University Support	$1,074,352	Smith Barney	3.102
	13-Dec-93	sold	($1,075,000)		
13-Dec-93	10-Jan-94	CP- University Support	$1,496,173	Smith Barney	3.288
16-Dec-93	20-Dec-93	Repo	$344,000	Smith Barney	3.050
	20-Dec-93	sold	($344,117)		
20-Dec-93	10-Jan-94	CP- University Support	$698,714	Smith Barney	3.156
27-Dec-93	18-Jan-94	CP- University Support	$2,180,727	Smith Barney	3.206
30-Dec-93	18-Jan-94	CP-Blue Hawk Funding	$1,746,998	Dain Bosworth	3.256
31-Dec-93	18-Jan-94	CP- FPL Fuels Inc./LOC Sum	$7,737,329	Smith Barney	3.275
		TOTAL OUTSTANDING	$20,656,971		
BOND ISSUE	**#2 - 1991 "G"**				
		Beginning Balance	$1,846,653		
		sold	($1,846,653)		
6-Dec-93	13-Dec-93	Repurchase Agreement	$1,959,520	First Bank St. Paul	2.850
	13-Dec-93	sold	($1,960,606)		
13-Dec-93	20-Dec-93	Repurchase Agreement	$1,834,929	First Bank St. Paul	2.800
	20-Dec-93	sold	($1,835,928)		
20-Dec-93	27-Dec-93	Repurchase Agreement	$1,827,681	First Bank St. Paul	2.800
	27-Dec-93	sold	($1,828,676)		
27-Dec-93	3-Jan-94	Repurchase Agreement	$1,828,676	First Bank St. Paul	2.800
		Balance	$1,828,676		
BOND ISSUE	**#3 - 1993 "D"**				
15-Sep-93	16-Sep-93	Repurchase Agreement	$6,909,000	Smith Barney	3.300
	16-Sep-93		($6,909,633)		
16-Sep-93	15-Mar-94	Repurchase Agreement	$6,885,900	Smith Barney	3.314
		Balance	$6,885,900		

REGIONAL TRANSIT BOARD
SCHEDULE OF BOND RECEIPTS AND DISBURSEMENTS
AS OF DECEMBER 31, 1993

	TOTAL CAPITAL BOND	TOTAL BUDGET CAPITAL BOND	ACTUAL/BUDGET VARIANCE FAV/(UNFAV)
BEGINNING BALANCE	$2,944,716	$2,944,716	$0
RECEIPTS			
BOND ISSUES	$6,909,000	$7,000,000	($91,000)
INTEREST	$73,877	$0	$73,877
TOTAL RECEIPTS	$6,982,877	$7,000,000	($17,123)
DISBURSEMENTS			
CAPITAL EXPENDITURES	$1,244,866	$3,244,000	$1,999,134
MISCELLANEOUS	$0	$0	$0
TOTAL DISBURSEMENTS	$1,244,866	$3,244,000	$1,999,134
EXCESS/(DEFIC) RECEIPTS OVER DISBURSEMENTS	$5,738,011	$3,756,000	$1,982,011
OTHER DISBURSEMENTS			
STATUTORY AUTHORIZATIONS			
COST ALLOCATIONS			
NET OTHER DISBURSEMENTS	$0	$0	$0
ENDING BALANCE	$8,682,727	$6,700,716	$1,982,011

DISBURSEMENT DETAIL

ISSUE #1– 1991 "B"

Human Services	$36.40
Human Services	$1,403.77
City of Roseville	$5,076.80
Mall of America	$3,332.00
City of Roseville	$225.04
Mall of America	$379.62
Harmon Glass	$418.15
Mall of America	$804
MN Valley Trans Authority	$592,209
	$603,884.92

ISSUE #2– 1991 "G"

Southwest Metro	$57,725.40
Southwest Metro	$6,012
Metropolitan Council	$68,965
Metropolitan Council	$57,000
MN Valley Trans Authority	$186,791
Metropolitan Council	($226,965.00)
Senior Transportation Program	$28,000.00
Metropolitan Council	$115,000
Scott County	$22,750
DARTS	$75,480
City of Maple Grove	$6,678
DARTS	$80,694
City of Plymouth	$45,708
MN Valley Transportation Atho	$31,676
City of Plymouth	$7,618
Visual Communications	$186
Met Council	($115,000.00)
MN Valley Transportation Auto	$3,157
City of Shakopee	$53,520
Southwest Metro Transit Comm	$80,404
Carver Co Comm Social Ser	$34,483
MN Valley Transportation Auto	$5,863
City of Plymouth	$15,236
TOTAL	$640,980

REGIONAL TRANSIT BOARD

Mears Park Centre
230 East Fifth Street, St. Paul, Minnesota 55101
292-8789

DATE: March 3, 1994

TO: Chair and Members of the Administration and Finance Committee

FROM: Howard Blin, Planning Manager

SUBJECT: Approval of MTC Application for FTA Section 10 Funding

The MTC has submitted a grant application to the Federal Transit Administration (FTA) for funding from the Section 10 program. These federal funds are available to transit agencies for professional, technical and managerial training. The MTC is requesting $75,000 in federal funds, representing 50 percent of total project costs.

The funding will be used by the MTC for a variety of training programs. These are described in the attached letter from the MTC.

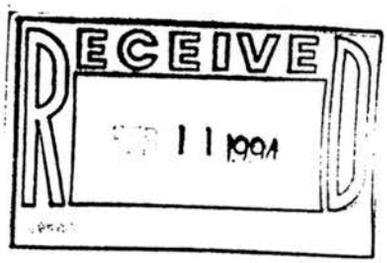
The RTB is required to approve all applications from within the region for federal transit funding.

RECOMMENDATION

That the Regional Transit Board approve the Metropolitan Transit Commission's grant application for $75,000 in funding from the Federal Transit Administration Section 10 grant program.

HB:jmo
Attachment

METROPOLITAN TRANSIT COMMISSION
560-6th Avenue North, Minneapolis, Minnesota 55411-4398 612/349-7400



February 9, 1994

Ms. Judith G. Hollander
Regional Transit Board
Mears Park Centre Building
230 East Fifth Street
St. Paul, MN 55101

Dear Judy:

On Tuesday, February 8, the MTC approved the application to FTA for a Section 10 Grant in the amount of $150,000 for the purpose of professional, technical and managerial training for MTC employees. The grant consists of a 50/50 split, with $75,000 being federal Section 10 dollars and $75,000 being MTC funds. If approved the grant will cover a two year period from mid-1994 through mid-1996.

With this letter, MTC requests that the RTB review and approve the MTC's application for a $150,000 Section 10 Grant for training of employees to be submitted to FTA as soon as possible.

For your information, I have attached the staff request submitted to the Commission, along with the Commission's action on this item. If you have any questions, please call me or Jim Gorski at 349-7550.

Sincerely,

Beverly J. Auld
Assistant Chief Administrator
for Administration

att.

cc: Gregory L. Andrews
Thomas Sather
Jim Gorski

MEMORANDUM

TO: Chair & Members of the Transit Development Committee

FROM: Jim Gorski
Director of Human Resources

DATE: January 12, 1994

SUBJECT: Authorization to Apply for FTA Training Grant

We are seeking authorization for the Chief Administrator to file an application for an FTA Section 10 Training Grant in the amount of $150,000. The grant would be used for training MTC managerial, professional and technical staff over a two-year period, beginning upon approval within the next two months and extending into early 1996.

These are some of the terms of the grant:

* MTC must match federal dollars on a 50/50 basis. Therefore, $75,000 of the grant would be local money and $75,000 would be federal money.
* Allowable expenses include consultant fees, seminar/course tuition fees and training materials.

The FTA training grant will provide needed additional funding for training activities that are important to future MTC initiatives. For example, there will be a heavy emphasis on training to use the new information technology the MTC is purchasing and installing. A copy of the program narrative and course list is attached. There is adequate money budgeted for training in 1994 to provide the required local match.

Human Resources staff will be available at the meeting to answer questions.

REQUESTED ACTION

Approve the resolution authorizing the Chief Administrator to file an application for an FTA Section 10 Training Grant in the amount of $150,000.

FTA Grant Application
January 1994

Program Narrative

Program Background

The Metropolitan Transit Commission (MTC) serves the seven-county metropolitan area surrounding Minneapolis/St. Paul. The growth experienced by the MTC in recent years has not been in size but rather in complexity. The environment in which the MTC operates has become more volatile, requiring new responses and new methods to meet transit service needs. A more competitive marketplace has caused the MTC to bid for service to suburban communities, to forge partnerships with private carriers and to manage service differently. Fully accessible fixed route service is becoming a reality. Today's transit customers demand higher quality service from providers in the private and public sectors. New technology is being introduced very rapidly. An ever-changing work force with new expectations presents unique management challenges.

The MTC has offered training to managers, supervisors and professionals for the past several years, but has not had the resources to meet many of the needs dictated by the changes described above. When the pace of change accelerates, so does the need for learning. The MTC must have a work force prepared to meet the challenges of the future. A continuing commitment to training on the local level, coupled with Section 10 assistance, will lead to such a work force.

Project Description

The MTC uses a thorough needs assessment process to identify types of training required by various groups of management, professional and technical employees. For the purpose of preparing this grant proposal, the normal process was supplemented by meetings and phone interviews intended to identify critical training needs not met by the MTC's usual activities.

The result is a multi-track training project, designed to meet the development needs in the following areas:

Track A: Computers and Information Technology

The MTC is moving rapidly toward an information-based organization. In the next two years our agency will implement a relational data base system functioning via a system of personal computers. Employees will have access to a wide variety of data from across the organization, eliminating the need for separate data bases residing in different divisions. This shift requires that all employees in support positions throughout the organization learn to use personal computers at an advanced level. Employees would learn to operate the various software programs as necessary, including the Windows environment, Paradox, Micrsoft Word, Excel and basic keyboarding skills. Without this background our transition to a technology-driven organization cannot be accomplished.

Advanced course work for Information Services employees is necessary to make sure our project leaders have the technical skill necessary to drive this effort. Courses to increase proficiency at operating, diagnosing and applications of the new relational data base will ensure a smooth transition to this new environment. Programs include:

- Paradox Application Language
- LAN
- Network
- UNIX
- C and C ++ Language
- Sybase
- Powerbuilder
- Telecommunications Concepts
- PC Tools

Finally there would be necessary additional specialized training required for employees in specific areas within the MTC . This would include:

- Automatic Vehicle Locator System skills

Track B: General Management Skills:

These courses provide training in a number of essential management skills for managers and supervisory personnel. In an era of sophisticated technology, we need to make sure that our supervisors and managers also maintain a focus on the "softer" aspects of their positions - the people skills. Communication in written and verbal forms, comminicating to encourage and support employees and to manage the performance of those who choose not to comply with agency direction are all critical components of a successful organization. Some of the courses in this category include:

- Effective business writing skills
- Communication/Listening skills
- Problem solving/Decision making
- Coaching/Counseling skills
- Performance management skills
- Employee discipline

Track C: Executive Development

This section provides training for our executive team of one Chief Administrator, 2 Assistant Chief Administrators and 9 Division Directors. The identified programs will help our senior management team lead the organization through the changes taking place at an ever increasing pace in the transit business. Courses are designed for those at executive levels of an organization who need to deal with complex business realities and make informed decisions based on big-picture analysis. A focus will be on the interdependence of the functional areas and how each component adds value to the whole.

Track D: Transportation Management

This track addresses the need for ensuring that key MTC staff is knowledgeable about all aspects of transportation planning. Courses in this section include transportation planning,

urban planning/traffic mitigation, and transportation management skills for those in management positions who need to understand the details of how a transit system operates.

Track E: Administrative Support Training

Track E provides training for agency employees in administrative work units, thus allowing them to support the organization through their functional areas. Courses in this section are varied, but all are designed to improve the technical proficiency of the employees within that work area. Human Resources, Finance, Internal Audit and Risk Management divisions are represented in this category.

A summary of proposed training activities is provided on the following pages. A one page description of each course is also included.

The training will take place over a 2-year period, beginning in February, 1994 and ending in January, 1996.

The administrative contact for this training project will be:

Shelly Bergh Gardner
Manager of Training and Development
Metropolitan Transit Commission
400 North Snelling
St. Paul, Minnesota 55104

Phone: (612) 349-5452

Summary of Proposed Training Activities

	Training Program	Vendor	Estimated Cost
Track A:	***Computers and Information Technology***		
1.	Word for Windows - Part 1	Science Museum of Minnesota	$ 3,200
2.	Word for Windows - Part 2	Same	$ 2,400
3.	Excel - Spreadsheet Introduction	Same	$ 1,600
4.	Excel - Spreadsheets - Intermediate	Same	$ 1,200
5.	Quatro Pro for Windows - Part 1	Same	$ 1,600
6.	Quatro Pro for Windows - Part 2	Same	$ 1,600
7.	Paradox Windows Introduction	Same	$ 2,560
8.	Paradox Windows - Databases	Same	$ 2,560
9.	Paradox Application Language	Same	$ 4,050
10.	Novell Netware 3.x Administration	Connect Education Service	$ 3,585
11.	Network	The Learning Tree	$ 3,690
12.	UNIX	The Learning Tree	$ 7,380
13.	C and C++ Language	Science Museum of Minnesota	$ 1,785
14.	SYBASE	DTA Training Services	$ 4,000
15.	Introduction to PowerBuilder	PowerSoft Education	$ 6,000
16.	Fundamentals of Telecommunication Concepts	Data-Tech Institute	$ 2,385
17.	PC Tools: PowerBuilder	Connect Education Services	$ 1,125
18.	Automatic Vehicle Locator System	To Be Determined	$ 6,000
			$56,720
Track B:	***General Management Skills***		
1.	Effective Business Writing Skills	University of St. Thomas	$ 3,000
2.	Principles of Effective Supervision	University of Minnesota	$ 4,750
3.	Effective Speaking Skills for Professionals	University of St. Thomas	$ 3,300
4.	Handling Difficult People	University of St. Thomas	$ 6,000
5.	Managing Employee Grievances	University of Minnesota	$ 5,625
6.	Creative Problem Solving	University of Minnesota	$ 3,000
7.	Writing Performance Standards	Management Concepts Inc.	$ 1,125
8.	The Basics of Coaching	Same	$ 3,000
9.	Managing Job Stress	Same	$ 3,000
10.	How to Talk About Performance Issues With Your Employees	University of St. Thomas	$ 3,000
11.	Substance Abuse Recognition How to Handle Problems	To Be Determined	$ 3,000
			$38,800
Track C:	***Executive Development***		
1.	Minnesota Management Institute	University of Minnesota	$16,200
2.	Executive Development Center	Personnel Decisions Inc.	$ 6,800
			$23,000

Track D: Transportation Management

1.	Transportation Planning	University of Minnesota	$ 1,000
2.	Urban Planning/Traffic Mitigation	Same	$ 1,000
3.	Transportation Management	University of Milwaukee	$ 3,250
4.	Emergency Response Training	To Be Determined	$ 5,000
			$10,250

Track E: Administrative Support Training

1.	Leading the Human Resources Function	University of Minnesota	$ 4,300
2.	American Compensation Certificate	American Compensation Association	$ 2,700
3.	Redesigning the Human Resources Function	Designed Learning	$ 2,400
4.	Conducting One-on-One Training	University of Minnesota	$ 950
5.	Internal Audit District Conference	APTA	$ 700
6.	Internal Audit Regional Conference	APTA	$ 1,400
7.	Evaluating a Contractor's Performance	Management Concepts Inc.	$ 1,750
8.	Basic Contract Administration	Management Concepts Inc.	$ 1,575
9.	Safety Certification	Minnesota Safety Council	$ 5,455
			$21,230

RESOLUTION NO. 94 - 18

AUTHORIZING THE FILING OF AN APPLICATION WITH THE DEPARTMENT OF TRANSPORTATION, UNITED STATES OF AMERICA, FOR A GRANT UNDER THE FEDERAL TRANSIT ACT, AS AMENDED THROUGH JUNE, 1992, AND RELATED LAWS

WHEREAS the secretary of transportation is authorized to make grants for a mass transportation program of projects; and

WHEREAS the contract for financial assistance will impose certain obligations upon the applicant, including the provision by it of the local share of the project costs in the program; and

WHEREAS it is required by the U.S. Department of Transportation in accord with the provisions of Title VI of the Civil Rights Act of 1964, that in connection with the filing of an application for assistance under the Federal Transit Act, as amended, through June, 1992, and related laws, the applicant gives an assurance that it will comply with Title VI of the Civil Rights Act of 1964 and the U.S. Department of Transporation requirements thereunder; and

WHEREAS, it is the goal of the applicant that disadvantaged business enterprises be utilized to the fullest extent possible in connection with these projects, and that definitive procedures shall be established and administered to ensure that disadvantaged businesses shall have the maximum feasible opportunity to compete for contracts when procuring construction contracts, supplies equipment contracts, or consultant or other services;

BE IT THEREFORE RESOLVED by the Metropolitan Transit Commission:

1. That the chief administrator is authorized to execute and file applications on behalf of the Metropolitan Transit Commission with the U.S. Department of Transportation to aid in the financing of training projects pursuant to Section 10, of the Federal Transit Act, as amended through June, 1992, and Related Laws.
2. That the chief administrator is authorized to execute and file with such applications an assurance or any other document required by the U.S. Department of Transportation effectuating the purpose of Title VI of the Civil Rights Act of 1964.
3. That the chief administrator is authorized to furnish such additional information as the U.S. Department of Transportation may require in connection with the application for the program projects.
4. That the chief administrator is authorized to set forth and execute affirmative minority business policies in connection with the program of projects' procurement needs.
5. That the chief administrator is authorized to execute grant agreements on behalf of the Metropolitan Transit Commission with the U.S. Department of Transportation for aid in financing the training projects.

MOVED BY: Commissioner Mairs SECONDED BY: Commissioner Paulson
ROLL CALL VOTE: Yea: Commissioners Mairs, Paulson and Snowden
Nay: None Absent at the Time: Commissioners Dean and Hartle
APPROVED: February 8, 1994

CERTIFICATION OF RESOLUTION – I, the undersigned, Ruane Onesirosan, Administrative Aide and Recording Secretary to the Metropolitan Transit Commission, do hereby certify that the foregoing Resolution 94-18 is a true and correct copy of a Resolution of the Metropolitan Transit Commission adopted at a meeting of said Commission duly convened and held on February 8, 1994 at which a quorum was present and voting; and the action taken has not been in any manner rescinded or modified. In witness whereof, I have hereunto set my hand this 9th Day of February, 1994

Ruane K Onesirosan

Ruane Onesirosan, Admin. Aide & Recording Secretary

REGIONAL TRANSIT BOARD

Mears Park Centre
230 East Fifth Street, St. Paul, Minnesota 55101
292-8789

DATE: March 4, 1994

TO: Chair and Members of the Administration and Finance Committee

FROM: Clarence Shallbetter, TDM Administrator

SUBJECT: Approval of the 1994 TDM Contract and Management Plan for Services from Minnesota Rideshare

SUMMARY

This memorandum requests approval of the contract and management plan with the Metropolitan Transit Commission (MTC) to provide various travel demand management (TDM) services through Minnesota Rideshare (MN/RS) for calendar year 1994.

DISCUSSION

The Regional Transit Board (RTB) is responsible for establishing and implementing a rideshare program in the metropolitan area (Minn. Stat. 473.375, Subd. 11). This statutory requirement recognizes the important role a package of services designed to encourage and assist commuters to ride rather than drive alone to and from work can have in the region's transportation system. In spite of the drop in use of carpooling during the past decade, it remains a substantial alternative to driving alone and accounts for 13 percent of peak-period travel. Combined with the 4 percent who take the bus and those who vanpool, bike and walk, TDM services account for almost 20 percent of the trips to work. The RTB five-year plan, "Vision '97," and the Metropolitan Council's Policy Plan further identify ridesharing by carpools and vanpools and commuting by bus as major components of the metropolitan transportation system.

Passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) and the Congestion Mitigation and Air Quality (CMAQ) Program opens up an opportunity for funding significant portions of the work directed to alerting, persuading and facilitating the use of carpools, vanpools and buses in TDM programs. These programs further complement High Occupancy Vehicle initiatives of Mn/DOT as they provide a communication and promotional line into employment locations with services to alert and enable employees to choose an alternative to the Single Occupant Vehicle (SOV). RTB staff are presently working on the outline and process for developing a TDM strategic plan for the region.

The RTB contracts with the MTC for a significant portion of the TDM program. In 1994, RTB staff performed a functional analysis of contract efforts and identified eight separate categories of activity. Several performance goals were set and MN/RS provided objectives for each of the eight categories of work. MN/RS further suggested the addition of a ninth category concerning contract administration. A budget estimate detailing how funds from a 1994 CMAQ grant

totaling $650,000 should be allocated for each activity has also been prepared by MN/RS. The management plan further begins the process of formally assigning employer marketing responsibilities to various TDM organizations in the region. These include the Downtown Minneapolis TMO, the I-494 Joint Powers Organization, and the University of Minnesota. Work to be performed by the Center for Energy and Environment that is funded by the state for the Bike-Bus and carPool (B-BOP) program is also recognized.

The major focus of the 1994 MN/RS Management Plan is to implement a much improved and more systematic employer marketing program with accompanying employee surveys and the development and execution of Implementation Action Plans. The plan sets an overall goal of ten employers who are committed to adoption and implementation of a complete TDM program. An additional 100 employers are expected to make significant commitments to major portions of these services. Significant efforts are also planned to undertake research to determine the results from the rideshare matching program and demonstration of an expanded employer Guaranteed Ride Home incentive program. A final objective is to increase the management information flowing from MN/RS activities to better assess program results and assist with targeting efforts for the future.

Operating expenses for MN/RS for calendar year 1994 are projected to total $769,906. Revenue sources are federal ISTEA funding through a CMAQ grant, state and local funding and fees for registration and verification of car and van pools using the Third Avenue Distributor Garages in Minneapolis. The recommended 1994 subsidy to the MTC for MN/RS activities is $649,906. Budget allocations of all anticipated expenditures to categories of activity in 1994 are as follows:

Employer marketing	$72,611	9%
Surveying of employers and employees	45,104	6%
Employer Implementation Action Plans	68,611	9%
General marketing and promotion	198,291	26%
Technical assistance - carpool, vanpool matching and bus information	95,647	12%
Carpool registration	107,669	14%
TDM product and service development	104,178	14%
Market research	52,045	7%
Contract administration	25,750	3%
Total budgeted expenditures	$769,906	100%
Less Third Avenue Distributor Garage revenues	(120,000)	
Total maximum contract amount	$649,906	

This contract represents an increase of $49,978, or 8 percent more than the 1993 contract. The largest expenditure increases are for production of brochures, maps, etc., one additional position in rideshare matching, and the advertising agency fee. The 1994 CMAQ grant request is awaiting Federal Transit Administration approval. Once this is obtained, the funds may be used until the end of the federal fiscal year. Discussion is under way to determine if it may be possible to extend the funds to the end of the calendar year.

FINDINGS AND CONCLUSIONS

- TDM is a significant component of the region's transportation future.
- RTB has responsibility for establishing and implementing a rideshare program.
- Minnesota Rideshare is the contractee obligated to perform the desired work detailed in nine categories of activity.
- Contract performance will be measured with specified objectives in each category of activity while expenditures will also be monitored within activity categories.
- Monthly reports and quarterly marketing plan will provide a detailed description of MN/RS activity and their results for planning and program development in future years.

RECOMMENDATION

That the Regional Transit Board authorize its executive director to enter into a contract for calendar year 1994 with the Metropolitan Transit Commission to provide rideshare services through Minnesota Rideshare in an amount not to exceed $649,906.

CJS:jmo

Attachments
1. Contract Agreement for Minnesota Rideshare Program
2. 1994 Travel Demand Management (TDM) Management Plan
3. Format for Monthly Reports
4. Format for Quarterly Marketing Plan

Attachment 1

**REGIONAL TRANSIT BOARD
AGREEMENT WITH
METROPOLITAN TRANSIT COMMISSION
FOR FUNDING AND OPERATING
THE MINNESOTA RIDESHARE PROGRAM**

THIS AGREEMENT, entered into this ___ day of March, 1994, is made by and between the REGIONAL TRANSIT BOARD (hereinafter referred to as the "RTB") and the METROPOLITAN TRANSIT COMMISSION (hereinafter referred to as the "MTC").

WHEREAS, the RTB is authorized in accordance with Minnesota Statutes, Section 473.375, subd. 11, to enter into contracts for administration of the Minnesota Rideshare program in the metropolitan area; and

WHEREAS, the RTB and the MTC have authorized the execution of this Agreement; and

WHEREAS, the MTC has represented that it has the necessary expertise and personnel and is qualified to perform such services.

NOW, THEREFORE, IT IS AGREED BY THE PARTIES:

I. DEFINITIONS

For purposes of this Agreement, the following terms shall have the meanings stated:

A. MINNESOTA RIDESHARE PROGRAM

Minnesota Rideshare Program shall mean a program providing services described in Minn. Stat., Section 174.257, subd. 1(a)-(f).

B. APPROVED OPERATING DEFICIT

Approved Operating Deficit shall mean the amount by which operating expenses approved by the RTB and incurred by the MTC for the delivery of services according to the management plan, exceed any revenues received as consideration for providing the services described in the management plan including any revenues from the City of Minneapolis, the Center for Environment and Energy, the Minnesota Department of Transportation and the Metropolitan Transit Commission.

II. STATEMENT OF WORK

A. RESPONSIBILITY OF THE MTC

The MTC shall coordinate, manage, provide, and control all necessary activities to operate and provide the services assigned to it and described in the approved management plan on file at the RTB and incorporated herein by this reference.

The MTC shall provide full and competent technical services to handle and correct any and all problems that arise associated with the operation of the system.

B. CHANGES IN SERVICE

The service to be provided shall be as described in the Management Plan. No change in service shall occur unless first approved by RTB. Following a mid-year contract review of performance administratively scheduled by the RTB, the Management Plan and allocation of budgets for categories of activity may be modified by mutual agreement of the RTB and the MTC. Up to 5 percent of the annual dollars and time of staff assigned to the contract may be moved from one category of activity to another with administrative approval of the RTB during the contract year. Such changes shall be noted in the monthly narrative and project expenditure reports.

III. TERM

This Agreement shall be in effect for transportation services rendered from January 1, 1994, through December 31, 1994.

IV. FUNDING OF SERVICES

A. The RTB agrees to pay the MTC an amount not to exceed Six Hundred Forty Nine Thousand Nine Hundred Six Dollars ($649,906) (the Contract Amount), or the total Approved Operating Deficit, whichever is less.

B. Payments shall be made by the RTB to the MTC monthly, based on submission of an approved Request for Funds form. A Monthly Summary Report in the form described in Section VII(B)(1) shall accompany each request. The Request for Funds shall not be submitted later than twenty-five (25) days after the end of the month in which services were provided.

C. Monthly requests for funds shall be sent to:

Regional Transit Board
Attn: TDM Administrator
230 East Fifth Street
Mears Park Centre, 7th Floor
St. Paul, Minnesota 55101

The request shall be prepared in a form acceptable to the RTB and shall be supported by such copies of invoices, payrolls, and such other information as may be required by the RTB.

D. The MTC's final monthly payment shall be withheld until completion of an audit by the RTB.

E. All invoices and related records are subject to audit by the RTB. If, at the end of the Term, as a result of final audit, it is determined that the RTB has overpaid the MTC, the MTC shall immediately refund to the RTB the amount of the overpayment. Upon completion of the final audit, the RTB shall make a final payment to the MTC of the amount of any unpaid balance in accordance with the provisions of this contract.

V. SCOPE OF THE MTC'S RESPONSIBILITIES

A. SERVICE DELIVERY

The MTC agrees to manage and supervise the Minnesota Rideshare program and provide those services specified in the Management Plan consistent with the budgets of time and resources allocated to categories of activity. The MTC agrees to oversee and operate the service in accordance with the Management Plan specifications and any revisions thereof. The parties agree that the Management Plan shall only be amended with the written approval of the RTB.

B. SUBCONTRACTING BY THE MTC

The MTC shall not assign or subcontract its obligations under this contract to any third parties including market research, evaluation and advertising agencies unless the RTB shall have first administratively approved the subcontractor and terms of any subcontracts. The RTB retains the right to disapprove any such third party contracts. Consent to any subcontract or assignment shall not relieve the MTC of its primary responsibility for performance hereunder.

C. INDEPENDENT CONTRACTOR

Under the terms of this contract, the MTC is an independent contractor and has and retains full control and supervision of the services and full control over the employment and direct compensation and discharge of all persons assisting in the performance of its services hereunder. The MTC agrees to be solely responsible for all matters relating to payment of employees, including compliance with social security, all payroll taxes and withholdings, unemployment compensation, and all other regulations governing such matters. The MTC agrees to be responsible for its own acts and those of its subordinates, employees, and any and all approved subcontractors during the Term.

VI. MANAGEMENT OPERATIONS

A. The MTC shall provide project management according to the Management Plan. The parties may agree on additional requirements that are reasonable for operation of this service.

B. PERSONNEL

1. Any and all employees of the MTC, its subcontractor of other persons while engaged in the performance of any work or services required by the MTC under this Agreement shall not be considered employees of the RTB, and any and all claims that may or might arise under the Workers' Compensation Act of Minnesota on behalf of said employees or other persons while so engaged, and any and all claims made by any third party as a consequence of any act or omission on the part of the MTC's employees, its subcontractors, or other persons while so engaged in any of the work or services to be rendered in be the obligation of the MTC.

2. MTC and its subcontractors shall be considered as independent contractors and have and retain full control and supervision of the services and full control over the employment and direct compensation and discharge of all persons assisting with performing services under this Agreement.

C. INSURANCE

MTC shall have in effect an insurance plan that is consistent with Minnesota Statute, Section 466.04. At least three (3) days prior to commencing service hereunder, MTC shall furnish to the RTB a description of the insurance plan in effect for this Agreement.

VII. DOCUMENTATION OF SERVICE DELIVERY

A. RECORDS

The MTC agrees to keep and maintain all records required by the RTB under this contract for a period of three (3) years from the date of final payment and to allow the RTB to copy and inspect all of the required records at any time during regular business hours.

Upon request, the MTC shall furnish to the RTB copies of all reports required by law or regulation to be furnished to the RTB or any other governmental body or authority having legal jurisdiction over operational matters of the MTC.

The MTC shall, at the end of the term of this Agreement, turn over in a timely fashion any and all records that are reasonably requested by the RTB, subject to the Data Practices Act.

B. PROJECT OPERATIONAL RECORDS

The MTC agrees to maintain operational records in the format requested by the RTB documenting the performance of the services provided. Operational records shall include, but are not limited to, the following:

1. Monthly Summaries

The MTC in accordance with the reporting schedule established, shall prepare and submit a Monthly Summary Report. This report shall include:

All Minnesota Rideshare program activity, operating statistics, and a narrative statement of performance shall be measured against Management Plan objectives consistent with format attached to the Management Plan. MTC shall use its best efforts to provide such other information as is reasonably requested by RTB.

2. Quarterly Marketing Plan

The MTC shall prepare and submit a Quarterly Marketing Plan. This report shall detail the employer marketing activities planned by Minnesota Rideshare for the upcoming quarter consistent with the format attached to the Management Plan.

3. Financial Records

The MTC shall separately account for all project expenditures and any other relevant financial records or documents. The MTC and any subcontractors shall keep full and complete books of account following generally accepted accounting principles reflecting its operations pursuant to this Agreement.

C. AUDITS

As required by Minn. Stat. Section 15.17, the records, books, documents, and accounting procedures and practices of the MTC and of any subcontractor relating to work performed pursuant to this Agreement shall be subject to audit and examination by the RTB and the legislative auditor or state auditor.

The MTC and its subcontractor shall permit the RTB or its designee to inspect, copy, and audit its accounts, records, and business documents at any time during regular business hours, as they may relate to the performance under this Agreement.

The MTC shall deliver to the RTB within 30 days after completion a copy of any internal or external audit of the MTC done by the MTC or at its request or at the direction of any governmental agency or department.

D. INSPECTIONS

The RTB shall have the right in its discretion to monitor, examine, and investigate all elements of the MTC's activities or property associated with this Agreement. The MTC shall cooperate with the RTB and assist with inspections as requested by the RTB and as authorized by Minn. Stat. Section 473.375, subd. 6.

VIII. INDEMNITY AND INSURANCE

A. INDEMNIFICATION

The MTC undertakes and agrees to defend, indemnify, and hold harmless the RTB and all of the RTB's board members, agents, and employees from and against all suits and causes of action, claims, losses, demands, and expenses, including, but not limited to, attorneys' fees and cost of litigation, damage, or liability of any nature whatsoever, for death or injury to any person, including the MTC's employees and agents, or damage to or destruction of any property of either party hereto or of third parties, arising in any manner by reason of or incident to the performance of the contract on the part of the MTC or a subcontractor, except that indemnification shall not be required hereunder for the share of any liability apportioned to RTB because of RTB negligence.

IX. GENERAL PROVISIONS

A. DEFAULT

1. Defined

The MTC shall be in default hereunder if it shall abandon or delay unnecessarily the performance of services hereunder; fail to provide services according to the Management Plan; fail to maintain or produce records required hereunder; or in any manner refuse or fail to comply with the specifications or instructions of the RTB relative to this Agreement.

2. Notice and Opportunity to Cure

The MTC shall have seven (7) days after receiving written notice of default to cure the default or show good cause for such delay, abandonment, refusal, or neglect to comply with this Agreement or the RTB specifications or instructions, or show good cause for failure to cure the default within seven (7) days, after which time if the default continues, the RTB may declare the MTC in default and terminate this Agreement.

B. TERMINATION

Upon Default by the MTC; the RTB may immediately terminate the entire contract service or any portions of it and related payments to the MTC. Notwithstanding termination of services and payment, all other obligations of the MTC under this Agreement shall remain in effect. In the event of termination due to default by the MTC, the RTB shall not be precluded from the exercise any other rights it has to secure performance of this Agreement.

C. NOTICE

Notice for purposes of this Agreement shall be sufficient if given by certified mail to the addresses listed below, and shall be deemed to have been given the day of mailing.

RTB:

Regional Transit Board
Attn: Programs Section
TDM Administrator
230 East Fifth Street, Mears Park Centre
St. Paul, MN 55101

MTC:

Metropolitan Transit Commission
Minnesota Rideshare Manager
560 Sixth Avenue North
Minneapolis, MN 55411-4398

D. REDUCED FUNDING LEVELS

Should the RTB budget appropriation and tax levy or federal funds requested for this contract be insufficient to meet current requirements or should appropriations for the RTB be reduced resulting in the lack of funds sufficient to meet all of its needs, the RTB may upon one hundred twenty (120) days' notice to the MTC terminate this Agreement.

E. EQUAL EMPLOYMENT OPPORTUNITY

In conjunction with the execution of its obligations hereunder, the MTC agrees that it and any subcontractors hereunder in performing the work required by this Agreement, shall not discriminate against any employee or applicant for employment because of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, disability, age, political affiliation, or sexual preference, and shall take affirmative actions to ensure applicants are employed and employees are treated during employment without regard to race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, disability, age, political affiliation, or sexual preference in all matters including employment, upgrading, demoting, or transfer, recruitment or recruitment advertising; layoff, return from layoff or termination; rates of pay or other forms of compensation; and selection for training or apprenticeship.

The MTC shall obtain and keep in force a certificate of compliance with the equal employment opportunity/affirmative action obligations of Minn. Stat. Section 363.073, or provide evidence of compliance with the provisions of House File 2596, enacted April 16, 1988.

F. TARGETED GROUP BUSINESSES

Pursuant to Minn. Stat. 474.142 and Regional Transit Board policy, Contractors shall make a good fair effort to encourage meaningful participation of targeted group businesses in the value of all procurements and contracts for consultant, professional and technical services. "Targeted Group Business" means a small business designated by the Minnesota Commissioner of Administration under Minn. Stat. 16B.19, that is majority owned and operated by women, persons with a disability, or minorities. These procurements include, but are not limited to, insurance, office supplies and equipment, building maintenance, vehicle maintenance, bus parts, fuel, printing and advertising. Upon request, Contractor shall submit proof to RTB of their good faith efforts in complying with this Section.

G. TITLE VI--CIVIL RIGHTS ACT OF 1964

The MTC hereby agrees that it will comply with Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and all requirements imposed by the U.S. Department of Transportation, to the end that, in accordance with Title VI of the Act, no person in the United States shall, on the ground of race, color, sex, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the MTC receives federal financial assistance from the Department under federal urban mass transportation programs; and hereby gives assurance that it will immediately take any measures necessary to effectuate this Agreement.

If any real property or structure thereon is provided or improved with the aid of federal financial assistance extended to the MTC by the Department under federal urban mass transportation programs, this assurance shall obligate the MTC, or in the case of any transfer of such property, and transferee, for the period during which the real property or structure is used for a purpose for which the federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. If any personal property is so provided, this assurance shall obligate the MTC for the period during which it retains ownership or possession of the property. In all other cases, this assurance shall obligate the MTC for the period during which the federal financial assistance is extended to it by the Department under federal urban mass transportation programs.

This assurance is given in consideration of and for the purposes of obtaining any and all federal grants, loans, contracts, property, discounts, or other federal financial assistance extended after the date hereof to the MTC by the Department under federal urban mass transportation programs. The MTC recognizes and agrees that such federal financial assistance will be extended in reliance on the representations and agreements made in this assurance, and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the MTC, its successors, transferees, and assignees.

H. NONWAIVER

The failure of the RTB at any time to insist upon the strict performance of any or all of the terms, conditions, and covenants herein shall not be deemed a waiver of any subsequent breach or default in the terms, conditions, and covenants herein contained.

X. ARBITRATION

Any dispute under this Agreement that the parties agree to arbitrate shall be settled in accordance with the rules and procedures of the American Arbitration Association, except that only one arbitrator shall be used to settle any dispute.

XI. MINNESOTA LAWS

This agreement shall be governed by Minnesota Laws.

IN WITNESS WHEREOF, the parties signed below have caused this Agreement to be executed.

REGIONAL TRANSIT BOARD

_____

Gregory L. Andrews
Its: Executive Director
230 East Fifth Street
St. Paul, MN 55101

Date: _____

_____

Judith Hollander, Director of Planning and Programs

_____

Dale Ulrich, Comptroller

METROPOLITAN TRANSIT COMMISSION

_____

Its:
560 Sixth Avenue North
Minneapolis, MN 55411-4398

Date: _____

Contract Requirements Reviewed by:

_____

Its Contracts Administrator

Financial Conditions Reviewed by:

_____

Its Director of Finance

Attachment 2

Regional Transit Board

MINNESOTA RIDESHARE

1994 TRAVEL DEMAND MANAGEMENT (TDM) MANAGEMENT PLAN

Table of Contents

1994 MANAGEMENT PLAN

I. INTRODUCTION

A. Background

Minnesota Rideshare (MN/RS) has provided most of the publicly managed Travel Demand Management (TDM) services in the Twin Cities area since 1978 when it became a unit of the Metropolitan Transit Commission (MTC). This followed a period of experimentation with the marketing of a set of ridesharing services in twelve employment centers by Public Service Options, a contractor to the MTC.

Efforts to organize car and van pooling accelerated during the energy crisis of the seventies and early eighties when carpooling was recognized as the largest alternative to driving alone. It also followed considerable development of vanpooling by single employers and the emergence of third-party providers of this service. The packaging of a carpool matching service with vanpool formation assistance and information about bus service and the marketing of this package to employees through employers built the foundation for present TDM services.

The work plan for 1994 systematically organizes and focuses the activities of MN/RS in relation to organizations that were established in recent years to handle employer marketing in downtown Minneapolis and along I-494. It also sets out an overall performance goal for the area and some objectives for each of the categories of work activity identified by the RTB.

B. Travel Demand Management Organizations

There are several organizations responsible for elements of Travel Demand Management. The following is a brief description of the diverse roles of each organization:

1. Minnesota Department of Transportation

   The Minnesota Department of Transportation (Mn/DOT) Office of Transit supports and maintains the "Greater Minnesota Rideshare" (GMRS) program. This program coordinates the TDM service needs in Minnesota outside the Twin Cities metropolitan area.

2. Metropolitan Council

   The Metropolitan Council sets regional policy regarding ridesharing, travel demand management and transit that provides direction to the Regional Transit Board and local units of government. The Council sets priorities for and approves expenditure of regional transportation resources. The Council has targeted regional travel demand management services to employment locations in highly congested corridors, the

downtowns, and corridors with HOV lanes. It requires communities in highly congested corridors and corridors with HOV lanes to develop travel demand management strategies, and encourages formation of transportation management organizations (TMO's) in regional business concentrations along major freeways and in downtowns.

3. Regional Transit Board

The RTB is responsible for providing policy and program direction to the MTC. This is done through policies adopted by the RTB and annual contracts with a number of transit providers including the MTC. The RTB further works with key agencies to establish policies that will provide incentives for employers to participate in TDM programs. Each year since 1984, the RTB has purchased the services of the Minnesota Rideshare program from the MTC. Services include employer marketing, surveying, general marketing, promotion and product development, ridematching, vanpool formation assistance, bus information, and employer coordinator assistance.

4. Metropolitan Transit Commission

Minnesota Rideshare (MN/RS) is the unit within the MTC with which the RTB contracts to provide rideshare services. All staff performing duties of this management plan are employees of the MTC. Some of them work directly in the Minnesota Rideshare unit while others are in the MTC Marketing Division. MTC supplies support service to the TDM program, including human resources, financing, training, data processing and planning.

5. Downtown Minneapolis Transportation Management Organization (TMO)

This group is made up of representatives of major public and private interests in the downtown. It is an advisory committee to the city council established two years ago with financial assistance from the RTB. Its major accomplishment to date is the creation of a "Commuter Connection" store where patrons may pick up bus schedules, bus passes, maps of the downtown and bike information. A monitor from the Traffic Management Center will shortly provide a TV image of congested spots on area freeways in the Commuter Connection store. The TMO 1994 work plan anticipates much more focused efforts at employer marketing.

6. I-494 Joint Powers Organization (JPO)

Five cities along I-494 (Bloomington, Richfield, Edina, Eden Prairie, and Minnetonka) have agreed to enter into a joint powers agreement to establish a Transportation Management Organization. They will further consider adoption of a common TDM ordinance to encourage employers to participate in their TDM program. The organization may expand in 1994 to also include Plymouth and Maple Grove. Initial employer marketing efforts are anticipated in 1994.

7. University of Minnesota

The University is a single large employer that also attracts thousands of students to its Minneapolis and St. Paul campuses each day. The University also has significant educational and information capabilities to reach their faculty, staff and students. In recent years, they have actively supported various TDM initiatives including the set-aside and discounts on well located parking spaces for carpools. From a TDM perspective, the U of M is unique as they are responsible for parking on the campus, for parking fees charged, and the construction of parking ramps. They also contract for specialized bus transit services in a bus route that circulates between campus buildings and a network of bus routes throughout the metropolitan area that transport students and staff directly to the University.

II. RESPONSIBILITIES FOR EMPLOYER MARKETING AND IMPLEMENTATION PLANS

The emergency of organizations in downtown Minneapolis and along I-494 to access employers and to work with them the TDM focus to planning by the University, and more focused employer marketing activities by MN/RS creates the opportunity for much more effective TDM programs.

One of the RTB's employer marketing objectives in 1994 is to maximize the marketing strengths of these organizations in the Twin Cities area. They include: A) Minneapolis Downtown Transportation Management Organization (TMO), B) I-494 Corridor Commission (JPO), C) University of Minnesota, and D) Minnesota Rideshare (MN/RS).

The Management Plan focuses responsibility for all employer marketing activities in designated areas for each organization. MN/RS, however, is also a resource for employer marketing by itself and for others. It shall conduct market studies to identify prime prospects and describe their experience with all of these employers to the TMO and JPO. Each TDM organization is responsible for developing their marketing plans, for making presentations to employers in their territories, for the development and presentation of Implementation Action Plans to these employers, and for whatever actions are identified as their responsibilities in Employer Implementation Action Plans.

A. Employer Marketing Responsibilities

The geographic area of responsibility for employer marketing for each TDM organization in 1994 is as follows:

1. Minneapolis Downtown Transportation Management Organization (TMO)

The overall territorial responsibility for the TMO is contained within an area from the Mississippi River, along I-35W to I-94 to I-394 to the Mississippi River. In 1994, the geographic territory they are responsible

for serving is somewhat smaller. It is an area contained within a line beginning at West River Parkway and Portland Ave., south on Portland Ave. to 10th St., west on 10th Street to 3rd Ave. No., north on 3rd Ave. N., to the West River Parkway, east on the West River Parkway to Portland Ave. Any employers outside this area but within the territorial responsibility of the TMO may be marketed to by MN/RS after it contacts the TMO and obtains their approval.

2. I-494 Joint Powers Organization (JPO)

The JPO is starting to organize its employer marketing activities in 1994. It's primary responsibility will be to work with employers located between the Minnesota River, I-494, 24 Ave. So, and T.H. 77; and the area north of 82nd street extended west from 24th Ave. So. to Co. Rd. 18 in Bloomington, west of T.H. 77 in Richfield, south of T. H. 62 in Richfield and Edina ;and east of T.H 169 in Edina from T.H. 62 to 82nd St. extended in Bloomington; and the area in Minnetonka and Eden Prairie west of T. H. 169 and south of a line along Hillside Lane in Minnetonka extended west to the city limits of Minnetonka and east of T. H. 101.

This contract may be administratively revised by the RTB to add portions or all of the cities of Plymouth and Maple Grove to the territorial responsibility of the Commission in 1994 if these cities adopt the Joint Powers Agreement and adopt the proposed TDM ordinance. MN/RS will complete Implementation Plans already started with Fairview-Southdale Hospital in this area and may focus marketing on employers in Plymouth and Maple Grove until notified about a shift in responsibility for these areas.

3. University of Minnesota

The Management Plan anticipates the University will be responsible for all work with the administration , its planning, transit and parking offices for all facilities owned or leased by the University in Minneapolis and St. Paul.

4. Minnesota Rideshare

MN/RS will be responsible for employer marketing activities outside of the areas noted above in 1, 2 and 3. They shall also provide technical assistance services such as surveying and analysis, initial implementation plan development, preparation of matchlists for carpools and vanpools and providing information on bus transit services requested in writing by other organizations. The cost of these support and technical services to other employer marketing organizations are included in the 1994 activity budget for MN/RS. If MN/RS determines these services will require significant resources from MN/RS it may choose to track the time and expenses related to them as a separate item in contract administration.

Any ongoing work by MN/RS for which TDM implementation action plans are developed, such as for Fairview Southdale Hospital, would continue even if they are in the geographic area for which other organizations are primarily responsible. These responsible organizations and the RTB, however, should be provided with monthly status and progress reports on the activities of MN/RS to achieve these implementation plans.

B. Employer Implementation Action Plan - Roles and Responsibilities

Implementation action plans should be developed consistent with the outline contained in IV.B.3. They should be developed by and presented to employers by each organization with primary responsibility for employer marketing. MN/RS is to provide the surveys and written analysis of survey data that is central to completion of an implementation plan for all TDM organizations. MN/RS is also to provide any of the carpool matching, vanpool and bus information services an implementation plan indicates will be provided by MN/RS. Consequently, MN/RS must be included in these negotiations about those portions of an Implementation Action Plan.

The RTB shall directly participate in the development of all employer and employee surveys called for in this management plan. It shall be sent a copy of each TDM Implementation Plan when the plan is submitted to the employer for RTB administrative review and comment. The RTB shall complete its review with comment within two weeks of receipt.

C. Relationship of a Special TDM Marketing Program to Other TDM Activities

In 1993 the Center for Energy and Urban Environment (CEE) received a two year grant of $150,000 from the Legislative Commission on Minnesota Resources (LCMR). This grant is for intensive work with 15 employers to design, implement and test employer based travel demand management (TDM) programs throughout the Twin Cities Metropolitan area. The project focuses on a set of activities and incentives beginning with Bike, Bus or carPool (B-BOP) week in May 1994 and test marketing in the B-BOP challenge for three or four months.

MN/RS shall cooperate with the marketing program by assisting with selection of employers in the geographic area in which they have primary employer marketing responsibility, and by supplying whatever technical assistance is possible as requested in writing by CEE. MN/RS, however, must track and report on their monthly report any receipts from CEE and expenditures of time or funds to assist CEE for employer marketing, and for the development, analysis, production or use of any surveys or marketing materials requested for this project. Technical services to assist commuters identified by CEE as interested in obtaining rides including provision of match lists, supplying bus information , forming vanpools or riding bikes should be supplied to these employees as they are to all requesting these

services at no recorded cost to CEE. Time and expenses related to special efforts to solicit interest or to provide greater than the usual level of service to collect applications or to supply this information, however, should be tracked by MN/RS and reported on the monthly reports.

III. 1994 TDM MANAGEMENT PLAN GOALS, OBJECTIVES AND PROGRAM PARAMETERS

A. Overall Goal

The overall program goal is to reduce the number of single occupant vehicles (SOVs) in the peak periods by persons commuting to work along congested corridors and to major job destinations. The RTB in its TDM strategic planning effort in 1994 will work with the Metro Council and the MN Department of Transportation to develop some techniques to periodically quantify the number of SOVs in peak periods.

B. Program Objectives and Target Markets

1994 TDM program objectives are:

1) to get ten significant TDM employer successes from MN/RS efforts, and

2) to obtain agreement on Implementation Plans from at least 100 other employers who do not have Implementation Plans that were completed in the past two years.

Significant employer success is measured for (1) when an employer completes all steps in the marketing, surveying, implementation and employee matching activities, agrees to provide incentives that are valued by employees and/or removes major obstacles to employee use of transportation alternatives within the year. It is also desirable to define success in terms of a measured reduction of a specified amount of SOV's at specific sites as a consequence of these efforts. It is probably premature, however, to achieve this level of performance measurement in 1994. However, this should be an objective for specific employers and/or employment concentrations in 1995.

In 1994, TDM services will be focused on employers and employees in congested corridors and major employment concentrations for trips in weekday peak periods. Individual employers who contact MN/RS and request services, who are located outside of these areas, should be assisted. However, these should be specifically mentioned in monthly reports that note what services are requested and what prompted these employers to request services. Services directed to non-employees including customers, students and patients will constitute a secondary market for TDM services that should use not more than ten percent of the amount budgeted in any activity category.

C. Production and Availability of Marketing Materials

The RTB shall be informed and invited to comment on the content, theme and character of all collateral materials produced for print or electronic media under this Management Plan.

Any collateral or advertising copy produced at the request of MN/RS shall be developed in such a manner as to enable their use by all TDM marketing organizations including the Downtown TMO and the I-494 Corridor Commission. Such materials should be produced to anticipate their use without significant change in the copy for a period of two years. Camera ready copy shall be retained in a secure manner so that additional copies may be produced or re-produced as needed by any TDM organization. The TDM organization will not be charged for any of the graphic development, design or layout costs. Copies of this material may be provided at no cost or purchased by any TDM organizations only at a rate to cover the cost of printing or reproduction.

D. Quarterly Marketing Plans

MN/RS shall prepare a quarterly employer marketing plan and submit it to the RTB. This plan shall detail which employers will be contacted, the person who will be contacted and their title or position in the firm, the MN/RS marketing agent that will be assigned, the approach that will be taken in developing an implementation plan, and information on other items noted in the marketing plan. An outline of plan contents is attached to this Management Plan.

IV. TDM PROGRAM ACTIVITIES

A. Overall

The 1994 TDM programs consists of nine categories of activity and a series of work items around which work plans can be developed.

Each activity category has an objective while some specific projects have further, more detailed objectives.

Budget funds are allocated to each of the categories of activity and to some projects that are limited in time or focused on specific marketing efforts. Monthly reporting will also be organized around each of these activity and project areas.

B. TDM Activities

TDM program activities and work items include the following:

1. Employer marketing

1994 Objectives: Successfully contact and persuade 100 new employers to assign a transportation coordinator and utilize and/or authorize participation in one or more of the TDM services including surveying of employees, marketing alternatives to driving alone to their employees, development and adoption of a TDM implementation action plan, and providing various incentives such as a guaranteed ride home, preferential parking, bus T-bill/passes, or discounts on carpool and vanpool parking. Additionally, work with 10 other employers to successfully develop a TDM Implementation Action Plan and fully implement it.

Activity work items to accomplish the objectives include:

A. Identification of employers and appropriate decision makers who will be contacted.

This may include the development of prospect lists from the 1993 market research effort or from an assessment of the present employer base. Additional prospects may further be identified later in the year from the market research to assess employer prospects noted in 8A. It may include public or private sector employers or building owners and managers if marketing is to occur on a building wide basis or if the support of the building owner/manager is desired to obtain employer support.

Identification of the top officers and other possible effective contacts of employment organizations, their addresses and telephone numbers.

B. Description of employment site and strategy to reach employers.

Develop a strategy to reach and persuade the top officers to do what is requested of their firm. This initially includes conducting an analysis that describes transportation problems of an employer, the kind of job activities conducted at the site, determining what employer policies may be important that affect employee trip behavior, what to specifically request of each employer, the sequence of steps that will be proposed to survey employees and to market TDM to them, and what measurement techniques will be used to ascertain the degree of change in employee commute trip behavior that results from information and marketing efforts.

The base case description of the employment location should also include the level of bus service, size and adequacy of parking facilities and any charges for parking, the level of congestion on surrounding arterial streets and other factors that may affect the market for TDM services.

C. Multi-employer program development.

Set out the communications and organizational efforts necessary to develop a multi-employer program. These may consist of efforts directed at bringing together the building owners, building managers, chambers of commerce, other business organizations and local public officials to organize a multi-employer TDM program in a specific employment center.

D. Employer marketing materials.

Develop materials to assist with making presentations, and prepare materials that may be left behind to summarize the presentation.

E. Employer presentations.

Arrange appointments and make presentations.

F. Quarterly Marketing Plan.

Each quarter MN/RS will lay out its proposals for employer marketing including the employers and contract person(s) it will market to in a detailed Marketing Plan as noted in Attachment A. A copy of the plan will be sent to the RTB for its administrative review at least two weeks before the beginning of each quarter.

Total Resources for Employer Marketing - $7,000 purchases - 2,400 FTE hours

2. Surveying of employees and description of employer policies.

This activity is very important in 1994 as it is central to development of TDM Implementation Action Plans, and to determining results of all the activities. The need and desire for all employers to permit employee surveying should be presented to all employers. Notes explaining an employer's reluctance to proceed with employee surveying and a statement about what other techniques will be used to obtain evaluation information should be noted in the monthly report. The report should also indicate what level of effort will continue to be made with individual employers who will not permit a survey of their employees.

1994 Objectives: Surveying objectives are to process, analyze and produce written reports detailing the market potential of TDM alternatives from all pre-marketing surveys of employees that are completed. Similar work directed to processing, analyzing and producing written reports will also be done for post-marketing surveys to determine the effect of TDM program efforts. A minimum of ten employers will complete both the pre-marketing and post-marketing surveys.

Activity work items to accomplish the objective include:

A. Employer questionnaire.

Develop and complete an employer questionnaire that describes the kinds of activities occurring at the employment location, relationship of the employer to other employers, hours worked by groups of employees, overtime policies, parking policies including any payment for parking, employee ability to modify working hours, and other information that describes activities and employer policies that affect the ability of employees to choose an alternative to driving alone.

B. Pre-marketing surveys of employee trip behavior and of interest in TDM services.

Develop survey forms that will describe the base case of travel behavior to specific work locations. The survey would determine employee home locations, commute trip mode, working hours, need for a car for personal or work trips during the work day and other questions needed to provide a complete profile of employee commute behavior at the particular work site where TDM marketing will occur. Surveys may be developed to include questions about home location or routes used to travel to work that assist with determining target markets for the market analysis of specific mode alternatives to provide direction to subsequent employee marketing efforts.

Another set of pre-marketing questions determine employee interest in a TDM service, identify barriers to riding to work and register attitudes about the desirability or attractiveness of various incentives and support services to assist them with making the ride choice. These questions may be included on either a comprehensive pre-marketing trip behavior and TDM service survey or on a separate survey distributed after employees are informed about TDM services.

C. Survey processing and analysis.

Process and analyze surveys and prepare a market report for the employer, or the TMO/JPO working with individual employers. Software programs that are flexible and capable of compiling, sorting, cross-tabbing and summarizing data from a variety of questionnaires that contain different numbers of questions may need to be developed. After surveys are processed, data will need to be analyzed to determine the profile of employee trip behavior, constraints affecting TDM choices, the interest in TDM services, and size of TDM service markets. This information needs to be organized in a written report that is informative and persuasive. This written report will be produced for every set of surveys that are processed. It is part of what is provided to the employer or to the TMO/JPO for development of the TDM Implementation Plan.

D. Post-marketing surveys to determine travel changes

Develop survey forms to determine what change in trip behavior occurred from a marketing effort, the incentives provided, and changes made to employer policies. Use of these surveys, how they would be conducted and when this would occur should be contained in the employer Implementation Action Plan.

Total Resources for Employee Surveying and Employer Policies	$10,000 purchases	1,300 FTE hours

3. Employer Implementation Action Plans

1994 Objectives: To develop, obtain agreement, fully implement and evaluate results contained in approved Implementation Action Plans with 10 employers. A secondary objective is to complete partial Implementation Action Plans for the 100 employers who agree to take some significant TDM actions.

Activity work items to accomplish this objective include the preparation and completion of each chapter of an Implementation Action Plan, efforts to carry out the plan and ongoing plan maintenance.

A. Preparation of Employer Implementation Action Plans.

The plan will be complete and considered for acceptance when it contains all of the chapters and a description of items called for in each chapter. Plan chapters and their items include:

1) Employer, employee, site and travel characteristics.

Describe employer characteristics, the base case characteristics of the location, and summarize findings from the employer questionnaire and the pre-implementation employee survey. Identify the employer transportation coordinator and top officer of the organization at this location.

2) Assessment of the TDM market potential.

An analysis of market potential for each mode and identify obstacles to reducing SOVs.

3) Identification of possible TDM services and steps to achieve them.

Identify steps that can be taken to increase use of alternatives to driving alone, incentives that will help achieve this, and the effect of removing specific obstacles. Submit requests for service route modifications or those for increased bus service to the service development staff of appropriate bus operators for their analysis and recommendations. Send a copy of these requests to the RTB TDM Administrator. The cost of these steps, incentives and obstacles to remove should be presented to the top officers for their consideration to include in the Implementation Action Plan.

4) Estimate results from implementation of the action plan.

Estimate possible results from proposed levels of implementation both in absolute numbers and relative to the pre-existing condition. Note the range of changes that may occur from the proposed effort. This estimate of results should also be presented to employers as part of a proposed Implementation Action Plan.

5) Implementation Action Plan.

Identify a series of steps that will be taken at an employment location by specified parties to communicate with employees, present information on alternatives to driving alone and incentives that will be provided, and information on modification to policies that will enable employees to get into pools and/or to take the bus, or to commute during other than peak periods. Action steps also include any marketing efforts to obtain applications from employees, to provide matching or pool formation on site or through outside processing, commuter fairs, etc. The final plan should also contain an estimate of possible results from the actions that will be taken.

6) Evaluation Plan.

Post-employee survey work and other activities proposed to be done to estimate the results of marketing, changes in policies, and incentives.

B. Implementation of the action plan.

Includes the efforts of MN/RS staff to implement the plan including the organization and staffing of commuter fairs, distribution of information, development and distribution of match lists, vanpool formation assistance or other specified activities directed by the action plan. It also includes those steps the employer and other organizations such as the bus operator agree to take.

C. On-going program maintenance.

Identify program maintenance efforts including those directed to new employees and communication and promotion of TDM with existing employees. Describe what is to be done by each of the parties to the plan and when regular maintenance is set to occur.

Total Employer Implementation Action Plans	$3,000 purchases,	2,400 FTE hours.

4. Marketing and promotion of TDM services.

These marketing efforts include a number of projects proposed by MN/RS to stimulate interest by employers and individuals in TDM services and alternatives to driving alone.

These projects include:

A. B-BOP (Bike, Bus Or car Pool) Program.

1994 objective: Obtain the endorsement and support of 15 employers who will encourage their employees to complete pledges that they will bike, bus or carpool to work. These 15 employers are different from and in addition to the employers the Center for Energy and Urban Environment will be working with.

Activities to accomplish this objective include identifying sponsors and partners, development and preparation of printed materials, advertising, promotions, contacting employers, the cost-sharing of graphic development and collateral production with partners including the Center for Energy and Environment, etc.

Total B-BOP Program	$12,000 outside purchase

B. Ride Choice Awards recognition program.

1994 objective: Develop and implement an event to provide ride choice awards to 50 employees who are participants in significant TDM programs or are making extra efforts. This event will also provide a general educational forum for interested employers and persons responsible for TDM efforts with various employers.

Activities to accomplish this objective include developing categories for awards and award criteria, development of printed materials, judging of applicants, purchase of trophies or award prizes, expenses related to luncheon held during B-BOP week, and other expenses for this activity.

Total Ride Choice Awards $8,000 outside purchase

C. Express Newsletter.

1994 Objective: Produce four issues of the Express Newsletter.

The newsletter should consist of news that is interesting and informative about what employers and employees are doing. Focus should be on these activities rather than the work of agencies. Stories and news should cover activity throughout the region including stories and news solicited from all the TDM marketing organizations. Activities to accomplish this objective include gathering news items, writing text, layout of the newsletter, printing, and distribution.

Total Express Newsletter $25,000 outside purchase

D. Pool Fuel promotion.

1994 Objective: To attract at least 200 persons to become poolers in at least 100 registered pools as a result of marketing this incentive program that offers $10 to new carpoolers who agree to register their carpools. This program project and any expenditures of funds for marketing, material preparation or advertising is to commence only after RTB administrative approval of the project assessment report. This written report is to assess target markets for this project, its possible coordination with congested corridor programs, anticipated results, cost per new pooler and comparison of results from this project with other incentives and program efforts.

Following project approval, work items include development of printed materials, an ad campaign to reach targeted audiences, tracking the work locations of applicants and award winners, and a survey of applicants as part of an evaluation to determine what role this incentive program played in the decision to carpool and to register.

Total Pool Fuel Promotion $85,680 outside vendor and $2,000 incentives

5. Technical Assistance-Information and formation services

1994 Objective: To add 5,000 new applicants to the rideshare data base. Evaluation work contained in 8C should be completed during the first half of the year to enable the setting of more specific objectives for each of the technical assistance activity work items.

Activity work items to accomplish this objective include:

A. Rideshare matching service.

Collect and process applications for carpool and vanpool matches and provide information about convenient bus routes and schedules. Distinguish between applications generated from employer marketing and from other sources such as I-394 promotion, individual call in requests, and other significant sources of applications in the monthly reports.

B. Rideshare matching service file maintenance.

Maintain match lists files. Review the files, send out renewal notices to all persons on the carpool file every six months. Eliminate those persons who do not reply that they are interested in maintaining their names on the file. Upgrade the computer matching software program at a cost of $6,000.

C. Testing of remote site, on-line matching service.

Develop and test reliable remote site on-line computer matching programs with two employers in 1994. These programs would provide real time matching that could be done by employers or by MN/RS as part of employee marketing and promotion. Demonstration includes additions to computer programming of $1,500.

Total Remote Site Testing $3,500 outside purchase

D. Vanpool driver assistance and formation service.

Identify prospective vanpool drivers, provide personalized assistance to help them with forming and operating a vanpool and/or provide a quick and helpful turnover of the person to Vanpool Services Inc. or other third

party providers and operators of vanpool services. Provide drivers with lists of prospective passengers and direct interested customers to existing vanpools or those being formed.

E. Bus information service.

Provide personalized packages of bus information consisting of route and schedule information to persons requesting them or those identified in Employer Implementation Action Plans as prospective bus customers.

F. Solicitation of service applications.

Assist with or conduct employee alternative transportation commute fairs and other informational promotions at employment locations. These may be done in conjunction with the implementation action plan, at the request of the TMO/JPO or as part of a general promotional effort. The time and materials used in the promotional activity or event should be noted in the monthly report.

Total Technical Assistance-information and formation service
$19,350 outside purchase 2,800 FTE hours

6. Carpool Registration

1994 Objective: Register 250 new pools in addition to those that re-register.

Activity work items to accomplish this objective include:

A. Register and renew Third Avenue Distributor (TAD) carpools.

Registration of new carpools and carpoolers in the downtown Minneapolis Third Avenue Distributor garages in conjunction with promotional efforts of Mn/DOT on I-394, the City of Minneapolis and the Downtown Minneapolis TMO.

Send out applications and process renewals of existing registrants within three business days of receipt and to process all pool renewals within five business days of receipt.

B. Register and renew non-TAD carpools.

Register and renew registrations for persons who are not in a downtown Mpls. TAD garage program, within three business days of receipt and to process all pool renewals within five business days of receipt.

Total Register Carpools $10,000 purchase service, 3,600 FTE hours.

7. Develop and expand TDM products and services

1994 Objective: Test and demonstrate a number of new and expanded incentives and services to determine their affect in attracting riders and/or improving the quality of service delivery.

Activity work items to accomplish this objective include:

A. Employer Guaranteed Ride Home Program.

1994 Objective: Administer an expanded employer Guaranteed Ride Home (GRH) program consistent with RTB approved criteria. This program is to operate for 10 employers for one year after they have agreed to a TDM Implementation Action Plan or for six months for many employers without an Implementation Action Plan. This will be the GRH program available to employers unless it is superceded by a demonstration GRH program in 7B.

Activities include the registration of employees and payment of reimbursements for six months or one year of the cost of bus and taxi fares for GRH, education of employer coordinators about the program, development and production of explanatory materials, program monitoring and the collection and analysis of data on program results.

The cost of reimbursements should be separated from other costs of marketing information in monthly reports. The annual comprehensive carpooler survey noted in 8C should include questions about the value of this service. Additional evaluation should also be designed and implemented to determine the impact of this service.

Total Employer Guaranteed Ride Home	$5,000 printing $10,000 reimbursements

B. Administer and assess results from the I-394 Guaranteed Ride Home Demonstration and plan for other demonstrations.

1994 Objective: Administer existing I-394 GRH demonstration program and participate in design of additional demonstrations.

This work consists of collecting and analyzing data from the I-394 demonstration program, existing employer GRH programs and in collecting other data requested to assess the impact and the effectiveness of various program components as the RTB develops policies to guide additional demonstrations directed to a broader more general regional GRH program Extensions of the existing I-394 GRH demonstration or additional demonstrations of GRH may be started in the second half of 1994. Planning for a broad based regional program will continue in 1994 on the basis of what is learned from the GRH demonstrations.

C. Employer Transportation Coordinator Assistance and Training Program

1994 Objective: Develop an Employer Transportation Coordinator Training program and the material designed to facilitate training in the first half of the year. Test materials with coordinators in the second half of the year.

Activities include determining what would be useful for Employer Coordinators to know in their role, issues they deal with, and how they can be most effective. Conduct market research and develop a market assessment with existing coordinators and estimate number of coordinators that may benefit from training in the next year. Develop a communications and training program for review by RTB administration which cost effectively achieves the objective. This may include the development of printed materials and/or a videotape explaining the roles of an Employer Transportation Coordinator including surveying and communicating with employees, employer policy analysis, the advancement of policy changes within their organization, identification of the kinds of issues and questions they will encounter, an outline of the ways they can most effectively increase riding instead of driving alone, and the kinds of assistance that will be available to them. This material and/or videotape may include testimonials from existing Coordinators about their role and their impressions about the time required for this job, their successes and the importance of the job.

Total Employer Transportation Coordinator Assistance and Training Program	$5,000 printing $30,000 outside vendor

Total New and Expanded TDM Product and Services	$50,000 purchases,	2,000 FTE hours

8. Market research

1994 Objective: To conduct market research that improves the quality of lists of employer prospects and determines quantifiable results from the carpool/vanpool matching and formation activities.

Activity work items to accomplish this include:

A. Assessment of employer prospects

1994 Objective: Undertake research to provide more reliable and useful list of employers who are very receptive to TDM services and excellent employer candidates in the entire Twin Cities area.

This work may include efforts to establish a matrix of factors that indicate both the receptivity of employers to undertake a TDM program and those that will be interested in providing incentives to encourage participation.

Prospects identified within the area of responsibility of the Downtown TMO and the I-494 Joint Powers Organization will be given to them.

Review and update the employer prospect files to keep current the list of officers and contacts, TDM Coordinators, phone numbers and addresses.

Much of this activity is similar to III-1-A. However, it includes an investment in surveying and other market research techniques to determine the better employer prospects.

B. Provide data for RTB strategic planning of TDM

Provide information, data and analysis as requested from the MN/RS files and experience for the TDM strategic plan that will be developed by the RTB in 1994. MN/RS will be one of the providers of TDM services invited to participate in this planning activity.

C. Evaluation of the impact and results from carpool and vanpool matching and formation activities

1994 Objective: Develop and conduct a comprehensive survey of the number who formed carpools or vanpools or were added to existing pools from the matching and formation activities of MN/RS.

Survey design and survey instruments should be completed in the first half of the contract period and administratively reviewed by the RTB. The survey should be of persons receiving matchlists and separately of persons on the carpool matchlist files to determine the rate of carpool/vanpool formation, the number of persons in carpools/vanpools, the one-way distance the carpool/vanpool travels and the usefulness of matching and formation services in forming, adding to or maintaining carpools/vanpools.

Total market research $49,000 outside purchase; 100 FTE hours

9. Contract Administration

1994 Objective: To track the time and expense of setting up and completing the reports required by the contract and services provided to the Downtown TMO and the JPO.

A. Set up of the monthly reporting format and of the quarterly marketing report format.

The time and materials used by MN/RS to set up the monthly reporting system and the quarterly marketing plan format may be separately tracked

and itemized as a separate activity of MN/RS. However, the ongoing maintenance and use of these systems and the regular reporting on them should be included in the general overhead that is allocated to all activities or tied to the specific category of activity reported on in the reports.

B. Itemization of support provided to the downtown Transportation Management Organization (TMO) and the I-494 Joint Powers Organization (JPO).

The time and materials supplied by MN/RS to assist the TMO and JPO may be tracked and itemized on a monthly basis. This data should be tracked and summarized in the following categories in the monthly report: employer marketing, surveying, employer implementation action plan, and technical assistance.

C. Local and non-local meetings.

This includes MN/RS expenditures for all MN/RS authorized costs incurred by their staff to attend meetings.

Total local and non-local meetings - $5,500.

D. Temporary Help.

Assistance required by MN/RS to handle the volume of applications and the workload of MN/RS.

Total temporary help - $2,000.

Total Contract Administration - $7,500 outside purchase, 700 FTE hours.

V. BUDGET NARRATIVE

A. Overview

Budget funds were allocated by MN/RS based on a description of TDM activities and work items. Since this is the first effort to organize work by functional categories, the allocations may change at the mid-year review based on experience and results from the first half of the contract year.

B. Budget Allocations to TDM Activities

Budget estimates were prepared by MN/RS for cost of outside purchases or services and for the estimate of time in FTA hours of MN/RS staff that will be allocated to each activity. Indirect expenditures for service supplied by the MTC totaling $74,708 for phones, office space, fax, postage, computers, MIS, human resources, and finance services were allocated to each activity based on their portion of total staff time. Estimates of the dollar value of staff time were

based on the total amount of time allocated to an activity multipled by the $22.98/hour average hourly rate specified.

Activity	Budget $$-purchases	FTE Hours	Total $'s	Percent of Total Budget
1. Employer Marketing	7,000	2,400	$72,611	9%
2. Surveying	10,000	1,300	45,104	6%
3. Employer Implementation Plans	3,000	2,400	68,611	9%
4. General Marketing and Promotion	132,680	2,400	198,291	26%
Projects — Budget $-Purchases				
B-BOP 12,000				
Ride Choice Awards 6,000				
Express Newsletter 25,000				
Pool Fuel Promotion 87,680				
5. Technical Assistance - Carpool, Vanpool, and Bus Information	19,350	2,800	95,647	12%
Test Remote Terminal 3,500				
Computer Equipment Contract 6,000				
6. Carpool Registration	10,000	3,600	107,669	14%
7. Develop and Expand TDM Products and Services	50,000	2,000	104,178	14%
Employer GRH Program 15,000				
Employer Transportation Coordinator Training 35,000				
8. Market Research	49,000	100	52,045	7%
9. Contract Administration	13,500	700	25,750	3%
Local and non-local mtgs. 5,500				
Temporary help 2,000				
Totals	$288,530	17,700	$769,906	100%
Less TAD Garage Revenue			(120,000)	
Total Maximum Contract Amt.			$649,906	

Expenditure items in the expenditure budget prepared for 1994 include the following:

1.	Wages and Fringe		
	Salaries - 6 rideshare program personnel		$282,408
	- 4 FTEs for marketing and graphics support		
	Fringe Benefits - 44% of salaries		124,260
2.	Services		
	Advertising company service fee	$70,980	
	Pool Fuel, database, employer research, etc.		
	Professional and technicalservicefees	3,500	
	Off-site terminal		
	Temporary help	2,000	
	Contract maintenance	6,000	
	Rideshare matching program		
			82,480
3.	Materials/Supplies		
	leave-behinds, brochures, maps, directories, forms		106,850
4.	Miscellaneous Expenses		
	Non-local travel	$3,000	
	Local travel 500		
	Local meeting expenses	2,000	
	Media advertising		
	Pool Fuel, database, research, etc. video	93,700	
			99,200
Total			$695,198
Indirect Allocated			74,708
Total			$769,906
Less TAD Garage Revenue			(120,000)
Total Maximum Control			$649,906

Attachment 3

Format for Monthly Narrative Report

The narrative section of the monthly report shall contain a written description of work done each month of the major items within the categories of activity identified in the Management Plan. In some months there may be little work done on a particular item as work may be completed or is scheduled later in the year. However, whenever work is done, it should be reported in the following format:

1. Employer Marketing

   A. Employers identified and information obtained for employer marketing.
      - Prospect list development - source of lists and data bases used, employer requests, work done to develop.
      - Identification/update of officers and contact persons.
      - Updating of employer officers, contacts, phone numbers and addresses.

   B. Employer marketing strategy development.
      - Name of employers where strategic development/assessment is underway.
      - Base case description of employment centers - locations.
      - Organizational efforts to develop a multi-employer program - location.

   C. Employer marketing materials - development/production.

   D. Employer presentations/contacts.
      - Employers contacted - names, position of contacted person, number of employees, locations, previous relationship to MN/RS, how employer was contacted and request made, results from contact, whether they will proceed with surveying and next steps. Employers should be organized into those that are new employers and existing employers.

2. Surveying of Employees and Describing Employer Policies.

   A. Employer questionnaires completed - name and location of firms.

   B. Pre-marketing employee surveys - name and location of firm.
      Attach copy of surveys used.
      - Under development.
      - Distributed - number.
      - Completed - number returned.
      - Surveys analyzed - report written.

   C. Post-marketing evaluation employee surveys - name and location of firm.
      Attach copy of surveys used.
      - Under development.
      - Surveys distributed.
      - Surveys returned.
      - Surveys analyzed - report written.

3. Employer Implementation Action Plans.

   A. TDM plan development - name and location of firms at each of the following stages and progress during month.
      - Early stage development (A 1 & 2).
      - Identification of possible TDM steps (A 3) and estimate of results.
      - Preparation of written TDM action plan and estimate of results (A 4 & 5).
      - Evaluation plan (A 6).

   B. Implementing TDM plan - name of firms.
      - Marketing to employees - distributing materials.
      - Commuter fairs, on-line matching.
      - Processing and distribution of match lists.
      - Setting up/operating incentives
      - Other.

   C. Ongoing program maintenance - names of firms.

4. Marketing and Promotion.

   A. B-BOP.
      - Activities done - describe.
      - Name of participating employers and number of employees participating by employer.
      - Number of employees pledging.
      - Relationship of efforts to work of CEE.
      - Production of graphics and materials, ad copy - attach a copy.
      - Promotional activities.

   B. Ride Choice recognition.
      - Activities done - describe.
      - Event planning.
      - Name of employers/others recognized.
      - Production of graphics and collateral materials - attach a copy.

   C. Express Newsletter - attach a copy.
      - Production activity - describe.
      - Copies distributed.
      - Anticipated results from newsletter.

   D. Pool Fuel promotion.
      - Program market research and assessment activities.
      - Determination of expected results and completion of market report.
      - Promotional campaign activities.
      - Campaign operations - results.
      - Campaign evaluation.

5. Technical Assistance.

   A. Significant events or efforts that account for the number of applications received.

   B. Volume of renewal notices sent and returned. Upgrades or changes made to the software or hardware of the computer matching program.

   C. Remote site - on-line matching service.
      - Demonstration design activities.
      - Computer software/hardware changes/purchases.
      - Employers identified/selected.
      - Demonstration underway.

   D. Vanpool service assistance.
      - Drivers identified and assisted.
      - Referrals to Vanpool Services, Inc.
      - Vanpool match lists produced.
      - Persons added to existing vanpools.
      - New vanpools formed.

   E. Bus information service assistance.
      - Bus route analysis done for employer or employment location.
      - Bus route and schedule information provided to employees.

6. Carpool Registration

   A. Register and Renew TAD Carpools.
      - Changes to spaces reserved for carpools, parking charges, or persons eligible to use them.
      - Factors accounting for changes in the number registered from month to month.

   B. Register and Renew Non-TAD Pools.
      - Location of parking for non-TAD pools, arrangements for parking with owners, parking charges and persons eligible.
      - Factors accounting for changes in number registered from month to month.

7. TDM Products and Services.

   A. Guaranteed Ride Home
      - 6-month employer program
        Name of employers Number of employees # and $ amount of reimbursement.

      - 12-month employer program
        Name of employers Number of employees # and $ amount of reimbursement.

   B. I-394 GRH program - significant promotional efforts - reimbursements claimed for bus and taxi.

   C. Employee Transportation Coordinator Assistance.
      - Determine number of existing and probable coordinators.
      - Determine what coordinators need to know.
      - Ascertain method for informing coordinators.
      - Develop materials.
      - Test materials.

8. Market Research.

   A. Assessment of employer prospects.
      - Research designed.
      - Research underway.
      - Research completed.

   B. Provide data for RTB strategic plan.
      - Data provided.

   C. Evaluation of impact and results from carpool and vanpool matching and formation.
      - Design of evaluation.
      - Circulation of RFP - attach a copy.
      - Research design completed.
      - Research started, in process or completed.

9. Contract Administration.

   A. Development of monthly reporting format.

   B. Tracking and reporting of TMO/JPO activities.
      - Materials provided.
      - Services provided: Employer marketing, surveying, employer implementation action plans, and technical assistance.

   C. Local and non-local meetings.

   D. Temporary help.

Minnesota Rideshare Monthly Statistical Report

Contract Month: 1994 - #00/00/00		
	Current Month	Year to Date
Computer System Transactions		
Commuters on File		
Commuters on file--last month		
Net gain/loss of commuters		
Records added		
Records deleted		
R file transfers (active file to temp. file)		
Records updated		
Total Carpools - Registered		
Carpool participants		
Average carpool size		
Carpools increase/decrease		
Carpool participants +/-		
Total Vanpools		
Vanpool drivers assisted		
Vanpool passengers assisted		
Vanpool participants		
Average vanpool size		
Vanpool increase/decrease		
Vanpool participants +/-		
Carpool/Vanpool Applications -Source of		
Employer marketing		
Commuter fairs		
Calls to 394-RIDE		
I-394		
TMO		
JPO		
B-BOP/CEE		
TV, radio, print ads		
Pool Fuel		
Call-in requests		
Other		

Date of Report:		
	Current Month	Year to Date
Operations Activity		
Matchlist results		
Requests for matchlists received		
Ridematch lists produced and sent		
Not able to match		
Matching service maintenance		
Renewal notices sent		
Renewals returned		
Number deleted from file		
Bus Transit Information		
Transit information requests received.		
Bus information provided.		
TDM Products		
Guaranteed Ride Home		
6-month employers		
# of employees		
# of reimbursements		
1-year employers		
# of employees		
# of reimbursements		
I-394 Program		
# of reimbursements		

Reporting: Trish Moga	New Employers 1994		Existing Employers 1992-1993	
	Current Month	Year to Date	Current Month	Year to Date
Employer Marketing Activity				
Employers on File				
Presentation made to top officers				
Presentation made to non-top officers				
Employer questionnaire completed				
Premarketing surveying under development				
Premarketing surveying in process				
Premarketing surveying completed				
TDM plans under development				
TDM plans written and presented to employers				
TDM plans approved by parties				
Information to employees distributed				
Provided match lists, bus info., and van info. to employees				
Evaluation surveying in process				
Evaluation surveying completed				
	Current Month		Year to Date	
Marketing/Promotion (monthly)				
Employer brochures/materials produced				
Employee surveys produced				
Employer questionnaires produced				
TV/radio ads produced				
Newspaper print ads produced				
B-BOP information sent to employers				
B-BOP employer pledges obtained				
B-BOP employee pledges obtained				
Express newsletters distributed				
CP registered from Pool Fuel				

Report Updated XX/XX/94

Minnesota Rideshare Monthly Statistical Report - Cont.

Contract Month: 1994 - #00/00/00		
	Current Month	Year to Date
Pool Registrations by Site		
1. I-394 HOV		
2. I-35W HOV (Leamington)		
3. Mpls. Surface/Gateway/Gov't Cntr.		
4. Dwntn StP Surface/Ramps		
5. Employer Pools		
6. General Pools		
Total Pools		
Pool Parking Reg. Revenue		
1. I-395-5th St. HOV		
2. I-394 5th St. SOV		
3. I-394 7thSt. HOV		
4. I-394 7th St. SOV		
5. I-394 4thSt. HOV		
6. I-394 4th St. SOV		
7. Leamington (Due From)		
Total Revenue		
Annual Benefits/20% Pool Conversion		
Vehicle Miles Traveled (VMT) Reduction		
Commuting Cost Reduction		
Carbon Monoxide Reduction (tons)		

Date of Report:		
	Current Month	Year to Date
Purchase of Service		
1. Employer Marketing Materials		
2. Surveying materials and analysis		
3. Employer Implementation Plans		
4. Gen. Marketing and Promotion		
-B-BOP		
-Ride Choice		
-Express Newsletter		
-Pool Fuel		
5. Product Delivery/Program		
Admin. - Technical Services		
6. Register Carpools		
7. Product/Service Development		
Expansion		
-GRH employer		
-GRH I-394		
-Coordinator Assistance		
8. Market Research		
-Employer prospects		
-Evaluation of CP and VP system		
9. Contract Administration		
Total Cost		

Reporting: Trish Moga		
	Current Month	Year to Date
Project Staff Time (Hours)		
1. Employer marketing		
2. Surveying		
3. Employer implementation plans		
4. General marketing and promo.		
5. Product delivery/program admin. - technical services		
6. Register carpools		
7. Product/service development/ expansion		
8. Market research		
9. Contract administration		
Total Hours		

Report Updated XX/XX/94

Attachment 4

Quarterly Marketing Plan Format

Market plans are intended to guide the employer marketing activities of Minnesota Rideshare (MN/RS). They are to be produced by MN/RS at least two weeks before the beginning of each quarter. They contain information about specific firms targeted for employer marketing and summary information about all employers and marketing strategies.

Information on each firm that will be contacted in the next quarter should be presented as follows:

1. Name and address of the firm.

2. MN/RS marketing agent assigned to work with the employer.

3. Source of the employer prospect: A) Employer research data base; B) Existing MN/RS data base; C) Employer request; D) Other.

4. Previous work with the prospect and extent of planned marketing efforts. Is the employer:
   A) new to the MN/RS existing data base, and a prospect for significant marketing effort;
   B) already on the existing data base but a prospect for significant marketing efforts; or
   C) on the existing data base but targeted for an on-going limited, specified marketing effort.

4. Name and title of officers and persons to be contacted.

5. Description of characteristics of each firm. These should include characteristics identified from outside observation or background information collected on the firm. It includes: A) Number of employees at the targeted location; B) Total on-site parking, sufficiency of parking, and whether parking is in structured ramps or surface lots; C) Posted parking fee schedule on parking lots or in nearby parking; D) Type of firm and activities of the firm at the targeted location; e.g., manufacturing, retailing, warehouse/distribution, office, sales, education or health care.

6. Description of key variables that may affect employer interest/receptivity to TDM:

   - Moving to a new location or just moved.
   - Labor shortage at targeted location.
   - Difficult to access during peak periods; i.e., in a congested corridor or area.
   - Employees must pay for parking.
   - Significant stated interest in energy savings, pollution reduction, or traffic congestion.
   - Other - be specific.

7. Timetable for taking the next steps toward development of the TDM action plan, its implementation, evaluation and ongoing maintenance:

   The quarterly marketing plan should indicate the timetable for the next steps that are planned with an employer. For example, the plan would suggest the timetable for possibly the first three steps in the next quarter for a moderate sized firm or possibly the first four or more steps for a small employer. For those employers who are already advancing along the steps, the timetable should indicate what steps are planned for the next quarter.

Steps that should be identified include:

A. Complete employer questionnaire.
B. Complete employee pre-survey.
C. Analyze pre-survey--identify travel behavior, target markets for TDM services, and assess TDM market potential.
D. Obtain commitment for an employer transportation coordinator.
E. Provide information about TDM services--markets, possible incentives that would encourage employee use of TDM alternatives, and obstacles employees face in using an alternative to driving alone. Assess effect of providing incentives or removing obstacles on ridership. Estimate cost of incentives and obstacle removal to employer and to MN/RS.
F. Complete preparation of implementation action plan and present it to employer for agreement and commitment.
G. Employee marketing and promotion and implementation efforts.
H. Post-employee survey.
I. Program maintenance efforts.

Information in the quarterly market report should be summarized for various planned activities as follows:

1. Number of employers plan to contact:

   - with personal presentations.
   - only with informational material.
   - As part of a multi-employer marketing effort.

2. Number of firms with surveys/questionnaires planned for:

   - Employers.
   - Pre-marketing travel behavior and TDM service surveys.
   - Post-marketing measurement of results including surveys.

3. Number of implementation plans that will be:

   - Started.
   - Completed.
   - In process.

4. Number of employee promotion or marketing efforts planned to promote and provide TDM services to employees as a result of:

   - Implementation plan follow-up.
   - Part of ongoing efforts with employers.
   - Response to an employer's/building manager request.

DISCUSSION

One tactic the Education Committee is using for building awareness and educating our community is the development of a transit education program for the schools. The first step of developing this curricula is to do the research and ground work necessary and to produce a feasible strategy and timelines for the development of the school program. Phase one of the approach is to develop a plan for how to proceed with transit curricula.

On January 3, 1994 the committee released a request for proposal for a comprehensive plan for developing school curricula. The RFP outlined four major areas of work including study of existing school transit programs, study teacher and school system preferences for transit educational materials, research analysis and final plan that includes research results, analysis and recommendations for implementing cost-effective regional school education strategies.

The subcommittee that developed the RFP and reviewed proposals includes the following people: Lynn Moratzka- Dakota County, Jill Goske- Ramsey County, Bob Vocrodt- MN. Dept. of Transportation, Audry Schwartz- Minnesota Valley Transit Authority, Ester Williams- Metropolitan Transit Committee, and Suzanne Hanson-Regional Transit Board.

The following three organizations submitted proposals for the work and were scored accordingly by the committee:

Organization	Cost	Committee Ranking
Minnesota Institute of Public Health	$14,925.00	213 points
Thomas Learning Consultants	$12,500.00	237 points
Minnesota Department of Transportation	$ 7,914.22	179.5 points

The committee selected Thomas Learning Consultants to complete the work outlined in the comprehensive plan for developing transit curricula RFP.

RECOMMENDATION

That the Regional Transit Board authorize the executive director to enter into a contract with Thomas Learning Consultants for an amount not to exceed $12,500.00 for the development of a comprehensive plan for developing transit curricula. The Metropolitan Transit Education Plan and budget has $15,000.00 budgeted for this task.

REGIONAL TRANSIT BOARD
Mears Park Centre, 230 East 5th Street
St. Paul, Minnesota 55101
612/229-2700

DATE: March 8, 1994

TO: Chair and Members of the Administrative and Finance Committee

FROM: Suzanne Hanson, Public Information Manager

SUBJECT: Metropolitan Transit Education Plan Implementation
(Plan for Developing School Education)

SUMMARY

That the Regional Transit Board authorize the executive director to enter into a contract with Thomas Learning Consultants for an amount not to exceed $12,500.00 for the development of a comprehensive plan for developing transit curricula. The Metropolitan Transit Education Plan and budget has $15,000.00 budgeted for this task.

BACKGROUND

In December 1992, the Regional Transit Board (RTB) and nine other transit related organizations combined to create the Metropolitan Transit Education Committee. A strategic communications and education plan that focuses on the transit issues of the 90s was developed with the assistance of a consultant.

The primary action plan included the implementation of seven tactics:

1. Developing an umbrella theme, tag line and logo to be used to represent transit.
2. Large display for state fair and other locations.
3. Traveling displays for employee sites, schools, libraries and other locations.
4. Radio/billboard campaigns
5. A plan for school education, followed by development of school education program.
6. Media kits and editorial sessions
7. A 5-10 minute video on the benefits of transit.

Funding for this program was attained through contributions from all of the organizations. The budget for the total program is $221,000.00.

The RTB is the lead agency on this project and has financial oversight responsibility.

Handout from W Stevens

1994 SOLICITATION FOR FEDERAL FUNDING

CMAQ PROGRAM

Thank you for your invitation to present this innovative program to you today. I was surprised and pleased to see my billing after Jim Moore. I heard this presentation to the Senate Transportation and Transit Committee several weeks ago. Ed Anderson and I have been on parallel paths for many years. In 1979 he and I travelled together to attend a Transportation Fair in Hamburg, Germany. Unfortunately their demonstration project is much larger and complex than my PARKING MODULE, but when they are operational I expect they will similarily have a world attractive facility. My system will be an interface with any mode - this PRT, LRT, bus or VAN - to provide a complete TRANSIT SYSTEM.

My mission before you today is to seek your approval to SPONSOR this project. As this SOLICITATION indicates, April 1st is the deadline. MTC and MPCA personnel have endorsed this proposal for its value to integrate with the bus system and release resources to more needed services. Within 6 to 8 months, to get (100) SOV's off I-394 during commuter periods, and potentially within 2-years, remove (2,130) SOV's would impressively impact improved Air Quality. While energy conservation is not a current concern, it will return - as a crisis.

With the present P & R lot at C.A.S.H.73 and I-394 converted from (284) surface stalls to an enclosed, heated structure for (2,100) stalls, the effect is equivalent to an additional lane of traffic in the rush hour, the following reduced fuel consumption is realized:

	SOV	BUS	VAN
PEOPLE	2,100	2,100	2,100
TRIPS PER DAY	4,200	250	380
MILES PER DAY	33,600	2,000	3,000
MILES PER YEAR	8.4 M	500 K	750 K
MILES PER GAL.	20	3	10
GAL. PER YEAR	420 K	170 K	75 K
RATIO	5.6	2.3	1

The VANS will be parked in the garages that were built for this purpose, connected with the SKYWAY SYSTEM. (190) VANS will be used. (63) BUSES on the downtown streets would measurably add to traffic gridlock. All HANDICAP patrons will have lift vehicles. Travel from one's garage to downtown would, in essence, be seamless, with less than a minute or two transferring from their personal vehicle into a VAN.

Five (5) questions must be addressed:

1. What is Park & Drive of MN, Inc.?
2. Will it hurt the MTC bus operation?
3. Isn't it experimental?
4. Shouldn't Sternad be seeking Venture Capital?
5. Will it be patronized?

1. P&D of MN will be a non-profit corporation to operate the facility and maintain the VAN fleet, in perpetuity. The first phase demonstration will not employ VANS because a critical mass size is needed as will be with the second phase. In this period, the (50) individuals who park their car here will pay the bus fare - $3.50 and save the cost of driving downtown. The (50) other drivers, now have an express lane trip downtown. Because it is random operation, the need for tight individual scheduling, as with Ride Share, is obviated. In a sense, this is the ultimate in RIDE SHARE.

2. In non-commuter hours, the bus will still service this hub. It will, however, release the MTC to use its resources to more fertile routes serving the city.

3. NO. Every component will be commonly employed industrial equipment, simply reconfigured to accomplish this job.

4. First, this is precisely the intent of ISTEA - to advance new technology to improve transit and address CMAQ. Secondly, no private enterprise has been able to compete with public transportation. This program will permit an un-subsidized transit operation on a non-profit basis, but that would not satisfy investment money. Incidentally, personnel could well be drawn from the ranks of your Agency or the MTC.

5. Almost without question, (100) people can readily be found to participate in this first demonstration phase. When the reality of it is in place, a realistic market determination can be made. The second phase size can then be reasonably determined. With decreasing facility size, departure headway of vans would increase. But using 7-passenger VANS in an installation of (250) stalls on a piece of land of only 20' x 200', VANS would depart approximately every 3-minutes.

Another interesting consideration is that this system can very well adapt to electric vehicles as soon as they become commercial.

Not many projects offer the innovation of this proposal. Both in the short-term and long-term the potential payback is unique. Further, the value to other more congested areas in our country is inestimable.

I urge you, the RTB board, to vote to sponsor this proposal and direct staff to assist me with preparation of the application to the TAB by the April 1st deadline. Thank you.

William A. Sternad, M.E., P.E.

Consulting Engineer

P.O. Box 8, Wayzata, Minnesota 55391

Controlled Systems **(612) 473-4700**

March 7, 1994

Mr. Allan E. Pint, P.E.
Assistant Division Engineer
MINNESOTA DEPARTMENT of TRANSPORTATION
Metropolitan Division - Waters Edge
1500 West County Road B-2
Roseville, MN 55113

Dear Al:

Thank you for your approval for me to construct a demonstration AUTOMATIC MECHANICAL PARKING MODULE in the Park & Ride lot on the north side of I-394 at the intersection of County Road 73. In the space now occupied by the seven (7) Handicap stalls (95'x 20' adjacent to the bus stop) we will build a structure that will accomomdate (50) vehicles. This will be the equivalent of reducing (100) vehicles from I-394's mixed lanes during the peak hours.

I will pursue gaining the necessary funding either through public or private sources. If the public money is available we will form a non-profit corporation and be able to bring to the commuters the greatest cost benefit. If private investment is used, obviously a for-profit corporation will be utilized to implement the project. The objective will be the same, however, to bring to the community a most efficient, minimum air polluting and energy conserving transit system.

As you agreed, Al, the present economic loss due to personal delay is probably $7 to $10 million a year without considering the value of reduced air pollution, opportunity for accidents and road wear. Following this demonstration a full (2,130) stall installation for $25 million will be the equivalent of the addition of an additional lane in each direction that would cost $150 million. Future similar expansion would also be possible in other lots.

Close Associates, a most prestigious local architect will design an attractive structure. We look forward to an exciting relationship with the City of Minnetonka and their Director of Engineering, David J. Sonnenberg, P.E.. As I have suggested to Dave, I believe this project will bring considerable national attention to their community. I anticipate the pleasure of working cooperatively with all interested parties, as copied by this letter.

Sincerely,

Bill Sternad

William A. Sternad
copy:
see page 2

The future belongs to the efficient

copy:

MNDOT - James N. Denn, Commissioner
Dave O'Connell, Chief of Staff
Darryl E. Durgin, Assistant Commissioner
Gene Ofstead, Assistant Commissioner

MET COUNCIL - Dottie Rietow, Chair
Carl Ohrn, Principal Planner
Emil L. Brandt, Transportation Coordinator, TAB
James E. Barton, Senior Transportation Planner
David B. Engstrom, P.E., Principal Engineer
Karen M. Lyons, Transportation Planner

RTB - Sally Evert, Chair
Gregory L. Andrews, Executive Director
Judith G. Hollander, Director of Planning & Programs
Howard Blin, Planning Manager

MTC - Tom Sather, Chief Administrator
Bev Auld, Assistant Chief Administrator / Administration
Jerrold S. Olson, Assistant Chief Administrator, Transit Operations

CITY of MINNETONKA -
David M. Childs, City Manager
David J. Sonnenberg, P.E., Director of Engineering
Virgil E. Herrman, Project Engineer
Ann Perry, Planning Director
Ronald S. Rankin, Community Development Director

MINNESOTA POLLUTION CONTROL AGENCY -
Charles W. Williams, Commissioner
Susanne Pelly Spitzer, Program Development & Air Analysis

PUBLIC / PRIVATE PARTNERSHIP
proposal for an
INNOVATIVE TRANSIT SYSTEM
on HIGHWAY I-394

The present Park & Ride lot at I-394 & C.S.A.H. 73 has (284) stalls.

This proposed 2-phase project would install (2,130), indoor, heated, secure and safe stalls in this same space. MNDOT, owner of the land, and FTA officials approve the project. SPONSORSHIP IS SOUGHT BY A TRANSIT AGENCY.

A NON-PROFIT, MINNESOTA CORPORATION, WILL BE ESTABLISHED TO BUILD & OPERATE THE FACILITY. For the cost of a monthly MTC bus pass, it is projected that this system will be self-sustaining, i.e., without requiring any subsidy. It will integrate with the MTC bus system.

1st PHASE - WE WILL BUILD ONE (1) AUTOMATIC MECHANICAL MODULE TO DEMONSTRATE THE MECHANICS OF THE EQUIPMENT & MARKET ACCEPTABILITY TO RIDERSHIP. Current experience is that the P & R lots are not being fully used. The innovative nature of this installation will permit a "SEAMLESS TRIP" from one's garage into the downtown skyway system.
COST OF THIS DEMONSTRATION - $1 million. TIME: 6 to 8 months.

(50) vehicles will be stored in the space currently occupied by (7) HANDICAP STALLS (every stall is ADA compliant.) (100) vehicles will thus be vacated from the mixed use lanes of I-394.

2nd PHASE - FULL PROPERTY INSTALLATION WILL BE A BUILDING INCLUDING (35) MODULES WITH THE CAPACITY TO STORE (2,130) VEHICLES. (200) 12-PASSENGER VANS WILL BE STORED OVERNIGHT. PATRONS WILL PARK THEIR VEHICLES AND BOARD THE VANS--THE FIRST PERSON BECOMES THE DRIVER. THE FULLY LOADED VAN PROCEEDS TO THE 7th STREET GARAGE WHERE IT IS PARKED ALL DAY. PATRONS ARE NOW WITHIN THE SKYWAY SYSTEM. THE PROCESS IS REVERSED IN THE EVENING. FULL PERSONAL SECURITY & SAFETY IS UNDER COMPUTERIZED SURVEILLANCE.
COST OF THIS INSTALLATION - $25 million. TIME: Appx. 1-year.

This facility will be attractive to patrons. It will vacate (2,130) vehicles from the mixed use lanes of the highway. This is the equivalent of constructing another lane in each direction, which would cost $150 million, if it could be done - but, there's no room. Vans will have full provision for Handicap persons.

THE AIR QUALITY AND CONGESTION MITIGATION IMPACT OF THIS PROGRAM IS SINGULARLY INNOVATIVE. THE POTENTIAL VALUE TO THE ECONOMIC VITALITY OF THE REGION IS UNIQUE. THE POSSIBILITY TO ACHIEVE THE BENEFITS WITHIN 2-YEARS IS THE ABILITY A PUBLIC / PRIVATE PARTNERSHIP OFFERS.

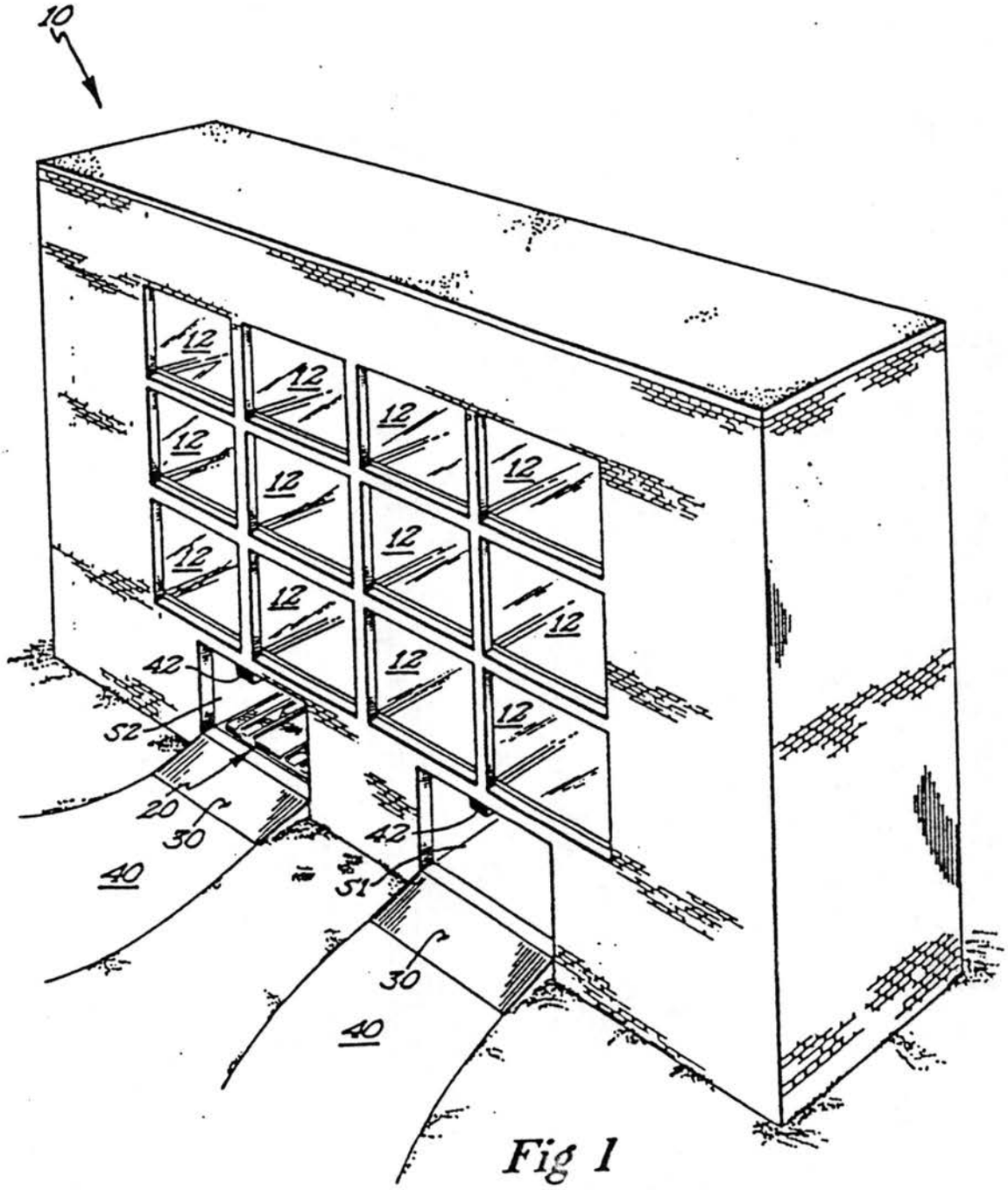


Fig 1

PUBLIC / PRIVATE PARTNERSNIP

ECONOMICS

The ultimate RIDE SHARE PROGRAM is one in which every vehicle is 100% occupied--a true HOV.

This tabulation indicates how a 3P, NON-PROFIT CORPORATION, will be able to, in perpetuity, provide self-sustaining, non-subsidized COMMUTER TRANSIT. It is proposed to be an adjunct to the MTC just as is the current RIDE SHARE PROGRAM. Members of the MTC and RTB will be on the Board of Directors and will, if desired, even be management.

Because a significant opportunity to demonstrate CMAQ advantages will be shown, this installation will attract national interest. FTA personnel have expressed interest and are prepared to approve this project.

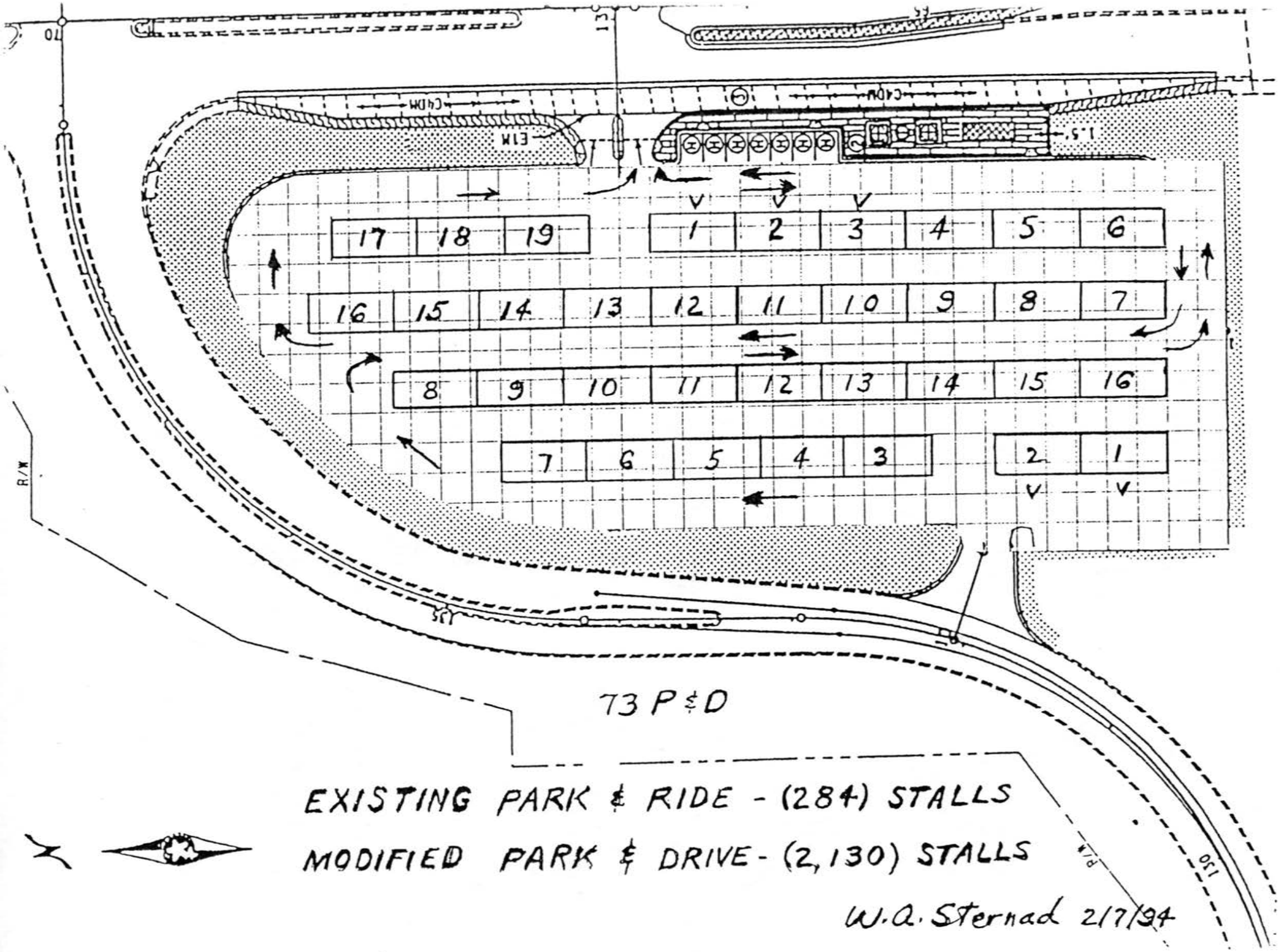
Unlike regular route bus service, commuter service starts out as 50% efficient because one leg of a trip is "deadhead." Coupled with the experienced occupancy, the efficiency is close to 35%. Presently, the fare box funds operating cost about 35%. This is a universal characteristic of transit systems. The capital cost of equipment is approximately $5,000. per seat and will go higher with the need for lift equipment on each vehicle.

With a 2-phased program, it is proposed to make an installation of a building that will provide a totally new concept for interface of people from SOV's into fully occupied 12-passenger vans. The initial cost of the facility will be $20 million and the cost of (200) vans will be $5 million. With revenue equal to the present cost of a monthly bus pass, this operation will be self-sustaining, including amortization for replacement of the vehicles in the future. The downtown garages, which were designed to accommodate such vehicles, will become most efficiently employed.

$65 x 12 months x 1940* = $1.5 million / year income.

* the driver gets a free ride, and for estimating purposes, vans are assumed with (11) occupants.

Facility cost of operation, labor and energy ------	$ 750 K
Vehicle replacement (10) per year ----------	250 K
vehicles travel 4,000 miles per year	
Vehicle maintenance (200 x $500.) ----------	100 K
Van downtown parking fee and fuel ----------	150 K
Insurance ----------	250 K
	$1.5 million



EXISTING PARK & RIDE - (284) STALLS

MODIFIED PARK & DRIVE - (2,130) STALLS

W.A. Sternad 2/7/94

METROPOLITAN TRANSIT COMMISSION
560-6th Avenue North, Minneapolis, Minnesota 55411-4398 612/349-7400

cc Board

March 21, 1994

Mr. William A. Sternad
P. O. Box 8
Wayzata, Minnesota 55091

Dear Mr. Sternad:

Thank you for sharing the Automatic Mechanical Parking Module with our chairman, Frank Snowden and me last Friday. As you requested, I will share some of our thoughts with you.

First, I do not believe that the I-394 Corridor represents a good opportunity to demonstrate your Automatic Mechanical Parking Module. I say this because our commuter survey data suggests that only three percent of the commuters would consider TDM in place of their current habits.

Secondly, the expenditure of public funds to "demonstrate" this project is not prudent in my view. A working model has not been constructed and the software technology, albeit simple, does not exist in a format that would allow for it to be demonstrated.

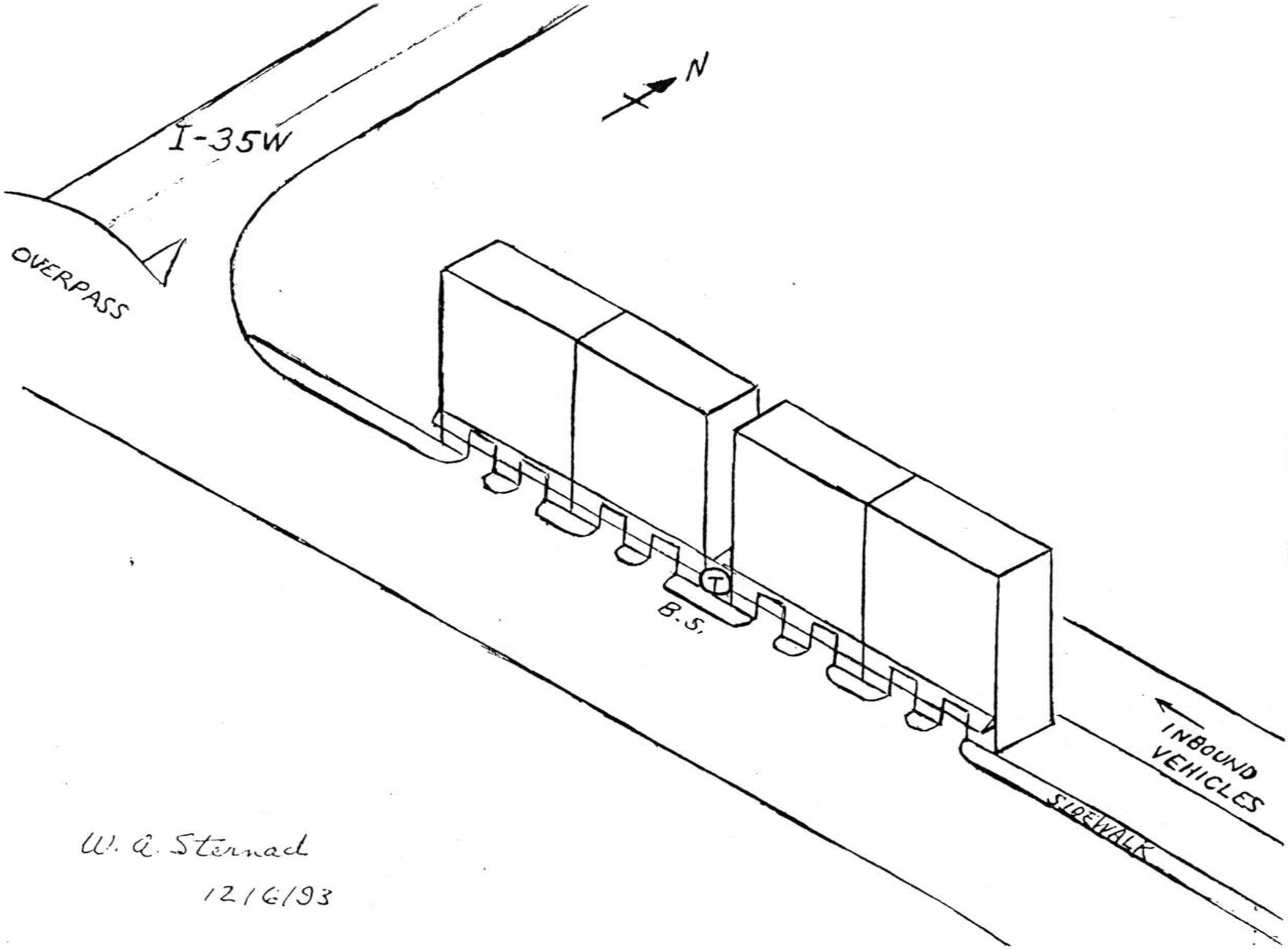
Thirdly, I believe that there is an opportunity to build the demonstration models with the help of venture capital. I'm certain that this option has some inherent risk for you, but it is the only way in which the MTC could minimize its exposure to building a parking facility for demonstration purposes.

Finally, Bill, the MTC has limited capital and operating resources. As planners, we have programmed the funding available to us from state and federal sources for the next two to three years. It is unlikely that the Automatic Mechanical Parking Module (as currently proposed) would displace anything to which we have already committed funds.

Sincerely,

Thomas R. Sather
Chief Administrator

TRS/dmk



W. A. Sternad

12/6/93

Packet 3/14

REGIONAL TRANSIT BOARD

Mears Park Centre
230 East Fifth Street, St. Paul, Minnesota 55101
292-8789

DATE: March 14, 1994

TO: Chair and Members of the Administration and Finance Committee

FROM: Mark W. Fuhrmann, Manager of Programs

SUBJECT: Minnesota Department of Administration Proposal to Conduct Metro Mobility Consumer Research Activities

SUMMARY

This memorandum requests Administration and Finance Committee approval of a contract with the Department of Administration Management Analysis Division to conduct Metro Mobility Consumer Research Activities.

DISCUSSION

Recent discussions between RTB staff and Fred Grimm, Director of the Management Analysis Division with the Department of Administration, indicate an opportunity for objective, thorough and innovative Metro Mobility consumer research to be conducted by an objective third party. The Management Analysis Division has broad experience providing consultant services to state agencies, the governor, the legislature, and local governments. They customize each project's scope and end product to meet the client's needs. A copy of their mission statement is attached for your information.

The Management Analysis Division has drafted a preliminary scope of services with the primary focus being consumer research regarding their satisfaction. The benefit to RTB from this work would be to gather consumer input to be considered in the revising of the RFP for Metro Mobility Service Coordinator in early April and developing a consumer survey methodology that could be applied regularly to track over time the level of Metro Mobility consumer satisfaction.

The proposal calls for a commitment of time from the Management Analysis Division not to exceed 450 hours and a cost not to exceed $29,700. A detailed work plan is being developed that will be provided to the full board March 21, 1994. Funding for this contract is available in the approved 1994 budget from Project 94-10, Elderly and Disabled Planning.

RECOMMENDATION

That the Regional Transit Board authorize the executive director to negotiate and execute a sole source contract with the Management Analysis Division of the Minnesota Department of Administration to provide Metro Mobility consumer research activities in an amount not to exceed $29,700.

MISSION STATEMENT

Management Analysis Division

Minnesota Department of Administration

The mission of the Management Analysis Division is to increase the capacity of government to manage resources and to create and implement strategies that improve the quality and cost effectiveness of public services.

We provide consultant services to state agencies, the governor, the legislature, and local governments.

We provide a continuum of management services ranging from analytical studies to design and implementation of change strategies. Our services include diagnosis, analysis, project management, operational and strategic planning, and organization development. Services are provided to individual agencies as well as on a state-government-wide basis.

We offer distinctive competences that ensure professional, objective, thorough and innovative services specific to the client's needs:

- Comprehensive knowledge of and broad experience in state government operations.
- A disciplined team approach combining staff expertise.
- A track record of sensitive, yet tough-minded, work and a bipartisan reputation for integrity.

We operate with a specific set of values:

- Responsiveness: We design each consultation to focus on areas that have the most potential for significant impact on the organizational challenges of our clients.
- Involvement: We include in the diagnostic and decision processes the people who will implement decisions.
- Regard for employees: We consider an organization's employees to be its most important resource, and we treat them with fairness and respect.
- Objective viewpoint: We strive to maintain a fair, neutral, comprehensive perspective that is apolitical and sensitive to both management and employee needs.
- Inherent respect for public service: We support the mission of state and local government, believe in the dedication and competence of public-sector managers and employees, and support continuous improvement of government services.

– July 1991