

Ramsey County Regional Railroad Authority. Records.

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RAMSEY COUNTY
Regional Railroad Authority

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Kathy Despiegelaere

Ramsey County Regional
Railroad Authority
Documentation

John T. Finley, Chairman
District 3
Diane Ahrens
District 4
Ruby Hunt
District 5
Duane W. McCarty
District 1
Hal Norgard
District 7
Donald E. Salverda
District 2
Warren W. Schaber
District 6

AGENDA

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Tuesday, March 13, 1990

10:30 A.M. - Large Conference Room - 316

1. * Minutes of the February 27, 1990 Board Meeting
2. Chairman's Comments
3. UMTA Report on Urban Rail Transit Projects: Forecast vs. Actual Ridership and Costs - Discussion
4. Ridership forecasting for the Midway Corridor - Discussion
5. LRT Cost Estimates - Discussion
6. Legislation - Discussion

*Action is requested.

AGENDA

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

February 27, 1990

The regular meeting of the Ramsey County Regional Railroad Authority Board was held on Tuesday, February 27, 1990 at 10:40 A.M. in the Large Conference Room of 316, Court House.

MEMBERS PRESENT:	Chairman John Finley Commissioner Ruby Hunt Commissioner Hal Norgard Commissioner Duane McCarty Commissioner Donald Salverda Commissioner Warren Schaber
MEMBERS ABSENT:	Commissioner Diane Ahrens
Also Present:	Patrick O'Malley, Ed Glaubitz, Karen Tero, James Van Houdt, Don Chmiel, Hugh Faville, Robert Clarkson, Mary Lou Grahek, Jill Goski, James Tolaas, Kathryn DeSpiegelaere, Terry Schutten, Frances Glendenning, David MacMillan represented the County Attorney's Office

1. Minutes - of the February 6, 1990 Meeting

Commissioner Norgard moved the following recommendation, seconded by Commissioner Schaber.

The Ramsey County Regional Railroad Authority approves the minutes of the meeting held on Tuesday, February 6, 1990, as written.

Roll Call: Ayes - 6, Nays - 0
Motion adopted.

2. Chairman's Comments

Commissioner Hunt informed the Chairman that she wished to add an item for discussion to do with the Joint Advisory Committee, and Chairman Finley suggested that this matter become part of Item 4.

Chairman Finley discussed the article that was written by UMTA criticizing ridership forecasts throughout the country, and part of it is in the letter. Everyone who went on the trips found out that the projections were made at the time the gas prices were going very high. Also, we were told that in addition to that that we sometimes had to revise our figures based upon the economy. This was a very critical letter that was written, and some of the

counties are addressing this, and Chairman Finley called on Kathy DeSpiegelaere to comment on this.

Ms. DeSpiegelaere stated that a report was prepared by the UMTA on rail projects, not just light rail, and this report is being reviewed today by Hennepin and Anoka County Commissioners. Apparently there is a Commissioner in Anoka County who has some reservations about light rail, so it is going to be on their agenda. As well as having it on their agenda, there will be a presentation made by Dave Minister of the RTB and Paul Day of BRW, who have knowledge of some of the assumptions and data in the study.

Dave Minister of the RTB is preparing a critque of the report and it will be presented to the Joint LRT Advisory Committee at their next meeting. This is happening today, and we will be getting information when it is available.

Ms. DeSpiegelaere continued, in response to Chairman Finley's question if we should have Dave Minister in, as we will have the documents before that so everyone would have an opportunity to have read it, this could be the RRA Board Meeting of March 13th. Ms. DeSpiegelaere does not know when the next meeting of the Joint LRT Advisory Committee will be, but Mr. Minister is expected to be in Washington on March 13th for a conference.

Chairman Finley said we should get the report, and then have Mr. Minister come to a later meeting.

Commissioner Schaber would like to know if some of the data used for our ridership projection was being challenged as well, and Ms.DeSpiegelaere said that it is not, these are projects that have already been constructed such as the Washington, D.C. system, Portland and San Diego systems. She added that people in those cities she have been told take issue with the report, and think that some of the data they gave was mis-reported.

Chairman Finley added that in San Diego, the newest line which goes out east, they are 1½ times what was anticipated by their highest estimate. When he was out there last week with Mike Ehrlichmann, they were on that line at 10:30 in the morning, going out of downtown, and it was 3/4 full, this is an odd time, almost steady, people getting on and off, and this moves, it moves fast, right along one of the highways. It is in a lot of railroad right-of-ways, it goes beyond Mesa, and they are going to extent to El Capun, two or three more miles, it is about fourteen miles. He also met with the top staff people, and they are quite upset about it. They are doing their own deal.

Chairman Finley continued, Dave Minister who is with the RTB, came from San Jose. One of the Commissioners from San Jose told him that Dave is one of the best light rail people in the country. Chairman Finley was impressed with Mr. Minister, who made a beautiful presentation at the last meeting, understanding our total system, the development plan and everything. He did an excellent job, and you could tell from the reception by the Subcomittee of Transportation that they were impressed with him. Ms. DeSpiegelaere added that it is helpful to have him here, especially with his LRT experience, and they have a good working relationship with him.

Chairman Finley reiterated, we will get the report from David Minister, so we will have it, even though he will not be at the meeting on March 13th, we will try to schedule him in for the next meeting.

3. Development and Financial Plan for LRT - for Discussion.

Chairman Finley had sent a letter to everyone telling you what the final approval was on the RTB, and Ms. DeSpiegelaere has provided us with a copy of the Executive Summary of the plan at the present time. We are well aware of the actions, and Ms. DeSpiegelaere's memo summarizes it. The deadline was the presentation to the Legislature,and it has gone to both the House and Senate, and the reception has been excellent.

Chairman Finley continued, last week Ms. DeSpiegelaere met with Carol Flynn who has just been elected to the Legislature, she was the Chairman of the Systems Committee of the Metropolitan Council. It was the first time when Ms. DeSpiegelaere spoke to her that she was aware that we had levied a property tax. Now, you know why we have gone into all these problems, that we are against this, etc. In relation to any other county, we have levied the most this year, including Hennepin, as to mills. This is in so many documents, but people were not aware of it, so you can see how the people read material.

Ms. DeSpiegelaere informed the Board that we have had some phone calls from people who are concerned that Ramsey County did not get its fair share, and that based on the newspaper articles, they thoughtwe were unhappy with the results of the development and financial plan. She does not think that is the case, so the Board may wish to address how they feel about the results.

Chairman Finley said, from where we were and where we are today, he had hoped that the one line had stood up better, but it hasn't, that is the one going towards the airport. He thinks that it is in great shape, we won everything that we asked for, the funding mechanism, we have all of our alignments in that we were really pushing for. The only thing that was defeated was no property tax at all, but with the offset of Federal funding, and offset of acquisition costs, development costs, it may be that the extent of any local funds may be diminished. We must keep in mind that whatever has been done is just a recommendation to the Legislature. In the East metropolitan area from where we were we are very very far ahead, and he personally is pleased with it.

Commissioner Hunt had met with Carole Faricy recently, and she is very impressed with what Ramsey County has been able to achieve through tenacity and everything else.

Chairman Finley feels that one thing that is making things more difficult is the City of St. Paul, this is very difficult, and secondly, we are sort of carrying the ball for the whole East Metro Area, Dakota and Washington Counties as well, as they are not up to speed with staff. So, we have to bring them along.

It is very important that all the governmental entities are working together in the coordination of the plans.

Commissioner Salverda referred to the summary in the documentation, under Goals for LRT, what the RTB has set for the program. Ms. DeSpiegelaere pointed out that Commissioners Hunt and Ahrens had presented a copy of Ramsey County Goals to the Advisory Committee, but evidently these are the ones set by the RTB.

Commissioner Salverda feels that Ramsey County's statement is a lot better, they do not mention environmental which is a very key factor in LRT, there is no mention of property tax or anything like that which we have mentioned in our statement. He thinks their goal statement is pretty week, and he is concerned as the goal statement really drives the statement.

Commissioner Hunt pointed out on Page 3 there are some other reasons why LRT should be implemented

Commissioner Salverda feels this should be built into their goal statement. It is very, very important that you have a goal statement that incorporates the reasons for having a goal statement.

Ms. DeSpiegelaere explained that the RTB and the Metropolitan Council have transit goals that are laid out in the complete plan rather than in the Executive Summary. In looking over these she does not believe they have anything related to the environment.

Chairman Finley thinks that the things they are talking about are really goals, they are an accomplished facts for example that LRT will enhance the existing bus system. The goal is really to do that.

Ms. DeSpiegelaere referred to Page 6 of their plan, one of the benefits of LRT is that it can provide environmental benefits (this is in the full plan which the Board does not have here today). This does say that LRT can provide environmental benefits by reducing auto and bus emissions as riders choose the clean powered electric rail service over gasoline powered modes.

Commissioner Salverda reiterated that goals are the foundation upon which the system is built, and the RTB should be spend more time fine-tuning their goals. He thinks that the Ramsey County statement is a superior, a fine statement.

Chairman Finley agrees.

Commissioner Hunt said that the LRT Advisory Committee did not have a lot of time, and there were a lot of other issues that were more compelling to resolve, so what we have here is what staff was able to draw together as they did not have a lot of time available to consider this.

Chairman Finley said that the same is true for the RTB Board, they had less than thirty days to consider the plan, and get it to the Met Council. However, he will address that with the RTB staff. It is a good point, we can incorporate than in future publications, as almost all of those are comprehensive under "Why Light Rail Transit?", these could be goals with rewording.

Commissioner Salverda said the goal statement addresses the question as to why we are doing it.

4. Coordination Plan for LRT

Chairman Finley said the Coordination Plan is now going to be going to the LRT Advisory Committee.

Commissioner Hunt wished to make some statements, this has gone to the Advisory Committee, she was very disturbed over the fact that Chairperson did not want to have the Advisory Committee deal with it, and chastised the staff person for having let it get on the agenda when he did not want to have it on the agenda.

Commissioner Hunt is concerned, this is a major decision which has to be made. She hopes that this Board has had an opportunity to go through the Executive Summary, the whole question of determining and getting background information on how we are going to proceed, the best way to go whether it should be turnkey or traditional, or is it going to be a hybrid. She thinks for the LRT Advisory Committee not to deal with this, and not get the kind of professional input it needs to make some recommendations we would be very negligent in our duties. She vociferously opposed the Chairman's effort to not deal with this issue, and the Committee then did deal with this issue.

Commissioner Hunt's concern is what gets on the agenda, and what does not get on the agenda for the LRT Advisory Committee, and her recommendation would be, much as she does not want to be at any more meetings than she has to, she thinks the only way we are going to protect our interests if we have input to an Executive Committee, and can be able to determine what goes on the agenda of that body. We have a Chairperson, Vice Chairperson, we should have an Executive Committee, another person on the Committee to determine what is going to go on the agenda. The Chairperson should not be able to keep something as important as this off the agenda when it has gone through an extensive process by the professional staff. She is very disturbed at this, and this is not the first time this has happened, it has happened several times before when the Chairperson has preferred not having something on the agenda because it did not fit with his agenda. She has no objection to the Hennepin County Board doing what they did, and taking the action they did in the minutes (if you have read those minutes which are being distributed to you). This is their prerogative to attempt to persuade the RTB not to proceed with the recommendation that came out of the LRT Advisory Committee, but she thinks for a group that makes up the LRT Advisory Committee do not have the input of some professional staff or some consultant that can give you the pros and cons on the various ways to go about constructing a system, we would not be doing our duty. She feels this is a very serious matter.

Commissioner Hunt reiterated that she is somewhat outraged, as we are charged with responsibility by the State Legislature, and if we do not have any say about how we are to proceed, she would have to complain to the Legislature.

Commissioner Norgard asked if Commissioner Hunt had any input from the other people who sit on this Advisory Board, the other counties. Commissioner Hunt said they did support her position, but as Chairman Finley has said there is not always an awareness of what is in the documentation that comes before you, and no one else said a word on her concern on this item which was on the agenda. Dave Minister was the staff person who prepared it, and she thinks it is an excellent plan, a logical way to go about determining how you are going to proceed, and taking a look at all the alternatives. To be told that you should not be looking at the alternatives, and every unit of government should do their own thing, that is not a coordinated regional plan.

Chairman Finley thought what happened, he did not have the plan, he knew that there was discussion, that Dave Minister had put something together. He had talked to Mike Ehrlichmann about it, and he thought that is where it should be, he was the one who suggested that it go exactly where it went to the LRT Advisory Committee as he wanted input from the elected officials to guide the RTB, so his staff put it on the agenda. Mr. Ehrlichmann did not want it to come to the RTB full Board without the input of the elected county officials, which is the proper process.

Commissioner Hunt feels it would not have been discussed if she had not brought this up. Finally, Anoka County did make a motion that we proceed with this, and she seconded the motion. What goes on in the agenda is very basic as to how you are going to accomplish your mission. Her recommendation, unless we can get some assurances that this is not going to be standard operating procedure, which it has been up to this point, that we would recommend there be an Executive Committee which includes Ramsey County, and if some of the others want to be involved in this Executive Committe, it would be fine, but we should have some control over the development of the agenda.

Commissioner McCarty suggested that the motion proposed by Commissioner Hunt be strengthened; however, Commissioner Hunt does not want to see it strengthened as she feels the message would be there with her motion. Chairman Finley added that this should include technical staff cooperation, as the technical staff had done what they were supposed to do.

Commissioner Hunt moved the following recommendation, seconded by Commissioner Salverda.

WHEREAS, The Legislature has created the Joint Light Rail Transit Advisory Committee to make recommendations to the Regional Transit Board on light rail transit matters; and

WHEREAS, The Joint LRT Advisory Committee, comprised of representatives of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, Washington Counties, Minnesota Department of Transportation, and Metropolitan Transit Commission, is considering matters of regional significance; and

WHEREAS, The bylaws permit an amendment by a simple majority vote of the members present at a regular meeting of the Committee, provided that prior written notice setting forth the contents of the proposed amendment has been given to the Committee two weeks prior to consideration of the amendment; Now, Therefore, Be It

RESOLVED, That Ramsey County Regional Railroad Authority requests that the bylaws of the Joint LRT Advisory Committee be amended to establish an Executive Committee of the Joint LRT Advisory Committee to consist at minimum of the Chair, Vice Chair, and a member from Ramsey County to determine the agendas for Joint LRT Advisory Committee meetings based on the recommendations of the Staff Committee to the Joint LRT Advisory Committee; and Be It Further

RESOLVED, That this resolution be transmitted by Ramsey County Regional Railroad Authority to all members of the Joint LRT Advisory Committee and to the Chair of the Regional Transit Board and be discussed at the next meeting of the Joint LRT Advisory Committee.

Roll Call: Ayes - 6, Nays - 0 R90-07
Motion adopted.

Chairman Finley would like to ask the Board Members on their own time, if they have any thoughts on this Coordination Plan, especially in the technical area, which is turnkey, etc., to ask Ms. DeSpiegelaere to spend a few minutes with you to explain, the differences between turnkey and design build, and when you take the time and read this, if you have any suggested input, please let Commissioners Hunt and Ahrens, or Ms. DeSpiegelaere, know, as it is going to be as important in the long haul as the Financial Plan develops, or it may be more important.

Ms. DeSpiegelaere briefly explained what turnkey and design build are. There are several ways of constructing a light rail transit system, and this coordination plan has as one of its basic tasks, how light rail should be implemented. One method is traditional, this method is usually used for example by our Public Works Department when roads are constructed, where the design is done inhouse, and it goes out for a competitive bid to be constructed.

Another method is called is design build, where certain percentage of the design is contracted to someone else and the contractor will guarantee a specific price for that work, and they might agree to operate the system as well. There are various methods by which that can be done.

Under a turnkey project, the contract would be given to someone else who would design, construct and operate the system for a period of time. This is the method that Hennepin County is exploring. They have a grant from the Federal Government, and they have three potential consortiums who are preparing turnkey packages. One of the advantages of this is that it allows you to do a very major project with very little of your own staff, and a light rail project would be very staff intensive as it is a major project. Some of the disadvantages are that you lose some control over what is occurring as you are having outside people do it, and that you are locked into a price.

The Super turnkey has some additional aspects related to financing and development, but she is very eager to have these different concepts explored by consultants as part of this process so that Ramey County can make a decision on what way we think would be best. Hennepin County had a workshop on this about a year and half ago, but she still has many questions in her mind on how exactly it would work, and how it has been used in other parts of the country. There never has been a light rail system that has been constructed with a turnkey concept, so it would be innovative.

Hennepin County either officially, or unoffically, does want to proceed under a turnkey project project process for implementing, so another question that has to be addressed is what does that mean to Ramsey County. We have the first light rail corridor that is in both counties, do we want to use a different process than theirs, and is that possible, that is a question that needs to be explored. This is really a major issue, and it is one the Legislature has asked to be addressed.

Commissioner Schaber asked if it was not the original proposal that the MTC would operate the system. Chairman Finley said that it was, it is in the law now.

Ms. DeSpiegelaere continued, if you have someone do a turnkey project, you want some assurances that over a period of time that it is working well. So, another area to be addressed is could this turnkey contractor contract with the MTC, since it is a requirement that the MTC operate the system. It is complicated.

Chairman Finley said you would probably want them to operate, somewhat like the RDF, you would want a trial period. Essentially, what we did with NSP was a turnkey operation, so we pretty much set forth what we wanted in the contract.

Commissioner Hunt said another question to be raised is each county going to determine what system they are going to use, that has not been addressed, it would seem to her that this somehow has to come out of this process with the RTB.

Chairman Finley added, that their concern is the RTB, just a thought, maybe the outcome will be a Joint Powers Agreement with the counties to make that determination, and he would be opposed to that as we would have even more of a sayso, rather than having the RTB. He thinks their concern is that the

RTB make the decision. He suggested to them what about a Joint Powers Agreement with the counties, and they said they would be much more agreeable to that, as the counties are much more knowledgeable. This still has to be addressed.The point is that if there is a recommendation that there be a Joint Powers Agreement between the counties as the ultimate decider for example, that should come through the process, through the coordination, that can be a decision through the Light Rail Advisory Committee.

Commissioner Hunt said from the political standpoint, you have to figure if you are outnumbered on the Joint Powers Agreement.

Ms. DeSpiegelaere said the previous question is a task of the work program, the organizational plan, we talked about who should be the one to construct LRT, do a number of tasks associated with it, and one option is to be the JOint Powers Agreement.

Commissioner Hunt added, her own political instinct would tell her that the Legislature is going to play a role in this as they are going to be very concerned about lack of coordination which is the reason we have the bill we have now. They would view this very skeptically if there is going to be something more decisive than the Joint Powers Agreement. She is willing to let it go through the process.

Chairman Finley agreed the key is to let it go through the process, and this might be an option as Ms. DeSpiegelaere pointed out, but at least it should go through the process, it should not be settled off the agenda. He feels Commissioner Hunt is absolutely right in being very upset, as this is the proper place for that to be discussed.

5. Legislation

Ms. DeSpiegelaere informed the Board that a lot has happened since the last week. The motor vehicle excise tax is used for our planning grant for light rail transit, we provide a 50% match. In the fiscal year 91 there is $3.4 million for light rail funds. It is possible that the Governor may propose using those funds for some other State purpose, and we should know that later this week.

Also, it was pointed out to her that the funds that we had been awarded on Tuesday at the RTB also had the possibility of being lost unless we got the contract signed with Mn/DOT quite rapidly, $914,000, so we have added Item 12 to this agenda at the last minute, as there is a possiblity that the Legislature may be looking at those funds as well. She expressed her gratitude to the people who worked hard in getting this put together at the last minute.

Ms. DeSpiegelaere explained that there is $3.4 million in funds for LRT. Chairman Finley said we were going to use this for the second phase of the Preliminary Engineering in the Midway Corridor. We are also afraid of losing our 1990 funds.

Commissioner McCarty asked about the status of the 1992 funds, as in 1988 there was a law which would sunset funds for 1992 contribution to transportation. He asked if there is an effort now to reinstate that.

Ms. DeSpiegelaere said she would check on that. There was another bill that was not introduced, but was distributed, this is the Carruthers Bill which would provide $90 million in state bonding for LRT for the Central Corridor, yards and shops, two downtowns, and $10 million in engineering funds for those same projects.

Chairman Finley added that this particular bill is dedicated to a corridor, and Carruthers was very helpful in making that designation, and our Representative Valento wanted to make sure that they were talking about this corridor. This is out of the state building fund, it has nothing to do with the regional bonding authority for the RTB. This is state dollars.

Commissioner Hunt, in her discussion with the Chairman of the Transportation Committee, said he indicated the first line should be between the two cities, so generally Legislators do tend to feel that that is it, so we are on the right cours

6. Authorize staff to negotiate a contract for Northeast Corridor Alignment Study with Strgar-Roscoe-Fausch, Inc.

Chairman Finley said this is the part of the funds that we are talking about, the 1990 MVET funds. Ms. DeSpiegelaere said this is correct.

Chairman Finley said we had two consultants, Strgar-Roscoe-Fausch, Inc. and BRW, and he asked Ms. DeSpiegelaere as to why the recommendation for Strgar-Fausch-Roscoe was made.

Ms. DeSpiegelaere explained that this is for the Northeast corridor, a group of six staff members, including two representatives from the City of St. Paul, and RTB, and three members of our staff reviewed proposals, and heard oral presentations from both firms. We felt that both firms presented good information and had staff available, the recommendation was to go with S-R-F in spite of the fact that they are not the low bidder. They have a demonstrated sensitivity to community issues.

Commissioner Hunt moved the following recommendation, seconded by Commissioner Norgard.

1D bid amount

WHEREAS, Ramsey County Regional Railroad Authority Commissioners authorized a request for proposals for consultant services for an alignment study for the Northeast Corridor; and

WHEREAS, A committee of six has reviewed the proposals, listened to presentations from the two firms which submitted proposals, and made a recommendation that the team of SRF/DeLeuw, Cather be offered a contract; Now, Therefore, Be It

RESOLVED, That Ramsey County Regional Railroad Authority staff is authorized to negotiate a contract with SRF for an alignment study for the Northeast Corridor.

Roll Call: Ayes - 5, Nays - 1 (McCarty) R90-08
Motion adopted

Commissioner Salverda commented that both consultants are excellent firms and the rationale of staff is in order here. It is nice to have a second professional firm involved and he does endorse the recommendation.

7. Comprehensive LRT Plan for Dakota County

Chairman Finley said this is an information item, shows the corridors aligning to ours and with Hennepin County. One of them is what we term as our South Corridor which crosses the Lafayette Freeway.

8. Ratify Partial Payment No. 3 to BRW, Inc. in the amount of $11,624.24.

Commissioner Hunt moved the following recommendation, seconded by Commissioner Salverda.

WHEREAS, The Ramsey County Regional Railroad Authority has contracted for the professional services of BRW, Inc. for the purpose of conducting Phase I Preliminary Engineering/Environmental Impact Statement studies for the Midway Corridor; and

WHEREAS, Ramsey County Regional Railroad Authority Agreement Number RCRRA-89-003, and the First Amendment thereto, govern the performance of services of and terms of payment to BRW, Inc.; and

WHEREAS, BRW, Inc. has satisfactorily completed portions of the work identified in the referenced agreements, and provided detailed invoice documentation for services and costs accrued through November 30, 1989; and

WHEREAS, To ensure timely payment for services rendered in accordance with Agreement No. RCRRA 89-003, the Ramsey County Regional Railroad Authority authorized (Resolution R89-70) the Director of Light Rail Transit Planning to process payments to BRW, Inc. for work completed and invoiced in accordance with the agreement; and

WHEREAS, Resolution R89- 70 requires submittal of invoice and payment documentation to the Rail Authority for ratification at the next scheduled meeting following staff approval of invoice documentation; Now, Therefore, Be It

WHEREAS, BRW, Inc. Invoice No. 56406, Partial Payment No. 3, and attachments thereto, provide the correct documentation of payments due BRW, Inc. through November 30, 1989; Now, Therefore, Be It

RESOLVED, Payment to BRW, Inc. in the amount of $11,462.24 for Ramsey County Regional Railroad Authority's share of services rendered through November, 30, 1989, is hereby ratified.

R90-09

Roll Call: Ayes - 6, Nays - 0
Motion adopted.

9. Ratify Partial Payment No. 4 to BRW, Inc. in the amount of $25,132.71

Commissioner McCarty moved the following recommendation, seconded by Commissioner Schaber.

WHEREAS, The Ramsey County Regional Railroad Authority has contracted for the professional services of BRW, Inc. for the purpose of conducting Phase I Preliminary Engineering/Environmental Impact Statement studies for the Midway Corridor; and

WHEREAS, Ramsey County Regional Railroad Authority Agreement Number RCRRA-89-003, and the First Amendment thereto, govern the performance of services of and terms of payment to BRW, Inc.; and

WHEREAS, BRW, Inc. has satisfactorily completed portions of the work identified in the referenced agreements, and provided detailed invoice documentation for services and costs accrued through December 31, 1989; and

WHEREAS, To ensure timely payment for services rendered in accordance with Agreement No. RCRRA 89-003, the Ramsey County Regional Railroad Authority authorized (Resolution R89- 70) the Director of Light Rail Transit Planning to process payments to BRW, Inc. for work completed and invoiced in accordance with the agreement; and

WHEREAS, Resolution R89-70 requires submittal of invoice and payment documentation to the Rail Authority for ratification at the next scheduled meeting following staff approval of invoice documentation; Now, Therefore, Be It

R90-10

WHEREAS, BRW, Inc. Invoice No. 56832, Partial Payment No. 4, and attachments thereto, provide the correct documentation of payments due BRW, Inc. through December 31, 1989; Now, Therefore, Be It

RESOLVED, Payment to BRW, Inc. in the amount of $25, 132.71 for Ramsey County Regional Railroad Authority's share of services rendered through December 31, 1989 is hereby ratified.

Roll Call: Ayes - 6, Nays - 0
Motion Adopted.

10. Authorize Payment to Strgar-Roscoe-Fausch, Inc. in the amount of $11,020.79

Commissioner Salverda moved the following recommendation, seconded by Commissioner Hunt.

WHEREAS, Adoption of the Comprehensive Plan on December 19, 1989, included the recommendation that, "Six corridors be included in the 20-year Phase I system: Midway, Northwest, Northeast, East, South, and South-Southwest and three corridors in the post 20-year system: Southeast, Southwest and East-West Crosstown"; and

WHEREAS, The Plan and related documents have been revised in accordance with that recommendation; and

WHEREAS, Strgar-Roscoe-Fausch, Inc. has submitted detailed invoice documentation in the amount of $11,020.79 for costs incurred in the performance of required revisions; Now, Therefore, Be It

RESOLVED, That the Ramsey County Regional Railroad Authority authorizes payment to Strgar-Roscoe-Fausch, Inc. in the amount of $11,020.79 for services rendered in completion of Comprehensive Light Rail Transit Plan revisions;

Roll Call: Ayes - 6, Nays - 0 R90-11
Motion adopted.

11. Quarterly report of payments for RCRRA - period of October through December 1989.

Commissioner Salverda moved the following recommendation, seconded by Commissioner Hunt.

WHEREAS, Payments have been made from the Ramsey County Regional Railroad Authority budget for the period October through December, 1989, and a record of these disbursements is attached; Now, Therefore, Be It

RESOLVED, That the report of payment is accepted by Ramsey County Regional Railroad Authority.

Roll Call: Ayes - 6, Nays - 0 R-90-12
Motion adopted.

12. Authorize the Chairman of the Ramsey County Regional Railroad Authority to sign the contract for 1990 State light rail transit funds.

Commissioner Schaber moved the following recommendation, seconded by Commissioner Norgard.

WHEREAS, the Ramsey County Regional Railroad Authority applied for 1990 state light rail transit funds administered through the Minnesota Department of Transportation; and

WHEREAS, the distribution of available 1990 state light rail transit funds to participating metro area counties resulted in allocation of $914,371 to Ramsey County; and

WHEREAS, 1990 state light rail transit funds allocated to Ramsey County are to be split over three project areas:

1) Northeast Corridor Alignment Study	$ 200,000
2) South Corridor Alignment Study	$ 50,000
3) Phase II Preliminary Engineering-Midway Corridor	$ 664,371
Total	$ 914,371

WHEREAS, the Minnesota Department of Transporation is preparing contract documentation which will govern issuance and use of 1990 funds in the amount of $914,371 in support of identified Ramsey County light rail transit studies; and

WHEREAS, the Ramsey County Regional Railroad Authority supports expeditious execution of the funding assistance contract as soon as it becomes available; Now, Therefore, Be It

RESOLVED, that the Ramsey County Regional Railroad Authority authorizes the Chairman to sign the contract for 1990 state light rail transit funds in the amount of $914,371, subject to review and sign-off by Budgeting and Accounting, the County Attorney, and Risk Management.

R90-13

Roll Call: Ayes - 6, Nays - 0
Motion adopted.

There being no further matters to come before this Board, Chairman Finley declared the meeting adjourned.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

2

Chairman Finley Originating Department	Board Action Requested
J.T.Finley /s/ 3/7/90 Authorized Signature Date	CHAIRMAN'S COMMENTS

Request Justification

Budgeting and Accounting

County Attorney

Risk Manager

Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date March 13, 1990	Signature F L Henderson jr	Date 3/7/90
Board Date	Signature	Date

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

3

Regional Railroad Authority
Originating Department

K. DeSpiegelaere 3/5/90
Authorized Signature Date

Board Action Requested

Urban Rail Transit Projects: Forecast versus Actual Ridership and Costs

DISCUSSION ONLY

Request Justification

See attached:
1) Memorandum from K. DeSpiegelaere
2) Minnesota Journal article
3) RTB analysis
4) Summary of UMTA report

Budgeting and Accounting Ed Glawitz 3/7/90
County Attorney Dan Mac Mull
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date	Signature	Date
March 13, 1990	F L Glendenning	3/7/90
Board Date	Signature	Date

RAMSEY COUNTY
Regional Railroad Authority

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MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning KD

SUBJECT: Urban Rail Transit Projects: Forecast versus Actual Ridership and Costs

DATE: March 5, 1990

The Urban Mass Transportation Administration (UMTA) funds rail transit projects has recently completed a study of ten rail projects in nine cities: Washington, Atlanta, Baltimore, Miami (heavy rail); Buffalo, Pittsburgh, Portland, Sacramento (light rail); Miami and Detroit (downtown people mover). The study examines projected and actual values for (1) ridership; (2) capital costs; and (3) operating and maintenance costs.

I have attached a Minnesota Journal article on the subject, the Regional Transit Board's summary and analysis and a summary of the UMTA report, "Urban Rail Transit Projects: Forecast versus Actual Ridership and Costs."

Recommendation:

For your information.

KD/blk
Attachments

/

Minnesota Journal

A publication of the Citizens League

Volume 7, Number 7
February 27, 1990

Avoiding transit forecast errors.—Page 1.

Arrowhead two-plus-two takes off.—Page 1.

Editors fuss about charitable gambling.—Page 3.

An epitaph for Edina?—Page 8.

Range 2+2 modeled on Rochester

by Alan T. Zdon

As a funding proposal for a Rochester two-plus-two college program wended its way through the Minnesota Legislature in 1984, Sen. Ron Dicklich, DFL-Hibbing, was an interested spectator.

Dicklich, like many other Iron Rangers, had long harbored a dream of a four-year higher-education institution on the Range. Now the Range has its own two-plus-two program, based on the model created by the Rochester program. And its future success may revolve around the ability of Range community colleges and people to work together in the next few years.

Dicklich, who was the prime mover behind the $500,000 Arrowhead University Center received from St. Paul for this biennium, said he is optimistic about the Range two-plus-two. He admits, though, that the historic animosity among Range towns and Range institutions is not helping at this point.

"Within the community colleges on the Range, there may be some misgings like, 'Don't sign up for that course, it's not offered in Hibbing.'

Continued on Page 7

Court, conference committees boost case for a single-house Legislature

by Gene Merriam

Ask your state senator how he or she voted on the recently enacted, controversial law that requires the Minnesota State High School League to conduct a two-tier state hockey tournament. You are unlikely to get a straight answer.

This is not a suggestion of absence of candor on the part of my colleagues. The fact is that there was never a separate vote on this law in the Minnesota Senate. Unfortunately, this was not a unique occurrence.

I would like to address two provisions that the framers of our Minnesota Constitution designed to assure a deliberative, accountable, public process and why they are no longer functioning to that end. The first is the single-subject clause; the second is the bicameral Legislature.

Article IV, Section 17 of the Minnesota Constitution states: "No law shall embrace more than one subject, which shall be expressed in its title." This "single-subject" clause is obviously intended to prohibit the Legislature from tucking a provision into an unrelated bill that would be difficult or impossible to pass on its own.

The clause was intended to serve as guarantee that each law would be subjected to open and thorough public discussion and review before enactment. It also requires that every legislator cast a public vote, thereby making legislators accountable to their constituents for the laws they make.

This concept is so simple and the constitutional language so clear that one would think that no one could misconstrue it. Not so. With reasoning that is mindful of Lewis Carroll's Humpty Dumpty, the Minnesota Supreme Court has said that the Constitution's single-subject clause does not mean what it says.

Major appropriations bills have a

Continued on Page 4

Forecasting perils put LRT planners on guard

by Stephen Alnes

A study completed last year for the federal Urban Mass Transportation Administration (UMTA) found the numbers of people riding new rail transit systems to be significantly below original forecasts in eight cities.

It also found capital costs of the systems were well above forecasts in eight of nine cities. The study forces questions of whether the Twin Cities can avoid the same forecasting mistakes and what Twin Cities transit planners are doing to avoid them. I put those questions to David Minister, director of light-rail transit development for the Regional Transit Board (RTB), and Natalio Diaz, manager of the transportation division for the Metropolitan Council.

On ridership, the study showed Washington's system 28 percent below forecast, Baltimore 59 percent below, Miami 85 percent below on its big system and 74 percent below on the downtown people-mover, Buffalo 68 percent below, Pittsburgh 66 percent below, Portland 54 percent below, Sacramento 71 percent below and Detroit 83 percent below.

On capital cost, the study found Washington's system ran 83 percent more expensive than forecast, Atlanta 58 percent more, Baltimore 60 percent more, Buffalo 51 percent more, Portland 55 percent, Sacramento 13 percent, Detroit 50 percent and Miami 33 and 106 percent for its two systems. The exception, Pittsburgh, came in 11 percent below the forecast price.

Continued on Page 6

Transit

Continued from Page 1

The RTB's David Minister said the UMTA report "has a lot of good reading" for transit planners. "The main advantage of this report is there's a lot to be learned, not to necessarily say rail is good or bad, but how can we make the estimates more credible and turn out to be closer in actual fact."

Still, he faulted the report for not including the San Diego transit line in its evaluations, for using numbers from the earliest stages of planning for the systems it did look at, and for not reporting current trends.

The ridership trend on all the systems is up, he said. For example, "even though Miami and Detroit started at ridership levels way below their projections, the trend is a nice upward trend. Miami is reaching 40,000 and 50,000 rides a day now, when it started at only 20,000 or 25,000."

San Diego's light-rail line, running from downtown to the Mexican border, carried only 11,000 riders a day on weekdays the first year, he said, but "just eight years later the same line is carrying 33,000 riders a day."

In Sacramento, the UMTA report showed actual ridership of 14,400 against a forecast of 50,000. In Portland, it showed 19,700 actual riders against a forecast of 42,500.

Minister said he doesn't think those are "fair numbers to use." Both cities, and San Jose, where Minister worked until joining the RTB staff in December, did their major planning studies in 1979-80 when gasoline prices were high and rising. So $2-a-gallon gasoline was predicted by 2000, which translated into more riders in the transit projections, he added.

In Portland, too, the economy was strong during the planning stages but nosedived along with housing starts and the lumber industry in the 1980s, Minister said. Portland finances transit with a payroll tax and hasn't been able to finance the buses that feed the rail system to the extent envisioned, he added.



Two years before the Portland system opened, a new ridership estimate was developed that said 15,000 to 17,000 riders could be expected, Minister said. The line opened in 1986 and had 20,000 riders within a few months, he said. In Sacramento, the final environmental-impact report forecast ridership of 21,000 a day for the early 1990s, instead of the 50,000 in the UMTA report, Minister said. Today ridership is 19,700, and "I feel very comfortable they're going to break 20,000 and probably 21,000" by the end of 1990, he said.

In the Twin Cities, he said, forecasters are being "very conservative" in estimating the effect of rising parking and gasoline prices on transit.

The San Jose light-rail project (not included in the UMTA study because it is not fully open yet) provides additional illumination on what can go wrong in ridership forecasts, Minister said. "Our report (for San Jose's system) was based on the assumption that there would only be a new four-lane expressway built in conjunction with our light-rail, with at-grade intersections. It would not be a freeway. But only about four years later, after we did our studies, the voters in our county approved a new sales tax to turn this road and several others into freeways."

That affected the light-rail project in two ways, Minister said. The cost went up because "we now had to build our line in the middle of a freeway, which had all kinds of bridges and interchanges and grade separations...And it affected it in terms of ridership because now we're going to have better highway competition and there's going to be less congestion."

Early estimates of capital costs are almost always too low, Minister said, because they are based on the most preliminary level of engineering detail and because of inflation. "As you get into more and more engineering definition of the system" and dealing with "important stakeholders, like the cities, neighborhoods, highway departments, utility companies," the cost rises, he said, because to make the system acceptable to the stakeholders, "you generally find a solution that winds up costing you more money. Not that it turns out to be wasteful or extravagant, but it just wasn't foreseen."

He cited a San Jose example where planners thought they could run the transit line down an arterial street without taking any new right-of-way, eliminate some left turns and remove some parking. But conversations with the city traffic engineer and businesspeople made it clear that wouldn't be acceptable. It became necessary, in fact, to widen the right-of-way, acquire some developed frontage and take out some "sacred trees."

The Metropolitan Council's Diaz said one reason for incorrect forecasts is that there has been "lots of optimism and desire to show that these systems are going to be terribly successful. And people just got very unrealistic."

But, in addition, there also have been more technical reasons—such as expecting more population and economic growth than occurred and higher gasoline prices than developed, he said. Although there is no way to be certain about forecasts, Diaz said, it should be possible to apply "some test of reasonableness" to forecasts.

For example, he said, Baltimore projected 103,000 riders, Buffalo 92,000 riders and Pittsburgh 90,500 riders on lines approximately eight to 15 miles long—"within the range of length that we have in the Twin Cities." Actual ridership in those cities, as shown in the UMTA report, is 42,600 in Baltimore, 29,200 in Buffalo and 30,600 in Pittsburgh.

Diaz said all Twin Cities forecasts are in the range of actual ridership that has developed in Baltimore, Buffalo and Pittsburgh—"more in the 15,000 to 35,000 range."

Moreover, he said, Twin Cities forecasts are based on "what's happening on the ground now...We haven't said that because you have a better system you are going to triple or quadruple (transit) ridership...We have said that because you improve your system, you are going to see some incremental increases in ridership, maybe in the 20 to 30 percent range...We have been trying very hard to stay away from the pie-in-the-sky approach."

On capital costs, Diaz agreed with Minister that changes in the system from the early planning stages to its completion play a big role in driving the cost up—such things as changing the station designs or adding artwork or building a more enclosed shelter or providing a different flooring.

"I think what has happened in some cases (is that) people have changed their minds and come up with some things that they wanted to do, some bells and whistles that they wanted to add to the system and that were not envisaged," including changes in alignment and station locations, Diaz said. And another factor is simple delay in construction, he said.

Planners have sought to deal with these uncertainties by building a number of contingencies into their projections, Diaz said.

Despite errors in forecasts, Diaz said, the new rail systems have pleased their users. "You talk to the people in Portland, and they are all delighted with it...It appears that maybe those projections were not that important to them. You go to Washington (D.C.), extremely costly, just mind-boggling, (but) everybody's enchanted...The people love it...At least 400,000 people a day are using that system...That's a lot of people...a very significant system by any standards...Whether it was worth $7 billion to carry those people, that's a different story."

UMTA REPORT ON "URBAN RAIL TRANSIT PROJECTS: FORECAST VS. ACTUAL RIDERSHIP AND COSTS"

SUMMARY AND ANALYSIS

This report was prepared under the direction of Dr. Don Pickrell, an economic analyst and researcher at the United States Department of Transportation Systems Center, in Cambridge, Massachusetts. It was prepared for the Urban Mass Transportation Administration's Office of Grants Management, in Washington, D.C., at the request of Sam Zimmerman, Director of the Office of Planning. Mr. Zimmerman's purpose in requesting the report was to find ways to help improve the process of planning for new rail transit systems, and to increase the reliability and level of understanding of forecasts of cost and ridership made during those studies. The report's limited purpose did not include judgments about any of the projects' success or failure.

The report analyzes ten federally-funded rail or fixed guideway projects built during the past ten years. Four are "heavy rail" or rail rapid transit (subway) projects; four are light rail projects; and two are downtown people-mover projects (automated guideways) in Detroit and Miami.

The basic finding of the report is that the ten projects cost more than were projected and carry fewer riders than were projected. The differences between the forecast and actual values vary widely among the projects. The report also makes some preliminary conclusions about why there are differences between projected and actual forecasts, and even more preliminary recommendations about how to avoid the problem in the future.

Even though the publication of the report, in late fall 1989, was somewhat anti-climactic because of the many "drafts" of key tables which had been released during the previous six months, its release focused a great deal of resentment in the transit industry against what was widely felt to be less than even-handed treatment by the author. While there is justification for some of this resentment, and there are some transparent biases in the author's selection and reporting of facts, no knowledgeable observer would argue with the basic conclusion cited above: Most federally-funded rail transit projects have cost more than were projected and carry fewer riders than were projected.

However, to put that into context, there are some other basic conclusions which must also be stated:

1. The UMTA Report investigated several selected UMTA-funded projects which had their inception in the sixties and seventies, and came to fruition in the seventies and early eighties. Many of the conditions which led to over-optimism and estimating errors at that time have been recognized, corrected and are being avoided in current projects. Sam Zimmerman, of UMTA, acknowledged this in a speech given at the Transportation Research Board's annual meeting in Washington, D.C. last month.

2. There are a number of other rail projects built in North America during the same time period without using UMTA funds, and they have largely achieved cost and ridership targets. These include San Diego's south LRT line, the light rail systems built in Calgary and Edmonton, and the Lindenwold Line (heavy rail) in Philadelphia. The report did not investigate or discuss these.

3. According to Sam Zimmerman, the most basic reason for the problem of not achieving forecasts is UMTA's own project-by-project funding mechanism: to qualify for UMTA funds for a rail project, the project sponsor must "prove" its worthiness by showing that it will achieve UMTA-established cost-effectiveness thresholds calculated by a set formula (i.e., 'x' $/new transit rider, etc.). The basic inputs to the formula are ridership and cost. Most forecasts are made with a high and low range to allow for uncertainty. When project sponsors submit applications to UMTA and must prove their project's value, the temptation to submit ridership numbers from the high end of the range, and cost numbers from the low end, is almost irresistible. Mr. Zimmerman believes that formula funding, like that used by the Federal Highway Administration, instead of project-by-project funding, will dramatically change this tendency. He further thinks that the higher local share (50% or more) now required on UMTA-funded rail projects will act to make local sponsors more realistic than in the past. All the projects in the UMTA Report had 80 percent or more of their costs paid by the federal government.

4. There is still a need to do a better job of articulating to the taxpaying public the reasons for some of the differences the report highlighted, not only for rail transit projects, but for any public works project. These reasons include:

   - Changes in the project scope to satisfy legitimate public concerns: impact mitigation, relocation of housing, alignment changes, neighborhood concerns, etc.

   - Differences between costs in constant dollars before project inception, and costs in year-of-expenditure dollars as it actually proceeds (escalation).

   - Impact of project delays, due to public policy discussions or lawsuits, upon total costs.

   - The need to project high ridership numbers to be conservative for design purposes (length of station platforms, tunnel station sizes, vehicles required, yard and shop capacity, etc.), while projecting low ridership to be conservative fiscally; and the clear explanation of the differences.

- Response to changes in external input assumptions, such as economic growth, population and employment distribution, gasoline prices, highway congestion levels and other factors which are dynamic in any region's economy are necessary as project planning proceeds. This means there will never be one "right" forecast.

On balance, the UMTA Report provides useful and important information. Even though it is reporting more on past history than on current projects, and the problems it documents are already being addressed and corrected to a large degree, it still serves as a useful reminder to all of us to avoid the sin of "compounded optimism."

Furthermore, while transit industry representatives can properly complain about some biases in the selection and reporting of data by the author, more can be gained by focusing on how to make our projects perform as anticipated.

It is worth noting that the public agencies in the Twin Cities-the Metropolitan Council, the Regional Transit Board, the Metropolitan Transit Commission and the county regional railroad authorities-and their consultants have already been following many of the procedures suggested by UMTA as ways to avoid problems of the kind documented in the report. These include:

- Peer Reviews-scrutiny of the planning/design cost and ridership estimates at key points in the process by outside experts with prior real-world experience.

- Careful review by knowledgeable local experts of the input assumptions which affect projected transit ridership-population and employment growth, parking and gasoline costs, levels of highway congestion, and bus feeder routes that will be available.

- Recycling of the cost and ridership forecasts at least twice during the development process to allow for changes in project design, more detailed engineering definition of the project, and revised input assumptions.

URBAN RAIL TRANSIT PROJECTS: FORECAST VERSUS ACTUAL RIDERSHIP AND COSTS

Prepared by:

U.S. Department of Transportation
Research and Special Programs Administration
Transportation Systems Center
Cambridge, Massachusetts

Prepared for:

Office of Grants Management
Urban Mass Transportation Administration

October 1989

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SUMMARY

Under a variety of grant programs administered by the Urban Mass Transportation Administration (UMTA), the federal government has contributed nearly $12 billion to support U.S. cities' investments in new rail transit facilities. This study evaluates the ridership and cost forecasts that led local officials to select ten rail transit projects that have been constructed with federal financial assistance during the past two decades, by comparing those forecasts to each project's actual costs and ridership. The forecast data employed in making these comparisons were originally reported in published planning documents prepared for each project, while actual data were drawn from a combination of published sources, internal documents provided by local agencies involved in constructing and operating these projects, and direct contacts with employees of those agencies.

Although different forecasts were prepared at varying stages during the planning process for many of the projects examined, this study focuses upon the accuracy of projections that were available to local decision-makers at the time the choice among alternative transit improvement projects was actually made. Because forecasts of ridership and costs prepared for a specific project after it was designated as the locally preferred alternative cannot have influenced its choice from among competing alternatives, the accuracy of these post-decision forecasts is not a focus of this study.

The study also attempts to identify causes of the divergence between forecast and actual performance of these projects, and makes specific recommendations intended to improve the accuracy of forecasts prepared for future projects. Its purpose is thus to improve the process currently used to plan and evaluate major transit capital investments, by recommending measures to increase the reliability of information available to local decision-makers when they compare and choose among alternative projects.

The differences between forecast and actual values of transit ridership and costs have important implications for the reliability of the process currently used to develop and choose among alternative transit projects:

(1) Actual ridership that differs significantly from its forecast level indicates that a project's benefits are also likely to vary from the expected level that led to its selection from among the alternatives under study.

(2) Capital costs that differ markedly from their anticipated level can substantially increase the financial burden on the government program and agency funding the project, resulting in postponement or cancellation of other projects competing for its support.

(3) Similarly, operating expenses that exceed their projected level can increase operating deficits or require reductions in the level of other transit services that an agency can operate within its budget.

(4) If the divergence between a project's forecast and actual cost-effectiveness in attracting new transit passengers exceeds the margin by which the chosen alternative was preferred to others that were rejected, the planning process may not have led to selection of the most desirable project.

Thus, an important objective is to ensure reasonable accuracy of forecasts prepared to support future choices among alternative transit improvement projects. To help attain this objective, it is useful to examine why the actual costs and ridership experienced by past projects diverge so markedly from their forecast values.

RIDERSHIP FORECASTS

Table S-1 compares forecast and actual passenger boardings on each of the ten new rail transit projects reviewed as part of this study.[1] As it indicates, only the extensive rail rapid transit system under construction in Washington, D.C. experiences actual patronage that is more than half of that forecast, and even there ridership remains 28% below that originally anticipated. The number of passengers carried by new rail lines in Baltimore and Portland is somewhat below half of that forecast, while actual ridership on Miami's Metrorail line, as well as on the light rail lines recently completed in Buffalo, Pittsburgh, and Sacramento ranges from 66% to 85% below its forecast levels. Similarly, the two downtown people movers constructed in Miami and Detroit carry 74% and 83% fewer daily passengers than were originally anticipated to use them.[2] The consistent over-estimation of future ridership on recent rail transit projects suggests that, with few exceptions, the levels of travel and related benefits they currently provide are far below those originally anticipated by the local decision-makers who selected these projects.

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[1] *The only forecast of rail ridership available for the Atlanta rail system applies to a much more extensive system than is presently in operation, and was not expected to be reached until it had been in operation for nearly 15 years. Therefore Table S-1 presents no forecast of rail transit ridership for Atlanta.*

[2] *The dates to which ridership forecasts prepared for light rail lines in Portland, Buffalo, and Sacramento apply have not yet been reached. Forecasts of ridership and other variables prepared for these projects applied to the years 1990, 1995, and 2000, respectively.*

Table S-1.
FORECAST AND ACTUAL COST PER PASSENGER FOR RECENT RAIL TRANSIT PROJECTS

	Heavy Rail Transit Projects				Light Rail Transit Projects				DPM Projects	
	Wash-ington	Atlanta	Balt-imore	Miami	Buffalo	Pitts-burgh	Port-land	Sacra-mento	Miami	Detroit
Weekday Rail Passengers (thousands)										
Forecast	569.6	NF	103.0	239.9	92.0	90.5	42.5	50.0	41.0	67.7
Actual	411.6	184.5	42.6	35.4	29.2	30.6	19.7	14.4	10.8	11.3
% difference	-28%	--	-59%	-85%	-68%	-66%	-54%	-71%	-74%	-83%
Rail Project Capital Cost (millions of 1988 dollars)										
Forecast	4,352	1,723	804	1,008	478	699	172	165	84	144
Actual	7,968	2,720	1,289	1,341	722	622	266	188	175	215
% difference	83%	58%	60%	33%	51%	-11%	55%	13%	106%	50%
Annual Rail Operating Expense (millions of 1988 dollars)										
Forecast	66.3	13.2	NF	26.5	10.4	NF	3.8	7.7	2.5	7.4
Actual	199.9	40.3	21.7	37.5	11.6	8.1	5.8	6.9	4.6	10.9
% difference	202%	205%	--	42%	12%	--	45%	-10%	84%	47%
Total Cost per Rail Passenger[1] (1988 dollars)										
Forecast	3.04	NF	NF	1.73	2.15	NF	1.68	1.53	0.90	1.14
Actual	8.75	5.93	12.92	16.77	10.57	7.94	5.19	6.53	7.11	10.21
% difference	188%	--	--	872%	392%	--	209%	328%	693%	795%

[1] *Annual total cost of rail service divided by annual equivalent of "Weekday Rail Passengers," computed using numbers of average weekday equivalents per year derived from annual total and average weekday rail ridership reported by project operators. Annual total cost of rail service is the sum of (1) the annualized value of "Rail Project Capital Cost," computed assuming a 40-year project lifetime and a discount rate of 10% per year, and (2) "Annual Rail Operating Expense."*

NF indicates no forecast of a data item was obtainable from published sources.

Calculations using measures of the sensitivity of transit ridership to demographic variables, transit service levels, and automobile costs -- the major inputs into ridership forecasts prepared for these rail projects -- suggest that errors in projecting their future values typically explain less than half of the observed gap between predicted and actual rail ridership. Overly optimistic assumptions about the frequency and speed of service that new rail lines would provide, as well as about the quality of bus feeder service on which these lines rely to generate much of their ridership, made the largest contributions to the over-estimation of their future ridership levels.

Even where a significant fraction of the difference between projected and actual rail ridership can be explained by errors in forecasting these inputs, these differences were usually so large that a substantial absolute difference remained unexplained. This suggests that important errors must have arisen from other, less obvious sources, including the structure of the ridership forecasting models, the way in which they were applied, or the misinterpretation of their numerical outputs during the planning process.

CAPITAL COST FORECASTS

Table S-1 also compares these projects' forecast and actual capital outlays, which include costs for acquiring rights-of-way, constructing fixed facilities, and purchasing vehicles. (Both forecast and actual outlays reported in the table are expressed in 1988 dollars). As these comparisons indicate, capital outlays for Pittsburgh's South Hills light rail reconstruction project were actually 11 percent below their forecast value, while cost overruns on other projects ranged from 13% for Sacramento's recently completed light rail line to 106 percent for Miami's downtown "Metromover" project.

Because changes in the physical characteristics of these projects between their planning and construction stages were generally quite minor, and because many of the changes that were made should have reduced rather than increased capital outlays, it appears that very little of the substantial cost overruns experienced in building most of these projects can be ascribed to major design changes. Instead, cost escalation must have been the product of many smaller changes in the physical design of facilities or the standards for their performance, no one of which was extremely costly but the cumulative effect of which was often a substantial increase in construction outlays.

Federal assistance under a variety of funding mechanisms ranged from 53 percent to 83 percent of capital outlays for the ten projects reviewed. Actual federal outlays for these ten projects totaled about $7.1 billion, although the equivalent of this figure in 1988 dollars would be considerably higher because much of it was denominated in the higher-valued dollars of previous years. Financing of the remaining share of capital outlays varied widely among these projects, although in nearly every case, either state or local government financed most of the non-federal share of project costs. (Only one project received substantial support from both state and local government.) Local financial contributions amounted to 5% or less of both

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planned and actual capital outlays for five of the ten projects studied (those in Baltimore, Buffalo, Pittsburgh, Portland, and Detroit), a surprisingly modest level of local government support considering the highly localized nature of the benefits from transit projects.

Until recently, the federal treasury assumed most of the burden of financing the large cost overruns that have characterized many of these projects. The federal government financed three-quarters or more of the cost overruns experienced by six of the ten projects, including four of the five on which these overruns exceeded the hundred-million dollar mark. In fact, the financing mechanisms originally incorporated in federal capital assistance programs placed on the federal treasury a share of the burden from cost overruns that often substantially exceeded its originally planned share of the project's total cost.

More recently, the declining federal share of cost overruns on rail projects appears to indicate that the use of "full-funding" agreements -- which limit the federal government's dollar contribution to a project -- has transferred much of the financial risk of cost overruns from the federal government to state and local agencies responsible for selecting these projects. The effectiveness of such arrangements in controlling cost escalation is limited, however, by the fact that they are not entered into until well after the local choice among projects has been made, by which time the estimated cost of constructing the preferred project has often escalated considerably from the forecast on which its selection was based.

OPERATING COST FORECASTS

Table S-1 also compares the forecast and actual values of annual operating expenses for rail service provided by each of the ten projects (again, these are expressed in 1988 dollars to remove the effect of errors in forecasting inflation). As the table shows, actual rail operating expenses are above those forecast in all but one case for which this comparison can be made: actual operating expenses for Sacramento's light rail line are 10% below those forecast, but elsewhere, actual expenses range from 12% to more than 200% above their projected levels.[3] Further, except for the two downtown people mover systems, the actual expenses reported in Table S-1 understate the full costs of operating rail service, because they omit the costs of operating the networks of feeder bus routes on which these projects rely to generate much of their ridership.

While actual operating expenses would be expected to exceed those forecast if the level of rail service actually provided is higher than that

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[3] *Operating expenses for Sacramento's light rail line during 1988 were 10 percent below the level project to be reached by the year 2000; however, the number of vehicle-miles of service operated during 1988 was 45 percent below the number expected to be operated during the year 2000.*

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originally anticipated, this is the case only in Atlanta and Portland. Elsewhere, actual vehicle-miles of service are more typically only one-third to one-half of those originally planned. Instead, the substantial differences between most of these projects' forecast and actual operating expenses appear to stem from a combination of lower labor productivity in rail operations and higher compensation rates than were originally anticipated, together with vehicle operating speeds that are considerably slower than those projected during these projects' planning stages.

COST PER RAIL PASSENGER

Finally, Table S-1 shows that forecasts of total cost per rail rider for seven of the ten rail projects that were studied ranged from slightly under $1.00 to more than $3.00 (when measured in 1988 dollars). However, actual costs per rail passenger carried by these ten projects ranged from somewhat more than $5.00 to nearly $17.00, or from 188% to nearly 900% higher than their corresponding forecast values. The weighted average forecast cost per rail passenger for the seven projects where this forecast could be computed was $2.35, while the weighted average of actual costs per rail rider for all ten projects was $8.56, or 264% percent higher than this forecast average.

Errors in projecting this cost-effectiveness index are a composite of previously documented errors in forecasting each of the three variables that enter into its calculation: rail ridership, project capital outlays, and rail operating expenses. Because no project achieved actual values of ridership, capital outlays, and operating expenses that were each close to those forecast, every project's actual cost per rail passenger was considerably higher than the value implied by forecasts of these variables.

SYSTEM-WIDE IMPACTS OF RAIL TRANSIT INVESTMENTS

Another important aspect of these projects' performance is their effectiveness in increasing overall transit ridership and controlling operating costs in the urban areas where they were built -- objectives that were commonly cited by local decision-makers when selecting rail projects over competing alternatives. To assess these projects' performance in doing so, Table S-2 compares forecast and actual changes in total transit ridership and operating expenses accompanying each of the eight heavy and light rail projects that were studied.[4]

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[4] *Because the two downtown people-mover projects are so small that their effects on area-wide transit ridership are difficult to isolate, Detroit is excluded from Table S-2, while the combined effects of Miami's Metrorail and Metromover projects on transit ridership and costs are included in the table. The procedures used to estimate these projects' forecast and actual impacts on system-wide transit ridership and operating expenses are discussed in detail in Chapters 2 and 4 of this report.*

Table S-2.
FORECAST AND ACTUAL COST PER NEW TRANSIT TRIP FOR RECENT RAIL TRANSIT PROJECTS

	Heavy Rail Transit Projects				Light Rail Transit Projects			
	Wash-ington	Atlanta	Balt-imore	Miami	Buffalo	Pitts-burgh	Port-land	Sacra-mento
New Transit Trips per Average Weekday (thousands)								
Forecast	NF	99.1	NF	262.9	81.0	NF	51.3	13.0
Actual	281.3	36.9	37.3	-25.8	-0.4	6.3	11.5	-4.2
% difference	--	-63%	--	--	--	--	-78%	--
Rail Project Capital Cost (millions of 1988 dollars)								
Forecast	4,352	1,723	804	1,092	478	699	172	165
Actual	7,968	2,720	1,289	1,516	722	622	266	188
% difference	83%	58%	60%	39%	51%	-11%	55%	13%
Annual Operating Expense Impact of Rail Project (millions of 1988 dollars)								
Forecast	NF	NF	NF	33.9	4.7	NF	0.6	-2.1
Actual	228.5	53.8	14.7	46.0	13.7	1.4	4.6	5.6
% difference	--	--	--	36%	191%	--	667%	--
Total Cost per New Transit Trip[1] (1988 dollars)								
Forecast	NF	NF	NF	1.67	2.20	NF	1.14	3.53
Actual	11.97	29.47	13.56	--	--	34.64	9.49	--
% difference	--	--	--	--	--	--	731%	--

[1] *Annual total cost impact of rail project divided by annual equivalent of "New Transit Trips per Average Weekday," computed using numbers of average weekday equivalents per year derived from annual total and average weekday total transit ridership reported by project operators. Annual total cost impact of rail project is the sum of (1) the annualized value of "Rail Project Capital Costs," computed assuming a 40-year project lifetime and a discount rate of 10% per year, and (2) "Annual Operating Expense Impact of Rail Project."*

[2] *No actual value can be calculated because ridership declined with the introduction of rail service*

NF indicates no forecast of a data item was obtainable from published sources.

As the table indicates, substantial growth in transit ridership accompanied the introduction of rail service in Washington, Atlanta, and Baltimore, although in no case did the increase in ridership approach that forecast. Increases in transit ridership accompanying the introduction of light rail service in Pittsburgh and Portland were more modest, particularly by comparison to the substantial growth in transit use that was forecast to occur in the latter. In contrast, overall transit ridership in Miami, Buffalo, and Sacramento -- including travel by both bus and rail -- actually declined rather than increased as rail transit service was introduced.

Table S-2 also attempts to identify the impact of introducing rail service on these cities' costs for providing transit service. This impact consists of the costs associated with investments in new rail facilities, together with any change in the total cost of operating the resulting network of bus and rail transit service. As it shows, the actual capital outlays necessary to construct new rail transit facilities were sharply higher than those initially projected in six of the eight cities that chose to make these major investments. The table also reports that while some of these projects' actual impacts on systemwide operating expenses compare fairly closely to those originally forecast, the actual effect of inaugurating rail service on systemwide operating expenses has often been a substantial increase from their "pre-rail" level, even where a reduction or only a slight increase in operating expenses was anticipated.[5] Thus, it appears that savings in total transit operating expenses, which were often anticipated to result from substituting rail for bus service, may have not have been widely realized.[6]

Finally, Table S-2 shows that the projected costs per new transit trip implied by these projects' anticipated additions to areawide transit ridership and costs were quite modest, ranging from somewhat more than $1.00 to slightly over $3.50 in the four cases where a forecast could be computed. In contrast, of the five projects for which actual costs per new transit passenger could be computed, only that in Portland was accompanied by ridership gains at a cost of less than $10.00 per new trip. While the substantial transit ridership increases in Washington and Baltimore were achieved at costs in the $12.00-13.50 per trip range, Atlanta's similarly impressive ridership gain as well as the more modest gain in Pittsburgh were attained at costs in the neighborhood of $30.00 per new trip.

---

[5] *The clear exception is Sacramento, where only a small fraction of the major increase in areawide transit service -- and thus in operating expenses -- that was originally projected to occur by the year 2000 has been implemented to date.*

[6] *This could occur either because replacing bus service with rail service does not actually reduce operating expenses, or because reductions in bus service originally anticipated to accompany the introduction of rail service were not actually implemented. It is not possible to distinguish between these two explanations for increased operating expenses on the basis of the information reported in this study.*

CONCLUSIONS AND RECOMMENDATIONS

Implications of Forecasting Errors

It is difficult to judge whether the substantial errors in forecasting ridership and costs for the rail projects reviewed here led decision-makers to select them when more accurate forecasts might have led them to prefer other alternatives, because the accuracy of forecasts prepared for alternatives that were discarded in favor of the chosen rail projects cannot be evaluated. Nevertheless, it appears that the divergence between forecast and actual cost per rail rider and per new transit trip for these projects was often larger than the entire range of values of these measures over all of the alternatives from which these projects were selected. Thus, it is certainly possible that decision-makers acting on more accurate forecasts of costs and future ridership for the projects reviewed here would have selected projects other than those reviewed here, at least in some cases.

Even if cost and ridership forecasts for each alternative considered were subject to the same sources and degree of inaccuracy as those examined here, the systematic tendency to over-estimate ridership and to under-estimate capital and operating costs introduces a distinct bias toward the selection of capital-intensive transit improvements such as rail lines. This bias arises because, as a variety of studies has shown, rail becomes the economically preferred transit mode only when its substantial capital costs and fixed operating expenses can be spread over large passenger volumes.[7] Thus, even if cost and ridership forecasts prepared for transit improvement projects entailing investments in different modes or technologies prove to be equally optimistic (that is, to represent equal proportional over-estimates of future ridership and under-estimates of costs), the planning process will still be biased toward selection of the most capital-intensive alternatives under consideration.

Recognizing the sensitivity of local transportation officials' choices among alternative transit improvement projects to the reliability of their projected future ridership and anticipated costs, it is important that steps be undertaken to improve the accuracy of forecasts prepared to support future transit investment decisions. These steps should include specific technical improvements in the procedures used to develop and check cost and ridership forecasts, some of which have already been at least partially incorporated into UMTA project planning guidelines. They should also include subjecting forecasts to review by outside experts, as well as acknowledging to local officials and the public that the resulting forecasts are still accompanied by considerable uncertainty.

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[7] *The earliest such study is reported in John R. Meyer, John F. Kain, and Martin Wohl, The Urban Transportation Problem, Cambridge, Massachusetts, Harvard University Press, 1965, Chapters 8-11. Several subsequent studies arrive at the same conclusion, although for a variety of reasons they differ regarding the exact ridership threshold at which rail becomes the most cost-effective transit mode.*

Technical Improvements in the Accuracy of Forecasts

The errors in ridership and cost forecasts documented in this report are so large that it seems unlikely they would have been eliminated by simple technical changes in the way forecasts are generated. Nonetheless, it should be possible to reduce substantially the magnitude of future errors by combining technical improvements in the preparation of forecasts with stronger incentives for local agencies planning these projects to develop more realistic projections of their costs and future ridership. Among the potentially valuable procedural improvements, most of which have already been incorporated into the current UMTA process for planning major transit projects, are the following:

(1) Using a nearer "horizon" year for ridership and operating expense forecasts, as is now strongly encouraged under the UMTA planning process. Although this study found that errors in forecasting variables that serve as inputs to travel demand forecasting models (demographic and economic variables, transit performance levels, and automobile travel conditions and costs) were not solely responsible for overestimation of future ridership, they did contribute significantly in a few cases. Input assumptions could be made more accurate by shortening the period between their preparation and the future year to which they apply. This should reduce the number of major developments during the intervening period (often as long as twenty years in current practice) that can cause projections of these input variables to be inaccurate, such as changes in the performance of the local economy, or reorientation of travel patterns in response to changing geographic distributions of jobs and population.

(2) Developing procedures that allow the effects of individual factors on costs and transit ridership to be isolated and examined separately. One approach would be to prepare "forecasts" using existing or "base year" population, employment, and transportation system characteristics, as if each proposed transit project could be implemented instantaneously. This could provide a more realistic estimate of the costs and increased ridership that would result from the service characteristics associated with each of the proposed transit improvements, since it would allow the effects on ridership of these changes to be distinguished from those of growth in overall travel demand due simply to demographic growth or changes in other exogenous factors (such as gasoline prices) that affect each transit alternative under consideration.

(3) Conducting sensitivity analyses to examine the effects of alternative assumptions affecting cost and ridership projections. This type of analysis can be very helpful both for refining forecasting procedures themselves, as well as for examining the likely effects on costs and ridership of uncertainty regarding such factors as demographic growth, transit service levels, energy prices, future escalation of construction costs, or design and performance characteristics of transit facilities.

(4) Checking the reasonableness of construction and operating cost forecasts, of ridership forecasts, and of inputs to these forecasts, by comparing them to the record established by previous projects. Significant discrepancies with empirical data for similar projects and urban areas should require either that these discrepancies be convincingly justified, or that revised forecasts be prepared using adjusted procedures or input assumptions.

Subjecting Forecasts to Expert Review

Another potentially effective strategy for establishing the reliability of cost and ridership forecasts, as well as of the assumptions and models used to generate them, is to subject them to review and verification by independent experts. Although such a review of each urban area's forecasting efforts is presently conducted by UMTA staff members, the growing number of projects for which planning is actively underway, together with a reduction in resources available for this effort, has reduced the scope and depth of review activities that can be performed.

For example, local agencies responsible for conducting the UMTA planning process could be required to designate a peer review panel with responsibility for assessing the credibility of input assumptions, technical procedures, and forecast results when they are still subject to review and revision. The responsibilities and powers of individual members comprising such a panel would need to be clarified prior to their selection, but wider use of such groups offers the potential for bringing valuable judgement and experience to bear in generating reliable information to support local decision-makers choices among alternative transit improvement projects.

Once projects have been selected and arrangements for financing their implementation have been completed, independent expertise in activities such as construction management, testing of completed systems, and actual initiation of service could also be employed by local agencies serving as project sponsors. Such expertise has recently been provided to sponsors of some recent federally-financed rail transit construction projects by Project Management Oversight (PMO) contractors designated by UMTA, who have been retained to provide specific assistance and oversight activities agreed to by UMTA and the local project sponsor. More widespread use of such contractors, including their participation before problems have arisen with project construction timetables or financing, is thus a potentially useful strategy for bringing independent expertise to bear on project implementation activities.

Acknowledging Uncertainty in Ridership Forecasts

The errors in forecasting ridership and costs identified in this study are so large that they appear unlikely to be eliminated completely by technical changes in the procedures for developing and reviewing forecasts. It thus

seems prudent that both ridership and cost forecasts prepared to support future choices among alternative projects be prepared and presented in a manner that explicitly recognizes the existence of uncertainty about whether their exact values will be achieved. Perhaps most important, this recognition also needs to be conveyed to the local political officials that will ultimately rely on these forecasts to choose among alternative projects, as well as to the more general public.

One obvious way to acknowledge that such uncertainty surrounds even the most carefully prepared and assiduously reviewed projections of ridership would be to report a range of patronage levels that could reasonably be expected to result from implementing each project under consideration. While this procedure may slightly complicate the calculation and interpretation of the cost-effectiveness measures local project sponsors are required to prepare, it will simply represent a formal acknowledgement that the performance of each alternative under consideration cannot be predicted with certainty, and that local officials' selection of a preferred alternative must recognize a variety of other criteria in addition to cost-effectiveness measures.

Increasing Contingency Allowances to Cover Cost Escalation

Recognizing that capital cost estimation and financial planning for major public works projects such as the construction of rail transit lines is an inherently difficult and risky activity, it seems prudent in project budgeting to provide contingency allowances that are adequate to cover capital cost escalation of the magnitude typically experienced by such projects. On the basis of the results reported in this study, it appears that such contingency allowances have been consistently inadequate to allow local project sponsors to absorb unforeseen developments without incurring major increases in their projects' budgets, and should be increased substantially for future projects.

Although it is difficult to specify the exact size of allowance that should be provided in capital budgeting for future transit projects, it does appear that some increase in those historically provided is warranted. The most prudent course would probably be for UMTA to draw upon the experience of other major public works projects, in combination with the record established by past major transit capital projects (including those reviewed here), to establish guidelines for the size of contingency allowances in relation to foreseeable project expenditures. Even within the scope of major capital grant programs administered by the various other branches of the U.S. Department of Transportation, there probably exists considerable project budgeting and oversight experience that could be called upon to develop guidelines for more realistic estimation of adequate contingency provisions in budgeting for future federally-supported transit investments.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

4

Regional Railroad Authority Originating Department	**Board Action Requested** Ridership forecasting for Midway Corridor. DISCUSSION ONLY
K. DeSpiegelaere 3/6/90 Authorized Signature / Date	

Request Justification

See attached memorandum from Kathryn DeSpiegelaere.

Budgeting and Accounting Ed Glaubitz 3/7/90	Date / Time Received By
County Attorney Daniel MacMillan	
Risk Manager	
Data Processing	
Previous Action taken on Request	

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date March 13, 1990 Board Date	Signature T. L Blandamer Signature	Date 2/7/90 Date

file

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, Ramsey County Regional Railroad Authority has contracted with BRW, Inc. for Phase I of preliminary engineering and an Environmental Impact Statement for the Midway Corridor; and

WHEREAS, One element of that study is the completion of patronage forecasts for alternative alignments in the Midway Corridor; Now, Therefore, Be It

RESOLVED, That, BRW, Inc. and Ramsey County Regional Railroad Authority staff are:

1. Authorized to solicit proposals for a subconsultant who specializes in patronage forecasting to assist in reviewing and commenting on aspects of the forecasts.

2. Are requested to provide Ramsey County Regional Railroad Authority Commissioners with information on the prospective vendor and the cost for those services in order that authorization can be provided for the patronage forecasting services.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

RAMSEY COUNTY
Regional Railroad Authority

Room 316 Courthouse
15 W. Kellogg Blvd.
St. Paul, MN 55102
Phone 298-4145

John T. Finley, Chairman
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Diane Ahrens
District 4
Ruby Hunt
District 5
Duane W. McCarty
District 1
Hal Norgard
District 7
Donald E. Salverda
District 2
Warren W. Schaber
District 6

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning KD

SUBJECT: Ridership Forecasting - Midway Corridor
Update to Work Plan Approach

The purpose of this memorandum is to update the Rail Authority of revisions to the work plan for LRT for the Midway Corridor in regard to preparation of ridership forecasts.

One element in the work plan is preparation of the 2010 Ridership Forecasts for each alignment alternative. The forecasts will be based on the model currently being used for regional forecasting.

The original approach to ridership work assigned responsibility for information development and computer modeling almost exclusively to the BRW consultant team. Subsequent coordination with regional agencies resulted in an alternative approach to both regional and corridor specific forecasting. Under this alternative, operation of all computer models and preparation of ridership forecasts will be done by Metropolitan Council staff, rather than by the BRW team. There will be no charges to the Rail Authority for services provided by the Metropolitan Council. BRW will, in cooperation with Metropolitan Transit Commission, Regional Transit Board, and Regional Railroad Authority staff, continue to define alignment alternatives/ supporting feeder bus networks, and code all model inputs under the guidance of Metropolitan Council staff. BRW is also facilitating the selection of an outside consultant to provide peer review of completed ridership forecasts.

The estimated net impact to overall study costs is a reduction of $70,000.00. Actual payment for ridership work will be based on services rendered in accordance with agreement provisions.

Recommendation:

For your information.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

5

Regional Railroad Authority
Originating Department

K DeSpiegelaere 3/5/90
Authorized Signature Date

Board Action Requested

LRT Cost Estimates

DISCUSSION ONLY

Request Justification

See attached: 1) Memorandum from K. DeSpiegelaere
2) Memorandum to Tom Todd

Budgeting and Accounting Ed Glawitsch 3/7/90
County Attorney Dennis MacMillan
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date March 13, 1990	Signature T. L. Glendenning	Date 3/7/90
Board Date	Signature	Date

RAMSEY COUNTY
Regional Railroad Authority

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Warren W. Schaber
District 6

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning KD

SUBJECT: LRT Cost Estimates

DATE: March 5, 1990

Tom Todd, House Research staff, requested information on engineering and capital cost needs for the Midway Corridor and for the "B Group" corridors in the Regional Transit Board's LRT Development and Financial Plan.

The information attached was prepared by the Regional Transit Board with assistance from regional railroad authority staff.

Recommendation:

For your information.

KD/blk
Attachment

REGIONAL TRANSIT BOARD

Mears Park Centre
230 East Fifth Street, St. Paul, Minnesota 55101
612/292-8789

DATE: March 2, 1990

TO: Tom Todd, Associate Director-House Research

FROM: David Minister, RTB-Director of LRT Development

SUBJECT: Capital Cost Estimates for the Group 'A' LRT Starter System and Funding Needs, 1990-1991 Biennium and 1992-1993 Biennium

Following up on our meeting on February 28th with the staffs of the three regional railroad authorities (Hennepin, Ramsey and Anoka), their consultant (BRW, Inc.) and ourselves, this memo is intended to provide you and Representative Carruthers with the information you requested that is necessary to support the proposed State LRT funding bond issue bill now being discussed.

This report is in two parts:

1. Overall Capital Cost Estimate for the Group 'A' LRT Starter System in the Central Corridor (downtown Minneapolis to downtown St. Paul, approximately 10.1 miles)-best current estimate, in 1990 $-see Table 1;

2. Funding Needs for LRT Engineering and Construction for the current 1990-1991 Biennium and the 1992-93 Biennium -see Tables 2 and 3.

(not completed yet)
Attachment 'A' contains information documenting the estimated capital costs of the Group 'A' LRT Starter System in the Central Corridor and how and why the estimate has changed from the figure published in RTB's LRT Regional Development and Financial Plan ($300 million, 1988 $) to the best current estimate (approximately $400 million, 1990 $).

RDM:cm

Attachment

cc: RTB Board Members
HCRRA-K. Stevens
RCRRA-K. DeSpiegelaere
ACRRA-T. Yantos
Metropolitan Council-N. Diaz
LRT Staff Committee
BRW, Inc.-R. Wolsfeld
LRT Files-Funding Plan

TABLE 1

OVERALL CAPITAL COST ESTIMATE

FOR

LIGHT RAIL TRANSIT STARTER SYSTEM

IN THE

CENTRAL CORRIDOR (GROUP 'A')

Element	Best Current Cost Estimate, Millions of 1988 $	Best Current Cost Estimate, Millions of 1990 $
1. Yards and Shops	$28	$31
2. Light Rail Vehicles (23)	35	39
3. Minn. CBD Tunnel (1.1 miles)	110	121
4. University Connector to County line (3.0 miles)	65-70*	71-77*
5. Midway Corridor to Rice St.-Capitol (5.1 miles) (Includes R/W /and Park-n-Ride Lots)	57-79*, depending on the alignment chosen	63-87*
6. Capitol to St. Paul CBD-Surface (2.0 miles)	50*	55*
Total (11.2 miles total; 4.1 in Hennepin County and 7.1 in Ramsey County)	$345-372*/**	$380-410*/**

* These cost estimates are subject to change, as LRT alignments and designs have not been finalized for these segments yet.

** Approximately 55-60% of the estimated capital costs, excluding yards and shops and light rail vehicles, are expected to fall within Hennepin County.

3/2/90

TABLE 2

LRT FUNDING NEEDS FOR THE

1990-1991 BIENNIUM

Element	Cost Estimate, Millions of 1990 $	RRAs	Suggested Funding Shares: Regional (RTB) [1]	State [2]
1. Central Corridor (Group 'A') Preliminary Engineering (3% of Total Estimated Cost in 1990 $)	$13.0	$6.5	--	$6.5
2. Group 'B' Corridors-Planning, Environmental and Preliminary Engineering	5.6	2.8	--	2.8
Sub-total Engineering:	$18.6	$9.3	--	$9.3
3. Construct Yards and Shops	31.0	--	31.0	--
4. Procure Light Rail Vehicles	39.0	--	39.0	--
Sub-total Construction:	$70.0	--	$70.0	--
Total for 1990-91 Biennium:	$88.6	$9.3	$70.0	$9.3

[1] Proceeds from either a new sales tax or RTB bonding supported by property tax levy.

[2] Proceeds from State G.O. Bond issue.

(31)

3/2/90

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TABLE 3

LRT FUNDING NEEDS FOR THE

1992-1993 BIENNIUM

Element	Cost Estimate, Millions of 1990 $	RRAs	Suggested Funding Shares: Regional (RTB) [1]	State [2]
1. Acquisition and Construction of the Central Corridor LRT Starter System	$180.0	--	$90.0	$90.0
2. Group 'B' Corridors (I-35W, Hiawatha, St. Paul South)- Preliminary Engineering	10.0	5.0	--	5.0
Total for 1992-1993 Biennium:	$190.0	$5.0	$90.0	$95.0

[1] Proceeds from either a new sales tax or RTB bonding supported by property tax levy.

[2] Proceeds from State G.O. Bond issue.

3/2/90

ANOKA COUNTY REGIONAL RAILROAD AUTHORITY (ACRRA)

Paul McCarron, Chairman
Margaret Langfeld, Vice Chairman
Dan Erhart
Bob Burman
Natalie Haas Steffen
Jim A. Kordiak
Nick Cenaiko

March 7, 1990

Kathryn DeSpiegelaere
Director of LRT Planning
15 West Kellogg Blvd. - Room 316
St. Paul, MN 55102

Dear Ms. DeSpiegelaere:

I am writing you today regarding the Urban Mass Transportation Administration (UMTA) Urban Rail Transit Projects Forecast Versus Actual Ridership and Cost Report which was discussed at our most recent Anoka County Regional Railroad Authority meeting. I would like to take this opportunity to share my observations of this report after speaking and gathering information from several reputable sources. As indicated in my attached statement, I do not take any pride in authorship, but do give credit to the many, many people who helped me put together this information.

Following the review and discussions of the UMTA Report, the Anoka County Regional Railroad Authority voted to complete the work that we have started, which includes the completion of the preliminary design phase, State Environmental Impact Statement, and the completion of a Federal Environmental Impact Statement.

Let me begin by saying that many of the preliminary projections by the various LRT agencies were done in the early 70's when gas prices were estimated to be $2-3 per gallon. Obviously that didn't happen. Also, LRT planning agencies developing these various forcasts were competing for UMTA funding, therefore projecting the most optimistic forecasts which would allow them to get UMTA funding.

Although the author was very aware of the climate in which these various preliminary forecasts were developed, the author chose to use this information as his comparison. I specifically find serious defects in this UMTA report which fall into three general categories

1. PROCESS: I do not believe that the UMTA report was based on an open, objective review of rail projects throughout the United States. The author's obvious negative bias towards light rail is apparent on the selective information that was gathered and printed. Rail authorities providing information were promised opportunities to review drafts, but this did not occur--as a matter of fact, requests were resisted by the author. After many complaints to UMTA, a limited number of excerpts from the author were provided.

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Anoka County Courthouse, Administration Office, 325 E. Main Street, Anoka, MN 55303

After considerable protest regarding the information, the author indicated that no amendments would be made. Drafts of the report were made available to groups opposed to rail and not to rail planners or operators, which leads one to believe that the author had little or no interest in an accurate or valid assessment of rail projects in the United States.

2. FACTUAL ERRORS: As a result of the author not sharing early report drafts with the rail authorities involved, we find a large number of factual errors. In my attached report I use the example of the Portland project. In contrast to what was reported in the UMTA report, the factual information is that the Portland light rail project was built on time and under budget, and the ridership exceeded final projections. Again, the author defined his parameters so narrowly that it guaranteed a negative finding when a comprehensive approach would have resulted in different conclusions.

3. STUDY TOO NARROWLY DEFINED: The UMTA report selects ridership, operating costs, and capital cost factors when projects were in their preliminary stages of review rather than using information that officials used to make their final decision whether to go ahead with the project or not. This UMTA report also didn't take into consideration whether or not the project is helping the community achieve the larger community goals that political, business, and citizen leadership had in mind when they chose to move forward with projects. Independent polls conducted in the Portland metropolitan area recently indicated a 90% approval rating of the project. Even with that extremely high acceptance at the local level, apparently UMTA is unimpressed.

As late as December 27, 1989, when the UMTA report was released to the Portland metropolitan press, UMTA had not provided a copy to the local rail authority and, once again, the report appears to be in the hands of anti-rail factions all over the United States.

I do believe that the report does provide a useful reminder to us all to avoid the sin of "compounded optimism". Our rail authorities and the metropolitan agencies have worked very hard to generate accurate information and forecasts in our metropolitan area, recognizing the ever-changing demographic and economic forces at work in the region.

I am available to discuss my statement on this report should you have any questions.

Sincerely,

Paul

Paul McCarron, Chair
Anoka County Regional Railroad Authority

PM/lp
Enclosure

MCCARRON'S STATEMENT ON 1989 UMTA REPORT

My observations have been compiled from a variety of sources throughout the United States, both in written and verbal form. I take no pride in authorship and really wish I could take the time and effort to give credit to everyone who has helped me put this information together, however to avoid the Joe Biden syndrome, I would like to say once again that there are many sources of the following information.

I find serious defects to the UMTA Report fall in three general categories:

Process - I do not believe the UMTA Report was based on an open objective review of rail projects throughout the United States. Apparently rail properties fully participated in terms of providing information requested, but promised opportunities to review drafts did not occur and, as a matter of fact, requests were resisted by the author. After many complaints to UMTA, a limited number of excerpts from the author were provided but the author indicated no amendments would be made. Drafts of the report were made available to groups opposed to rail and not to rail planners or operators. In one city, four months lapsed between a copy of the report being made available to anti rail forces and when copies of the report were officially transmitted to the rail authority which leads one to believe the author had little or no interest in an accurate and valid assessment of rail projects in the United States.

Factual Errors - As a result of the author not sharing early report drafts with the rail authorities involved, we find a large number of factual errors. Careful examination of the document is being made in many locations throughout the United States and are not available at this point in time because those people intend to do a scientific, methodical review. In some instances,

the author defined his parameters so narrowly that it guaranteed a negative finding when a comprehensive approach would have resulted in different conclusions.

Study Too Narrowly Defined - Whether by design or not, the report ("errors and all") is being used to question investments in rail transit. However, investments in Minnesota and other major transportation centers throughout the United States are being based on a long list of factors in addition to the ridership, operating costs, and capital cost factors UMTA chooses to use. Although I believe the Portland project performed quite well in the few areas UMTA reviewed, the real test of success of such a project is whether or not it is helping the community achieve the larger community goals that political, business and citizen leadership had in mind when they chose to move ahead with the projects. Those goals include integration of land use decisions and transportation investments, traffic congestion, environmental/quality of life issues, economic development and the ability to provide a service which is attractive for numerous trip purposes beyond normal work related commute. It is my judgment that the greater Portland community considers the light rail project a tremendous success in moving towards accomplishing their goals and is a source of community pride. Independent polls conducted in the Portland metropolitan area indicate a 90 percent approval rating of the project. Even with that extremely high acceptance at the local level, apparently UMTA is unimpressed.

As late as December 27, 1989 when the report was released to the Portland metropolitan press, UMTA had not provided a copy to the local rail authority and once again the report appears to be in the hands of anti rail factions all over the United States. While many arguments can be made about the methodology and conclusions in the UMTA Report, the simple facts are these (I will use Portland as the example):

Based on the 1980 funding agreement, signed and agreed to by UMTA, official construction costs were under budget. For reasons unknown, the author of the report chose to use earlier cost estimates made before planning was completed or approval was finalized. Portland light rail ridership is slightly above the 1985 projections when revised to reflect economic realities of the 1980s. Today the Portland light rail carries 16 percent of the transportation authority's total ridership. The same percentage was forecasted in 1980. Portland light rail operating costs have actually been lower than projections. Even the highly critical UMTA Report acknowledges that, though vehicle hours are 105 percent above those projected, operating cost per vehicle is 29.4 percent below projection. The report also acknowledges that overall operating costs are less than those projected in the Final Environmental Impact Statement but chooses to use other data for comparison.

More Factual Errors

Fact - Portland ridership exceeded projections revised in 1985 to reflect the economic realities of the decade...

The report claims that Portland ridership does not meet projections made in 1978, when the line was first proposed. That is true, but the report fails to note the effects of the worldwide recession in the 1980s on the local economy.

- Instead of the forecasted growth, the greater Portland metropolitan region lost 34,000 jobs, 25,000 of them in the central county between 1980 and 1983,

prompting changes in the regional population and employment forecasts used by banks, utilities, businesses and of course the rail authority.

- In 1985, the Portland rail authority revised its ridership projections based on new assumptions which reflected the economic realities of the 1980s.

- In 1978, ridership projections were for the rail authority's seventh year of service. The rail authority has just completed its third year of service and I believe that if it took UMTA two years to do the study, their information is even further out of sync (may be at one year).

Construction Costs

Fact: The Portland light rail project was built on time and under budget. The UMTA report compares apples and oranges. The report does not use final cost estimates, agreed to and signed by UMTA officials in UMTA's 1980 Full Funding Agreement with the Portland rail authority, rather the author chooses to use earlier construction cost estimates made before the final scope of the project had been determined.

What the author describes as "cost overruns" were actually fundamental changes in the project which UMTA agreed to fund. Those changes, made as part of the local decision to build light rail, including adding brick sidewalks and amenities in Old Town as well as extending the line more than half a mile in downtown Portland and in one other location.

CAPITAL COSTS

Projection 1978	Full Funding Agreement 1982	Experience 1986
$160 million for highway improvements and 14.4 mile line completed in 1984 ($259.2 million, 1987 dollars)	$328 million (built-in inflation factor of 12%/yr.) for highway - transit project.	$321 million highway transit: $214 million 15.1 mile light rail line. $107 million - 5 miles of highway improvements.

The nation's first joint highway transit project was completed under budget at $321 million. The 1982 Full Funding Agreement was for $328.5 million. The 1978 estimate of $161 million (in uninflated dollars) was intended for a 14.4-mile line which would open in 1984 after preliminary engineering. The project scope was changed to include an extended route and downtown improvements, as well as double tracking and beautification work.

OPERATING COSTS

	Projection 1978	Experience 1988
Per Year	$3.5 million in seventh year of service (inflates to $6 million in 1988 dollars)	$5.6 million (1988 dollars)

	Projection 1978	Experience 1988
Per Vehicle Hour	$81.86 (1988 dollars)	$57.77 (1988 dollars)

Operating costs are lower than expected, even though more than 100% additional vehicle hours were provided than anticipated. (The 1978 forecast was 45,900 annual vehicle hours; experience first year was 94,400).

RIDERSHIP

Projection 1978	Projection 1985	Experience 1987
42,500 for seventh year of service	19,270 after first year	19,900 average weekday

In the rapidly growing 70s, planners projected a light rail daily ridership of 42,500 for its seventh year of service. The recession of the early '80s caused a drop in the region's employment and, consequently, a drop in transit riders. Faced with these new realities in 1985, planners then projected 19,270 daily rides for the first year of service.

DEVELOPMENT

Projection	Experience
None made, but light rail was chosen out of seven alternatives because of potential to focus urban growth, encourage development, and reduce traffic congestion.	$693 million in development has been planned or constructed along the line since the decision to build the line.

AIR QUALITY

1973	1989
Downtown air was so dirty it violated federal standards one out of every three days.	Today, downtown air is clean and healthy 365 days a year.

COST EFFECTIVENESS

	Bus	Light Rail
Farebox Recovery Ratio	31%	51%

A Portland passenger's ride costs rail properties half as much as a bus passenger's. Cost per Portland passenger was 81 cents the first year; cost per bus passenger was $1.60.

Kathy Despiegelaere

Ramsey County Regional
Railroad Authority
Documentation

Ramsey County Regional Railroad Authority
316 Courthouse, St. Paul, Minnesota 55102 612-298-4145 / FAX 292-6689

John T. Finley, Chairman
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Duane W. McCarty, Vice Chairman
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Warren W. Schaber, Secretary
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Ruby Hunt, Treasurer
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District 7
Donald Salverda
District 2

AGENDA

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

PUBLIC SCOPING MEETING

Phase I Preliminary Engineering / Environmental Impact Statement Studies for Light Rail Transit in the Midway Corridor

March 27, 1990

10:30 A.M. - LARGE CONFERENCE ROOM - 316 COURT HOUSE

1. Procedures for Scoping Meeting - John T. Finley/Kathryn DeSpiegelaere

2. Regional Overview of Light Rail Transit - John T. Finley

3. History of the Midway Corridor - John T. Finley

4. Overview of State Environmental Review Process - Jim Tolaas

5. Public Participation - Jill Goski

6. Scoping Process - Dick Wolsfeld

7. Overview of Implementation Requirements - John T. Finley

8. Questions/Comments

9. Concluding Remarks - John T. Finley

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RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

Regional Railroad Authority Originating Department	Board Action Requested
K. DeSpiegelaere 3/19/90 Authorized Signature Date	Scoping Meetings for Midway Corridor DISCUSSION ONLY

Request Justification

See attached: 1) Memorandum from K. DeSpiegelaere
2) Agenda for scoping meetings
3) Affidavit of Notice of Public Meeting Publication

Budgeting and Accounting Ed Glaubitz 3/20/90
County Attorney [illegible]
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date March 27, 1990	Signature F. L. Glendenning	Date 3/20/90
Board Date	Signature	Date

RAMSEY COUNTY
Regional Railroad Authority

Room 316 Courthouse
15 W. Kellogg Blvd.
St. Paul, MN 55102
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Diane Ahrens
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District 6

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning

SUBJECT: Scoping Meetings for the Midway Corridor

DATE: March 19, 1990

The Ramsey County Regional Railroad Authority (RCRRA) has prepared for public review the Environmental Assessment Worksheet and Draft Scoping Decision Document on the Midway Corridor light rail transit project. These reports are required as part of the process of preparation of an Environmental Impact Statement for the Midway Corridor.

The RCRRA has scheduled two Scoping Meetings, conducted by Railroad Authority Commissioners, to receive oral public comments on these reports, which were distributed to Railroad Authority Commissioners at a previous meeting. They are:

Tuesday, March 27, 1990 at 10:30 AM at 316 Ramsey County Courthouse

Tuesday, March 27, 1990 at 7:00 PM at Concordia College.

An agenda for the meetings and an affidavit of publication of the meeting notice are attached.

The purpose of the reports is not to identify a specific choice for an alignment for LRT for the Midway Corridor, but to outline what will be studied. The reports examine major alternatives to be address in the Environmental Impact Statement, including one no-build and three potential build LRT alternatives:

1. Retain existing bus service without major improvements (no-build)

2. LRT on Burlington Northern/Pierce Butler Route/University of Minnesota Transitway

3. LRT on University Avenue

4. LRT on Interstate 94/Soo Line.

Combinations and variations of the three alternative LRT alignments will also be considered, as will alignments in downtown St. Paul.

The written comment record will remain open until April 4.

A work session will be held with you on April 17 to review the comments that are received.

Recommendation:

For your information.

KD/blk
Attachments

AGENDA

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

PUBLIC SCOPING MEETING

Phase I Preliminary Engineering / Environmental Impact Statement Studies for Light Rail Transit in the Midway Corridor

March 27, 1990

****

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6. Scoping Process - Dick Wolsfeld

7. Overview of Implementation Requirements - John T. Finley

8. Questions/Comments

9. Concluding Remarks - John T. Finley

SCOPING MEETING NOTICE

The Midway Corridor light rail transit study is following the State Environmental Impact Statement process. The Ramsey County Regional Railroad Authority (RCRRA) has prepared for public review the Environmental Assessment Worksheet (EAW) and Draft Scoping Decision Document which are requirements of this process. The purpose of these reports is not to identify a specific choice for an alignment for the Midway Corridor but to outline what will be studied. The reports have been issued in draft form so they can be reviewed by the public and various agencies before they are finalized. The reports have been circulated to organizations involved in the process and copies are available for review in all public libraries in Ramsey County.

In addition, the RCRRA will hold two Scoping Meetings for the Midway Corridor to receive oral public comments on the reports. The meetings are scheduled for:

Tuesday, March 27, 1990
10:30 a.m.
316 Ramsey County Courthouse
15 West Kellogg Boulevard

Tuesday, March 27, 1990
7:00 p.m.
Concordia College
Fine Arts Center/Buetow Music
Auditorium Choral Room
(Hamline Avenue between
Concordia and Marshall)

The EAW identifies issues relevant to the project by answering a series of standard questions developed by the Environmental Quality Board. The Draft Scoping Decision Document:

- identifies the LRT alignment alternatives to be studied in the Midway Corridor;
- identifies the issues to be addressed in the EIS; and
- describes how those issues will be addressed.

Major alternatives to be addressed in the EIS include one no-build option and three potential LRT alignments for the Midway Corridor between Oak and Washington in Minneapolis and downtown St. Paul:

Alternate 1 — No Build (retain existing bus service without major improvements)
Alternate 2 — LRT on Burlington Northern/Pierce Butler Route
Alternate 3 — LRT on University Avenue
Alternate 4 — LRT on Interstate 94

Variations and combinations of the three LRT alternatives will also be considered in the EIS. A decision on the alignment in the Midway Corridor is expected to be made in late 1990 by the Ramsey County Regional Railroad Authority after completion of the draft EIS.

The public comment period extends until April 4, 1990, and written comments should be submitted to Kathryn DeSpiegelaere, Director of LRT Planning, Ramsey County Regional Railroad Authority, 316 Courthouse, St. Paul, Minnesota 55102 (612-298-5420) by that date in order to be considered.

(Mar. 8)

◄◄◄◄◄ ST. PAUL LEGAL LEDGER ►►►►►

AFFIDAVIT OF PUBLICATION

State of Minnesota
County of Ramsey

Samuel E. Lewis, Jr., being duly sworn, on oath says that he is the publisher of the newspaper known as the Saint Paul Legal Ledger and has full knowledge of the facts which are stated below:

(A) The newspaper has complied with all of the requirements constituting qualification as a qualified newspaper, as provided by Minnesota Statute 331A.02, 331A.07, and other applicable laws, as amended.

(B) The printed Notice which is attached was cut from the columns of said newspaper and was printed and published once; it was published on Thursday, the 8th day of March, 1990; and printed below is a copy of the lower case alphabet from A to Z, both inclusive, which is hereby acknowledged as being the size and kind of type used in the composition and publication of said notice:

abcdefghijklmnopqrstuvwxyz

Samuel E. Lewis, Jr.

Subscribed and sworn to before me this 8th day of March, 1990

C. M. LEWIS
NOTARY PUBLIC—MINNESOTA
WASHINGTON COUNTY
My Comm Expires Mar 15, 1995

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(2) Maximum rate allowed by law for the above publication is $_____.

(3) Rate actually charged for the above publication is $_____.

Kathy Despiegelaere

Ramsey County Regional
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AGENDA

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY MEETING

Tuesday, March 27, 1990

****Immediately following the 10:30 A.M. Public Scoping Meeting - Large Conference Room - 316 - Court House**

* 1. Minutes of March 13, 1990 RRA Board Meeting.

2. Chairman's Comments

3. Survey on Light Rail Transit

4. Ridership Forecasts for Midway Corridor

* 5. Ratify Partial Payment No. 5 to B.R.W., Inc. in amount of $50,216.59.

*Action is requested.

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MINUTES

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

March 13, 1990

The regular meeting of the Ramsey County Regional Railroad Authority Board was held on Tuesday, March 13, 1990 at 10:45 A.M. in the Large Conference Room of 316 Court House.

MEMBERS PRESENT: Chairman John Finley
Commissioner Diane Ahrens (left during Item 4)
Commissioner Ruby Hunt
Commissioner Duane McCarty
Commissioner Hal Norgard
Commissioner Warren Schaber

MEMBERS ABSENT: Commissioner Donald Salverda

Also Present: James Van Houdt, Ed Glaubitz, Lee Aase, Karen Tero, Robert Clarkson, Hugh Faville, Jayne Rankin, Louis Porter II, James Walsh, Jill Goski, Jim Tolaas, Tom Foley, Kathryn DeSpiegelaere, Frances Glendenning, David MacMillan represented the County Attorney's Office

1. Minutes of the February 27, 1990 Board Meeting.

Commissioner McCarty asked that the minutes be expanded, to explain the reason for his "Nay" vote on Item 6, on Page 10 of the printed minutes.

"The consultant bid amounts for the bid were $211,200 for BRW, and $244,865 for Strgar-Roscoe-Fausch, Inc./DeLeuw, Cather & Company, and it is the recommendation of the staff group that SRF be selected even though they were not the lowest bidder, based on the reasons included in the documentation."

This will explain the "Nay" vote from Commissioner McCarty, as he agrees with the comments of Commissioner Salverda that both consultants are excellent firms, however, they were not the lowest bidder.

Commissioner McCarty moved the following recommendation, seconded by Commissioner Schaber.

The Ramsey County Regional Railroad Authority Board approves the minutes of the meeting held on Tuesday, February 27, 1990 as written with the addition of the bid information as shown.

Roll Call: Ayes - 5, Nays - 0
Motion adopted.

2. Chairman's Comments

Chairman Finley did not have any comments to present at this time.

3. UMTA Report on Urban Rail Transit Projects: Forecast vs. Actual Ridership and Costs.

Kathy DeSpiegelaere addressed the Board, at the last meeting we discussed the fact that a report by the Urban Mass Transportation Administration on Rail Projects had been discussed at the Anoka County Rail Authority Meeting, and has generated some interest in the Twin Cities. Attached to her cover memo is an article in "Minnesota Journal" about forecasting, costs and ridership for transit projects both heavy rail, light rail and downtown people mover. There is a summary, an analysis prepared by Dave Minister of the RTB on the UMTA Report, and last is an executive summary of the UMTA Report.

The UMTA Report analyzes ten different rail projects in nine different cities. The conclusion was that early in the process when the decision was made to build a rail project that the forecasts for ridership were overstated, and that the cost figures to construct it and operate it had been understated.

Chairman Finley distributed to the Board a letter which Paul McCarron from Anoka County wrote on this subject.

Chairman Finley said overall indication he received from this was that they were anti-rail project, and everyone is now taking shots at it. Paul McCarron has pointed out were promised opportunities to review drafts, but this did not occur. Commissioner McCarron did a good job on this.

Ms. DeSpiegelaere informed the Board in reviewing the report, she went back to another report that this Rail Authority had adopted and that is the goals for light rail transit. If you recall, this Board directed me to first of all find out what goals other light rail transit systems had, and secondly, to determine how well they had met those, and third, to propose goals for you so in doing that in relation to this UMTA report, it is important for you to recognize that cost and ridership are very important factors, but that many of these cities had additional goals in mind when they made the decision to build light rail. For example, in Portland, she found a statement in our goals report that said that the officials and citizenry wanted people to be aware that they were simply not making a selection of a particular mode, but rather they were to make a conscious action to shape the future and direction of the metropolitan area.

Ms. DeSpiegelaere thinks this Board should be aware that there are other factors in addition to the parameters that UMTA considers important that were factors in the cities' decision to construct rail systems. It is important to point out that there have been suggestions made in this report about how to improve on the forecasts and that engineers and planners in the Twin Cities area are taking those under advisement, and in fact, some of those suggestions have already been implemented, one of them for example is to have peer review panel of elements of light rail systems, and the RTB has done that in the past, and it is a requirement of the coordination plan that Legislature is composing

that there be a peer review. There have been some assumptions made in the past that were erronious in regard to what gasoline cost would be in the future, and the cost of operating automobiles that she thinks were the basis of some of the ridership figures that were over-estimated. There are things that we can learn from this report, and we are taking it to heart. But, she also thinks that things may be a little bit overstated in regard to some of these systems.

4. Ridership forecasting for the Midway Corridor

Ms. DeSpiegelaere wanted to make the Board aware that the ridership forecast for the Midway Corridor originally was planned to be done by private consultants, and the Metropolitan Council has now stepped forward and has indicated that they will be doing the regional forecast for all of the light rail systems on their model, so the impact of this is the savings to the amount we would have expended on the Midway Corridor contract in the amount of about $70,000.

Commissioner Norgard has some doubts about the Metropolitan Council taking this over. We deal with them with a number of things, and he is not so sure that the counties are happy with what they are doing in other fields, for example, waste to energy, also with the regional parks money. His personal opinion that it is a defeatist attitude, if we do not have a positive attitude about things, you cannot win, you have to be realistic. From the few things that he has dealt with them there can be a real conflict, and by their taking this over, he does not think this is such a good idea.

Commissioner Schaber asked if they have a right to do that, some of the data that has come out of Met Council is not too accurate, so why do we have to take this.

Ms.DeSpiegelaere deferred to James Tolaas who has been involved in some of the sessions with the Metropolitan Council, but before he responds, she thinks this has to be done on a regional basis rather than each County on its own, it would be far preferable for there to be one unit, not necessarily government, but it could be a consultant doing this on a regional basis. So, it would be very difficult for Ramsey County to say that we do not want this done by the Metropolitan Council if the other agencies such as the RTB and other counties may think this is a good idea.

Chairman Finley asked if BRW has contracts with other counties, don't they still affect the same goal of regional ridership forecasts, but it would be in the hands of one whom we have selected as our consultant.

James Tolaas addressed the Board, in response to Commissioner Schaber's question, it is important to remember that the data development, the technical information becomes the basis of the ridership projection, this will continue to be developed by the consultant in coordination with our staff, MTC, RTB, and Met Council staff in coordination in this project. It isn't the Met Council developing the input data, it just became apparent that the Metropolitan Council

has a computer and has the program capability and the expertise to run these off to generate the ridership forecast. The model itself was developed by Richard Pratt and Gordon Schultz who are world reknown experts on ridership forecasts, so the Met Council has not skewed that in any way. It is important that the input data accurately reflects our interest. He does not think how the data is input would be any different from what the consultant would have.

Chairman Finley said we have to keep in mind that before there was a Regional Rail Authority, the planning was being done by the Metropolitan Council, they were working with the City of St. Paul planning staff, there was one line of six in the metropolitan area that even touched our borders, and that was the Midway Corridor. They had made a conscious decision that light rail through the year 2010 would not be in any other corridor other than the Midway Corridor, in the East Metropolitan Area. They reaffirmed that as late as February of last year. When we have these things with the City and Met Council, we should keep in mind where we were in 1986 before we formed the Regional Rail Authority. That is what the East Metro Area have, now we have five or six lines in the metro area, we are part of the metropolitan area, we are not Anoka with one line or Brooklyn Center with one line, we are St. Paul, we are the East Metro Area with five or six lines, and the ridership is an integral part of the process to determine which alignments are in which category, A, B, C, or D. The ridership figures, because the Metropolitan Council had determined that unless the cost per rider is $4.00 or less, it does not cut the mustard in the next twenty years. They had made that determination before, and evidently they had determined that there could not be any in the East Metro Area because their transportation calls for $4.00, however, based upon the RTB plan which we have tremendous amount of input from at our Comprehensive Plan, we find that there are four lines in addition to the Midway Corridor that meet the Met Council criteria. Yet, in their plan, they were not there, so the concern that Commissioners Schaber and Norgard have expressed is very very valid as they made a conscious decision saying that our ridership forecast today that there should be no light rail in the East Metro Area. We have come a long way. We have to keep this in mind, we have to keep on top of it if we are going to do it.

Mr. Tolaas informed the Board that BRW is going to hire an outside expert, and we will have input into the selection of that consultant, that will provide some oversight and expertise as to whether the model and the assumptions made in the model process are correct. This will not be simply one ridership project, it will fine-tuned and we will have direct control over that. The thrust of this particular ridership forecast for Midway Corridor is to do riderships for each particular alignment under study at this time, and will provide really a planning tool to describe the difference between each particular line. It is not necessarily to justify the regional scenario.

Chairman Finley said when we are talking on these issues regarding St. Paul and the Metropolitan Council we should all keep in mind where we were when they had control of this, it is very important that people are aware that there was one corridor, but now we have four more corridors than we ever had before.

Commissioner Ahrens asked to be excused at this time, as she had to leave.

Commissioner Schaber said that the Chairman has said this very well, he did not want to get into that detail, but this was his concern that he is afraid if they have come in with a pre-disposition in the past as to which is the line that should be used, he is afraid if they are going to be running the numbers, again, we better have real input. He is very cynical and leery of this, once we have seen the pre-disposition in the past, and the pressure the City of St. Paul has put on.

Commissioner Hunt asked if we could approach this through the direction to our staff, as well as the staff of the consultants, to monitor this as they provide the information, and as it comes out, that the data will be put together. This would be one way of having some control.

Commissioner Schaber asked again why have they taken it over, is it because of the regional significance of it. Ms. DeSpiegelaere said the model is under their jurisdiction, they have the software to do it.

Mr. Tolaas added that BRW felt that the original consultant who was going to do this for them would not be timely, some of the computer run itself is costly.

Chairman Finley commented that several thousand dollars is a lot of money, and the overall effect it would be for the overall transportation plan.

Commissioner McCarty is not really comprehending what is going on right now, we have this exercise, this activity in the hands of our consultants and now it is going elsewhere. Why would we pull our team off of that when we have already budgeted for it. He does not understand why we should be changing courses. Why not have our consultants do it as planned, and have a check and a balance.

Ms. DeSpiegelaere replied that it was because of the sensitivity of the issue that it is on your agenda. Tomorrow she is meeting with Ferrol Robinson who is the consultant who works on our Comprehensive Plan, but also is working on contract to the Metropolitan Council to discuss some of these items. What she would suggest if the Board would like to have the staff bring back more information for you at the next Rail Authority Meeting, as to could BRW continue on the course that we had originally laid out, is that a reasonable thing for them to do, and what safeguards do you have that the concerns will be addressed.

Commissioner McCarty thinks it is critical that we have our consultant continue on the course that we have very carefully laid out, and worked so hard in the decision-making process, all that we have gone through, but to take it off piecemeal now, and accept someone else, he thinks this is bad form.

Mr. Tolaas feels it is incorrect to say that BRW is going to be pulled from this. We are still going to be spending $80,000 in developing the input information that will be the basis of the model itself. Metropolitan Council is taking the data developed by staff and putting it in a giant computer. The information is coded and when the Met Council actually begins their work with the coded information, the results should be the same. The interpretation of some of the information at the time of coding is something where biases could enter into judgment. He does not feel it is a serious risk. The assumptions that go in is fine,and once it gets to the computer it appears rather non-judgmental. There are many processes thereafter in looking at those results, and going back and adjusting parameters, again that is where you want to be very careful that biases do not enter into judgments. We have a direct control over that process at all times, he does not feel that Met Council can just take it, run it, and give us whatever they think they want to have us see. He does not feel we are relinquishing as much control as it might appear.

Commissioner McCarty is still concerned on the checking.

Commissioner Hunt, if we were going to go it alone, how would we duplicate all that work that the computer has set up at Met Council, it could be extremely costly. They evidently have someone that is nationally recognized, and they would have to be fair if they are competent.

Ms. DeSpiegelaere reiterated, she would suggest that staff get more information and put this together for the next meeting.

Chairman Finley said what we are concerned about is the input, and making sure that the input into it is done by us, and we want to make sure that there are adequate controls on the input.

Commissioner Schaber added, also the assumptions that the program is written under, and if we have an objection to the assumptions, as an example, could these be modified.

Mr. Tolaas replied, the program is fairly tightly structured, so that you can not enter a great deal of bias, and it includes so many parameters, it is technically difficult to explain it. It is not a Met Council program it is a national recognized program.

5. 6. LRT Cost Estimates and Legislation

Ms. DeSpiegelaere addressed the Board, this was the information that was provided by the RTB to the Legislators. Representative Carruthers in preparing legislation had asked for updated cost estimates for the Midway or Central Corridor, and this is the information the Board has before them. Also, it indicates what the needs would be for 1990-91 biennium for that corridor, and the 1992-1993 biennium and for other corridors in the Group B category.

Chairman Finley said both Items 5 and 6 could be discussed at this time.

Chairman Finley informed the Board that the Transportation Committee in the House had a bill before it last week, the Carruthers Bill which called for $100 million for bonding for the Midway Corridor, $10 million for this biennium, $90 million, for the biennium commencing next July 1. After hours and hours of meeting, the bill passed with the $10 million, but not the $90 million. In addition, the RTB is going to seek their 1¢ general sales tax authorization which was our Number 1 source of funding for light rail.

One of the discussions was on the bonding bill, because it is the Midway Corridor and would be used for possibly engineering and final design. The $3.4 million which was already allocated to Mn/DOT for the balance of this year may have to go in the general scheme of things. From our standpoint our request for next year was going to be concentrated on the Midway Corridor for our share of that $3.4 million was for vehicles to be used by Hennepin and Ramsey County.

Chairman Finley had talked to Senator Krueger's Office, he is on the Senate Transportation Committee, and they are going to try to get a hearing on this for Thursday. Carruthers has done a super job in the transportation area, he is very astute and had a good feel for what was needed to professionally present this.

Commissioner McCarty asked for an explanation of Table 2. Ms. DeSpiegelaere explained that the Central Corridor would be constructed according to the RTB Plan entirely with State and Regional funds, without local funds. The B Group Corridors would have a 10% local match. Other sources are property tax levy and the other would be private funds from a benefit assessment district, or if a corridor is successful in Federal Funds, that would reduce the local share.

The Board then discussed the $10 million, $90 million, the consensus was that these should be looked at in the biennium in which they are at. The $90 million is not needed this year.

Chairman Finley emphasized that the legislation specifically calls for the Midway Corridor, between the two downtowns, this does not include the downtowns. In regard to the $120 million for the tunnel in downtown Minneapolis, they are not getting into that hassle. There is a concern if the $3.4 million gets lost in the Governor's balancing, and there would not be monies available.

There being no further matters to come before this Board, Chairman Finley declared the meeting adjourned.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

2

Chairman Finley
Originating Department

John T. Finley — 3/21/90
Authorized Signature — Date

Board Action Requested

CHAIRMAN'S COMMENTS

Request Justification

Budgeting and Accounting
County Attorney
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time
Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date March 27, 1990 Board Date	T. L. Glindemann Signature	Date 3/21/90 Date

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

3

Regional Railroad Authority Originating Department	Board Action Requested
K. DeSpiegelaere 3/19/90 Authorized Signature Date	LRT Survey DISCUSSION ONLY

Request Justification

See attached: 1) Memorandum from K. DeSpiegelaere
2) Survey results

Budgeting and Accounting Ed Blaukat 3/20/90	Date / Time
County Attorney Dan McNeilus	Received By
Risk Manager	
Data Processing	
Previous Action taken on Request	

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date	Signature	Date
March 27, 1990	J. L Glunderson	3/20/90
Board Date	Signature	Date

RAMSEY COUNTY
Regional Railroad Authority

Room 316 Courthouse
15 W. Kellogg Blvd.
St. Paul, MN 55102
Phone 298-4145

John T. Finley, Chairman
District 3
Diane Ahrens
District 4
Ruby Hunt
District 5
Duane W. McCarty
District 1
Hal Norgard
District 7
Donald E. Salverda
District 2
Warren W. Schaber
District 6

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere KD

SUBJECT: LRT Survey

DATE: March 19, 1990

The Regional Transit Board has had Minnesota Opinion Research conduct a survey, "Public Attitudes Regarding Metro Public Transportation." I have attached a copy of the summary and selected detailed information relating to light rail transit from the survey. A copy of the complete survey may be obtained from me.

Recommendation:

For your information.

KD/blk
Attachment

INTRODUCTION

The Regional Transit Board commissioned Minnesota Opinion Research, Inc. to conduct a public opinion poll to explore transportation issues, including light rail transit, perceptions of existing services, and awareness of Metro Mobility.

A total of 503 telephone interviews with adults (age 18 or older) were conducted in the seven-county metro area during the period of February 9 - 15. Household telephone numbers were selected randomly, and within each household, a respondent was randomly selected using the "last birthday" method.

The survey data base was adjusted to match known age and sex distributions in the metro area.

Survey results on any particular question are projectible to the general population but are subject to sampling error of about four percentage points. Results are also subject to other potential errors, such as variations in respondent understanding, that are inherent in any survey research.

2
MORI
RESEARCH

SUMMARY OF FINDINGS

1. **DEPENDENCE ON CARS:** This survey demonstrates the current dependence of the metro population on automobiles, as about nine in ten adults report owning at least one vehicle, and about nine in ten say they use automobiles to go to work or school. Even two-thirds of those who walk or take a bus say they also go by car.

Only 12 percent report that they ride the bus, and they live primarily in Minneapolis or St. Paul.

2. **PUBLIC TRANSPORTATION NEEDS:** About two-thirds of Twin Cities metro area adults agree that their "public transportation needs are being met," while about one-fourth say they are not. Those living in the 2nd and 3rd ring suburbs are least satisfied as a group with current public transportation.

However, when asked in an open-ended manner what they would change about existing public transportation, almost half of those interviewed could think of ways to improve on the bus system, particularly by adding lines and expanding existing service (particularly to outer suburbs), and making the service more convenient in general.

Another significant group of responses, mentioned by one-fourth of those surveyed, dealt with various aspects of overcrowding on freeways.

3. **LIGHT RAIL TRANSIT:** Light rail transit appears to be an appealing if quite tentative concept to metro residents.

More than half (53%) of those interviewed chose light rail transit over four other options suggested as ways of handling growing traffic in the Twin Cities area. This was more than twice the proportion choosing expanding the bus service (22%), and about four times the proportion choosing widening existing freeways (14%).

While about half of those interviewed said they were at least "somewhat knowledgeable" about light rail transit, only six percent said they were "very knowledgeable" about LRT.

As to why people would use LRT, respondents split about equally between "individual" and "social" benefits when given four choices. That is, about equal numbers chose "More economical than driving and parking (35%), or "get to work or school quickly" (17%), compared to "would ease traffic congestion (31%), or "to protect the environment" (14%).

It is not clear that perceived social benefits would be

sufficient to attract large numbers of riders in the absence of perceived personal benefits. In particular, "avoiding traffic congestion while getting to your destination economically and quickly" would probably have greater appeal than "relieving traffic congestion." The current bus system relieves traffic congestion, after all.

Another question asked respondents to choose the most important among four benefits that would accrue from LRT. About half chose "relieve traffic congestion," which was more than twice as many choosing the environmental soundness of LRT. This is logical, since the environmental benefits would seem to require that the LRT in fact relieves traffic congestion.

Another set of questions asked respondents to rate the desirability of various characteristics of LRT. It is clear that respondents expect that this system should provide convenience to where one starts and where one ends up, as well as reasonable speed:

	% VERY/SOMEWHAT IMPORTANT
It is convenient to your destination	92
It allows you to avoid traffic jams	91
There is convenient access from your home	89
Get to your destination as fast as or faster than a car	87
It is accessible from bus routes that serve your area	81
It is convenient to "park and ride" lots	81
The cost is the same as riding the bus	80

Yet another set of questions rating the desirability of various characteristics shows that most metro adults believe that while LRT should be faster than existing busses, but they do not have as strong feelings yet about where the system should be located:

	% STRONGLY/SOMEWHAT AGREE
Light rail transit should be faster than the bus	90%
Light rail transit should be separated from main traffic areas	69%
Light rail transit should go underground where possible	65%
Light rail transit should be built along the freeways	68%

When presented with several choices, respondents strongly favored paying for LRT with the fiscal disparities tax. This result is suggestive but should be viewed with caution, given the complexity of the fiscal disaparities concept.

4. **EXISTING BUS SERVICE:** About half of the respondents rate existing bus service in their community as excellent or good, and only 11% feel that the existing service is poor. However, a significant proportion (one-fifth) have no opinion about the bus service.

The satisfaction rate is higher among those who ride the bus service. Those who don't, especially those in the outer suburbs, are more critical.

Awareness of public transportation alternatives to the MTC is not especially high, as only 37% could think of other services, and most of those mentioned taxi cabs.

About 8 in 10 respondents said they know whom to call for bus information. (Awareness is higher among those most likely to ride a bus, including residents of Minneapolis, St. Paul and the 1st ring suburbs, and lower income respondents).

Almost half of those surveyed say they have called the MTC, Cityline or The Connection to get bus information. Satisfaction with the phone service among callers is high, as nine out of ten who had called said they were satisfied with the way their request was handled.

5. **PERSONS WITH DISABILITIES:** Virtually everyone (95%) agrees that it is very or somewhat important that disabled persons are able to use the public bus system.

Three-fourths of metro adults say they are aware of the Metro Mobility program when asked on an aided basis:

6. **REGIONAL TRANSIT BOARD AWARENESS:** Less than one tenth of the respondents said they had heard of the RTB. Among those who had, most (eight in ten) could identify it as the Regional Transit Board.

Among all respondents, a plurality identified the Regional Transit Board as a government agency. However, almost as many could not choose between it being a government or private body.

A plurality (42%) of respondents know that the Regional Transit Board set transit policy for the Metro area.

Awareness of officials associated with the RTB and light rail transit is considerably below that of Gov. Rudy Perpich, probably the state's best known official.

DRAFT
5
MORI

DETAILED FINDINGS

6
MORI RESEARCH

TRANSPORTATION PATTERNS

CAR OWNERSHIP:

Twin Cities residents overwhelmingly rely on automobiles for daily transportation.

Almost nine in ten Twin City area residents report owning or leasing a car, truck or van. The level of ownership is only somewhat lower than average in the central cities, among those with lower incomes, and women.

OWN OR LEASE VEHICLE:

	%
Total:	88
Mpls residents	81
St. Paul	79
1st Ring	88
2nd Ring	93
3rd Ring	93
<$20k	76
$20-$39k	89
$40k+	97
Male	93
Female	83

MORI RESEARCH

CHANGES IN EXISTING PUBLIC TRANSPORTATION:

When asked in an open-ended manner what they would change about existing public transportation, about half of survey respondents could think of various problems with the bus lines. (46%). Smaller numbers mentioned changes in freeways (26%) and adding light rail transit (8%).

The most frequent bus service improvements mentioned include additional bus services such as bus shelters, more frequent buses on existing routes and additional routes, particularly to 2nd and 3rd ring suburbs.

Problems with freeways included overcrowding, changes in road systems and road design (addition of ramps in various locations, for example) and expansion of roads - more lanes, extended freeways.

Remaining answers form an "other" category consisting primarily of "Don't use public transportation" and "Wouldn't change anything".

QUESTION: We have discussed several alternative solutions to growing traffic in the Twin Cities metro area. If you could change one thing about existing public transportation, what would it be? (Multiple answers accepted)

Buses	**46% (net)**
Additional bus services (general)	18
Bus frequency	16
More suburban bus service	10
Bus efficiency	5
Bus improvements	4
More express buses	2
Lower bus fare	1
Better elderly/handicapped access	1
Bus information	1
Roads (Freeways)	**26% (net)**
Too many cars	8
Road system/design	7
Expand roads	7
Driving rule concerns	4
More traffic flow lights, signs	2
More carpool and bus lanes	1
Light rail transit (positive)	**8%**
Other	**24% (net)**
Don't use public trans.	11
Wouldn't change anything	5
Pollution (general)	2
Other	7

FUTURE ALTERNATIVE TRANSPORTATION

When asked in a closed-ended manner which alternatives would be the best way to handle growing traffic, a majority chose light rail transit. This was more than twice the proportion who said to expand the bus service, and about four times the proportion who said to widen existing freeways.

QUESTION: I'd like to read you a list of alternative ways to handle the growing traffic in the Twin Cities area as the population increases. In you opinion, which one is the best alternative?

	%
Building light rail transit	53
Expanding bus service	22
Widening existing freeways	14
More lanes for buses and carpools	7
Some other way	1
Don't know/refused	3

Those who say their public transportation needs are not being met (24% of respondents) are somewhat more likely than average to choose light rail on this question (62%).

MORI RESEARCH

LIGHT RAIL TRANSIT

Over half of adults in the Twin Cities metro area say they are at least somewhat knowledgeable about light rail transit. However, only a much smaller proportion (6%) claim to be very knowledgeable, and almost half are not very or not at all knowledgeable.

QUESTION: Recently there has been quite a bit of news about light rail transit. How knowledgeable are you about light rail transit? Would you say you are:

	%
Very knowledgeable	6
Somewhat knowledgeable	48
Not very knowledgeable	34
Not at all knowledgeable	12

Men are more likely than women to say they are at least somewhat knowledgeable about light rail transit (64% - 44%).

Also claiming a higher level of knowledge of light rail transit are respondents whose public transportation needs are not being met, those who feel light rail transit is the best alternative to growing traffic.

Differences among other demographic groups on this question are not substantial.

Characteristics of Respondents at Least Somewhat Knowledgeable About Light Rail Transit

	%
Total	54
LRT is best alternative	65
Male	64
Public transportation needs not met	63
1st ring residents	59
Minneapolis residents	58
Work/school in Minneapolis	57
Work/school in St. Paul	57
Commute more than 10 miles	57

REASONS FOR TAKING LIGHT RAIL:

When asked which of four choices would be the most important reason for taking light rail, respondents divided about equally between "personal" and "social" advantages. The most-named reason was that riding on light rail would be cheaper than driving and parking. Almost as many chose easing traffic congestion.

Different demographic groups did not differ substantially on this question.

QUESTION: Of the following, which is the most important reason why people would take light rail transit?

	%
More economical than driving/parking	35
Ease traffic congestion	31
Get to work/school quickly	17
Protect the environment	14
Don't know/refused	3

MORI RESEARCH

BENEFITS OF LIGHT RAIL:

When asked to choose among four possible benefits that would accrue from building a light rail transit system, almost half said relieving traffic congestion. A fifth said that environmental benefits are most important.

QUESTION: If the decision is made to build a light rail transit system, in your opinion, which <u>one</u> of the following would be the <u>most</u> important benefit?

	%
Relieve traffic congestion	47
Environmentally sound	21
Cost less than a new highway	17
Runs in all weather conditions	10
None	3
Don't know/refused	2

DESIRED CHARACTERISTICS OF LRT:

Respondents rated the importance individually of several potential characteristics of a light rail transit system in their decision to use it.

Being "convenient to your destination," allowing "you to avoid traffic jams," "convenient access from your home," and "get to your destination as fast or faster than a car" were each rated as very or somewhat important by about nine in ten respondents.

QUESTION: How important would the following characteristics of a light rail system be in your decision to ride or not ride light rail transit?

	% VERY/SOMEWHAT IMPORTANT
It is convenient to your destination	92
It allows you to avoid traffic jams	91
There is convenient access from your home	89
Get to your destination as fast as or faster than a car	87
It is accessible from bus routes that serve your area	81
It is convenient to "park and ride" lots	81
The cost is the same as riding the bus	80

The rated importance of these statements does not vary substantially among different demographic groups.

However, getting "to your destination as fast as or faster than a car" is of somewhat greater relative importance for those most likely to drive cars to work or school. This includes those with higher incomes (67% very important, compared to 59% very important among all respondents), those working in the second or third ring suburbs (66%), and young adults (64%).

Being "accessible from bus routes that serve your area" (51% very important among all respondents) is of greater than average importance to those with less than $20,000 income (63% very important) and women (56%).

Similarly, costing "the same as riding the bus" (44% very important among all respondents) is a higher than average priority to those more likely to use a bus, such as those with less than $20,000 income (59% very important), women (51%), and Minneapolis residents (54%).

Being "convenient to 'park and ride' lots (48% very important among all respondents) is a higher priority for those from the second ring suburbs (56%) and those with $40,000+ incomes (54%).

RESEARCH
MORI

Reactions to other possible characteristics of light rail were measured by asking how strongly respondents agreed with each characterization:

QUESTION: Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statements:

	% STRONGLY/SOMEWHAT AGREE
Light rail transit should be faster than the bus	90%
Light rail transit should be separated from main traffic areas	69%
Light rail transit should go underground where possible	65%
Light rail transit should be built along the freeways	68%

Being at least as fast as buses is a clear expectation, as six in ten respondents strongly agree with that description. (Only 10 percent disagree with this statement).

Putting light rail underground is more important to those in Minneapolis and St. Paul (41% strongly agree) than for suburban residents (26% strongly agree).

Building light rail along the freeways is of somewhat greater concern for second and third ring suburban residents (25% very agree) than for other respondents (15%).

PAYING FOR LIGHT RAIL TRANSIT:

Using a percentage of the fiscal disparities tax was by far the most attractive of several options presented to respondents. This result should be interpreted with caution, however, given the inherent complexity of the fiscal disparities concept.

QUESTION: Of the following, which one would be the best way to pay for a light rail transit system?

	%
Percentage of fiscal disparities tax	52
Metro sales tax	12
Metro gas tax	12
Metro property tax	5
Metro payroll tax	4
Other	5
None	5
Don't know/refused	5

(Note: Respondents were read the following description of fiscal disparities tax: "Fiscal disparities is a tax base sharing program by which all metro area local government entities share in the benefits of regional commercial industrial development.")

REGIONAL TRANSIT BOARD AWARENESS

Less than one tenth of the respondents said they had heard of the RTB. Among those who had, most (eight in ten) could identify it as the Regional Transit Board.

Among all respondents, a plurality identified the Regional Transit Board as a government agency. However, almost as many could not choose between it being a government or private body.

QUESTION: As far as you know, is the Regional Transit Board a private company or a government agency?

	%
A government agency	43
A private company	19
Don't know/refused	38

The majority of the respondents know that the Regional Transit Board set transit policy for the Metro area.

QUESTION: As far as you know, does the Regional Transit Board set transit policy for the metro area, state-wide, or the five-state region?

	%
Metro area	42
State-wide	12
Five-state region	11
Don't know/refused	35

MORI RESEARCH

Awareness of officials associated with the RTB and light rail transit is considerably below that of Gov. Rudy Perpich, probably the state's best known official. The awareness figures for officials other than Perpich should be discounted a bit due to the 12% claiming awareness of "Sally Stevenson," a made-up name included to test for false claiming of awareness.

QUESTION: I would like you to tell me if you are aware or not aware of the following names:

Name Awareness

	%
Rudy Perpich	99
Steve Novak	31
John Derus	26
Michael Ehrlichman	25
Steve Keefe	12
"Sally Stevenson"	12

RESEARCH
MORI

Ramsey County Regional Railroad Authority
316 Courthouse, St. Paul, Minnesota 55102 612-298-4145 / FAX 292-6689

John T. Finley, Chairman
District 3
Duane W. McCarty, Vice Chairman
District 1
Warren W. Schaber, Secretary
District 6
Ruby Hunt, Treasurer
District 5
Diane Ahrens
District 4
Hal Norgard
District 7
Donald Salverda
District 2

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning KD

SUBJECT: Ridership Forecasts for Midway Corridor

DATE: March 19, 1990

At the March 13 meeting of Ramsey County Regional Railroad Authority (RCRRA), you requested additional information on the approach to ridership forecasting for the Midway Corridor and the potential change in services to be provided by the Metropolitan Council and BRW.

Background

Transit patronage forecasts are an important factor in deciding whether and where to construct transit systems. Patronage influences the cost effectiveness of LRT systems.

In response to a request by Ramsey County Regional Railroad Authority soliciting issues to be addressed in preliminary engineering for the Midway Corridor, Mayor George Latimer responded in 1989, "Of particular interest to the City are accurate patronage projections and cost figures for transit in the Midway Corridor after introduction of any one given alternative LRT alignment. Much debate during the last study centered around whether the patronage figures were accurate estimates. It is critical, if we are to again compare alternative alignments, that the metropolitan travel model at the minimum be used to model patronage."

The Midway Corridor preliminary engineering study being conducted by Ramsey County Regional Railroad Authority (RCRRA) with BRW will yield patronage forecasts to compare the Midway Corridor LRT patronage to that of other corridors in the region and to compare alternative alignments within the Midway Corridor.

The proposal made by BRW in 1989 for patronage forecasts for engineering for the Midway Corridor relied on the regional forecasting model.

Printed on Recycled Paper

Regional Travel Forecasting

The Metropolitan Council has responsibility for transit forecasts within the metropolitan area. The transit forecasts are one element of the travel mode choice model, which predicts whether trips will be made by auto or some other means.

In 1989, in order to improve the accuracy of LRT patronage forecasts, Hennepin County Regional Railroad Authority contracted with BRW and its subcontractors, Barton Aschman, Comsis, and Richard Pratt, to develop patronage forecasts for its LRT corridors. Richard Pratt had been hired by the Regional Transit Board in 1988 to prepare LRT patronage forecasts for the Midway Corridor at a less detailed level than is required for the current work effort. Three elements of the current process to develop patronage forecasts that have been completed are:

1. A survey of existing bus riders.

2. A survey of non-bus riders.

3. Development of a model to predict ridership of LRT in 2010.

The survey of existing bus riders was funded in part by the Regional Transit Board, which insisted that it include riders in the entire metropolitan area, not just Hennepin County. The survey of non-bus riders was done in Hennepin County but the results can be extrapolated to other areas. The development of the forecasting model has not proceeded on schedule, but has now been completed by Richard Pratt and Gordon Schultz of Comsis.

Forecast Elements

Some of the steps in generating patronage forecasts for LRT and the responsible parties are:

Step	Responsible Party
1. Develop assumptions	
o Land use (population employment, households)	Metropolitan Council with City concurrence
o Regional travel characteristics (parking costs, highway speeds, transit fares, transfer policy, auto operating costs, inflation rate)	Metropolitan Council/Regional Transit Board/Metropolitan Transit Commission/Regional Railroad Authorities/consultants

2. Set parameters for forecasts	
o Corridor travel characteristics (feeder bus service, alignments, frequency of transit service, location of stops, park/ride availability)	Affected Regional Railroad Authority/affected City/Regional Transit Board/Metropolitan Transit Commission/consultants/ Metropolitan Council
o Other corridors	Affected Regional Railroad Authority/affected City/Regional Transit Board/Metropolitan Transit Commission/consultants/ Metropolitan Council
3. Develop model to predict patronage	Consultant, under contract to Hennepin County Regional Railroad Authority, with involvement of other agencies
4. Code data for specific LRT alignments/feeder bus alternatives	Consultant to respective Regional Railroad Authorities with involvement of Metropolitan Council
5. Operate computer to produce forecasts	Metropolitan Council
6. Review information generated from computer runs	Metropolitan Council/Regional Transit Board/Metropolitan Transit Commission/Regional Railroad Authorities/consultants
7. Refinements to model	Metropolitan Council/Regional Transit Board/Metropolitan Transit Commission/Regional Railroad Authorities/consultants
8. Complete final forecasts	Metropolitan Council
9. Review forecasts	Metropolitan Council/Regional Transit Board/Metropolitan Transit Commission/Regional Railroad Authorities/consultants

Change in Approach

In early 1990, Nacho Diaz of the Metropolitan Council indicated that his agency would take on the responsibility for operating the computer to produce the LRT patronage forecasts. So rather than having BRW or its subcontractor perform the computer work, the Metropolitan Council will perform that technical, operational work, not only for the Midway Corridor, but for other LRT corridors throughout the region. The estimated savings to RCRRA for the Midway Corridor forecast is $70,000.

If the Metropolitan Council does not perform this work, BRW does have the capability to do it. No delay in the time schedule would be required for BRW to do that work if that decision is made within the next two weeks.

Influences on Forecasts

Generating patronage forecasts for LRT is a highly technical and specialized task. Although there are many opportunities for errors, the most influential area is that of assumptions. It is particularly critical that accurate assumptions are made for:

1. Feeder bus and level of service for LRT for each alignment within a corridor.

2. Land use, parking costs, and other regional factors.

3. Highway system.

4. Existing conditions for bus service, such as speed, ridership, and vehicle miles of travel.

Recommendations

The primary safeguard Ramsey County Regional Railroad Authority has over the patronage forecasting outcome is involvement in determining the assumptions. As a result of meetings held within the last week to provide you with additional information, I recommend:

1. RCRRA staff and consultants meet with Metropolitan Council and St. Paul staff to review Metropolitan Council assumptions for employment, population, and number of households.

2. RCRRA staff and consultants continue meetings with Metropolitan Council, Regional Transit Board, Metropolitan Transit Commission and St. Paul staff to develop feeder bus and other assumptions for alignments within the Midway Corridor.

3. Because of the complexity of forecasting transit patronage, RCRRA staff should retain an independent consultant familiar with forecasting to review Metropolitan Council work and should have continuing contact with consultants familiar with forecasting to advise RCRRA staff on this matter. It is essential to make sure that the critical questions are being asked at the appropriate time. A critique of work after it is completed is less effective than frequent, early involvement in assumptions.

KD/blk

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

5

Regional Railroad Authority
Originating Department

K. DeSpiegelaere 3/6/90
Authorized Signature Date

Board Action Requested

Ratify Partial Payment No. 5 to BRW, Inc. in the amount of $50,216.59.

***Action is required.**

Request Justification

Ramsey County Regional Railroad Authority has contracted the professional services of BRW, Inc. for the purposes of conducting Phase I Preliminary Engineering/ Environmental Impact Statement Studies for the Midway Corridor. Contract No. RCRRA-89-003 governs the performance of services and terms of payment. Payment in the amount of $50,216.59 for the period ending January 31, 1990, has been issued in accordance with contract provisions and Rail Authority Resolution No. R-89-70 . Payment documentation is being submitted for ratification in compliance with the latter. Attachments are:

1) Proposed resolution ratifying payment
2) Accounts Payable form and Partial Payment No. 5
3) BRW, Inc. Invoice No. 57083 and attachments

Budgeting and Accounting Ed Glawitz 3/20/90
County Attorney Barbara Gill
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date: March 27, 1990 (Board Date)	F. L. Glendinning (Signature)	Date: 3/20/90

RAMSEY COUNTY Regional Railroad Authority

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, The Ramsey County Regional Railroad Authority has contracted for the professional services of BRW, Inc. for the purpose of conducting Phase I Preliminary Engineering/Environmental Impact Statement studies for the Midway Corridor; and

WHEREAS, Ramsey County Regional Railroad Authority Agreement Number RCRRA-89-003, and the First Amendment thereto, govern the performance of services of and terms of payment to BRW, Inc.; and

WHEREAS, BRW, Inc. has satisfactorily completed portions of the work identified in the referenced agreements, and provided detailed invoice documentation for services and costs accrued through January 31, 1990; and

WHEREAS, To ensure timely payment for services rendered in accordance with Agreement No. RCRRA 89-003, the Ramsey County Regional Railroad Authority authorized (Resolution R89-70) the Direction of Light Rail Transit Planning to process payments to BRW, Inc. for work completed and invoiced in accordance with the agreement; and

WHEREAS, Resolution R89-70 requires submittal of invoice and payment documentation to the Rail Authority for ratification at the next scheduled meeting following staff approval of invoice documentation; Now, Therefore, Be It

WHEREAS, BRW, Inc. Invoice No. 57083, Partial Payment No. 5, and attachments thereto, provide the correct documentation of payments due BRW, Inc. through January 31, 1990; Now, Therefore, Be It

RESOLVED, Payment to BRW, Inc. in the amount of $50,216.59 for Ramsey County Regional Railroad Authority's share of services rendered through January 31, 1990 is hereby ratified.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

ACCOUNTS PAYABLE

(1) CHARGE TO: Dept. **Regional Railroad Authority** Date **March 6, 1990**

(2) Appropriation Item **Consulting Services**

For Accounting Use Only

Claim #		Date Paid	
CA	PA 800	1	

1-2 3-7 8 9-14

WARRANT NO.

(3) Code

RFC	Fund	Dept	Object	Amount
	591	59103	020102	$50,216.59

15-17 18-20 21-25 26-31 32-41

$50,216.59
Total

(4) PAY TO: (2)
8 First Name & Initial 9-22
BRW, Inc.
Last Name or Firm Name 23-52
Thresher Square
53-76
(3) 700 Third Street South
8 Address 9-32
Minneapolis, MN 55415
City State 33-54 Zip Code 55-59

Soc Sec No
OR
Fed Tax ID 60-71

(5) On Check Stub Put: (4) Partial Pymt. 5; Invoice No. 57083; Phase I PE/EIS Studies for Midway Corridor
9-60
(5) Agreement PA 800; Acct. 59103-020102; 1/31/90
9-60

For Risk Management Use Only (6) 8 9-24
Last Name First Name

(6) SEND TO: Use only if Payee and/or Address differs from Item 4

Address

(7) Attach to the back of this form: Original Invoices, Receipts, Certified Claims or other documents.

Preparer's Signature: /s/ Bette Kurysh

(8) I declare that the above materials and/or services have been received, are for Ramsey County, allowed by law, and approved for payment.

Authorized Signature: L. Vanspiegelaere

NOTE: The vendor's Social Security Number will be used to report taxable income to the Internal Revenue Service. This data is considered private under Minnesota Statutes 15.165, but we will not be able to process this claim without it.

BA-354 (02 - 89)

FOR INSTRUCTIONS SEE ACCOUNTING SYSTEM PROCEDURES MANUAL

2

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

PARTIAL PAYMENT NO. 5

PREPARED BY:

ENTERED BY:

PROJECT: PHASE I PE/EIS STUDIES FOR THE MIDWAY CORRIDOR
CONTRACT AGREEMENT NUMBER RCRRA-89-003

PROJECT COST CENTER: 59103 AGREEMENT NO: PA 800

DATE: 05 MAR 90

RAMSEY COUNTY REGIONAL
RAILROAD AUTHORITY
316 COURTHOUSE
ST.PAUL, MN 55102

CONTRACTOR: BRW, INC.
THRESHER SQUARE
700 THIRD STREET SOUTH
MINNEAPOLIS, MN 55415

ACCOUNT NUMBER 59103-020102	PERCENT COMPLETED	10.7%
TOTAL VALUE OF WORK CERTIFIED - 31 JAN 90		$149,776.98
LESS 5% RETAINAGE		$7,488.86
AMOUNT DUE		$142,288.12
LESS PREVIOUSLY APPROVED PAYMENTS:		$85,409.43
ALLOWABLE PAYMENT FOR THIS PARTIAL:		$56,878.69

THIS IS TO CERTIFY THAT I HAVE EXAMINED THE WORK AND DETAIL OF THE INVOICE, AND FIND THE TASKS LISTED HAVE BEEN COMPLETED IN ACCORDANCE WITH AGREEMENT REQUIREMENTS.

3/14/90 K J Spiegelaere
DATE DIRECTOR, RC REGIONAL RAILROAD PLANNING

3/6/90 David M. Ulamen
DATE CONSULTANT

PREVIOUS PARTIALS:	RCRRA SHARE	HCRRA SHARE	TOTAL
PARTIAL PAYMENT NO. 1	$22,793.28	$2,960.20	$25,753.48
PARTIAL PAYMENT NO. 2	$16,204.16	$2,162.13	$18,366.29
PARTIAL PAYMENT NO. 3	$11,462.24	$1,450.12	$12,912.36
PARTIAL PAYMENT NO. 4	$25,132.71	$3,244.59	$28,377.30
PARTIAL PAYMENT NO. 5	$50,216.59	$6,662.10	$56,878.69
PARTIAL PAYMENT NO. 6	$0.00	$0.00	$0.00
PARTIAL PAYMENT NO. 7	$0.00	$0.00	$0.00
PARTIAL PAYMENT NO. 8	$0.00	$0.00	$0.00
PARTIAL PAYMENT NO. 9	$0.00	$0.00	$0.00
PARTIAL PAYMENT TOTAL:	$125,808.98	$16,479.14	$142,288.12

SUMMARY OF AGREEMENT

ORIGINAL AGREEMENT AMOUNT:	$1,398,039.00
LESS TOTAL PARTIAL PAYMENTS (INCLUDING THIS PAYMENT)	$142,288.12
AMOUNT REMAINING ON AGREEMENT	$1,255,750.88

BRW

MINNEAPOLIS • DENVER • PHOENIX • TUCSON • ST. PETERSBURG

INVOICE
57083

Mr. James Tolaas
Ramsey County RRA
316 Courthouse
15 West Kellogg Blvd.
St. Paul, MN 55102

Mr. Ken Stevens
Hennepin County RRA
A-2307 Government Center
Minneapolis, MN 55487-0237

DATE: January 31, 1990

JOB NO: 41-8923 through 41-8936, 62-8944, 62-8954, 26-8956, 62-9004, 62-9008

INVOICE PERIOD: January 1 - January 31, 1990
INVOICE DATE: January 31, 1990
FEDERAL TAX ID NUMBER: 41-1625272

For Professional Services provided to the Ramsey County Regional Railroad Authority and the Hennepin County Regional Railroad Authority in preparation of Phase I Preliminary Engineering and an Environmental Impact Statement for light rail transit in the Midway Corridor, in accord with Agreement No. RCRRA 89-003.

AGENCY	DUE THIS BILLING	PAST AMOUNT INVOICED	TOTAL INVOICED TO DATE
Ramsey County RRA	$ 52,859.57	$ 79,570.94	$ 132,430.51
o Less 5% Retainage	2,642.98	3,978.55	6,621.53
o Due This Billing	$ 50,216.59	$ 75,592.39	$ 125,808.98
Hennepin County RRA	$ 7,012.74	$ 10,333.73	$ 17,346.47
o Less 5% Retainage	350.64	516.69	867.33
o Due This Billing	$ 6,662.10	$ 9,817.04	$ 16,479.14

NOTE: See the attached details on cost by work tasks and allocation of cost to each RRA.

I hereby certify that the above statement is just and correct and payment has not been received.

BRW, INC.

David M. Warner

David M. Warner, PE
Senior Associate

ATTATCHMENT NUMBER 1 TO AGREEMENT RCRRA - 89-003
COST DETERMINATION BY WORK TASK FOR RCRRA AND HCRRA
INVIOCE PERIOD : JANUARY 1, 1990 - JANUARY 31, 1990
FILENAME: 89003_1

WORK TASK	JOB NUMBER	DIRECT LABOR *	DIRECT EXPENSES **	TOTAL	RCRRA ALLOCATION %	RCRRA ALLOCATION AMOUNT	HCRRA ALLOCATION %	HCRRA ALLOCATION AMOUNT
0 PROJECT MANAGEMENT	41-8923	$2,457.50	$8.47	$2,465.97	89%	$2,194.71	11%	$271.26
1 PROJECT INITIATION	41-8924	$0.00	$0.00	$0.00	88%	$0.00	12%	$0.00
2 COMMUNITY PARTICIPATION PROGRAM	41-8925	$5,080.75	$108.31	$5,189.06	90%	$4,670.15	10%	$518.91
3 SYSTEM PLANNING AND ENGINEERING	41-8926, 62-8944, 26-8956	$36,307.75	$1,860.29	$38,168.04	88%	$33,587.88	12%	$4,580.16
4 ROUTE ENGINEERING AND DESIGN	41-8927, 62-9004, 26-9001	$1,947.50	$0.00	$1,947.50	88%	$1,713.80	12%	$233.70
5 PROTOTYPICAL STATION ZONE DESIGN	41-8928, 62-9005	$2,171.00	$3.64	$2,174.64	90%	$1,957.18	10%	$217.46
6 SUPPORT FACILITIES	41-8929, 62-9006	$0.00	$0.00	$0.00	100%	$0.00	0%	$0.00
7 COST ANALYSIS	41-8930, 62-9007	$0.00	$0.00	$0.00	88%	$0.00	12%	$0.00
8 FINANCE AND MANAGEMENT ANALYSIS	41-8931, 41-8936	$0.00	$0.00	$0.00	90%	$0.00	10%	$0.00
9 IMPLEMENTATION PLANNING	41-8932	$0.00	$0.00	$0.00	90%	$0.00	10%	$0.00
10 ENVIRONMENTAL STUDIES	41-8933, 62-8954	$9,649.00	$278.10	$9,927.10	88%	$8,735.85	12%	$1,191.25
11 SELECT LOCALLY PREFERRED ALTERNATIVE	41-8934	$0.00	$0.00	$0.00	88%	$0.00	12%	$0.00
12 WORK PROGRAM- PHASE II PRELIMINARY ENGINEERING	41-8935, 62-9008	$0.00	$0.00	$0.00	88%	$0.00	12%	$0.00
TOTAL		$57,613.50	$2,258.81	$59,872.31		$52,859.57		$7,012.74

Kathy Despiegelaere

Ramsey County Regional
Railroad Authority
Documentation

Ramsey County Regional Railroad Authority
316 Courthouse, St. Paul, Minnesota 55102 612-298-4145 / FAX 292-6689

John T. Finley, Chairman
District 3
Duane W. McCarty, Vice Chairman
District 1
Warren W. Schaber, Secretary
District 6
Ruby Hunt, Treasurer
District 5
Diane Ahrens
District 4
Hal Norgard
District 7
Donald Salverda
District 2

AGENDA

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY MEETING

Tuesday, April 10, 1990

10:30 A.M. - Large Conference Room - 316

1. * Minutes of March 27, 1990 Board Meeting
2. Chairman's Comments
3. Low Floor Light Rail Transit Vehicles - Discussion Only
4. Downtown St. Paul LRT Alignments - Discussion Only
5. Stations, Park/Ride, and Feeder Bus Planning for Midway Corridor
6. * Bridges along Burlington Northern Right of Way
7. * Letter to Urban Mass Transportation Administration (UMTA)
8. Update on Legislation - Discussion Only

*Action is Requested.

Printed on Recycled Paper

AGENDA

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

March 27, 1990

The regular meeting of the Ramsey County Regional Railroad Authority Board was held on Tuesday, March 27, 1990 at 11:30 A.M. in the Large Conference Room of 316 Court House.

MEMBERS PRESENT: Chairman John Finley
Commissioner Diane Ahrens
Commissioner Ruby Hunt
Commissioner Duane McCarty
Commissioner Hal Norgard
Commissioner Donald Salverda
Commissioner Warren Schaber

Also Present: James Van Houdt, Ed Glaubitz, Denise Kapler, Robert Clarkson, Hugh Faville, Richard A. Hanson, George Hunkins, A. Rossini, Duane Prew, Gary Simpson, Jim Steinworth, Mike Welte, Karen Tero, Susan Ode, Mark Filipi, Dean Hollisters, Tom Mahowald, Patrick O'Malley, Dick Wolsfeld, Kathy DeSpiegelaere, Mark Niles, Dave Warner, Harry A. Lyon Jr., Toni Baker, George K. Isaacs, Jill Goski, Rich Hadley, Jim Tolaas, Lee Aase, David Minister, Frances Glendenning, Kris Wendorff represented the County Attorney's Office

1. Minutes - of the March 13, 1990 Regional Railroad Authority Board Meeting.

Commissioner Hunt moved the following recommendation, seconded by Commissioner Norgard.

The Ramsey County Regional Railroad Authority Board approves the minutes of the meeting held on Tuesday, March 13, 1990, as written.

Roll Call: Ayes - 7, Nays - 0
Motion adopted.

2. Chairman's Comments

Chairman Finley did not have any comments to present at this time.

3. Survey on Light Rail Transit

Kathy DeSpiegelaere discussed the summary of the survey on selected information relating to Light Rail.

Commissioner Salverda commented about the credibility of the survey, for example, the questions that were asked, the names used, etc.

Ms. DeSpiegelaere pointed out that on page 17, the Name Awareness, was put in to determine if people were answering in a truthful manner, e. g., does Sally Stevenson exist. She had asked the RTB what confidence level was there, and they said it was plus or minus 4%.

Chairman Finley mentioned that is normal in surveys, the MINNEAPOLIS STAR and WCCO had done a survey on this,and their acceptance rate was 70%, and over 50% said they were willing to pay for LRT. This is very interesting.

Commissioner Schaber discussed the question of paying for light rail, the fiscal disparities has a high percentage, and he is concerned if these people really know what fiscal disparities are.

Ms. DeSpiegelaere referred to Page 15 of the documentation, this has the notation: Note: Respondents were read the following description of fiscal disparities tax: "Fiscal disparities is a tax base sharing program by which all metro area local government entities share in the benefits of regional commercial industrial development."

Chairman Finley introduced David Minister who is now with the RTB. Dave is very well informed on light rail, he came from San Jose, he is one of the few people in the country who has worked on development and construction of LRT.

Mr. Minister said he is pleased to be here, has been here three months, and is now buying a home. He is hoping to be able to help the Regional Railroad Authorities get something on track here.

4. Ridership Forecasts for Midway Corridor

Chairman Finley said he had received a letter from Paul McCarron who gave a a very good analysis, and he compliments Commissioner McCarron on this. Kathy DeSpiegelaere is applying this to the Midway Corridor, and is going to obviate those future problems.

Ms. DeSpiegelaere addressed the Board, at the last meeting the Board asked for information. Because there has been a change in the proposal, she has outlined the steps under the elements of forecasting process. Metropolitan Council will run the computer. The parameters have been set with some of the agencies and with the RCRRA staff. All steps are done by Met Council. We have already been meeting with the affected agencies and will continue to do so.

Commissioner Hunt commended Ms. DeSpiegelaere and staff as this is some very valuable information that has been pulled together and spelled out for us.

Commissioner Schaber feels we should retain our independent consultant, and he feels this is something that we should be discussing or talking about.

Dick Wolsfeld, BRW, informed the Board that there are four or five people in the country who have had a lot of experience in light rail transit. He suggested as you may be saving $70,000 on this survey, you may want to take a small portion of that, $5,000 or $10,000, and have someone come in and review the results, to say that this is reasonable or unreasonable. It is not going to be a magnitude of numbers, ridership and characteristics will be described as clearly as possible. It would be a good idea to hire someone to do that.

Chairman Finley asked the Board if we should authorize Dick Wolsfeld and Kathy DeSpiegelaere to interview these people.

Mr. Wolsfeld pointed out that he cannot subcontract with anyone unless the RRA approves it.

The Board discussed this, and the following recommendation was made.

Commissioner Hunt moved the following recommendation, seconded by Commissioner Ahrens.

WHEREAS, Ramsey County Regional Railroad Authority has contracted with BRW, Inc. for Phase I of preliminary engineering and an Environmental Impact Statement for the Midway Corridor; and

WHEREAS, One element of that study is the completion of patronage forecasts for alternative alignments in the Midway Corridor; Now, Therefore, Be It

RESOLVED, That, BRW, Inc. and Ramsey County Regional Railroad Authority staff are:

1. Authorized to solicit proposals for a subconsultant who specializes in patronage forecasting to assist in reviewing and commenting on aspects of the forecasts.

2. Are requested to provide Ramsey County Regional Railroad Authority Commissioners with information on the prospective vendor and the cost for those services in order that authorization can be provided for the patronage forecasting services.

Roll Call: Ayes - 7, Nays - 0 R90-14
Motion adopted.

Chairman Finley added that this would be a nice check and balance.

5. Ratify Partial Payment No. 5 to B.R.W., Inc. in amount of $50,216.59.

Commissioner Norgard moved the following recommendation, seconded by Commissioner Schaber.

WHEREAS, The Ramsey County Regional Railroad Authority has contracted for the professional services of BRW, Inc. for the purpose of conducting Phase I Preliminary Engineering/Environmental Impact Statement studies for the Midway Corridor; and

WHEREAS, Ramsey County Regional Railroad Authority Agreement Number RCRRA-89-003, and the First Amendment thereto, govern the performance of services of and terms of payment to BRW, Inc.; and

WHEREAS, BRW, Inc. has satisfactorily completed portions of the work identified in the referenced agreements, and provided detailed invoice documentation for services and costs accrued through January 31, 1990; and

WHEREAS, To ensure timely payment for services rendered in accordance with Agreement No. RCRRA 89-003, the Ramsey County Regional Railroad Authority authorized (Resolution R89-70) the Direction of Light Rail Transit Planning to process payments to BRW, Inc. for work completed and invoiced in accordance with the agreement; and

WHEREAS, Resolution R89-70 requires submittal of invoice and payment documentation to the Rail Authority for ratification at the next scheduled meeting following staff approval of invoice documentation; Now, Therefore, Be It

WHEREAS, BRW, Inc. Invoice No. 57083, Partial Payment No. 5, and attachments thereto, provide the correct documentation of payments due BRW, Inc. through January 31, 1990; Now, Therefore, Be It

RESOLVED, Payment to BRW, Inc. in the amount of $50,216.59 for Ramsey County Regional Railroad Authority's share of services rendered through January 31, 1990 is hereby ratified.

Roll Call: Ayes - 7, Nays - 0 R90-15
Motion adopted.

Commissioner Salverda said when Mr. Isaacs spoke at the Public Hearing on the Scoping Document he had some articles, with regard to the low vehicles. Ms. DeSpiegelaere said she would have copies for any member of the Board.

Dick Wolsfeld suggested that this may be a topic for discussion at the April Work Session.

There being no further matters to come before the Committee, Chairman Finley declared the meeting adjourned.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

2

Regional Railroad Authority
Originating Department

Authorized Signature Date

Board Action Requested

Chairman's Comments.

Request Justification

Budgeting and Accounting
County Attorney
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time
Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date April 10, 1990	Signature F. L. Glendenning	Date 4/3/90
Board Date	Signature	Date

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

3

Regional Railroad Authority
Originating Department

K. DeSpiegelaere 3/29/90
Authorized Signature Date

Board Action Requested

Low floor light rail transit vehicles.

DISCUSSION ONLY

Request Justification

See attached: 1. Memorandum from K. DeSpiegelaere
2. Resolution

Budgeting and Accounting Ed Blaufuss 4/3/90
County Attorney
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date: April 10, 1990	Signature: F. L. Glendenning	Date: 4/3/90
Board Date	Signature	Date

RAMSEY COUNTY
Regional Railroad Authority

Room 316 Courthouse
15 W. Kellogg Blvd.
St. Paul, MN 55102
Phone 298-4145

John T. Finley, Chairman
District 3
Diane Ahrens
District 4
Ruby Hunt
District 5
Duane W. McCarty
District 1
Hal Norgard
District 7
Donald E. Salverda
District 2
Warren W. Schaber
District 6

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere KD

SUBJECT: Low Floor Light Rail Transit Vehicles

DATE: March 28, 1990

At the March 27 Scoping Meeting for the Midway Corridor, George Isaacs suggested that Ramsey County Regional Railroad Authority examine the decision on vehicle boarding that was made in 1989. A copy of the resolution adopted by Ramsey County Regional Railroad Authority on this subject is Attachment 1.

Mr. Isaacs has made copies of articles on low floor vehicles available to staff. When low floor vehicles were discussed in 1989, the reluctance to endorse that type of vehicle was in part because they were considered to be relatively recent technology. An interest was expressed on the part of the region to invest in "proven, off the shelf" technology for light rail transit.

The Legislature has required the preparation of a Coordination Plan that will address this subject by July 1, 1990. Because the type of vehicle is a regional decision, the discussion of vehicle type is appropriate for discussion by the Joint LRT Advisory Committee and Regional Transit Board.

Recommendation:

I have spoken with the Regional Transit Board staff about this matter and recommend that it be addressed during the preparation of the Coordination Plan by staff and consultants and that information be provided to the Joint LRT Advisory Committee and Regional Transit Board.

1

Resolution
Board of
RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: March 28, 1989 No. R89-15

WHEREAS, The Ramsey County Regional Railroad Authority voted to delay a position on what type of platform to utilize for light rail transit within Ramsey County on the 28th day of February, 1989; and

WHEREAS, It now appears that it would be most prudent to proceed with a determination on the issue based upon all presently available facts; Now, Therefore, Be It

RESOLVED, That the Ramsey County Regional Railroad Authority hereby rescinds the resolution dated February 28, 1989 which delayed the decision on the type of access to be used for light rail transit; and Be It Further

RESOLVED, That Ramsey County Regional Railroad Authority supports level boarding of light rail transit vehicles, and because high platforms are the most appropriate current technology that provide level boarding, supports high platforms for access to light rail transit vehicles; and Be It Further

RESOLVED, That during the preparation of the comprehensive LRT plan for Ramsey County and subsequent planning and design efforts for light rail transit, discussions with the community about the system and how it can best be integrated into the areas through which it passes will continue; and Be It Further

RESOLVED, That if information developed during the preparation of the comprehensive LRT plan and subsequent planning and design efforts indicates that high platforms are not the most prudent type of platform for light rail transit in the Twin City metropolitan area, Ramsey County Regional Railroad Authority reserves to itself the right to reconsider the high platform decision.

John T. Finley, Chairman

By _____
Warren W. Schaber, Secretary

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

4

Regional Railroad Authority
Originating Department

K. DeSpiegelaere 4/2/90
Authorized Signature Date

Board Action Requested

Downtown St. Paul LRT Alignments

Discussion Only

Request Justification

See attached:
1. Memorandum from K. DeSpiegelaere
2. Downtown LRT Task Force - membership list
3. Intergovernmental Committee - membership list
4. Memorandum from BRW, Inc.

Budgeting and Accounting Ed Glaubitz 4/3/90
County Attorney
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date	Signature	Date
April 10, 1990 Board Date	F. L. Glendenning Signature	4/3/90 Date

RAMSEY COUNTY
Regional Railroad Authority

Room 316 Courthouse
15 W. Kellogg Blvd.
St. Paul, MN 55102
Phone 298-4145

John T. Finley, Chairman
District 3
Diane Ahrens
District 4
Ruby Hunt
District 5
Duane W. McCarty
District 1
Hal Norgard
District 7
Donald E. Salverda
District 2
Warren W. Schaber
District 6

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning

SUBJECT: Downtown LRT Alignments KD

DATE: April 2, 1990

On April 5, the Downtown LRT Task Force (membership list attached) is expected to recommend downtown St. Paul street alignments to be considered further for light rail transit and alignments to be eliminated from further consideration. This information will be considered by the Intergovernmental Committee (membership list attached) at its meeting on April 10.

A copy of the information that was distributed to the Downtown LRT Task Force and the Intergovernmental Committee on this subject is attached. The recommendation from the analysis is that further consideration should be given to three alternatives:

1. One way operation along Cedar Street and Minnesota Street, two way transit mall along Fourth Street.

2. Two way transit mall along Cedar Street, two way transit mall along Fourth Street.

3. Two way transit mall along Cedar Street, one way operation along Fifth Street and Sixth Street.

Recommendations:

1. I will brief you on the recommendations made by the Downtown LRT Task Force at its April 4 meeting at the April 10 Railroad Authority meeting.

2. You will be asked to make a decision at the April 24 Rail Authority meeting on the alignments to retain for further consideration in downtown St. Paul.

Attachments

Chuck Wiger
St. Paul Area Chamber of Commerce
600 North Central Life Tower
445 Minnesota Street
St. Paul, MN 55101

Bill Buth
BOMA
386 No. Wabasha St., Suite 645
St. Paul, MN 55102

Peter Bruce
St. Paul Downtown Council
600 North Central Life Tower
445 Minnesota Street
St. Paul, MN 55101

Gary Grefenberg
CAAPB
B-46 State Capitol Building
St. Paul, MN 55155

Dave Minister
Regional Transit Board
Mears Park Centre
230 East Fifth Street
St. Paul, MN 55102

Jerry Thole
First Bank Midway Office
2383 University Avenue
St. Paul, MN 55114

Ronnie Brooks
St. Paul Downtown Council
600 North Central Life Tower
445 Minnesota Street
St. Paul, MN 55101

Tim Rogers
St. Paul Area Chamber of Commerce
600 North Central Life Tower
445 Minnesota Street
St. Paul, MN 55101

Lucy Thomas
300 East 4th Street
Apt. #601
St. Paul, MN 55101

Bill Sands
Western Bank
663 University Ave.
St. Paul, MN 55102

Mike Murphy
Towle Real Estate
7831 Glenroy Road
Bloomington, MN 55439

Elin M. Skinner
Midway Civic & Commerce Assn.
475 Cleveland Ave., No., Suite 211
St. Paul, MN 55104

Alan K. Ruvelson, Jr.
Griggs Midway Building
Suite 325 South
St. Paul, MN 55104

Dick Wolsfeld
BRW, Inc.
Thresher Square
700 Third Street
Minneapolis, MN 55415

Bob Bach, Chair
Felhaber Larson Fenlon & Vogt
900 Meritor Tower
St. Paul, MN 55101

Brian A. Field
West 1290 First National Bank Bldg.
St. Paul, MN 55101

Bill Fallon
American National Bank
St. Paul, MN 55101

Mary Krueger
Downtown Community Dev. Council
245 East Sixth St., Suite 101
St. Paul, MN 55101

John Lund
Minnesota Mutual Life Insurance Co.
400 North Robert Street
St. Paul, MN 55101

Sharon Murphy
514 North Central Life Tower
445 Minnesota Street
St. Paul, MN 55101

Rich Hadley
St. Paul Chamber of Commerce
600 North Central Life Tower
445 Minnesota Street
St. Paul, MN 55101

Mark Niles
BRW, Inc.
Thresher Square
700 Third Street
Minneapolis, MN 55415

Rob Kost
Frauenshuh Companies
180 East 5th Street
Suite 230
St. Paul, MN 55101

Ron Dockery
3M Center
International Human Services
Building 220-5E-01
St. Paul, MN 55133-3800

Andy Rossini
Department of Transportation
Rm. 313 Transportation Bldg.
John Ireland Blvd.
St. Paul, MN 55155

DOWNTOWN LRT TASK FORCE
LIST OF MEMBERS

Leon Pearson
St. Paul Public Works
8th Floor City Hall Annex
St. Paul, MN 55102

Peggy Reichert
St. Paul PED
11th Floor City Hall Annex
St. Paul, MN 55102

Al Lovejoy
St. Paul PED
11th Floor City Hall Annex
St. Paul, MN 55102

Julian Empson
347 City Hall
St. Paul, MN 55102

Lisa Clemens
347 City Hall
St. Paul, MN 55102

Council President Bill Wilson
719 City Hall
St. Paul, MN 55102

DOWNTOWN LRT TASK FORCE
LIST OF MEMBERS

INTERGOVERNMENTAL COMMITTEE LIST OF MEMBERS

Mr. Rich Hadley, President
St. Paul Area Chamber of Commerce
600 North Central Life Tower
445 Minnesota Street
Saint Paul, Minnesota 55101

Mr. Rick Heydinger, Vice President
U of M External Relations
254 Morrill Hall
100 Church Street Southeast
Minneapolis, Minnesota 55455

Mr. Randy Halvorson, Director
Office of Transit
Minnesota Dept. of Transportation
Room 815 Transportation Building
St. Paul, Minnesota 55155

Russ Larkin, Commissioner
Washington County
P.O. Box 607
Willernie, Minnesota 55090

Mr. Steve Jensen, Member
New Brighton Planning Commission
2999 Stinson Court
New Brighton, Minnesota 55112

Ms. Pat Johnson, Chair
Roseville Planning Commission
2986 Mildred Drive
Roseville, Minnesota 55113

Mr. George Jungkunz, Supervisor
White Bear Town Board
2576 Arbor Drive
White Bear Lake, Minnesota 55110

Jerry Wallin, Attorney at Law
1859 North Snelling Avenue
Saint Paul, Minnesota 55113

Mr. Gary Grefenberg, Exec. Secretary
Capitol Area Arch. & Planning Board
B46 State Capitol
St. Paul, Minnesota 55155

Mr. Paul McCarron, Commissioner
Anoka County
325 Main Street
Anoka, Minnesota 55303

Mr. Harry A. Lyon, Jr., Councilmember
City of North St. Paul
2159 East Belmont Lane
North St. Paul, Minnesota 55109

Mr. Bob VandeKamp, Chair
Chisago County RRA
P.O. Box 206
Almelund, Minnesota 55002

Mr. Mark Andrew, Commissioner
Hennepin County
A-2400 Government Center
Minneapolis, Minnesota 55487

Mr. Steve Keefe, Chair
Metropolitan Council
Mears Park Centre
230 East Fifth Street
St. Paul, Minnesota 55101

Mr. George Marks, Councilmember
City of St. Anthony
3301 Silver Lake Road
St. Anthony, Minnesota 55418

Michael Ehrlichmann, Chair
Regional Transit Board
Mears Park Centre
230 East 5th Street
St. Paul, Minnesota 55101

Mark Sather, Manager
City of White Bear Lake
4700 Miller Avenue
White Bear Lake, Minnesota 55110

Norbert Theis, Member
Regional Transit Board
12466 Marystown Road
Shakopee, Minnesota 55379

John Finley, Chairman
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St. Paul, Minnesota 55102

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1406 East County Road C
Maplewood, Minnesota 55109

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City of Gem Lake
3960 Scheuneman Road
Gem Lake, Minnesota 55110

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City of Little Canada
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Little Canada, Minnesota 55117

Don Chapdelaine, Commissioner
Dakota County
575 Chapel Lane
Eagan, Minnesota 55121

Roger Goswitz, Councilmember
City of St. Paul
701 City Hall
St. Paul, Minnesota 55102

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City of Shoreview
1003 Richmond Court
Shoreview, Minnesota 55126

Sue Hankner, Mayor
City of Mounds View
2401 Highway 10
Mounds View, Minnesota 55112

Duane McCarty, Commissioner
City of North Oaks
316 Court House
St. Paul, Minnesota 55102

Bruce Davis
Midway Civic & Commerce Assn.
Commercial State Bank
World Trade Center
St. Paul, MN 55102

Dick Elasky (alt)
Assistant District Engineer
Traffic Planning, Mn/DOT
3485 Hadley Avenue North
Oakdale, Minnesota 55109

Thomas Baldwin, Mayor (alt)
City of Falcon Heights
2077 West Larpenteur Avenue
Falcon Heights, MN 55113

Mr. Paul Malone, Councilmember
City of Arden Hills
1450 W. Highway 96
Arden Hills, MN 55112

Mr. Gary R. Berger (alt)
City Administrator
City of Arden Hills
1450 W. Highway 96
Arden Hills, MN 55112

Ms. Cindy Wheeler, Councilmember
City of Lauderdale
1972 Eustis Street
Lauderdale, MN 55113

Mr. Bob Kren
Metropolitan Transit Commission
1288 Edgehill Court
Maplewood, Minnesota 55109

Intergovernmental Committee List of Members
March 12, 1990

BRW

PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN

BRW, INC · THRESHER SQUARE · 700 THIRD STREET SOUTH · MINNEAPOLIS, MINNESOTA 55415 · PHONE 612 370-0700 FAX 612 370-1378

MEMORANDUM

DATE: March 28, 1990

TO: Kathryn DeSpiegelaere

FROM: Dick Wolsfeld
Mark Niles

RE: Results of the Preliminary Analysis of Alternatives (Fatal Flaw Analysis)

This memorandum summarizes the results of the preliminary analysis of conceptual Light Rail Transit (LRT) alternatives for Downtown Saint Paul. Initially, the preliminary evaluation criteria recommended by the Downtown LRT Task Force were analyzed for each of the downtown LRT candidate streets. These streets include St. Peter Street, Cedar Street, Minnesota Street, Fourth Street, Fifth Street, and Sixth Street. As a result of this analysis, several alternatives are recommended to be eliminated from further consideration. The three remaining alignments, Alternatives B, M, and N, are recommended for further analysis.

ADDITIONAL LRT ALIGNMENT ALTERNATIVES

Alternatives M and N have been added to the alternative alignments for consideration in the downtown area. Alternative M includes a two-way transit mall on Cedar Street transitioning to a two-way transit mall on Fourth Street. Alternative N includes a two-way transit mall on Cedar Street that transitions to one-way LRT operations on Fifth and Sixth Streets. These alternatives were added to reduce the number of streets impacted by LRT and minimize traffic impacts to north-south streets in downtown area.

PRELIMINARY FATAL FLAW ANALYSIS

The preliminary (fatal flaw) analysis of LRT alternatives included assessments of:

- ability of LRT to make the required turns
- availability of right-of-way for LRT
- grades compatible with LRT operations and stations
- block size sufficient to accommodate LRT stations

These criteria have been applied to each of the candidate streets for LRT in the downtown area. The results of the analysis for each of the four criteria are summarized in the following sections.

LRT Turns

Many of the alternatives require that LRT make turns at intersections in the downtown area. One-way traffic operations, LRT operating in the opposite direction of traffic (contra-flow), and LRT on the right side of the street has been maintained where possible at each of the LRT turn locations. The minimum turning radii for LRT has been compared to the existing right-of-way at these intersections.

Many of the alternatives require LRT turns that line up with the outside edges of each of the two street alignments. These "outside to outside" turns can generally be accommodated by the existing street rights-of-way in Downtown Saint Paul. Some alternatives also require that LRT turns line up with the inside edges of the two street alignments. Given the minimum turning radii of LRT, these "inside to inside" turns would impact the sidewalk and any buildings located on the street corner. However, these "inside to inside" turns can be modified to eliminate these impacts by shifting the LRT from the inside edge of the street to the outside edge of the street prior to the LRT turn location and once the turn is completed shift the LRT back to the inside edge of the street. This is less desirable than outside to outside turns because there is a greater impact on other street uses. The modified inside to inside turn is shown in Figure 1.

By using the modified version of the "inside to inside" turn, turns for all of the alternatives could be accommodated. Some of the LRT turns may encroach on the sidewalk at intersection locations. Additional studies to determine the impact and mitigations at these locations will need to be completed.

Available Right-of-Way

The roadway right-of-way widths for the downtown LRT candidate streets are shown in Figure 2. Most of the downtown streets are 60 feet or more in width. For one-way LRT operations on Fifth, Sixth, Saint Peter, Cedar, and Minnesota Streets, a sixty foot cross-section would provide enough room for the sidewalks, track, and two traffic lanes. At station locations the street width could accommodate the sidewalks, station platform, track, and only one traffic lane. A typical cross-section for one-way LRT at station locations is shown in Figure 3. For a two-way LRT transit mall on either Fourth or Cedar Street, a 60 foot width could accommodate the sidewalks, two tracks, and one traffic lane. At station locations the traffic lane would be eliminated to provide room for the station platform. A typical cross-section for two-way LRT at station locations is shown in Figure 4.

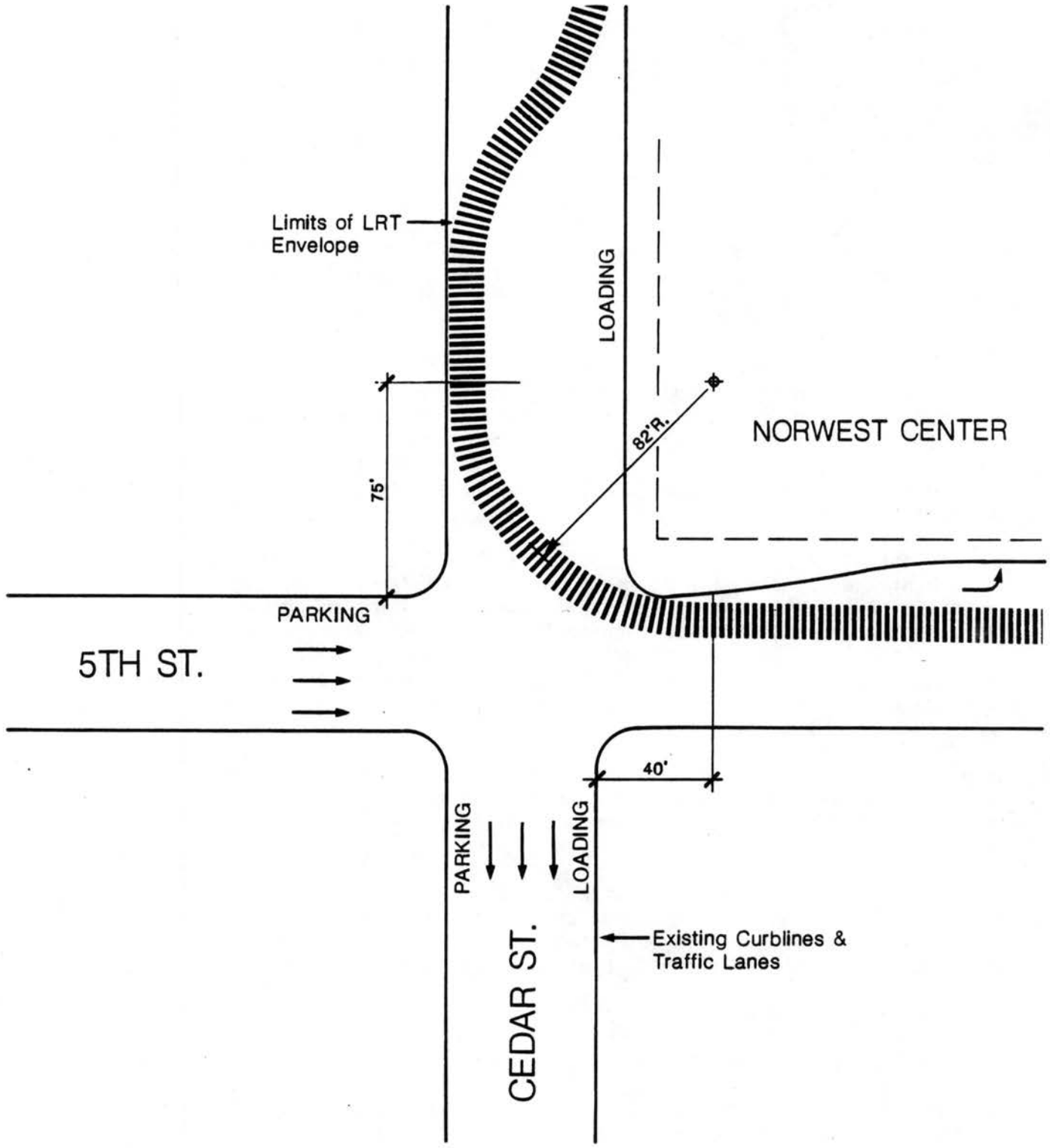


Figure 1

0' 10' 20' 40'

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Ramsey County Regional Railroad Authority

DOWNTOWN ST. PAUL LRT STUDY

Modified Inside To Inside Turn

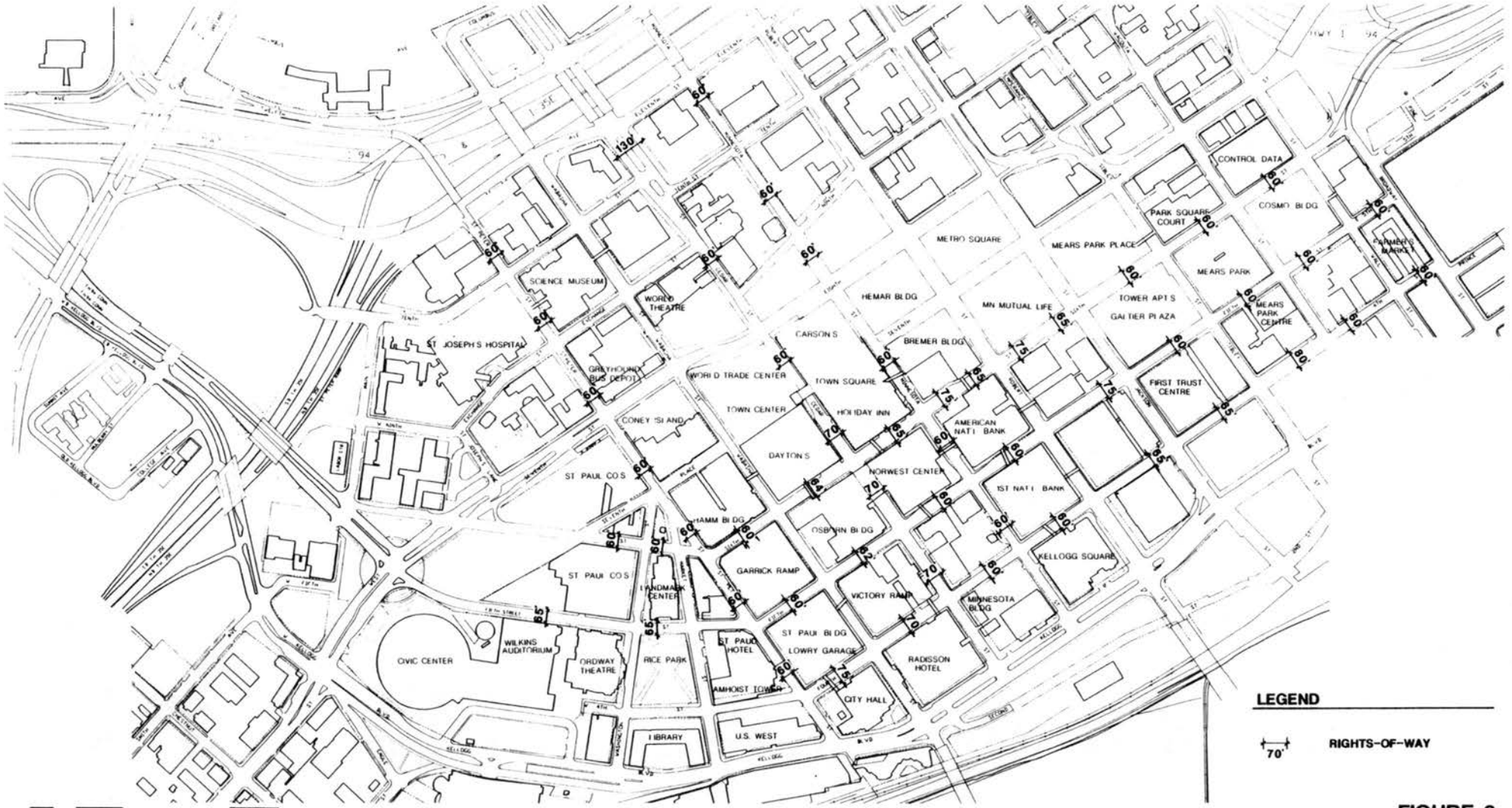


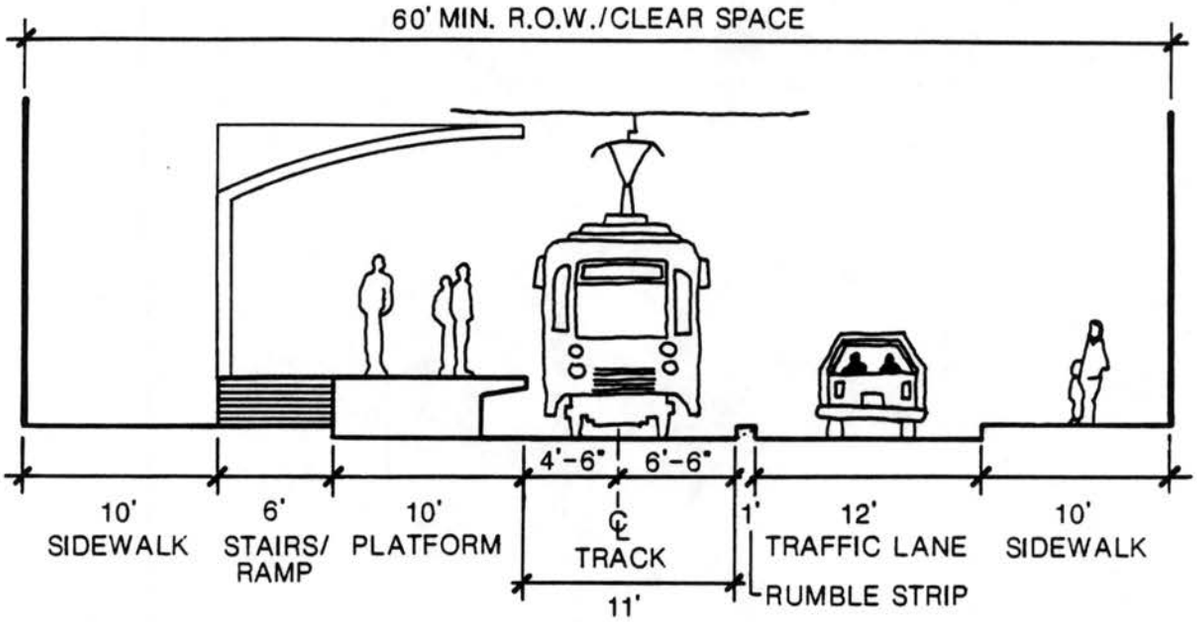
FIGURE 2

BRW

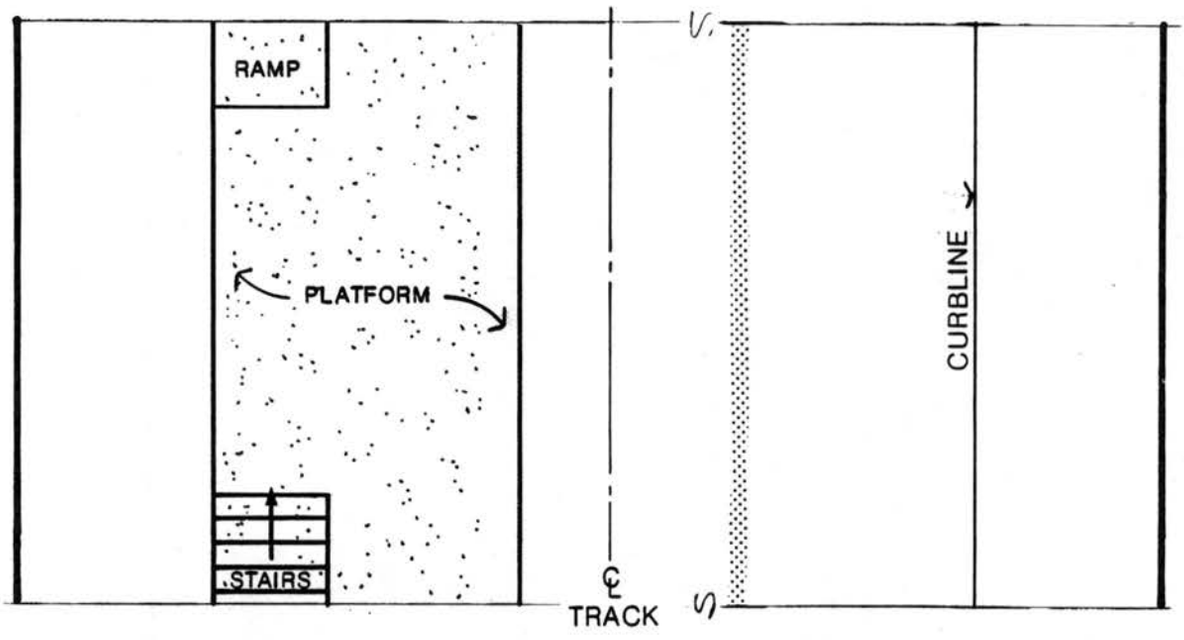
Ramsey County Regional Railroad Authority

DOWNTOWN ST. PAUL LRT STUDY

RIGHTS-OF-WAY



SECTION



PLAN

Figure 3

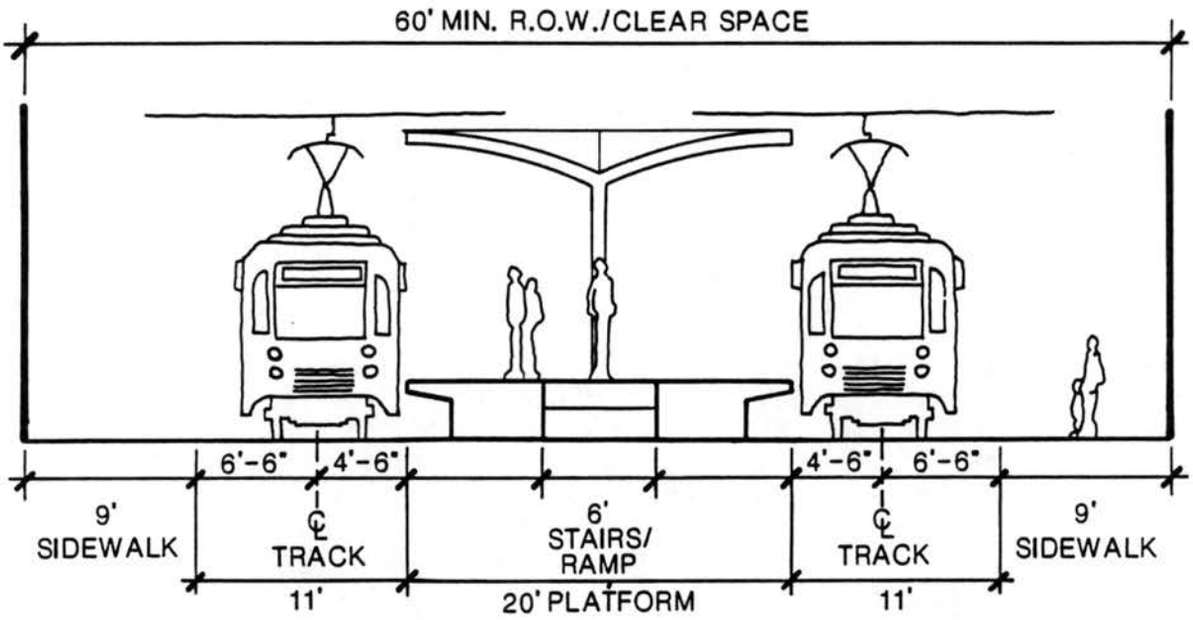
0' 2' 4' 8'

Ramsey County Regional Railroad Authority

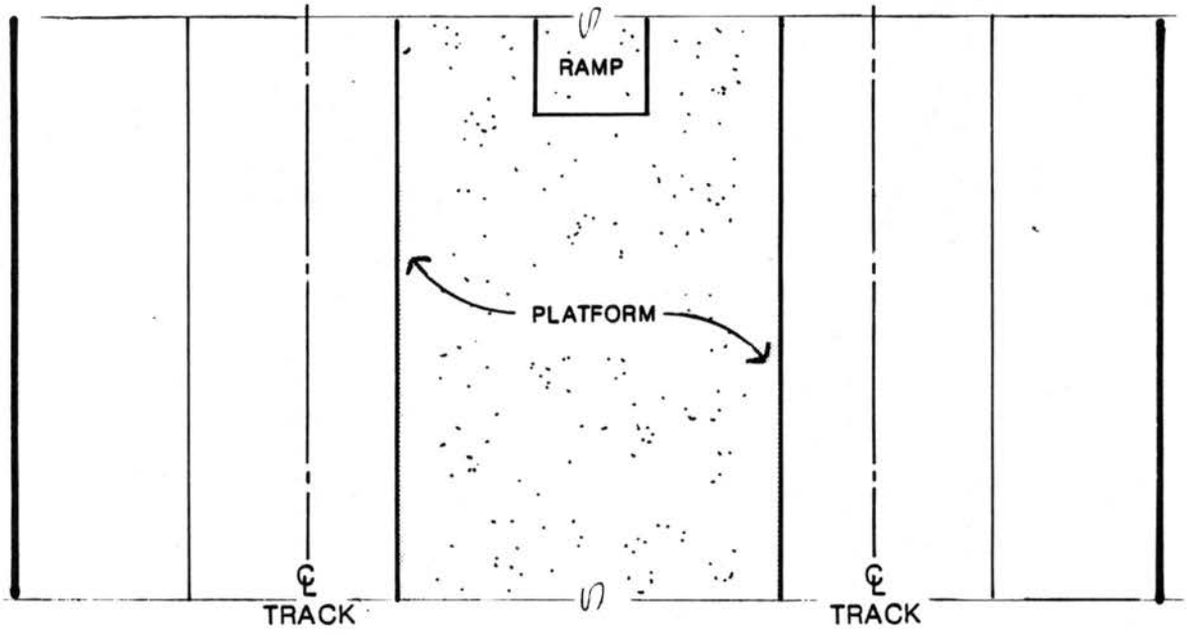
DOWNTOWN ST. PAUL LRT STUDY

Single Track Platform (Curbside Location)

3/90



SECTION



PLAN

Figure 4

0' 2' 4' 8'

BRW PLANNING TRANSPORTATION ENGINEERING URBAN DESIGN

BRW, INC. THRESHER SQUARE, 700 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415

Ramsey County Regional Railroad Authority

DOWNTOWN ST. PAUL LRT STUDY

Double Track Center Platform

3/90

Grade Restrictions

Light Rail Transit vehicles can negotiate slopes of up to six percent. However, LRT stations need to be located on blocks with street slopes of approximately one percent or less. High platform station sites on slopes at greater than one percent are not comfortable environments for waiting LRT patrons. In addition, there are safety hazards for trains starting and stopping on steep slopes. The train may roll backward or forward several feet before start-up or after it comes to a stop. The grades along each of the streets that accommodate the LRT alternatives in the downtown area are shown in Figure 5. Most of the blocks in the downtown area include grades that exceed one percent. Fourth Street includes only two blocks with grades of less than one percent. Cedar and Minnesota Streets include only three blocks, and Fifth Street includes four blocks with acceptable grades for station locations.

Block Size

In order to accommodate LRT stations, blocks need to be a minimum of 320 feet in length. This allows for the 300-foot station platform to accommodate a three-car train and two ten-foot sidewalks and crosswalks at either end of the platform. Block lengths in the downtown area are shown in Figure 6. Most of the blocks are between 320 and 400 feet in length and could accommodate station platforms. However, many of these blocks have major access driveways to parking garages and loading areas at mid-block locations that may eliminate many blocks for consideration as station locations. Major mid-block access driveways are shown in Figure 7.

PRELIMINARY SCREENING OF LRT ALTERNATIVE ALIGNMENTS

Figure 7 shows the impact of all four of the preliminary fatal flaw evaluations on the LRT candidate streets in the downtown area. While all of the streets are able to accommodate the LRT tracks, there are only a few blocks where the grade, block size, and turns can accommodate LRT stations. This information has been applied to each of the individual LRT alternative alignments (Alternatives A through N) that have been identified for study in the Downtown area.

If the minimum block size, grade, and right-of-way criteria are strictly applied to the LRT alternative alignments, none of the alternatives would be acceptable. However, with some improvements and mitigations a few of the alternatives are viable options that warrant more detailed study. There are three major problems with station siting that impact a number of the LRT alternatives. These issues are described below.

Station Siting on Minnesota Street

Given the relatively steep slopes of nearly three percent and the block sizes along Minnesota Street, there is not a viable station site north of Sixth Street for the alternative alignments that use this street. Alternatives A and G include one-way LRT operations along Minnesota and Cedar Streets with a

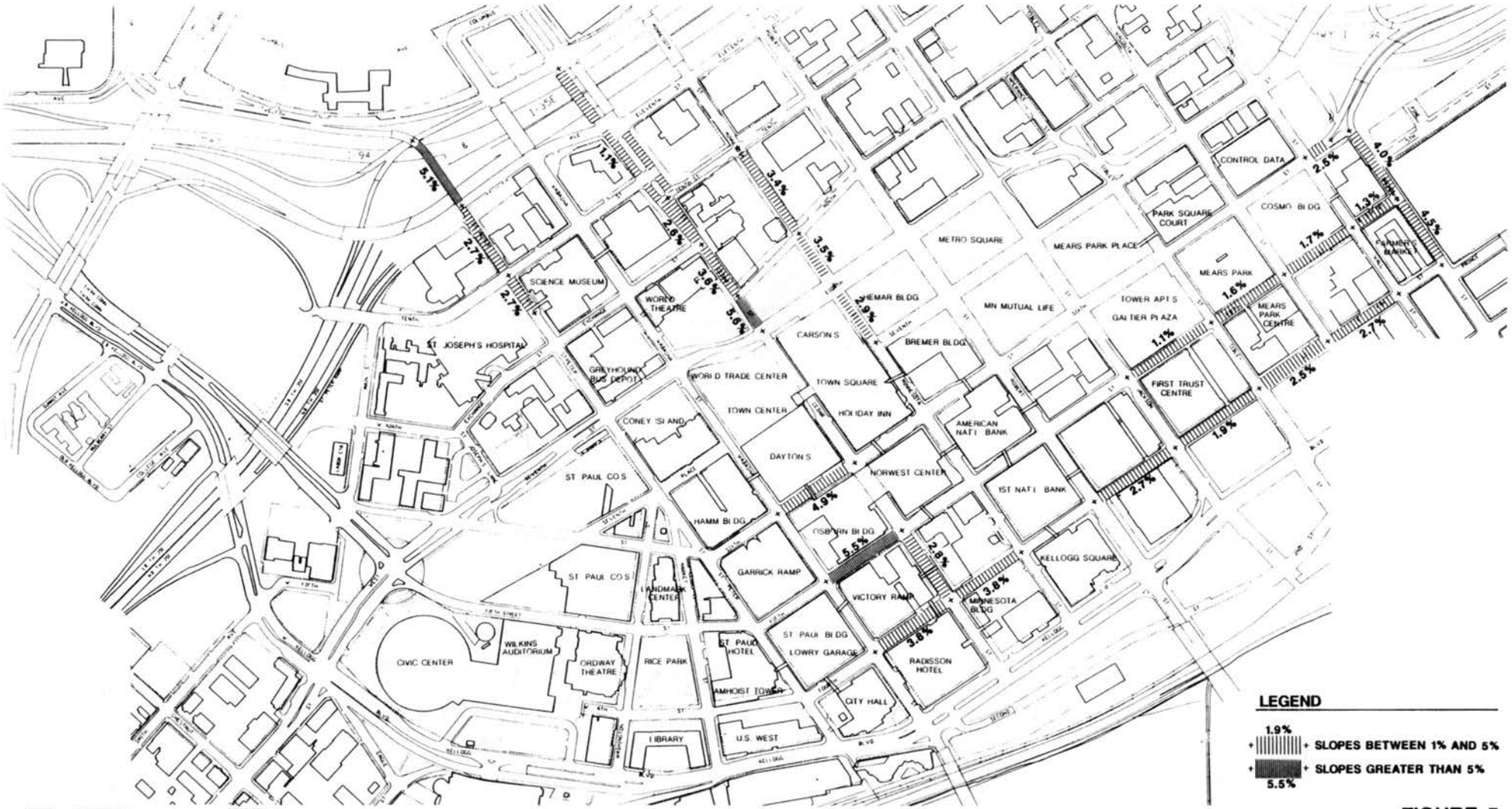


FIGURE 5

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Ramsey County Regional Railroad Authority

DOWNTOWN ST. PAUL LRT STUDY

LONGITUDINAL SLOPES

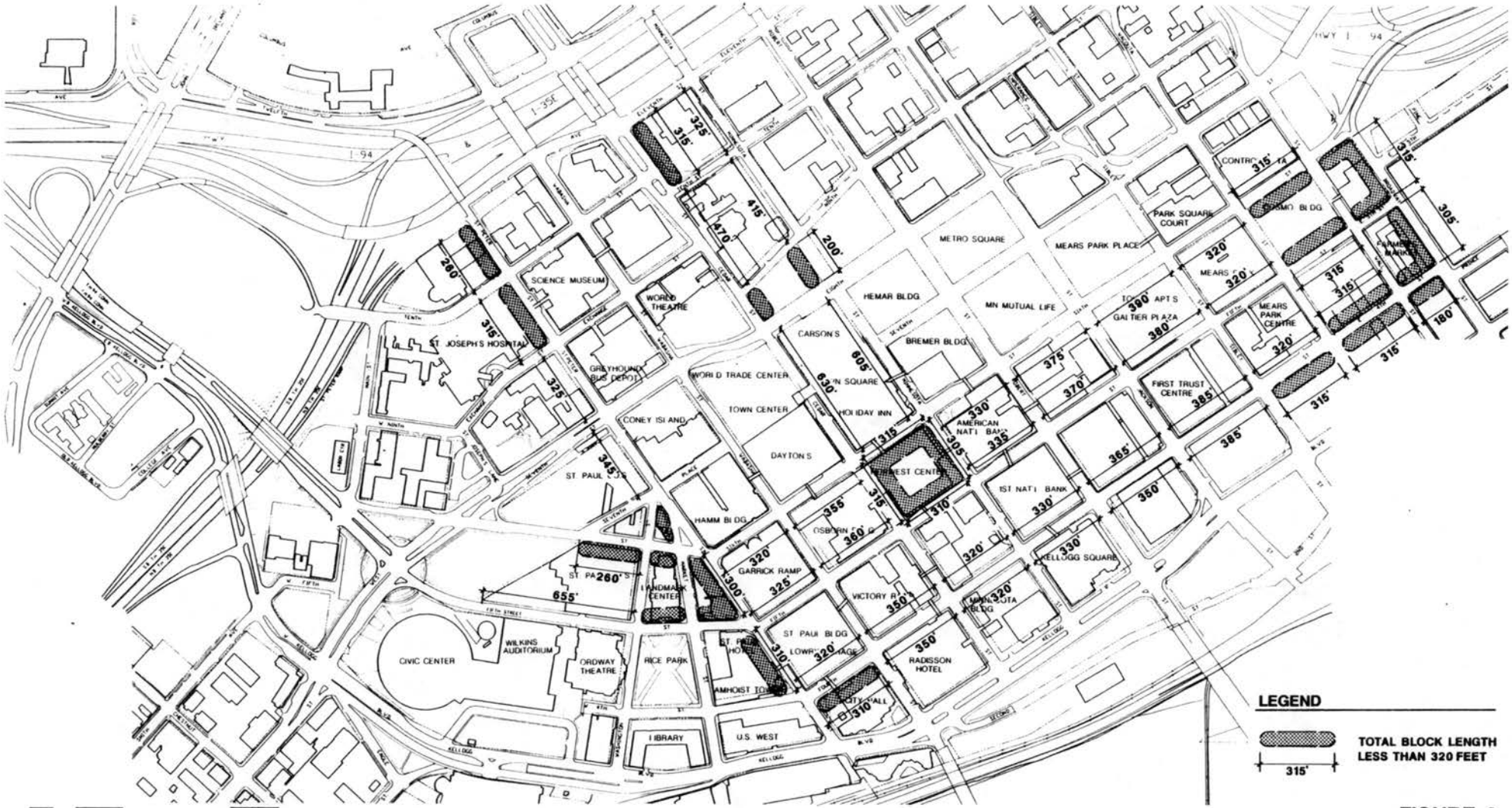


FIGURE 6

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Ramsey County Regional Railroad Authority

DOWNTOWN ST. PAUL LRT STUDY

BLOCK LENGTHS

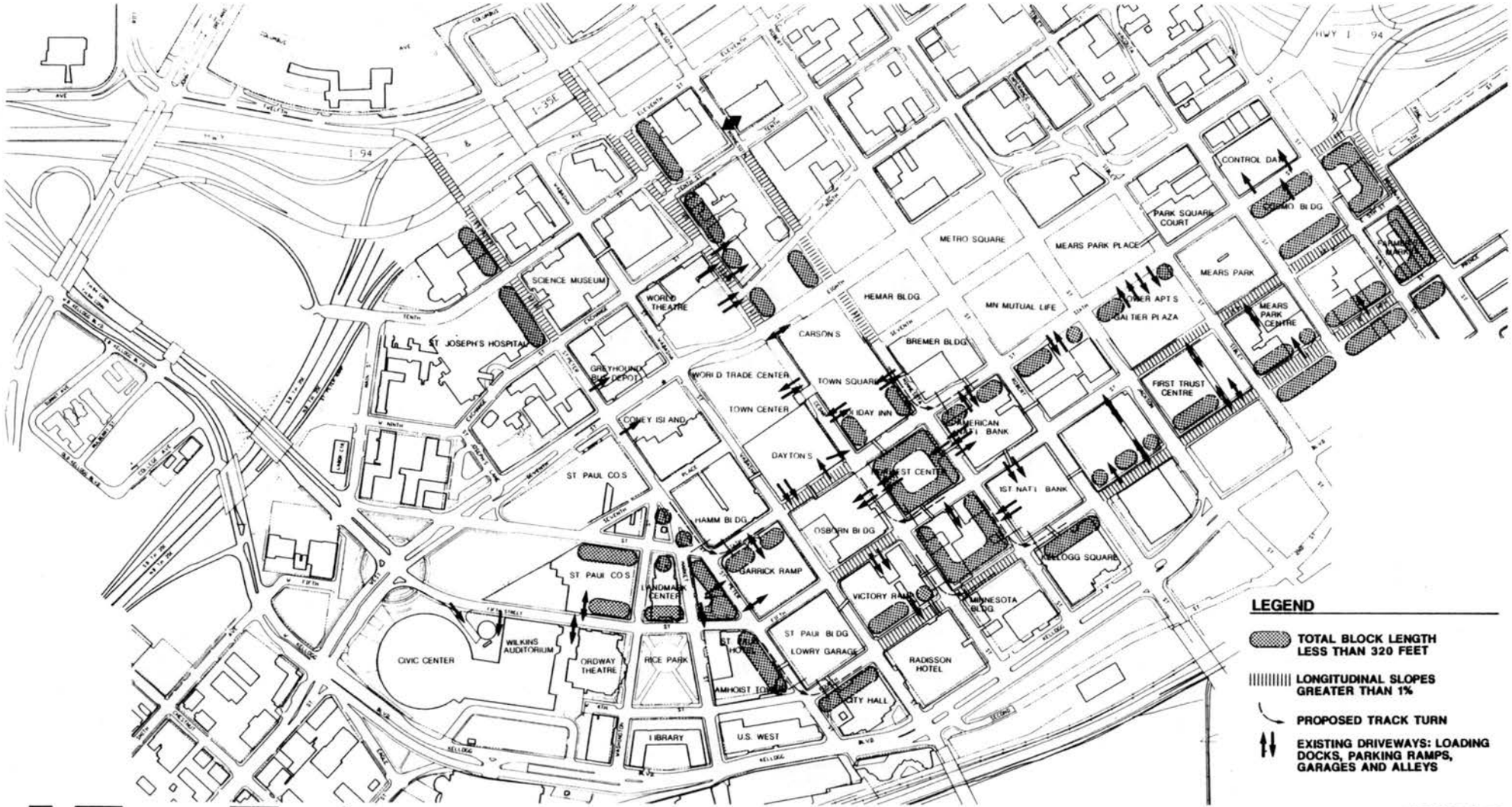


FIGURE 7

BRW

Ramsey County Regional Railroad Authority

DOWNTOWN ST. PAUL LRT STUDY

FATAL FLAW EVALUATION - STATION SITING

transition to one-way operations along Fifth and Sixth Streets. For these alternatives there would not be a station site on Minnesota Street, and it is recommended that these alternatives be eliminated from further consideration.

LRT Operations on Saint Peter Street

Alternatives C, D, I and J use one-way LRT operations along Saint Peter and Cedar Street. These streets are both one-way southbound streets for traffic and would require that LRT on Saint Peter Street travel in the same direction as traffic rather than contra-flow. This will pose significant automobile driver hazards as it will be difficult for automobiles making right turns from Saint Peter Street to see the approaching train. Additionally, the sixty foot right-of-way on Saint Peter and Cedar Streets would require that traffic be restricted to one lane at station locations on both of the major southbound streets in the downtown area. Based on these issues it is recommended that Alternatives C, D, I and J be eliminated from further consideration. Also, the two block spacing between station locations on Saint Peter and Cedar Streets would likely confuse riders looking for the station to complete the return trip.

Reduction of Traffic Lanes on Fifth and Sixth Streets

Alternatives E, F, K, and L rely on Fifth and Sixth Streets to enter and exit the downtown area from the west. The 60 foot rights-of-way on these streets would require a reduction to only one traffic lane at station locations. Each of the four LRT alternatives use the portion of Fifth and Sixth Streets between Saint Peter and the new West Seventh Street. These streets provide major traffic access from Interstate 94 west to the downtown core. A station to serve the Civic Center area located along Fifth and Sixth Streets would reduce this connection to one traffic lane in each direction. Alternatives E and K would also include a station on Fifth and Sixth Streets east of Minnesota Street. These station locations would require a second lane restriction on Fifth and Sixth Streets. Because of the volume of traffic on these streets, the reduction in traffic lanes would be undesirable. These alternatives also would not provide service to the Capitol Area. Alternatives F and L also include an undesirable and circuitous "figure eight" configuration to complete the transition from Fifth and Sixth Streets to a two-way transit mall on Fourth Street. This movement requires a number of difficult LRT turns to provide the necessary connections. It is recommended that Alternatives E, F, K, and L be eliminated from further consideration.

ALTERNATIVES TO BE RETAINED FOR FURTHER STUDY

It is recommended that Alternatives B, M, and N be retained for further study in the downtown area. These alternatives will require some additional improvements and mitigations to accommodate LRT stations. These alternatives would be carried into the more detailed evaluations that constitute the third phase of the Downtown Saint Paul LRT Study. Each of these alternatives and issues for more detailed study is descibed in the following sections.

Alternative B

Alternative B includes one-way LRT operations along Cedar and Minnesota Streets with a transition to a two-way transit mall along Fourth Street. This alternative is shown in Figure 8. Potential station locations have been identified along Fourth Street between Sibley and Jackson Streets, on Cedar Street between Seventh and Eighth Streets, and on Minnesota Street between Fifth and Sixth Streets. The station location on Minnesota Street south of Sixth Street would be located on a 305-foot block length. However, with the elimination of a right turn lane on Fifth Street the block length would increase to nearly 320 feet, which would be acceptable for station platform location.

The station location on Fourth Street is on a two percent grade. The street grade could be altered to the minimum one percent grade. This would likely require the closing of Wacouta Street at Fourth Street to accommodate the change in grade.

Alternative M

Alternative M includes a two-way transit mall along Cedar Street that transitions to a two-way transit mall along Fourth Street. This alternative is shown in Figure 9. The station location identified on Fourth Street between Sibley and Jackson Streets will require a change in grade similar to Alternative B. The station location on Cedar Street south of Eighth Street may impact access to the World Trade Center Garage. Alternative garage access will need to be studied. The two-track turn from Cedar Street to Fourth Street may impact the sidewalk and building on the southeast corner of this intersection. Further study will be required to determine the extent of any impact at this location.

Alternative N

This alternative includes a two-way transit mall along Cedar Street that transitions to one-way LRT operations along Fifth and Sixth Streets. This alternative is shown in Figure 10. This alternative includes station locations on Cedar Street south of Eighth Street and on Fifth and Sixth Streets between Minnesota and Robert Streets and between Sibley and Wacouta Streets adjacent to Mears Park. The station locations on Fifth and Sixth between Minnesota and Robert Streets may require that Fifth and Sixth Streets be reduced to one lane in each direction. The traffic impacts of this reduction will need to be studied. Two traffic lanes on each of Fifth and Sixth Streets could be maintained at the stations between Sibley and Wacouta Streets if the station platforms are allowed to encroach on Mears Park. The impacts of this encroachment will need to be studied more closely. Similar to Alternative M, the access to the World Trade Center Garage will be impacted by the station site on Cedar Street. Alternative access will need to be studied.

DW/ch

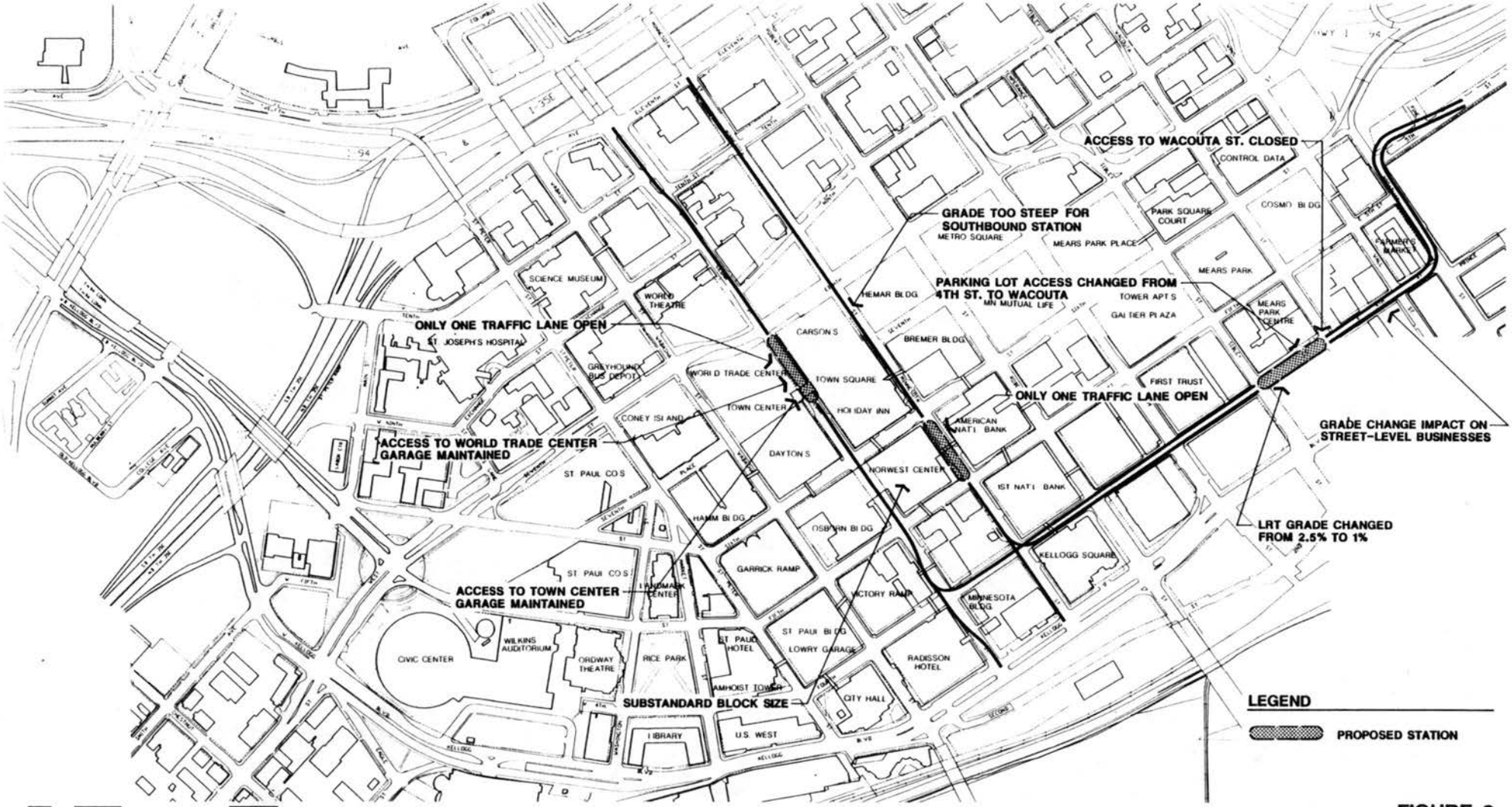


FIGURE 8

DOWNTOWN ST. PAUL LRT STUDY

ALIGNMENT ALTERNATIVE B

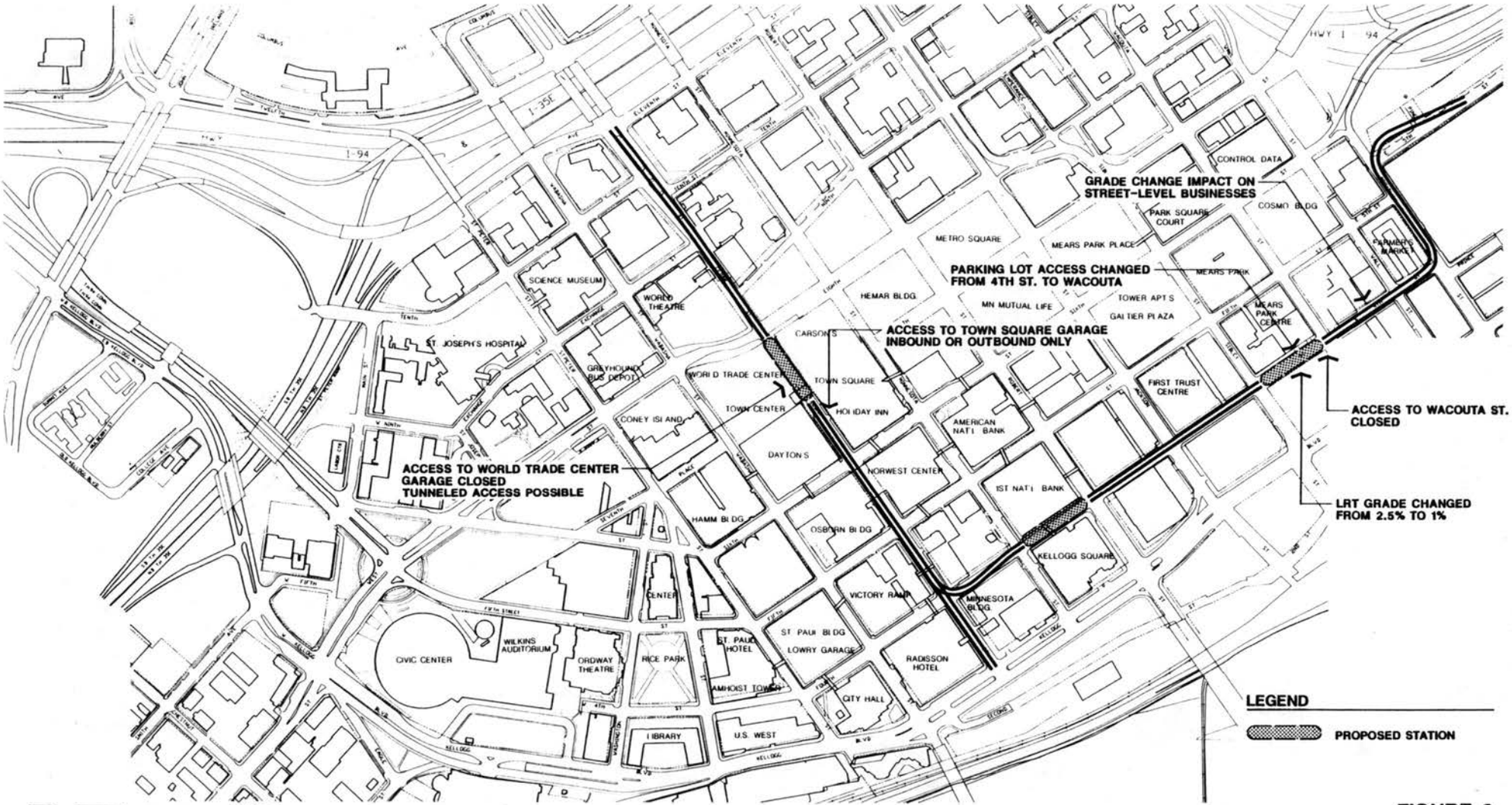


FIGURE 9

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Ramsey County Regional Railroad Authority

DOWNTOWN ST. PAUL LRT STUDY

ALIGNMENT ALTERNATIVE M

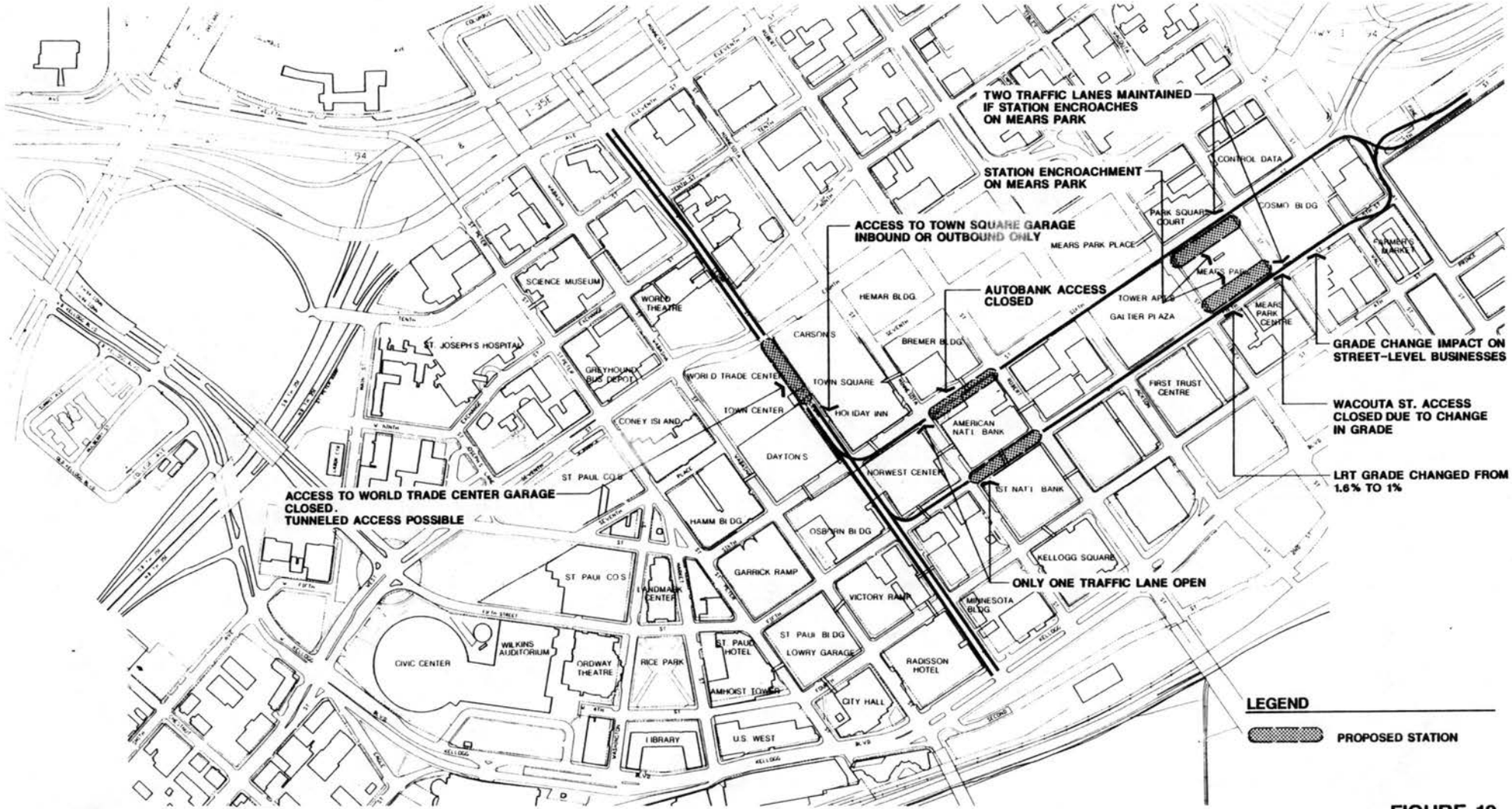


FIGURE 10

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Ramsey County Regional Railroad Authority

DOWNTOWN ST. PAUL LRT STUDY

ALIGNMENT ALTERNATIVE N

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

5

Regional Railroad Authority
Originating Department

K. DeSpiegelaere 4/2/90
Authorized Signature Date

Board Action Requested

Stations, Park/Ride, and Feeder Bus Planning for Midway Corridor

DISCUSSION ONLY

Request Justification

See attached: 1. Memorandum from K. DeSpiegelaere
2. RTB Feeder bus guidelines

Budgeting and Accounting Ed Glantitz 4/3/90
County Attorney
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date	Signature	Date
April 10, 1990	J. L. Glendenning	4/3/90
Board Date	Signature	Date

RAMSEY COUNTY
Regional Railroad Authority

Room 316 Courthouse
15 W. Kellogg Blvd.
St. Paul, MN 55102
Phone 298-4145

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Diane Ahrens
District 4
Ruby Hunt
District 5
Duane W. McCarty
District 1
Hal Norgard
District 7
Donald E. Salverda
District 2
Warren W. Schaber
District 6

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning KD

SUBJECT: Stations, Park/Ride, and Feeder Bus Planning for Midway Corridor

DATE: April 2, 1990

Three elements of the Midway Corridor preliminary engineering and Environmental Impact Statement work are planning of station spacing and location, park/ride facilities, and feeder bus service.

Technical staff of Ramsey County Regional Railroad Authority, Metropolitan Transit Commission, Regional Transit Board, City of St. Paul, and Metropolitan Transit Commission are working with BRW on these elements.

Stations are proposed outside of downtown St. Paul for:

Soo Line/I-94 alignment

Marion Street
Dale Street
Lexington Avenue
Snelling Avenue
Prior/Transfer Road
Franklin Avenue
Oak/Washington Avenue

University Avenue alignment

Rice Street
Western Avenue
Dale Street
Victoria Street
Lexington Avenue
Hamline Avenue
Snelling Avenue
Transfer Road
West Ramp T.H. 280
University and 27th
Oak/Washington Avenue

BN/Pierce Butler Route/Energy Park Drive alignment

Rice Street
Como Avenue
Dale Street
Lexington Avenue
Snelling Avenue
East ramp T.H. 280
Oak/Washington Avenue

A few of the issues related to station spacing are:

How far can patrons be expected to walk to transit service?

Where are the majority of people getting on/off transit service?

Where is it necessary to connect to feeder bus service?

Where is space available for stations?

What potential land uses require service with a station?

How does station spacing affect travel time?

How should the Northwest Corridor be connected to the Midway Corridor?

What is the demand for areas to drop off passengers and how can that be accommodated?

Park/Ride Facilities

Park/ride facilities are being considered along all three alignments in the Midway Corridor.

Issues related to park/ride facilities are:

If park/ride facilities are provided, will that discourage patrons from taking a bus to LRT service?

If park/ride facilities are not provided, will that encourage LRT patrons to park in neighborhoods adjacent to LRT stations or use spaces needed by businesses?

Where can park/ride facilities be provided at a reasonable cost in a developed corridor? What is a reasonable cost?

How can park/ride facilities be located with sensitivity to adjacent land uses?

Where is there a demand for park/ride facilities?

How close to LRT stations must park/ride facilities be located?

Feeder Bus Service

The Regional Transit Board has adopted feeder bus guidelines that are being used in planning feeder bus service (attached).

Issues related to feeder bus planning are:

What is a reasonable distance for patrons to walk to transit?

What are the tradeoffs between service and cost?

Should some type of bus service (not necessarily the through-type 16A) be retained on University Avenue if LRT is constructed on University Avenue at half mile station spacing?

Recommendation:

We will apprise you of consultant and staff recommendations on these topics as they are developed.

KD/blk

REGIONAL TRANSIT BOARD
STANDARDS AND CRITERIA FOR LRT FEEDER BUS PLANNING

The LRT and bus systems should complement, not duplicate, each other. Feeder bus service should be developed to complement LRT based on the following criteria:

- Duplicative or parallel line-haul bus service should not be provided. Instead, routes should be restructured to feed the LRT line. Duplicative or parallel lines are defined as those routes serving the same corridor with the same schedule and frequency of service.

- Direct bus service to the downtown CBD for inner-city residents should be maintained if transferring to an LRT line would add travel time, diminish directness of service, significantly decrease levels of service, or where there are high volumes of short trips.

- The change from a line-haul bus to an LRT line should impose no more than one (1) transfer on trips to the CBD for the majority of riders. This assumes no downtown transfer.

- Route spacing will encompass, but is not limited to, the following guidelines:

  a. In densely populated areas, and/or low auto ownership areas, potential passengers should not be required to walk more than one-quarter mile. This would equate to approximately a one-half mile route spacing.

  b. In moderately dense areas, and/or moderate auto ownership areas, potential passengers should not be required to walk more than one-half mile.

  c. In light density areas, service will be provided as passenger demand dictates with major emphasis put on use of park-and-ride facilities.

  d. Travel time to destination. Goal--competitive with automobile travel time or less.

- In estimating travel times and wait times for feeder buses, three (3) minutes will be used for transfers made at timed-transfer connections; one-half the headway will be used for random transfers.

- The level of service for the feeder bus system will be based on LRT level of service, existing headways and the estimated use of the system. The feeder bus system will be designed to meet the LRT headways. In most cases, a 15/30/60 minute frequency will be used. As needed, this can be increased to include a 7/8 minute frequency.

- A financial/performance guideline should be developed that defines the appropriate levels of "feeder bus" service.

- Feeder bus service should have the secondary function of providing intra-suburban service. Feeder bus service should provide access from "non-residential" traffic-generation with LRT.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

6

Regional Railroad Authority
Originating Department

K. DeSpiegelaere 4/2/90
Authorized Signature Date

Board Action Requested

Bridges along Burlington Northern Right of Way

ACTION IS REQUESTED

Request Justification

See attached:
1. Proposed resolution
2. Memorandum from K. DeSpiegelaere
3. Map
4. Letter from Tom Kuhfeld

Budgeting and Accounting Ed Glaubitz 4/3/90
County Attorney
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date	Signature	Date
April 10, 1990	J. L. Glendenning	4/3/90
Board Date	Signature	Date

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, Ramsey County Regional Railroad Authority is negotiating with Burlington Northern for acquisition of right of way from downtown St. Paul to Beam Avenue and for an agreement on the section from Beam Avenue to the north border of Ramsey County; and

WHEREAS, The City of St. Paul Department of Public Works has indicated a desire to have bridges over Maryland Avenue and Arlington Avenue along the Burlington Northern right of way removed; Now, Therefore, Be It

RESOLVED, That Ramsey County Regional Railroad Authority will not object to the removal of the two bridges.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

RAMSEY COUNTY
Regional Railroad Authority

Room 316 Courthouse
15 W. Kellogg Blvd.
St. Paul, MN 55102
Phone 298-4145

John T. Finley, Chairman
District 3
Diane Ahrens
District 4
Ruby Hunt
District 5
Duane W. McCarty
District 1
Hal Norgard
District 7
Donald E. Salverda
District 2
Warren W. Schaber
District 6

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning KD

SUBJECT: Bridges along Burlington Northern Right of Way

DATE: April 2, 1990

Ramsey County Regional Railroad Authority is negotiating an option to purchase the abandoned Burlington Northern right of way from downtown St. Paul to Beam Avenue in Maplewood. It has come to my attention that the City of St. Paul has asked Burlington Northern to remove bridges at Arlington Avenue and at Maryland Avenue where they intersect the Burlington Northern right of way (map attached).

Because of our interest in the right of way, I have asked St. Paul to provide us with information on the bridges in order that Ramsey County Regional Railroad Authority could determine if it is in the best interest of the Rail Authority to have the bridges removed (letter attached).

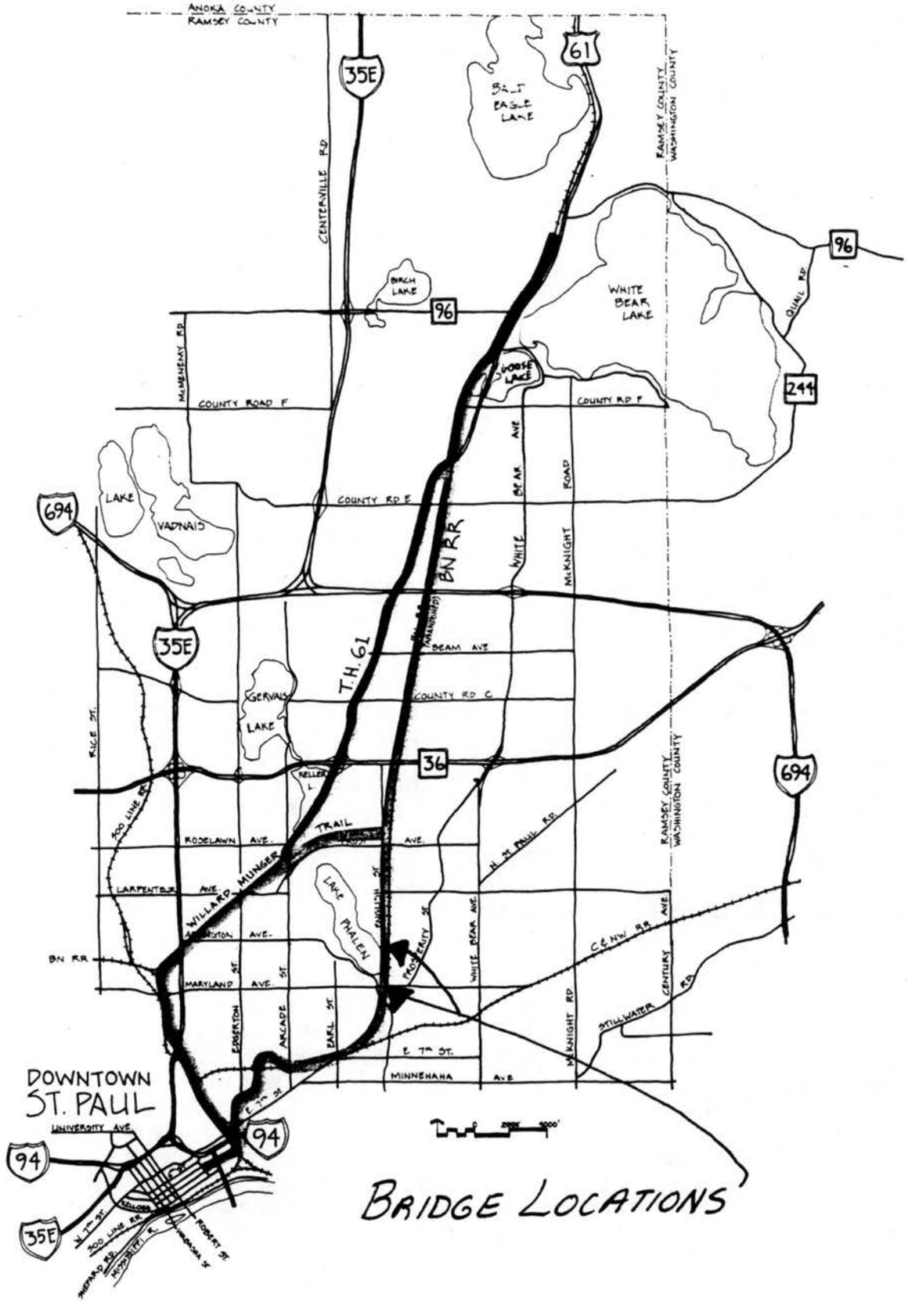
Jim Tolaas has reviewed the bridge inspection records and met with Tom Kuhfeld, St. Paul Public Works Department. It is Jim's recommendation that the structures are not suitable for future LRT operations. In addition, the presence of the bridges restricts proper operation of the roads beneath them. John Wirka of St. Paul Parks Department has concurred that removal of the bridges is recommended. For parks use, the preference would be to substitute prefabricated structures for the existing bridges. I have spoken with Peggy Lynch, Friends of Ramsey County Parks, and she feels that the solution recommended by the Parks Department would address that group's concerns.

Recommendation:

A resolution is attached which concurs with St. Paul Public Works Department's request to remove the bridges.

KD/blk
Attachments

2



Ramsey County Regional Railroad Authority

SRF

FIGURE 14
RAMSEY COUNTY COMPREHENSIVE LRT PLAN
NORTHEAST CORRIDOR
PROPOSED ALIGNMENT ALTERNATIVES

CITY OF SAINT PAUL
DEPARTMENT OF PUBLIC WORKS

THOMAS J. EGGUM, DIRECTOR
600 City Hall Annex, Saint Paul, Minnesota 55102
612-298-~~4241~~
5151

JAMES SCHEIBEL
MAYOR

February 16, 1990

Ms. Kathy Despiegelaere
Ramsey County Public Works Department
Suite 270
350 Saint Peter Street
Saint Paul, Minnesota 55102

RE: Burlington Northern/Phalen Creek Corridor

Dear Ms. Despiegelaere:

As you know, sometime ago the City through its Bridge Engineer ordered Burlington Northern to remove the bridges crossing Maryland Avenue and Arlington Avenue in the vicinity of Phalen Park. After that they were asked to delay their removal for approximately one month. We want to reaffirm our position that these bridges must be removed. In addition to being hazardous, they are deficient in terms of clearance. We have a sewer separation and street paving project scheduled for 1991, which will include sewer and street repaving on Maryland Avenue from Johnson Parkway to Barclay Street. We want the Maryland Avenue Bridge out by that time.

My purpose in writing you is to let you know that our position on these bridges is that inasmuch as they no longer serve the function for which they were constructed, they are deficient and hazardous and they should be removed. If this corridor is reused for either light rail or a pedestrian bicycle path facility, bridges appropriate to those uses should be constructed at that time. Because of your involvement in light rail transit, I wanted to give you some advance warning before we sent our letter to Burlington Northern.

Yours very truly,

Thomas Kuhfeld

Thomas E. Kuhfeld
Assistant City Engineer

TEK:caw

cc: Art Werthauser
Joe Koenig
Tom Eggum

4

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

7

Regional Railroad Authority
Originating Department

K DeSpiegelaere 4/2/90
Authorized Signature Date

Board Action Requested

Letter to Urban Mass Transportation Administration (UMTA)

Action is Requested.

Request Justification

See attached:
1. Proposed resolution
2. Memorandum from K. DeSpiegelaere
3. Letter to UMTA

Budgeting and Accounting Ed Blaufuss 4/3/90
County Attorney
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date	Signature	Date
April 10, 1990	F. L Glendenning	4/3/90
Board Date	Signature	Date

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, The Metropolitan region desires to maximize federal funding for light rail transit; and

WHEREAS, Ramsey County Regional Railroad Authority has been assured that the proposed letter to the Urban Mass Transportation Administration does not preclude the potential for federal funding for Ramsey County light rail transit corridors; Now, Therefore, Be It

RESOLVED, That Chairman John T. Finley is authorized to sign the proposed letter to the Urban Mass Transportation Administration that requests federal funding for light rail transit for the Minneapolis Northeast, Hiawatha and South (I-35W) corridors.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

RAMSEY COUNTY
Regional Railroad Authority

Room 316 Courthouse
15 W. Kellogg Blvd.
St. Paul, MN 55102
Phone 298-4145

John T. Finley, Chairman
District 3
Diane Ahrens
District 4
Ruby Hunt
District 5
Duane W. McCarty
District 1
Hal Norgard
District 7
Donald E. Salverda
District 2
Warren W. Schaber
District 6

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning KD

SUBJECT: Letter to UMTA

DATE: April 2, 1990

The purpose of this memorandum is to request authorization for Chairman John T. Finley to sign a letter to the Urban Mass Transportation Administration (UMTA). His signature will be one of five. The Regional Transit Board is expected to approve the proposed letter at its meeting on April 2.

The letter has gone through many variations since it was last considered by Ramsey County Regional Railroad Authority. The proposal is designed to initiate discussion with UMTA about federal funding for the Minneapolis Northeast, Hiawatha and I-35W LRT corridors.

The Regional Transit Board Development and Financial Plan for LRT recommended that the Midway Corridor be constructed first, with regional and state, rather than federal funding. This letter does not preclude the potential for federal funding for other Ramsey County LRT corridors in the future, nor for the Midway Corridor, should regional and state funds not be forthcoming.

Recommendation:

A resolution is attached for your consideration.

KD/blk
Attachment

REGIONAL TRANSIT BOARD
Mears Park Centre
230 East 5th Street
St. Paul, Minnesota 55101
612/292-8789

March 28, 1990

DRAFT

Mr. Brian W. Clymer
Administrator
Urban Mass Transportation Administration
400 Seventh Street SW
Washington, DC 20590

Dear Administrator Clymer:

A significant decision was reached in early February 1990 in the Twin Cities. The Metropolitan Council and the Regional Transit Board unanimously approved a Regional LRT Development and Financial Plan. The plan outlines the following:

- a maximum twenty-year plan for LRT
- a maximum ten-year plan for LRT
- a staging of the ten-year plan into three groups
- a financial plan

The financial plan identifies federal, state, regional, local (county) and private sources to pay for the ten-year plan. A copy of the plan is enclosed.

The purpose of this letter is to outline for the Urban Mass Transportation Administration (UMTA) a proposed approach for federal participation in the Twin Cities' LRT implementation plan. The plan recognizes that UMTA has limited resources, but also recognizes the importance and benefit of federal participation.

To initiate federal participation, the attached report outlines three specific requests:

- Request UMTA to designate the Northeast Corridor between downtown Minneapolis in Hennepin County and the Northtown Shopping Center in Anoka County (eleven miles) as an overmatch corridor and to authorize the initiation of a Phase II Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS). The attached report outlines how the three requirements for initiation of an AA/DEIS have been met.

- Request that UMTA accept the 1985 Federal Highway Administration (FHWA) Hiawatha Corridor EIS as satisfying the environmental requirements and designate this corridor as an overmatch corridor. The RTB and Hennepin County Regional Railroad Authority (HCRRA) further request that UMTA apply the pending $24 million grant for the HCRRA Stage I, as outlined in a May 30, 1989, letter from Mr. DelliBovi to Commissioner Sivanich (See Attachment A.) as the first installment on the federal share for this corridor.

- UMTA is presently a Cooperating Agency for the I-35W DEIS being prepared under FHWA procedures. The request is made that UMTA accept the FHWA environmental process as meeting the UMTA planning and environmental requirements for this corridor and designate this corridor as a potential overmatch corridor.

The adopted regional LRT plan identifies the Central Corridor between downtown Minneapolis and downtown St. Paul as the first priority corridor. The financial plan for this corridor does not include federal funding; the estimated cost is $330 million (1988 dollars). This approach will allow the earliest implementation of LRT in the region and will provide a strong indication of local commitment for rail transit to UMTA.

The ten-year (1992-2002) plan outlines a $1.36 billion (1988 dollars) program with a UMTA participation of $296 million (1988 dollars) or 22 percent of the total. This amount of money has been typically granted to other metro areas for a single rail corridor.

The staff of the RTB will be contacting UMTA staff in the next week to arrange a meeting to discuss each of the three corridor requests, the new regional plan, and UMTA's participation in the plan.

We are very proud of the accomplishments in regional consensus developed over the past eight months. LRT is a very important component of the Twin Cities' future transportation system. We hope we can count on UMTA's cooperation and support in the plan's implementation in the 1990s.

Thank you for your attention.

Sincerely yours,

REGIONAL TRANSIT BOARD

Michael Ehrlichmann
Chairman

METROPOLITAN COUNCIL

Steve Keefe
Chairman

ANOKA COUNTY REGIONAL RAILROAD AUTHORITY

Paul McCarron
Chairman

HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

Mark Andrew
Chairman

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

John T. Finley
Chairman

/jkf
Attachments
cc: Minnesota Congressional Delegation
Commissioner Earl Gnan, Carver County RRA
Commissioner Donald Chapdelaine, Dakota County RRA
Commissioner William Koniarski, Scott County RRA
Commissioner Russ Larkin, Washington County RRA
Joel Ettinger, UMTA Region V
Ron Jensen-Fisher, UMTA-Washington, DC

ATTACHMENT A

U.S. Department of Transportation
Urban Mass Transportation Administration

The Administrator

400 Seventh St., S.W.
Washington, D.C. 20590



Mr. Sam S. Sivanich, Chairman
Hennepin County Regional
Railroad Authority
A-2307 Government Center
Minneapolis, Minnesota 55487-0237

RE: Program No. MN-08-0058

Dear Mr. Sivanich:

I am pleased to advise you that your application for a Technical Studies grant under Section 8 of the Urban Mass Transportation Act of 1964, as amended, has been approved in the maximum amount of $1,500,000. This project will allow Hennepin County Regional Railroad Authority to proceed with the development of technical and financial plans for Light Rail Transit (LRT).

It is UMTA's intention to participate in the proposed LRT construction project with a Section 3 grant as soon as all the legal, cost-effectiveness and environmental requirements are met. This one-time expenditure of $24 million in Federal funds to construct an entire 29-mile light rail system is a good example of Secretary Skinner's initiative to use scarce Federal resources to leverage increased non-Federal funding.

Enclosed are four copies of the approved project budget and four counterparts of a grant agreement executed on behalf of this Administration. Instructions which you should follow in executing these counterparts are included. You may incur costs for this project as of the date specified on the enclosed Notification of Grant Approval.

If you have any questions on the enclosed grant materials, please call UMTA's Regional Office in Chicago at (312) 353-2789.

Sincerely,

Alfred A. DelliBovi

Enclosures

ATTACHMENT B

REQUEST OF THE URBAN MASS TRANSPORTATION ADMINISTRATION FOR PARTICIPATION IN THE TWIN CITIES' REGIONAL LRT IMPLEMENTATION PLAN

March 1990

OVERVIEW

This report outlines the regional approach recently unanimously agreed to by the Metropolitan Council and the Regional Transit Board. The approach calls for federal, state, regional, local (county), and private sector financial participation. Three requests are made of UMTA at this time in order to initiate federal participation in LRT implementation for three overmatch corridors. The report is organized into the following sections:

- o History/Status of LRT Planning in the Twin Cities
- o Summary of System Planning Activities in the Twin Cities
- o Regional Development and Financial Plan
- o Proposed UMTA Participation in Northeast Corridor
- o Proposed UMTA Participation in Hiawatha Corridor
- o Proposed UMTA Participation in I-35W Corridor
- o Local Financial Capability
- o Appendix: Very Preliminary Cost-Effectiveness Calculations

HISTORY/STATUS OF LRT PLANNING IN THE TWIN CITIES

Many planning activities have occurred in the last two years; the major activities are summarized below.

- Hennepin County Comprehensive LRT System Plan - 1987 state legislation required Hennepin County to complete a Comprehensive Plan for LRT. The plan was approved by the Hennepin County Regional Railroad Authority (HCRRA) in June 1988. The Stage I plan includes 29.1 miles of LRT service and is estimated to cost $497 million (1988 dollars). Over 150 public meetings were held prior to the plan adoption.

  One of the corridors in the HCRRA plan is the Hiawatha Corridor. A federal EIS was completed in 1985 for this combined roadway and transit project. The Federal Highway Administration procedures for EIS preparation were followed. UMTA was a cooperating agency. The roadway portion of this project is now under construction; the LRT component is under preliminary engineering design.

- Central Corridor - The Central Corridor extends from downtown Minneapolis through the University of Minnesota to downtown Saint Paul, a distance of approximately eleven miles. The portion from Minneapolis through the University is referred to as the "University Connector." East of the University, the corridor is referred to as the "Midway Corridor." The Metropolitan Council has historically designated the Central Corridor between downtown Minneapolis and downtown Saint Paul as the first priority corridor in the Twin Cities. A Central Corridor UMTA Phase II AA/DEIS was conducted between 1982 and 1984; the work was never completed because the 1985 Legislature prohibited further fixed guideway planning. This ban was lifted in 1987.

  In March 1988, the Regional Transit Board (RTB) in cooperation with the Ramsey County Regional Railroad Authority (RCRRA) completed a study of alternative alignments in the Midway Corridor; the draft report was

made available for public, agency, and community review. The number of alignment alternatives was reduced to three. The RCRRA and HCRRA began preliminary design and state environmental work on this corridor in the fall of 1989; this work will result in the selection of a preferred alignment in late 1990.

- Comprehensive LRT Plan for Ramsey County - In December 1989, the Comprehensive LRT Plan was completed. The plan identifies the Midway Corridor as the top priority LRT corridor in Ramsey County. Five other corridors are recommended for LRT implementation in the next twenty years.

- Northeast Corridor Planning - In July of 1988, the Anoka County Regional Railroad Authority (ACRRA) and HCRRA initiated comprehensive planning in the Northeast Corridor. In February 1989, the ACRRA adopted a Comprehensive Plan and Hennepin County approved the results of the study which outlines plans for LRT in a single corridor; location options were defined in the plan. HCRRA will update its Comprehensive Plan when a specific alignment is selected within the corridor. Analysis of two route options is currently underway and the state environmental review process has recently been initiated.

- I-35W Corridor Planning - The Metropolitan Council and Minnesota Department of Transportation (Mn/DOT) are currently completing an environmental process following FHWA procedures for I-35W between downtown Minneapolis and Burnsville in Dakota County. The Scoping Document has been completed and the DEIS is currently being prepared and is expected to be completed in early 1991. Both LRT and HOV lane alternatives are being studied. UMTA is a cooperating agency in this corridor study/EIS.

- Other Regional Railroad Authority Comprehensive Plans - Dakota and Washington Counties are in the process of developing plans. Carver and Scott Counties have received state money to assist in plan development. Evaluation of corridors and preservation of right-of-way are primary focuses of these plans.

- State Legislature Activities - The 1988 Legislature appropriated $4.2 million for Railroad Authorities to plan and engineer LRT; each RRA must match each state dollar with a local dollar. Comprehensive LRT planning requirements for all Regional Railroad Authorities were also defined. The 1989 Legislature defined a regional oversight process for LRT development and focuses that function with a newly-constituted RTB and a Joint LRT Advisory Committee, and retains Metro Council approval on some issues and review/comment on others.

The 1989 Legislature appropriated $6.8 million for the next two years of LRT planning and engineering. In addition, the legislation states that the MTC "shall operate regional railroad authority light rail transit facilities and services upon completion of construction of the facilities and the commencement of revenue service using the facilities." Bills have been introduced both in the 1989 and 1990 legislative sessions that, if approved, would fund a significant share of Central Corridor light rail transit design and construction costs.

- Recent Federal Funding Activities - The HCRRA recently applied for two federal grants. A Section 8 grant for $1.5 million would assist potential turnkey contractors in preparing detailed technical and financial approaches for the Stage I LRT system. The second grant application is a Section 3 application for $24 million of federal support for a Minimum Operating Segment that is part of the Hennepin County Stage I system. The first grant has been approved. UMTA has stated its intention in a May 30, 1989, letter (See Attachment A.) to participate in the Stage I system with an expenditure of $24 million in federal funds. The grant is contingent upon meeting all the legal, cost-effectiveness, and environmental requirements.

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SUMMARY OF SYSTEM PLANNING ACTIVITIES IN THE TWIN CITIES

UMTA is familiar with the numerous transit studies that have been completed over the past twenty years in the Twin Cities. The region has evaluated heavy rail, light rail, automated guideway transit, busway/high occupancy vehicle lanes, personal rapid transit, and various transportation system management options. These studies have led to a regional consensus on a strategy for fixed guideway transit.

In 1986, the Metropolitan Council completed a regional transit analysis entitled, "A Study of the Potential Transit Capital Investments in Twin Cities Corridors." This study identified the range of appropriate transit modes in eighteen corridors in the Twin Cities. The analysis became the technical basis for the Transportation Policy Plan adopted by the Metropolitan Council in February 1989. Relative to LRT, the plan identifies six corridors as candidates for LRT service to be implemented by 2010. The corridors include: Central Corridor (University Connector/ Midway), Northeast Corridor (North Corridor in Metropolitan Council Report), Minneapolis Northwest Corridor, Southwest Corridor, I-35W Corridor, and Hiawatha Corridor.

In December 1989, the Metropolitan Council's Transportation Policy Plan was amended to state that planning for LRT service is appropriate in corridors where the annual capital and annual operating/maintenance cost per annual passenger is less than $4.00 (1988 $).

The 1989 legislature directed the newly reconstituted Regional Transit Board to develop a Regional LRT Plan. The plan contains two parts: a Development and Financial Plan, which was recently completed; and a Regional LRT Coordination Plan to be completed by July 1, 1990. The Development and Financial Plan outlines a twenty-year plan, a ten-year plan, and a recommended staging plan. This plan has been approved by the RTB and has been approved by the Metropolitan Council as being in conformance with the Metropolitan Council's transportation policy plan for the Metropolitan region.

The Regional LRT Coordination Plan will address the following issues: implementation strategy; organizational plan; implementation plan, schedule, and budget; general design standards and performance specifications; operating plan and philosophy; process for updating the Regional LRT plan; and process for relating new land development proposals to LRT. The Joint LRT Advisory Committee will prepare the Coordination Plan with the assistance of staff and consultants and submit it to the RTB.

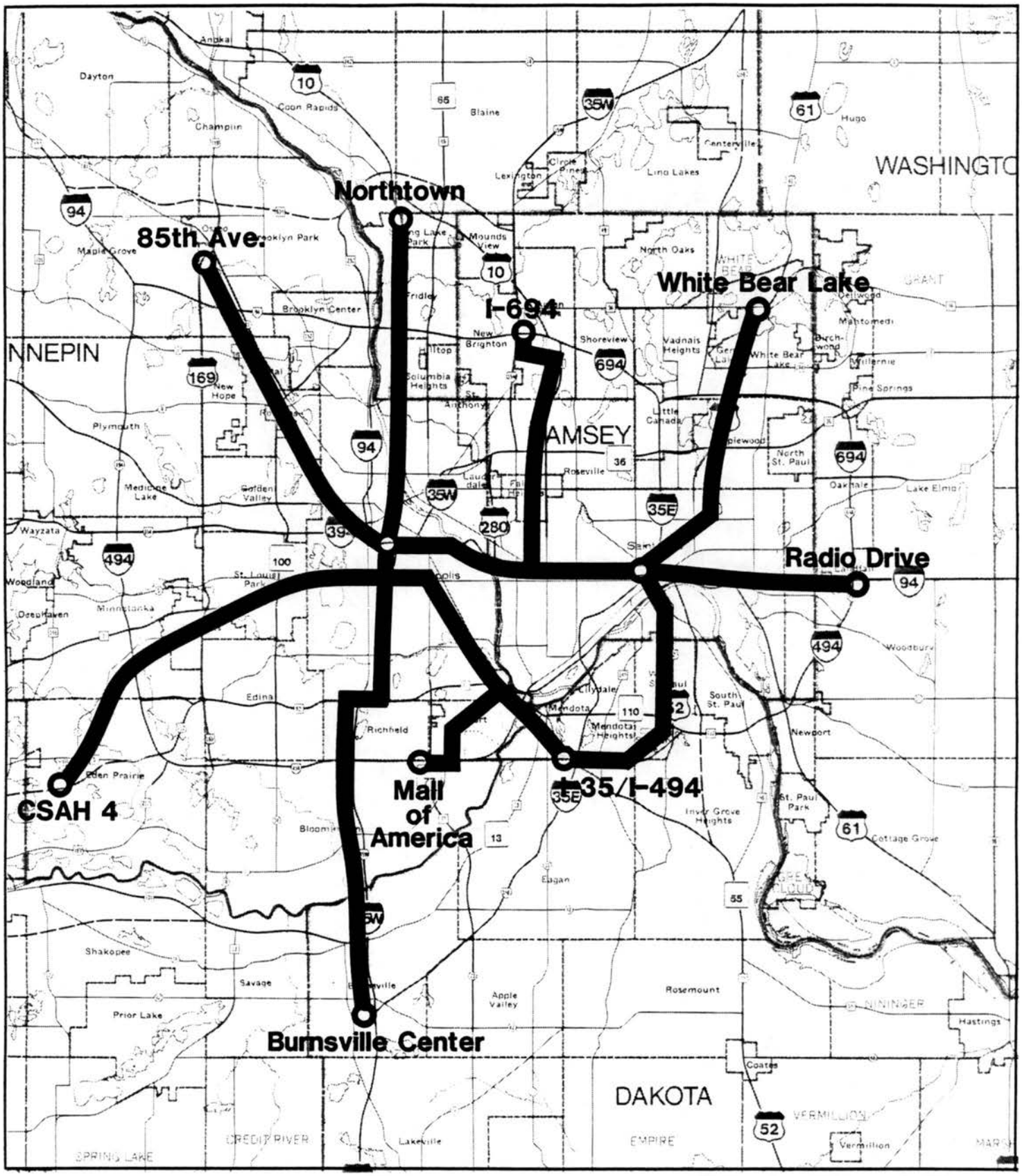
REGIONAL DEVELOPMENT AND FINANCIAL PLAN

The Development Plan contains three components: a maximum twenty-year plan of 123 miles (Figure 1), a maximum ten-year plan of 83 miles (Figure 2), and a staging of the ten-year plan by three groups (Figure 3). Each corridor in the ten-year plan has a total cost per passenger less than $3.20 (1988 dollars). The corridors in the three groups are listed below:

- Group A:
  - Downtown St. Paul Distribution System
  - Central Corridor
  - Downtown Minneapolis tunnel
  - Yard and Shops and Initial Vehicle Fleet
- Group B:
  - Extension of Minneapolis Tunnel to 29th Street
  - Hiawatha Corridor
  - Minneapolis Northeast
  - Minneapolis Northwest
  - Minneapolis South
  - St. Paul South
- Group C:
  - Minneapolis Southwest
  - St. Paul Northeast
  - St. Paul Northwest
  - Hiawatha Extension to Airport
  - Minneapolis South Extension to TH 13

The Financial Plan developed by the RTB includes the following key recommendations on LRT financing:

- The Financial Plan should include federal, state, regional, local and private funding.
- It should be the goal of the region to obtain at least 20 percent federal funding and 30 percent state funding for the ten-year LRT plan. RTB in cooperation with the Regional Railroad Authorities should seek federal funds for corridors which are strongest in meeting federal eligibility requirements to ensure the best chance to maximize federal funding.

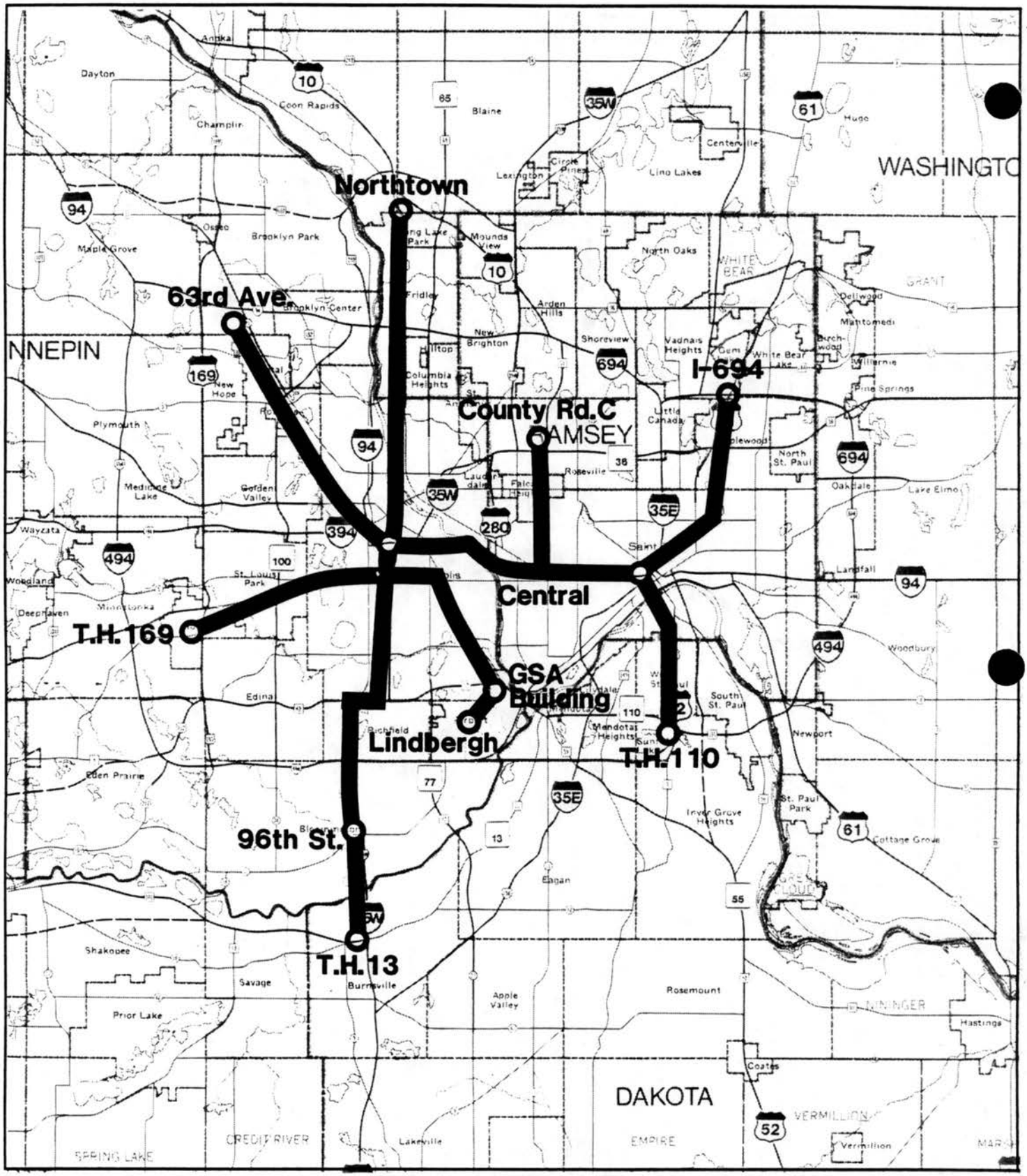


Proposed Maximum 20 Year Regional LRT Plan

Source: Final Light Rail Transit Regional Development and Financial Plan, Regional Transit Board, February 1990.

0 3 6 Miles North

BRW



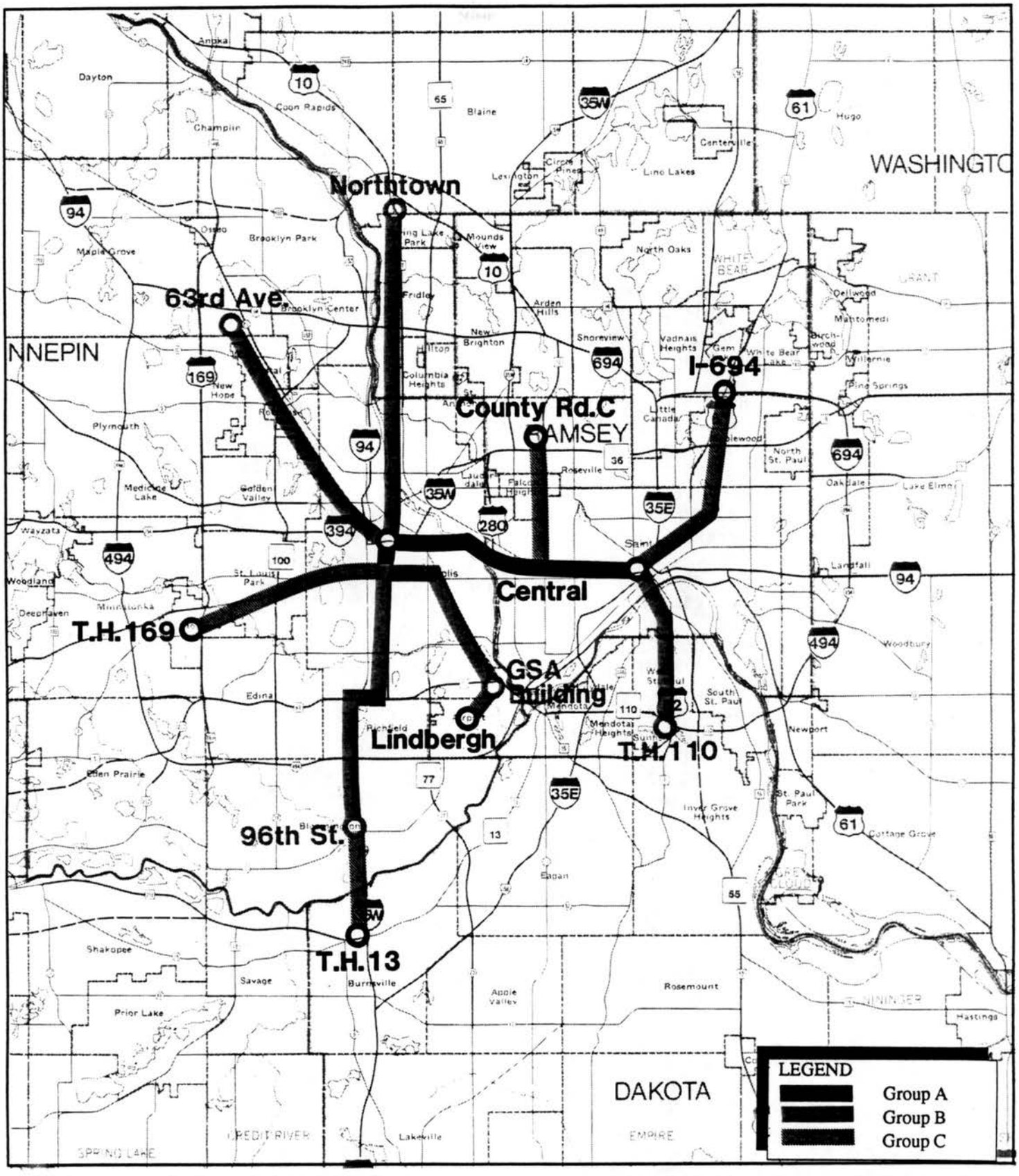
Proposed Maximum 10 Year Regional LRT Plan

Source: Final Light Rail Transit Regional Development and Financial Plan, Regional Transit Board, February 1990.

0 3 6 Miles North

BRW

16



Proposed Maximum 10 Year Regional LRT Plan

Source: Final Light Rail Transit Regional Development and Financial Plan, Regional Transit Board, February 1990.

0 3 6 Miles North

BRW

17

- Increased state MVET (Motor Vehicle Excise Tax) funds and increases in the RTB property tax levy needed to supplement MVET funds should be used for LRT operating deficits.

- Corridors which meet technical performance thresholds and have obtained the necessary environmental and design approvals should be eligible for up to 50 percent combined federal and state matching funds.

- The RTB should seek authorization from the Legislature for a regional tax to support the construction of LRT. Priorities are: (1) regional sales tax for broad-based transportation purposes; (2) RTB debt service property tax levy.

- Any regional tax should include a method for feathering (variable tax rates) or redistribution of revenues for those counties which contribute taxes, but receive limited short to mid-term benefits from the LRT system.

- The regional railroad authorities should retain their current property tax levy authority for LRT.

- The regional railroad authorities should be able to construct any LRT corridor within the maximum ten-year plan using 100 percent county funds if appropriate environmental and design approvals, including approval from the RTB, have been obtained. Advance funding for constructing Group A and B corridors to a budgeted amount should be reimbursed if regional need for the corridor is shown and regional funds are available.

- The regional railroad authorities should aggressively pursue private participation in the funding of LRT construction, particularly transit stations.

- A local (county) share of 10 percent should be required for all corridors in Groups B and C. The local share would not be required for those corridors receiving federal funding.

It is recognized that federal funds are presently very limited for transit capital projects and that there is significant competition for available federal dollars. It is also recognized that federal funding can be a very beneficial component of an overall financial plan. The following guidelines were established in the plan for federal funding:

- It is the goal of the region to obtain at least 20 percent federal funding for the ten-year LRT plan.

- Federal funds should be sought by the RTB in cooperation with the Regional Railroad Authorities for individual corridors which are strongest in meeting federal eligibility requirements to ensure the best chance to maximize federal funding.

- The following corridors should complete the federal UMTA environmental review requirements at this time to assure eligibility for federal funding:

  - Minneapolis Northeast Corridor--Conduct an Alternative Analysis/Draft EIS (AA/DEIS)

  - Hiawatha Corridor--Use the existing Federal Highway Administration (FHWA) EIS to meet UMTA requirements.

  - I-35W--Complete the federal EIS currently being prepared with UMTA as a cooperating agency so as to meet UMTA's requirements.

- The Central Corridor and the two downtown distribution systems should not pursue federal funding to ensure the earliest possible implementation of the highest priority corridor. This position is subject to modification, dependent upon changing federal regulations and funding programs.

Specifics of the present proposed UMTA participation in each corridor are defined below.

Table 1 presents the corridor costs that were utilized in the development of the RTB Plan. These costs were prepared for facilitating comparative analysis among corridors. The costs included a portion of the downtown systems and the yard and shop. The table presents corridor costs without these two cost elements.

Table 2 presents the proposed financial plan for Group A, Group B, and Group C corridors.

Table 2 was prepared using the following principles/assumptions:

- The Northeast, Hiawatha, and Minneapolis South (I-35W) Corridors would be overmatch corridors, and UMTA would fund 75 percent of these corridors.

- The total UMTA funding is 22 percent of the total financial commitment to LRT in the Twin Cities.

TABLE 1
CORRIDOR CAPITAL COSTS (MILLIONS 1988 $)
MAXIMUM TEN-YEAR LRT PLAN

CORRIDOR (TERMINUS)	CAPITAL COST	DOWNTOWN* COMPONENT	YARD/SHOPS** COMPONENT	CAPITAL COST WITHOUT DOWNTOWN AND YARD/SHOPS
Central Corridor (Downtown to Downtown)	$161.8 - 192.8	$17.0	$5.6 - $6.6	$139.2 - $170.2
Minneapolis Northeast (Northtown Mall)	194.0	13.3	5.0	175.7
St. Paul Northwest (County Road C)	99.4	3.7	3.3	92.4
St. Paul Northeast (I-694)	85.8	7.3	1.7	80.4
St. Paul South (Highway 110)	125.6	7.3	1.7	116.6
Hiawatha (GSA)	105.3	36.7	2.3	66.3
Hiawatha (GSA to Airport)	60.2	0.0	0.7	59.5
Minneapolis South (I-35W, 96th Street)	193.5	36.7	4.0	152.8
Minneapolis South (I-35W, 96th Street to TH 13)	55.1	0.0	1.9	53.2
Minneapolis Southwest (TH 169)	111.8	36.7	3.3	71.8
Minneapolis Northwest (63rd Avenue)	129.6	13.3	3.6	112.7
	$1,322.1 - $1,353.1	$172.0*	$33.1-$34.1**	$1,120.6-$1,151.6

* Downtown Minneapolis Tunnel, $150 million. Downtown St. Paul Loop, $22 million. Minneapolis Tunnel cost was increased from $150 to $163 million between draft and final versions of the RTB Plan.

** Yard and Shops capital cost computed at $750,000 per light rail vehicle.

TABLE 2
CAPITAL COSTS AND PROPOSED FUNDING SOURCES (MILLIONS 1988 $)
MAXIMUM TEN-YEAR LRT PLAN

CORRIDOR	CAPITAL COST	FEDERAL FUNDS	STATE/ REGIONAL FUNDS	COUNTY FUNDS	PRIVATE FUNDS
o **Group A:**	$330	$ 0	$313	$ 0	$17
o **Group B:**					
- Minneapolis Tunnel (to 29th Street)	$ 53	$ 0	$ 45	$ 5	$ 3
- Minneapolis Northeast (Northtown Mall)	176	132	35	0	9
- Minneapolis Northwest (63rd Avenue)	113	0	96	11	6
- St. Paul South (Highway 110)	117	0	99	12	6
- Hiawatha (to GSA)	66	50	13	0	3
- Minneapolis South (I-35W to 96th Street)	153	114	31	0	8
	$678	$296	$319	$28	$35
o **Group C:**					
- St. Paul Northwest (County Road C)	$ 92	$ 0	$ 78	$ 9	$ 5
- St. Paul Northeast (I-694)	80	0	68	8	4
- Hiawatha (GSA to Airport)	60	0	51	6	3
- Minneapolis South (I-35W, 96th Street to TH 13)	53	0	45	5	3
- Minneapolis Southwest (TH 169)	72	0	61	7	4
	$357	$ 0	$303	$35	$19
TOTAL (1988 $)	$1,365*	$296	$935	$63	$71

* Reflects refined Minneapolis Tunnel cost of $163 million. Group A Tunnel share, $110 million, and Group B Tunnel share, $53 million.

- The private sector would raise approximately 5 percent of each corridor's cost.

- The counties would fund 10 percent of the corridor cost for non-federally funded corridors, except for Group A.

- The state/region would fund the remaining amount.

- It is understood that the proposed funding allocations (and grouping of corridors) described in Table 2 may change subject to annual Plan reviews and two-year Plan updates.

- Group A costs, which total $330 million (1988 $), consist of the following elements:

  - Approximately 67 percent of the Downtown Minneapolis tunnel
  - University Connector
  - Midway Corridor
  - Midway Corridor Connector to Downtown St. Paul
  - Downtown St. Paul Loop
  - Yard/Shops
  - Vehicles
  - Park-and-ride facilities

PROPOSED UMTA PARTICIPATION IN NORTHEAST CORRIDOR

The Northeast Corridor extends approximately eleven miles from downtown Minneapolis to the Northtown Shopping Center, a regional mall. The corridor traverses portions of both Hennepin and Anoka Counties. The two major transit arteries, Central Avenue and University Avenue, provide service to northeast Minneapolis, Columbia Heights, Fridley, Hilltop, Coon Rapids, Blaine and Anoka. The systemwide LRT analysis conducted by the Metropolitan Council in 1986 identified 15,800 daily transit riders in the corridor. This daily ridership level was used as the base for the 2010, LRT ridership forecasts. A 1988 survey by the MTC indicated this had grown to 17,200 riders per day. The 2010 ridership projections have not been adjusted to reflect this increase in bus ridership. Peak hour ridership in the Northeast Corridor has consistently ranked among the top three corridors in the region over the last five years.

The Comprehensive LRT plan for Anoka County identified two alternative LRT routes in the corridor as shown on Figure 4. Based upon the RTB's study, the 2010 daily LRT ridership projections range from 17,600 to 24,400. The preferred route will be selected during the preliminary design and state environmental work presently underway.

The following requests of UMTA are made:

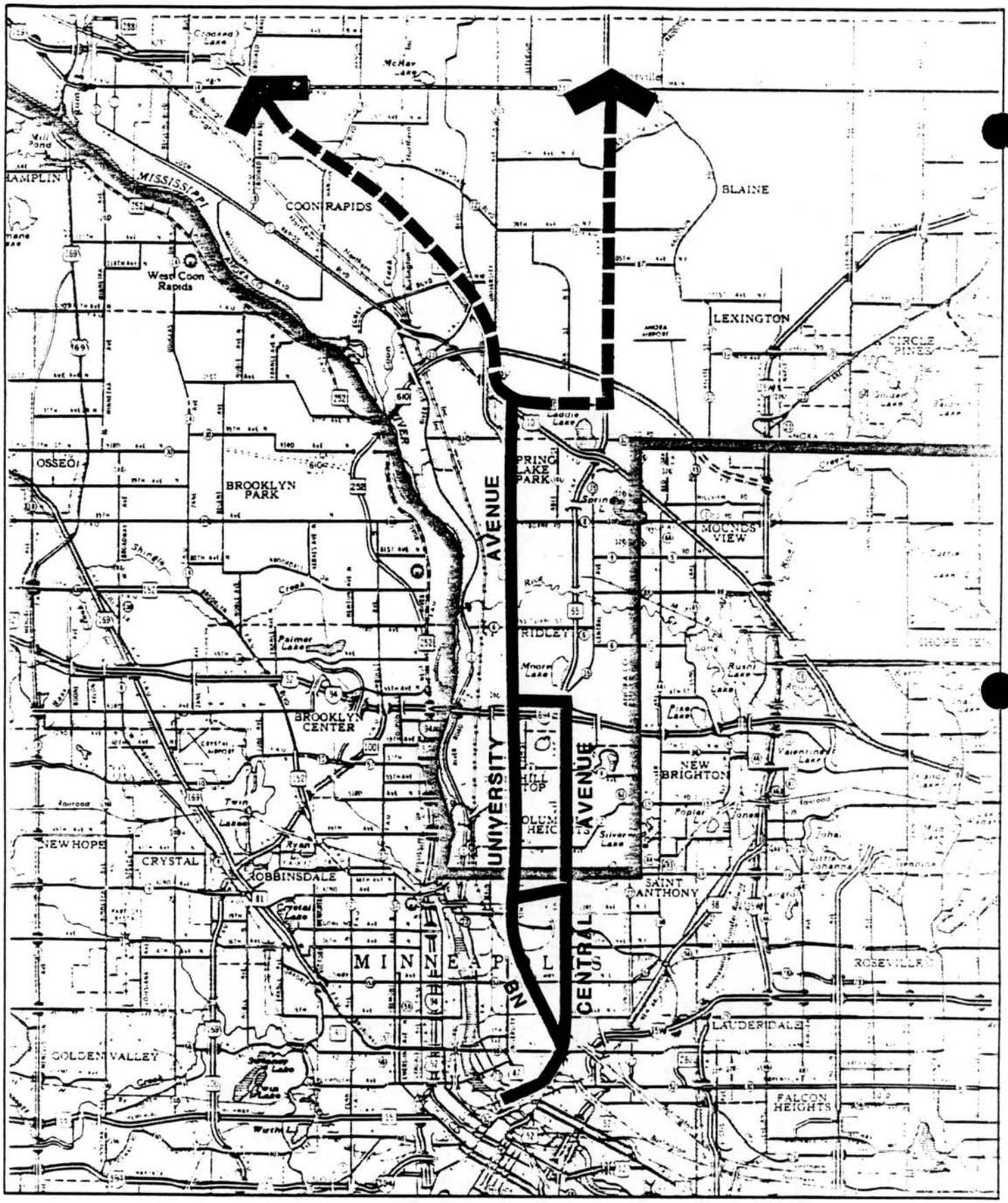
- Agree that the UMTA required Phase I: System Planning activities are completed for the Twin Cities.

- Designate the Northeast Corridor as an overmatch corridor.

- Negotiate a scope of services for an UMTA Phase II AA/DEIS. Justification for not including a busway/high occupancy vehicle lane alternative is being developed. Therefore, the expected alternatives include no-build, TSM and LRT.

- Authorize the initiation of a Phase II AA/DEIS and agree to expedite review of the thirty products required during the development of the AA/DEIS. This corridor meets the three requirements of UMTA for entry into the AA/DEIS process:

  - It has over 15,000 transit trips today.



Northeast Corridor Light Rail Transit Alignment Options

- The expected annual cost per new annual transit rider is less than the standard of $10.00 (See the attached "very preliminary" calculation.).

- A conceptual financial plan has been developed.

No federal funds will be requested to assist in paying for the AA/DEIS in order to expedite the study. State and county funds will be used instead.

PROPOSED UMTA PARTICIPATION IN HIAWATHA CORRIDOR

As previously mentioned, UMTA has stated in its May 1989, letter, its intention to participate in the Hennepin County Stage I LRT System with a $24 million grant. The RRA must meet all legal, cost-effective, and environmental requirements to receive the grant. It is the intention of the HCRRA to expend the $24 million on a Minimum Operating Segment (MOS) in the Hiawatha Corridor. The likely MOS would be between the south tunnel portal at 29th Street/Portland and 46th Street.

In 1985, a FHWA EIS was completed for the Hiawatha Corridor between downtown Minneapolis and Bloomington. The preferred alternative was a four-lane, at-grade urban arterial roadway and LRT. A wide range of highway and transit alternatives were evaluated during the six-year planning process. Construction on a segment (Lake Street to 46th Street) of the roadway portion of the recommended transportation solution was started in the summer of 1988.

Very preliminary cost-effectiveness calculations have been completed for the corridor; the results indicate the cost per new rider is $4.48 (1988 $).

The HCRRA requests that UMTA accept the 1985 Hiawatha Corridor EIS as satisfying the NEPA environmental requirements for the MOS. The HCRRA would suggest a meeting in the very near future with UMTA to discuss this request.

PROPOSED UMTA PARTICIPATION IN I-35W CORRIDOR

UMTA is currently a Cooperating Agency for the I-35W Corridor Study. This study is sponsored by the Metropolitan Council, Mn/DOT and FHWA. This study is evaluating both High Occupancy Vehicle (HOV) lane alternatives and LRT alternatives, as well as freeway widening alternatives. The Hennepin County Regional Railroad Authority is also a Cooperating Agency. The study is following Federal Highway Administration (FHWA) procedures for preparing the environmental documents.

The Corridor Study was initiated in early 1986 and has generated considerable interest. Neighborhood groups, city councils, members of the legislature and the general public have been very active. New Councils and a Neighborhood Transportation Network have been formed. A Scoping Decision has been made and the DEIS is currently being prepared. Given this situation, the request of UMTA is to accept the FHWA environmental process as meeting the UMTA planning and NEPA environmental requirements.

LOCAL FINANCIAL CAPABILITY

The Twin Cities has a long history of local, dedicated funding support for public transit. This tradition is extended to LRT. Since 1980, over $50 million has been appropriated for LRT studies and right-of-way acquisition. Outlined below are the annual taxing capabilities authorized by the legislature for each Railroad Authority, the amounts levied to date and the state LRT contributions. To give an indication of the capability to operate the combined LRT and bus system, the funding of the bus system for the past five years is also outlined.

- The annual property tax capability of the four Railroad Authorities includes:

REGIONAL RAILROAD AUTHORITY	ANNUAL TAXING CAPABILITY (1990)
Anoka County	$ 3,200,000
Hennepin County	20,900,000
Dakota County	4,500,000
Ramsey County	7,300,000

- To date the Authorities have levied for property taxes as follows:

REGIONAL RAILROAD AUTHORITY	YEAR PAYABLE	AMOUNT
Anoka County	1989	$ 500,000
Anoka County	1990	250,000
Dakota County	1989	0
Dakota County	1990	179,520
Hennepin County	1982	2,239,350
Hennepin County	1983	2,500,727
Hennepin County	1984	2,700,785
Hennepin County	1985	2,809,021
Hennepin County	1986	0
Hennepin County	1987	0
Hennepin County	1988	6,931,031
Hennepin County	1989	9,218,000
Hennepin County	1990	9,494,540

REGIONAL RAILROAD AUTHORITY	YEAR PAYABLE	AMOUNT
Ramsey County	1988	125,000
Ramsey County	1989	1,700,000
Ramsey County	1990	3,900,000

These amounts have adequately funded planning, preliminary engineering, and environmental studies that are currently underway and selected property acquisition.

- The state through the Motor Vehicle Excise Tax (MVET) has funded LRT as follows:

TIME PERIOD	MVET (LRT)
FY '89	$ 4,170,000
FY '90	$ 3,400,000
FY '91	$ 3,400,000

- The following additional amounts have been expended locally to support the public bus transit service in the Twin Cities.

YEAR	PROPERTY TAX*	STATE CONTRIBUTION**
1984	$45,572,000	$21,604,000
1985	48,619,000	21,604,000
1986	52,837,000	20,468,000
1987	55,835,000	20,468,000
1988	62,103,000	23,946,000
1989	65,771,000	23,946,000

* Funding for MTC Regular Route service and capital exurban services.

** Includes funds for regular route service, Metro Mobility, rural/small urban programs, new services and RTB administration.

- The RTB has unlimited authority to levy property taxes to retire bonds that are authorized by the Legislature.

APPENDIX: PRELIMINARY COST-EFFECTIVENESS CALCULATIONS

3/16/90
Version 2

VERY PRELIMINARY COST EFFECTIVENESS CALCULATIONS FOR NORTHEAST CORRIDOR

ASSUMPTIONS

- The LRT capital cost is $176,000,000 (1988 $) for the 11.6-mile system.
- The annual LRT capital cost is $17,952,000 or 10.2 percent of the total cost.
- The downtown distribution system is not part of the capital cost.
- The incremental TSM annual capital cost (TSM versus bus capital cost of LRT alternative) is $1,000,000 (bus replacement and minor street-related improvements).
- The forecasted LRT ridership is 24,400 rides per day.
- The TSM forecasted ridership is 110 percent of the existing ridership (15,800 X 1.10 = 17,400 rides per day).
- The LRT annual operating cost is $7,700,000 per year. Source: LRT Regional Development and Financial Plan.
- The operating cost for the feeder bus and remaining radial routes/crosstown routes in the Northeast Corridor is $10.5 million.
- The TSM operating cost is $12,800,000 per year (122 peak buses and 3,660,220 bus miles); this is the same operating cost of the existing bus system.
- The travel time savings is $3,194,640 per year (17,400 rides X 306 days X .15 hours X $4.00/hour).
- A factor of 306 is used to convert weekday transit ridership to annual riders.

CALCULATION

The formula suggested by UMTA to calculate the annual capital and annual operating and maintenance cost per annual new transit rider is:

$$\text{Incremental Index} = \frac{\Delta \$CAP + \Delta O \& M + \Delta TT}{\Delta \text{Riders}}$$

where the Δ 's represent incremental changes in costs and benefits compared to the TSM alternative, and

$CAP = total capital costs, annualized over the life of the project
$O&M = annual operating and maintenance costs
$TT = annual value of travel time savings for existing riders
RIDERS = annual transit ridership, measured in "linked" trips.

$$\$8.92 = \frac{(\$17.9M - \$1.0M) + (\$7.7M + \$10.5M - \$12.8M) + (-\$3.2M)}{(24{,}400-17{,}400) \times 306}$$

CONCLUSION

The annual capital and operating/maintenance cost per new annual rider of the LRT system in the Northeast Corridor as compared to the TSM alternative is under $10.00.

3/28/90

VERY PRELIMINARY COST EFFECTIVENESS CALCULATIONS FOR HIAWATHA CORRIDOR (Portal to 46th Street)

ASSUMPTIONS

- The LRT capital cost is $40,500,000 (1988 $) for the 3.6-mile system.
- The annual LRT capital cost is $4,131,000 or 10.2 percent of the total cost.
- The downtown distribution system is not part of the capital cost.
- The incremental TSM annual capital cost (TSM versus bus capital cost of LRT alternative) is $480,000 (bus replacement).
- The forecasted LRT ridership is 14,400 rides per day.
- The TSM forecasted ridership is 110 percent of the existing ridership (10,700 x 1.10 = 11,700 rides per day).
- The LRT annual operating cost is $2,633,800 per year.
- The operating cost for the feeder bus and remaining radial routes/crosstown routes in the Hiawatha Corridor is $5,730,000 per year.
- The TSM operating cost is $7,530,200 per year (7,031 VMT x $3.50 per mile x 306 days).
- The travel time savings is $716,040 per year (11,700 rides X 306 days X .05 hours X $4.00/hour)
- A factor of 306 is used to convert weekday transit ridership to annual riders.

CALCULATION

The formula suggested by UMTA to calculate the annual capital and annual operating and maintenance cost per annual new transit rider is:

$$\text{Incremental Index} = \frac{\Delta \$CAP + \Delta O \& M + \Delta TT}{\Delta \text{Riders}}$$

where the Δ 's represent incremental changes in costs and benefits compared to the TSM alternative, and

$CAP = total capital costs, annualized over the life of the project
$O&M = annual operating and maintenance costs
$TT = annual value of travel time savings for existing riders
RIDERS = annual transit ridership, measured in "linked" trips.

$$\$4.48 = \frac{(\$4.1M - \$0.5M) + (\$2.6M + \$5.7M - \$7.5M) + (-\$0.7M)}{(14,400-11,700) \times 306}$$

CONCLUSION

The annual capital and operating/maintenance cost per new annual rider of the LRT system in the Hiawatha Corridor as compared to the TSM alternative is under $10.00.

VERY PRELIMINARY COST EFFECTIVENESS CALCULATIONS
FOR MINNEAPOLIS SOUTH (I-35W) CORRIDOR (Portal to 96th Street)

- To be completed by SRF, Inc. within the next two weeks.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

8

Regional Railroad Authority
Originating Department

K. DeSpiegelaere 3/29/90
Authorized Signature Date

Board Action Requested

Update on legislation.

DISCUSSION ONLY

Request Justification

A verbal update on legislation relating to LRT will be provided at the meeting.

Budgeting and Accounting Ed Stanley 4/3/90
County Attorney
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date	Signature	Date
April 10, 1990	J L Glendenning	4/3/90
Board Date	Signature	Date

RAMSEY COUNTY Regional Railroad Authority

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, The Twin Cities Metropolitan Region desires to maximize federal funding for light rail transit; and

WHEREAS, Ramsey County Regional Railroad Authority has completed a Comprehensive LRT Plan that identifies six corridors in which light rail transit should be considered in the next 20 years; and

WHEREAS, Ramsey County Regional Railroad Authority has adopted seven goals for light rail transit that are:

1. To integrate a Ramsey County LRT system with other counties' LRT systems, with other transit services, and other transportation services in the metropolitan area.

2. To reduce the need for roadway construction or expansion; to assist in relieving congestion on roadways in Ramsey County.

3. To enhance economic development in Ramsey County.

4. To decrease costs of transportation services in Ramsey County.

5. To respond to mobility needs in Ramsey County.

6. To reduce environmental impacts associated with the automobile in Ramsey County.

7. To promote financing the planning, construction, and operation of an LRT system in Ramsey County with broad-based funding to minimize the impact to Ramsey County taxpayers.

and;

WHEREAS, The proposed letter to the Urban Mass Transportation Administration is consistent with the above goals and does not preclude the potential for federal funding for Ramsey County light rail transit corridors; Now, Therefore, Be It

RESOLVED, That Chairman John T. Finley is authorized to sign the proposed letter to UMTA that requests federal funding for light rail transit for the Minneapolis Northeast, Hiawatha and South (I-35W) corridors, and Be It Further

RESOLVED, That a copy of this resolution should accompany the letter to UMTA.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

RAMSEY COUNTY Regional Railroad Authority

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, Ramsey County Regional Railroad Authority on March 28, 1989, adopted a resolution supporting "level boarding of light rail transit vehicles, and because high platforms are the most appropriate current technology that provide level boarding, supports high platforms for access to light rail transit vehicles;" and further stating that, "if information developed during the preparation of the comprehensive LRT plan and subsequent planning and design efforts indicates that high platforms are not the most prudent type of platform for light rail transit in the Twin City metropolitan area, Ramsey County Regional Railroad Authority reserves to itself the right to reconsider the high platform decision"; and

WHEREAS, The Coordination Plan being prepared by the Joint LRT Advisory Committee will include an examination of vehicles, including the type of boarding and platforms; Now, Therefore, Be It

RESOLVED, That the Joint LRT Advisory Committee is encouraged to schedule a presentation by George Isaacs on low floor vehicles at a meeting of the Committee.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

Ramsey County Regional Railroad Authority
316 Courthouse, St. Paul, Minnesota 55102 612-298-4145 / FAX 292-6689

John T. Finley, Chairman
District 3
Duane W. McCarty, Vice Chairman
District 1
Warren W. Schaber, Secretary
District 6
Ruby Hunt, Treasurer
District 5
Diane Ahrens
District 4
Hal Norgard
District 7
Donald Salverda
District 2

AGENDA

WORK SESSION
RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

APRIL 17, 1990
3:00 TO 5:00 P.M.
SAINT PAUL HOTEL

Time		
3:00 - 3:05	1.	Introduction/review of agenda - Chairman Finley
3:05 - 3:10	2.	Outline of Scoping Comment Record - Kathryn DeSpiegelaere
3:10 - 3:35	3.	Downtown issues - Scoping comments - Kathryn DeSpiegelaere o Tunnel - Kathryn DeSpiegelaere o Geology of St. Paul - Dick Wolsfeld o Cost/time estimate for tunnel work program - Dick Wolsfeld o Recommendation - Kathryn DeSpiegelaere
3:35 - 3:50	4.	Alignment issues - Scoping comments - Jim Tolaas o Combinations - Jim Tolaas o University/Sherburne - Jim Tolaas o Recommendations - Dick Wolsfeld/Dave Warner
3:50 - 4:05	5.	Other issues - Scoping comments - Jill Goski o Other modes of transit - Jill Goski o No-build alternative - Jill Goski o Recommendations - Dick Wolsfeld/Dave Warner
4:05 - 4:10	6.	Summary of recommendations: EAW and Scoping Report - Dick Wolsfeld/ Dave Warner
4:10 - 4:15	7.	Proposed resolution for action on 4/24 - Kathryn DeSpiegelaere
4:15 - 4:20	8.	Decisions/timetable - Kathryn DeSpiegelaere
4:20 - 4:25	9.	Budget/schedule for EIS - Kathryn DeSpiegelaere
4:25 - 4:45	10.	Progress on alignments - Dick Wolsfeld/Dave Warner
4:45 - End	11.	Open Discussion - Chairman Finley

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Public Record of Comments	Attachment

SUMMARY OF COMMENTS

Midway Corridor LRT Scoping Report

The comments received on the Midway Corridor Scoping Report are incorporated as they were submitted in a public record.

Those agencies, groups and individuals who submitted written comments or spoke at the Scoping Meetings were:

City of St. Paul
Minnesota Department of Transportation
Capitol Area Architectural and Planning Board
Minneapolis Park and Recreation Board
Minnesota Pollution Control Agency
University United
Midway Corridor Task Force
Regional Transit Board
Metropolitan Council
Minnesota Historical Society
Councilmember Tom Dimond
Hugh Faville
Andrew Rossini
Fern Belle Frost
Elin Skinner
Laura Sweney
R. L. Wicker
Anita and Alois Powers
Robert DeWerff
C. Maxwell
John A. Goodlad
Doug Kelm
George Hunkins
Jim Steinworth
George K. Isaacs
Harry Lyons, Jr.
Tom Mahowald
Tom Conlon
Mike Samuelson
Bev Ryan
Don Bentfield

SUMMARY OF SCOPING COMMENTS

Favors University Avenue alignment:
- George Hunkins
- George Isaacs
- John Goodlad
- Doug Kelm

Opposed to University Avenue LRT alignment:
- G. Maxwell
- Laura Sweney
- Hugh Faville
- Andrew Rossini

Favors I-94 alignment:
- Jim Steinworth
- G. Maxwell

Favors Burlington Northern/Pierce Butler Route alignment:
- Harry Lyons, Jr.
- Andy Rossini

Consider variations/combinations of alignments:
- Bob Wicker (I-94 east to Dale, north to University Avenue; I-94 east to Prior/Short Line tracks, north to University Avenue; U of M busway, south to I-94 on Fairview Avenue, Transfer Road, Raymond Avenue, T.H. 280)
- Hugh Faville (in general)
- St. Paul (I-94/Soo Line to University Avenue or BN/Pierce Butler Route on Fairview)

Consider I-94 north slope and center of freeway:
- Bob Wicker

Opposed to Soo Line/I-94 alignment:
- Andrew Rossini

Favors I-94 or Burlington Northern/Pierce Butler Route alignments:
- Tom Conlon
- Mike Samuelson

Study University Avenue/Sherburne Avenue one way streets with LRT on north side of University Avenue:
- St. Paul

Include St. Paul's transportation plan for University/Sherburne Avenues in EIS:
- University United

Consider studying tunnel in Downtown St. Paul:
- Midway Corridor Task Force

Consider studying tunnel in Capitol area:
- Capitol Area Architectural Planning Board

Consider studying tunnel in Downtown St. Paul and/or Capitol area:
St. Paul
Tom Dimond

Analyze two-way LRT on Cedar and Fourth Streets:
St. Paul

Mention that EIS will not address other transit modes because of extensive previous studies:
Regional Transit Board

Study enhancements to existing modes of transportation:
St. Paul

Compare alternatives to LRT:
Tom Dimond

Consider Automated Guideway Transit:
Tom Mahowald

Consider low-floor vehicles:
George Isaacs

LRT should not be considered primarily a development tool:
George Isaacs

Address station spacing in EIS:
Mike Samuelson

Address University Avenue bus service if LRT is on University Avenue:
Mike Samuelson

Consider construction odors:
Don Bentfield

Identify land use and development coordination in EIS:
Metropolitan Council

Evaluate impact on T.H. 280 in EIS:
Metropolitan Council

Assess impacts of I-94 LRT alignment on I-94 interchanges:
Metropolitan Council
Regional Transit Board

Address impacts of LRT on air, soil, property values, noise, impact on bus system, parking:
Anita and Alois Powers

Consider parking/access impacts on Concordia College:
Robert DeWerff

Mention Regional Transit Board's Development and Financial Plan and Coordination Plan:
Regional Transit Board

Clarify if no-build alternative includes reconstruction of I-94:
Regional Transit Board

Address coordination with I-94:
Minnesota Department of Transportation

Inventory effect on historic and archaeological resources:
State Historic Preservation Office

Integrate LRT planning with artistic, historic, and other elements:
Elin Skinner

Improve bus service on University Avenue:
Andrew Rossini

Organization for mass transit planning needs revision:
Tom Dimond

Cost implications of LRT should be considered:
Tom Dimond

Are projections for cost and ridership accurate:
Tom Dimond

Consider wider Arcade Street for alignment in Northeast corridor:
Tom Dimond

Consider parking impacts:
Minnesota Department of Transportation

Consider construction impacts on traffic:
Minnesota Department of Transportation

Do not consider LRT on Columbus Avenue:
Capitol Area Architectural Planning Board

Consider access across LRT for pedestrians and bicyclists:
Minneapolis Park and Recreation Board

Advocates noise mitigation:
Minnesota Pollution Control Agency

Investigate contaminated soils:
Minnesota Pollution Control Agency

MAJOR ISSUES

Although many comments were received on the Scoping Report, not all of them were directed at what should be studied in the Environmental Impact Statement (EIS) for the Midway Corridor. The major issues to be discussed today and resolved by Ramsey County Regional Railroad Authority in relation to the project at this time are:

1. Should a tunnel be studied at this time for Downtown St. Paul and/or the Capitol area?

2. How should combination alignments be considered in the development of the EIS?

3. How should Ramsey County Regional Railroad Authority address the St. Paul and University United request to study a University Avenue/Sherburne Avenue alternative?

4. Should the EIS address other types of rail transit technology, in addition to LRT?

5. Is the no-build alternative as proposed for study acceptable?

BRW

PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN

BRW, INC. · THRESHER SQUARE · 700 THIRD STREET SOUTH · MINNEAPOLIS, MINNESOTA 55415 · PHONE 612 370-0700 FAX 612 370-1378

MEMORANDUM

DATE: April 11, 1990

TO: Kathryn DeSpiegelaere

FROM: David M. Warner, PE

RE: Midway Corridor LRT EIS and Preliminary Engineering
SCOPE, COST AND SCHEDULE IMPLICATIONS OF DOWNTOWN TUNNEL STUDY

Work completed to date on the downtown and Capitol area alignments has generated suggestions that tunnel alignments be considered in one or both areas. There are three possible projects:

- o CBD Tunnel (1.0 miles)
- o Capitol Area Tunnel (0.5 miles)
- o CBD/Capitol Area Tunnel (1.5 miles)

The study and preliminary design of a subway section generally includes the following six steps:

1. Geotechnical Investigation

2. Design Criteria and Standards

3. Alignment and Station Location and Layout Concepts

4. Design

    - o Line Structures
    - o Subway Stations and Access
    - o Utility Relocation and Support
    - o Environmental Control Systems
    - o Plans
    - o Specifications

5. Capital Cost Estimates

6. Construction Contract Packaging

Following, for each of three levels of analysis which the RCRRA may consider regarding study of tunnel alignments, is a brief description of the level of effort and the type of expectations an owner may have.

Tunnel Concept Study

1. Collect and review available geotechnical information.

2. Assume criteria and standards previously developed for HCRRA tunnel analysis are applicable.

3. Prepare type studies based on available information and reach tentative conclusion. Develop conceptual plan and profile layouts and station schematics.

4. No design plan development.

5. Cost estimates with 50 percent contingency allowance.

6. No effort.

Tunnel Concept Study with Supplemental Rock Information

1. Collect and review available geotechnical information. Obtain 3-5 rock borings. Characterize rock formations in study area.

2. Assume criteria and standards for HCRRA tunnel analysis previously developed are applicable.

3. Prepare type studies based on available information and reach tentative conclusion. Develop conceptual plan and profile layouts and station schematics.

4. No design plan development.

5. Cost estimates with 50 percent contingency allowance.

6. No effort.

Preliminary Tunnel Design (10% Level) (This is the level of analysis LRT alignments in the Midway Corridor will be at when the EIS is completed for the Midway Corridor.

1. Collect and review available geotechnical information. Obtain 10-15 rock borings. Prepare rock profiles along proposed routes.

2. Customize criteria and standards as necessary.

3. Preliminary plan and profile layouts and station plans. Identify critical utility conflicts and determine how they will be accommodated. Locate user access points and means of serving the tunnel with utilities, ventilation, and emergency access.

4. Prepare 10 percent design plans.

5. Cost estimates with 30 percent contingency allowance.

6. No effort.

Cost/Confidence Assessment

Level of Analysis	Design Cost ($1,000's) CBD 1.0 mi.	Capitol 0.5 mi.	CBD/Capitol 1.5 mi.	Confidence Level
Tunnel Concept Study	$120	$60	$150	Low
Tunnel Concept Study with Supplemental Rock Information	$200	$100	$250	Low +
Preliminary Tunnel Design (10% Level)	$720	$360	$900	Medium

Schedule Impact Assessment

Level of Analysis	Additional Time Required to Complete EIS *
Tunnel Concept Study	0-1 month
Tunnel Concept Study With Supplemental Rock Information	2-4 months
Preliminary Tunnel Design (10% Level)	4-6 months

* Assumes analysis of tunnel starts within about one month.

The current contract with BRW does not include costs for analysis of a tunnel alignment. The costs outlined above would be in addition to the current contract costs.

DMW/lm
cc: File 41-8933

- While elevation differences south of downtown make it relatively easy to penetrate downtown with a tunnel option, the I-94 freeway on the north would require that the tunnel be a significant depth underground at that location.

- The sensitivity of the Capitol Area north of downtown requires careful assessment of the alignment options in that area.

In the downtown area, LRT could be located on the street, below it in a tunnel or above it on an aerial structure. This analysis concentrated on LRT at the street level because it is usually the lowest cost alternative. Aerial structures throughout the downtown area can result in significant visual impacts. In addition, because of the second-level skyway system in downtown, aerial structures would have to be located on the third-level and are, therefore, not recommended. Skyways are of sufficient height to allow light rail vehicles to operate beneath them on street level. Additional analysis of tunnel options and street alignments is recommended before a specific route is selected in downtown St. Paul.

EVALUATION OF DOWNTOWN STREETS

Downtown St. Paul is divided into a core area, where the greatest concentration of retail activity and employment is located, and a larger peripheral frame area where activity is less concentrated (Figure 20).

Initially, during the committee and public participation process of the Comprehensive LRT Plan, criteria were identified to assist in the evaluation of downtown streets. These criteria are:

- Continuity with non-downtown routes
- Travel time
- Impacts on curb use
- Traffic impacts
- Connection of major trip generators/destinations
- Pedestrian impacts
- Street width/right-of-way
- Cost
- Projected ridership
- Impact on Capitol Area
- Environmental impacts
- Economic impacts
- Utilities

As a first step in the evaluation process, the following criteria were used to help identify the most promising LRT routes through downtown St. Paul:

Connection to the South-Southwest Corridor

The South-Southwest access to downtown St. Paul may pose the greatest challenge because of the difference in elevation between Shepard Road and downtown, and because of the presence of the Irvine Park Historical District, West Seventh Street commercial area, and the West Publishing property. Shepard Road is to be relocated. If the alignment is on the north side of new Shepard Road, there are five options to connect to downtown:

- Follow Eagle Street to West Seventh Street, to Fifth and Sixth Street.
- Follow Hill Street to Washington, to Fifth and Sixth Streets, which would require dealing with substantial grades.
- Follow Shepard Road to Market Street, in which case substantial grades would have to be negotiated.
- Continue along Shepard Road past Chestnut, which would require a structure over the railroad, east of Chestnut. This structure would pass under Wabasha and connect to Cedar/Minnesota.
- Extend eastward from Wabasha Street along Shepard Road which presents serious constraints because of narrow right-of-way.

LRT can be routed along West Seventh Street either on the surface or in a cut-and-cover tunnel section which would start at Smith Avenue and end near Fifth Street. The cut-and-cover option is more costly and its construction will cause major disruptions to traffic during the construction period. The surface route would affect traffic operations along Seventh Street and would require that on-street parking be eliminated, that left turns be prohibited at certain locations, and that some intersections be channelized to remove cross street traffic flows. Either alignment on Seventh Street avoids the West Publishing property and the grade problems caused by the bluff south of downtown St. Paul.

TUNNELS



The topography of downtown St. Paul makes tunneling a potential option for LRT. The river bluffs on the south side of downtown, the 'valleys' of the railroad corridors on the east and north sides of downtown and the sloping areas west of downtown would enable tunnels to be built with a minimum amount of surface disruption and with relatively flat grades.



Tunnels have several advantages:

- They provide a weather protected environment
- They do not diminish street capacity for vehicular traffic
- There are no visible overhead wires at surface level
- Impacts of at-grade stations are avoided

Cost is a major consideration in tunneling for LRT. The layout of downtown St. Paul and the directions from which the LRT corridors would approach the downtown indicate that two tunnels would be required to accommodate all primary regional corridors. One tunnel would run east-west and the other north-south. A tunnel in one direction and surface lines for the other direction is also a possibility.

Given the difficulties of penetrating downtown from the South and South-Southwest Corridors, and because of potential traffic impacts on surface streets, it is recommended that the tunnel option continue to be explored in subsequent phases of LRT analysis.

TUNNEL STUDY RECOMMENDATION

The City of St. Paul, Midway Corridor Task Force, and Capitol Area Architectural and Planning Board have asked for consideration of a tunnel under the Capitol and/or Downtown St. Paul. We have had BRW prepare cost, time, and confidence level information for the tunnel work. We have spoken with Hennepin County Regional Railroad Authority staff about the expenditures that County has made for tunnel work and the rationale for having the City of Minneapolis share half the cost of the analysis of a surface option in Downtown Minneapolis in the Environmental Impact Statement. We have reviewed recommendations of the Comprehensive LRT Plan on a tunnel and talked with Regional Transit Board staff about this subject.

Recommendation:

The recommendation of staff is to continue only with exploration of surface alignments in Downtown St. Paul and the Capitol area at this time for these reasons:

1. We have been influenced in our conversations with staff in areas where LRT has been constructed who indicate that a tunnel should be avoided where possible. We do not consider it the first choice option. Funding is limited and the decision to construct a tunnel with the additional costs involved limits the funds available for the remainder of the LRT system.

2. We will have additional information in the next few months on the feasibility of surface alignments that will be of value in determining if a tunnel is the most feasible option for LRT in Downtown St. Paul or the Capitol area.

3. The cost of constructing a tunnel would exceed the cost of constructing a surface alignment for LRT.

4. The cost of studying a tunnel alignment and the level of confidence of the information developed is a consideration. To complete a study of Downtown St. Paul and the Capitol Area to a comparable level of that of the surface alignments for the Midway Corridor EIS, it is estimated that the cost would be $900,000. The estimates would have a 30% continency allowance. A lesser level of expenditure would provide an insufficient level of information.

5. The Coordination Plan being prepared by the Joint LRT Advisory Committee will include information on tunneling experiences in other areas that will be of benefit to Ramsey County Regional Railroad Authority in making a decision to study tunneling.

6. If the tunnel issue is opened for consideration by agreeing to a conceptual study now, it is likely that additional study of a tunnel would be warranted at a later date, at additional cost. While tunneling may be considered by some to be an easy, simple solution, we do not believe that to be the case. Those who have been involved with construction of a tunnel for rail transit projects have information to share with us on that topic.

BRW

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BRW, INC. · THRESHER SQUARE · 700 THIRD STREET SOUTH · MINNEAPOLIS, MINNESOTA 55415 · PHONE 612 370-0700 FAX 612 370-1378

MEMORANDUM

DATE: April 11, 1990

TO: Kathryn DeSpiegelaere

FROM: David M. Warner, PE

RE: Midway Corridor EIS and Preliminary Engineering
Combination Alignments

The request by Councilmember Bill Wilson to consider an alignment alternative which uses the Burlington Northern/Pierce Butler alignment, Dale Street and University Avenue, is the most definitive of several requests to consider combination alignments.

Most other requests have been suggestions to consider combinations without defining a specific reason for the combination, and sometimes without defining a specific alignment. These requests are likely to continue to arise.

A combination alignment, if it is to be studied to a full EIS level of detail, will require a significant investment of project resources. Alternative definition, layout, feeder bus plan, ridership forecasts, impact assessment, etc., will all require time and budget. Therefore, consideration of combination alignments should be made within guidelines, such as:

1. Combination alignments will not be sought out, but will be allowed to develop out of opportunity and adversity, such as the ability to serve a significant traffic generator or avoid a serious alignment problem.

2. A brief assessment of a combination alignment proposal should be conducted to determine whether a complete analysis should be completed.

A combination alignment may result from further analysis of the basic LRT alternative.

DMW/ks
P418933

JAMES SCHEIBEL
MAYOR

CITY OF SAINT PAUL
DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT
DIVISION OF PLANNING
25 West Fourth Street, Saint Paul, Minnesota 55102
612-228-3270
Fax: 612-228-3220

TO: Kathy DeSpiegelaere

FROM: Peggy Reichert
Leon Pearson

SUBJECT: LRT Alternative

DATE: April 10, 1990

This memorandum is in response to your request last week to describe more fully the nature of the north side of University Avenue LRT Alternative that the City has requested be evaluated.

We would suggest that the alternative be defined as follows:

1. Sherburne and University would be paired to operate as a one-way system of parallel streets between Rice and Aldine with LRT located on the north side of the existing University Avenue right-of-way.

2. Sherburne Avenue would be reconstructed as necessary within the existing right-of-way to accommodate increased traffic volumes.

3. A service/bus lane would be provided along the north side of University Avenue between the sidewalk and the LRT tracks.

4. Assume there would be no additional right-of-way nor housing acquisition south of the existing Sherburne right-of-way.

The following issues or potential impacts of this alternative would need to be evaluated:

1. Traffic

2. Noise

3. Air quality

4. Access

5. Parking

6. Aesthetics

7. Pedestrian safety

8. Economic/land use

You also asked what additional planning the City would be undertaking in the University Avenue Corridor. We intend to continue analysis of the land use and transportation system for University Avenue both with or without LRT. We will also be evaluating the long-term transportation and land use concept for the broader area from the freeway north to the Burlington Northern tracks and from the Capitol westward to TH 280. As you may be aware, the City Planning Commission is working on an update of the City's land use plan. We will also be working on an overall update to our transportation plan. We need to do this comprehensive planning by focusing on various geographic sectors of the City. This broad midway sector is a logical transportation and land use area to analyze. The work that we conduct over the next six months should help us to provide more thorough input to your EIS as well.

If you have any further questions please feel free to give us a call. Thank you very much.

PR:dc

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MEMORANDUM

DATE: April 11, 1990

TO: Kathryn DeSpiegelaere

FROM: David Warner, PE

RE: Midway Corridor and Preliminary Engineering
University/Sherburne One-Way Pair Alternative

The City of St. Paul has requested that the RCRRA include analysis of an LRT alignment alternative which responds to the City's plan to operate University and Sherburne as a one-way pair.

Assuming that the RCRRA will continue analysis of LRT in the median of a two-way University Avenue, the City's alternative is a new and additional alternative which lies outside the scope of our current agreement. Prior to taking on the assessment of this new alternative, several issues should be resolved:

1. Roadway Plan Definition - What is the proposed roadway system improvement project? The City should prepare the definition:

   - o Extent
   - o Use existing Sherburne or rebuild
   - o Cross-section
   - o Transition area design
   - o Timing
   - o Treatment of major north-south street intersections
   - o Treatment of minor north-south streets
   - o Redevelopment plan

2. Division of responsibility for Impact Analysis - The City should prepare the analysis of the roadway project impacts (probably a major EIS) such that the RCRRA could limit its analysis to incremental impacts due only to construction of LRT.

3. LRT Alternative Definition - Once the City has completed a description of the proposed roadway project, the RCRRA would have to develop the corresponding LRT alternative at a level of detail comparable to the other University Avenue alternative.

4. Unique Alternative - This alternative would require separate analysis of impacts which will be different than those of the original University Avenue LRT alternative. Areas affected would include essentially all impact areas, such as traffic operations, noise, air quality, etc.

5. Time and Cost - The addition of a new alternative to the EIS will require additional analysis and additional time. If begun immediately, the addition of this alternative could add about two to three months to the EIS preparation time. The additional cost would be about $300 to $400 thousand.

DW/ch
P418933

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DATE: April 10, 1990

MEMORANDUM

TO: Kathryn DeSpiegelaere

FROM: Dave Warner
Mark Niles

RE: Selection of LRT as Transit Technology for Study in the Midway Corridor

This memorandum briefly describes why Light Rail Transit (LRT) has been chosen as the transit technology for study in the Midway Corridor and the Twin Cities Metropolitan Area. Several studies of transit technologies appropriate for the Twin Cities have been conducted during the past twenty years. Early studies conducted by the Metropolitan Transit Commission (MTC) in the 1970s considered both Heavy Rail and Automated Guideway Transit (AGT), among other options, to determine what technologies could best serve as the backbone of the regional transit system. Heavy Rail was rejected for cost-effectiveness reasons and AGT was rejected because of cost considerations and concerns regarding technological problems. By 1975 it was determined that these technologies for regional transit would not be pursued.

In 1986, the Metropolitan Council reassessed the selection of transit technology for study in the region as part of the Long-Range Transit Analysis. The analysis considered potential ridership, cost, and transit needs in specific corridors to determine recommended improvements. The study concluded that Heavy Rail Transit, Personal Rapid Transit (PRT), and Automated Guideway Transit (AGT) are not feasible for the Twin Cities Area. Furthermore, the study specifically recommended Light Rail Transit (LRT) for several corridors, including the Midway Corridor. The Midway Corridor (Central Corridor) was also given the number one priority for implementation of LRT in the region.

Upon review of the Draft Scoping Decision Document for the Midway Corridor LRT project, the Regional Transit Board (RTB) has requested that the document clearly state that the EIS will not address other transit modes as alternatives to LRT. This request is based on the extensive previous planning done on LRT in the Twin Cities Metropolitan Area.

Given the recommendation of previous studies of transit technologies, LRT was selected for study in the Midway Corridor. Other technologies such as Heavy Rail or Automated Guideway Transit will not be considered.

DW/lm
cc: File 41-8933

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MEMORANDUM

DATE: April 9, 1990

TO: Kathryn DeSpiegelaere

FROM: David M. Warner, PE

SUBJECT: Midway Corridor EIS and Preliminary Engineering
DEFINITION OF TRANSIT SERVICE PROVIDED UNDER EACH ALTERNATIVE

Discussion of the three LRT alternatives to be considered in the Midway Corridor Environmental Impact statement will focus on where the LRT is located, but will also include descriptions of complementary transportation services. What is left out is a discussion of overall transit service provided in the corridor under each alternative, and how LRT fits into the picture.

NO-BUILD ALTERNATIVE - The assumed transit service under the No-Build Alternative is the 2010 All-Bus System. This is the RTB vision of the transit service which will be in place in the Year 2010. If this were an UMTA Alternatives Analysis, UMTA would require analysis of a forecast year "best bus" transit system. When UMTA staff was here in the spring of 1989, they told us that existing bus service in the Midway Corridor in the Twin Cities was so good that there was little or no difference between a "best bus" system and the 2010 All-Bus System.

BUILD ALTERNATIVES - Each build alternative will include, in addition to an LRT alignment and service definition, a custom-designed (by MTC staff in consultation with RTB, Metropolitan Council, City of Saint Paul, Ramsey County Regional Railroad Authority and BRW) complementary bus system providing both LRT feeder service and traditional radial service. In areas in which transit riders can save travel time by transferring to LRT, the bus service will feed LRT stations. If transit riders save time by riding a bus all the way to their destination, radial bus service will remain in place. This set of decision rules normally results in definition of an LRT travelshed within which all bus services are oriented to nearby LRT stations. The feeder bus routes also serve as neighborhood circulators, in that they connect neighborhoods with nearby major activity areas.

Each alternative, including no-build, includes additions of transit service.

DMW/jal
cc: Mark Niles, BRW, Inc.
File: 41-8933

Proposed resolution to be considered by RCRRA on April 24, 1990:

WHEREAS, An Environmental Assessment Worksheet/Draft Scoping Decision Document has been prepared for Ramsey County Regional Railroad Authority and Hennepin County Regional Railroad Authority; and

WHEREAS, Notice of availability of the reports was published in the Minnesota Environmental Quality Board's (EQB) Monitor and the period of comment ended on April 4, 1990; and

WHEREAS, Copies of the reports were forwarded to all agencies listed on the official notification list of the EQB, to all libraries in Ramsey County, and to other interested parties; and

WHEREAS, Press releases were sent to newspapers in the area of the project and those of general circulation about the availability and content of the reports; and

WHEREAS, A scoping meeting to present information on the project and obtain the responses of the public was convened at two times at two different locations on March 27, 1990; and

WHEREAS, Comments on the project have been received from many organizations and individuals and have been considered by Ramsey County Regional Railroad Authority; Now, Therefore, Be It

RESOLVED, That, Ramsey County Regional Railroad Authority adopts the Scoping Decision Document dated April 24, 1990 for the Midway Corridor.

BRW

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BRW, INC. · THRESHER SQUARE · 700 THIRD STREET SOUTH · MINNEAPOLIS, MINNESOTA 55415 · PHONE 612 370-0700 FAX 612 370-1378

MEMORANDUM

DATE: April 10, 1990

TO: Kathryn DeSpiegelaere

FROM: Dave Warner
Mark Niles

RE: Final Revisions and Submittal of Scoping Decision Document

This memorandum describes the process for the revision of the Draft Scoping Decision Document for the Midway Corridor and submittal of the Final Scoping Decision Document. The Draft Scoping Decision Document was submitted to the Environmental Quality Board (EQB) and required governmental agencies for review and comment on February 13, 1990. The comment period for the scoping document began on March 5, 1990, and closed on April 5, 1990. Scoping meetings were held on March 27, 1990.

During the scoping comment period several comments were received from state and local government agencies and interested groups and individuals. These comments have been reviewed to determine whether they are:

1. relevant to the Midway LRT Project
2. already covered in the Draft Scoping Document
3. inappropriate for the scoping process
4. require clarification in the scoping document
5. a new issue or alignment to be included in the scoping document

Those comments that require clarification in the scoping document or include a new issue or alignment for study will be incorporated into the Revised Scoping Document. Comments regarding the Environmental Assessment Worksheet (EAW) will be reflected in the Revised Scoping Document and the subsequent Draft Environmental Impact Statement (DEIS). A revised EAW is not required.

The Revised Scoping Decision Document will be submitted to the Ramsey County Regional Railroad Authority (RCRRA) on April 20, 1990, for approval on April 24, 1990. Upon approval by RCRRA, the Scoping Decision Document and a summary of the document are submitted to the EQB on May 7, 1990. The summary document will be published in the EQB Monitor on May 14, 1990, and will serve as an EIS preparation notice. At this time, the Scoping Decision Document is also distributed to the individuals and organizations that received the Draft Scoping Decision Document.

P41-8933

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY
MIDWAY CORRIDOR LRT PE AND EIS

KEY DECISION POINTS

April 24, 1990	Scoping Document Approval
May - June 1990	Opportunity to further refine both corridor and downtown alternatives. Analyses of alternatives may also provide opportunities to reduce the number of alternatives based on in-depth review.
September 1990	Approval and distribution of Draft Environmental Impact Statement (DEIS).
January 1991	Identify Preferred Corridor and Downtown Alignment.
February 1991	Approval and distribution of Final Environmental Impact Statement FEIS.
March 1991	Determination of Adequacy for the FEIS which formally ends the EIS process.

Resolution
Board of
RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, Ramsey County Regional Railroad Authority has reviewed comments made on the Environmental Assessment Worksheet/ Draft Scoping Decision Document for LRT for the Midway Corridor; and

WHEREAS, The City of St. Paul has commented, "The EIS should study one or more tunnels as alternative alignments in the Downtown area and/or Capitol area."; and

WHEREAS, The Capitol Area Architectural and Planning Board has commented, "A below-grade alignment under the Mall should be seriously considered. Such an alignment could connect with the Capitol Complex tunnel system. No alignments should cross the surface of the Capitol Mall."; and

WHEREAS, The Midway Corridor Task Force has passed a motion that, "The current scope of work for consultants for the Midway Corridor does not include analysis of a tunnel option for Downtown St. Paul. Ramsey County Regional Railroad Authority Commissioners should consider adding a tunnel for Downtown St. Paul to the scope of work being performed for the Midway Corridor."; and

WHEREAS, St. Paul Councilmember Tom Dimond has commented, "Tunneling should be considered for Downtown and the Capitol Complex so street traffic is not restricted, appearance is enhanced, and the best all-weather conditions are provided."; and

WHEREAS, These comments have been carefully considered; and

WHEREAS, Funding for LRT is limited. The decision to construct a tunnel, with its higher cost than a surface alignment, would limit the funds available for the remainder of the LRT system; and

WHEREAS, Additional information will be available in the next few months on the feasibility of surface alignments that will be of value in determining if consideration of tunnel alternatives are warranted for LRT in Downtown St. Paul or the Capitol area; and

WHEREAS, The Coordination Plan being prepared by the Joint LRT Advisory Committee will include information on tunneling experiences in other areas that will be of benefit to decisions on tunneling in the Twin Cities Metropolitan area; Now, Therefore, Be It

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

RESOLVED, That Ramsey County Regional Railroad Authority will continue with exploration of surface alignments in Downtown St. Paul and the Capitol area and will not consider tunnel options at this time for the following reasons:

1. The additional cost of studying a tunnel for Downtown St. Paul and the Capitol area to a level of detail comparable to the engineering work being completed for surface alignments in the Midway Corridor has been estimated by BRW to be $900,000 and would require four to six months to be added to the anticipated completion date of the Draft Environmental Impact Statement for the Midway Corridor. The Legislature is anticipating a decision by Ramsey County Regional Railroad Authority on LRT alignment for the Midway Corridor in January, 1991. The addition of a tunnel study would delay that decision until at least April, 1991.

2. Unlike downtown Minneapolis, which has uniform geology, the geology of the Capitol area and Downtown St. Paul is variable. It is likely, therefore, that there would be less certainty in initial identification of tunnel options and costs for Downtown St. Paul.

3. Tunnel configurations for Downtown St. Paul may limit alternatives for connections to additional LRT corridors and present serious difficulties for connection to the South/Southwest LRT Corridor; and Be It Further

RESOLVED, That tunnel alternatives may be considered if surface alignment alternatives are not feasible.

RAMSEY COUNTY Regional Railroad Authority

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, Ramsey County Regional Railroad Authority has reviewed comments made on the Environmental Assessment Worksheet/Draft Scoping Decision Document for LRT for the Midway Corridor; and

WHEREAS, Several comments were received that combinations of alignments, such as LRT on a portion of I-94 and a portion of University Avenue, should be considered in the Environmental Impact Statement for the Midway Corridor; and

WHEREAS, These comments have been carefully considered; Now Therefore, Be It

RESOLVED, That Ramsey County Regional Railroad Authority will address combination alignments in the Environmental Impact Statement within these guidelines:

1. Combination alignments will not be sought out, but will be allowed to develop out of opportunity and adversity, such as the ability to serve a significant traffic generator or avoid a serious alignment problem. After a limited assessment of the combination alignment proposal, Ramsey County Regional Railroad Authority will determine whether a detailed analysis of the combination alignment should be completed.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

RAMSEY COUNTY Regional Railroad Authority

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, Ramsey County Regional Railroad Authority has reviewed comments made on the Environmental Assessment Worksheet/ Draft Scoping Decision Document for LRT for the Midway Corridor; and

WHEREAS, The City of St. Paul requested that "The Environmental Impact Statement should address implications of future land use and transportation system changes upon LRT alignment options along University Avenue. Specifically, the EIS should evaluate alignment options in the event that University and Sherburne Avenue become paired as one-way streets in the future."; and

WHEREAS, University UNITED requested that the "Ramsey County Environmental Impact Statement for the Midway Corridor include the transportation plan for University and Sherburne Avenues, which was initiated by University UNITED in December through a request to PED for a comprehensive transportation plan for University Avenue which would address possible LRT location on the Avenue."; and

WHEREAS, These comments have been carefully considered; and

WHEREAS, Sherburne Avenue is under the jurisdiction of the City of St. Paul and University Avenue is under the jurisdiction of the Minnesota Department of Transportation and making the two streets that are currently two-way streets into one-way streets would require a detailed analysis, coordination among units of governments and involvement of the residents and business establishments that would be affected; and

WHEREAS, The University/Sherburne Avenue proposal has implications for land use and transportation under the control and direction of the City of St. Paul that far exceed the impacts of light rail transit; Now, Therefore, Be It

RESOLVED, That Ramsey County Regional Railroad Authority will assess after August 15, 1990, the incremental impacts of locating two LRT tracks on the north side of University Avenue only if:

1. The City Council of St. Paul adopts a resolution by August 15, 1990, that approves University and Sherburne Avenues as one-way streets within a timeframe consistent with LRT implementation in the Midway Corridor, and

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

2. The Council in its resolution clearly identifies the portion of each street included in the one-way designation, and

3. The basis for St. Paul's commitment is an analysis that includes but is not limited to issues defined in an April 10 memo by St. Paul staff: traffic, noise, air quality, access, parking, aesthetics, pedestrian safety and economic/land use, and

4. There is an understanding that the agency responsible for LRT will not absorb the land use/transportation costs associated with making University/Sherburne Avenues one-way streets, and

5. Neighborhood, business and Minnesota Department of Transportation concurrence has been received for the proposed changes before August 15, 1990, and

6. The assessment of LRT on the north side of University Avenue assessment is still desired by the City Council of St. Paul at that time.

4

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, Ramsey County Regional Railroad Authority has reviewed comments made on the Environmental Assessment Worksheet/Draft Scoping Decision Document for LRT for the Midway Corridor; and

WHEREAS, Comments have been received that transit technologies in addition to LRT should be examined in the Environmental Impact Statement; and

WHEREAS, The Regional Transit Board has commented that, "Both the EAW and the Scoping Decision Document should mention that the EIS will not address other transit modes as alternatives to LRT because of the extensive previous planning done on LRT in the Twin Cities metropolitan area. The Midway Corridor has been previously identified by the Metropolitan Council as a candidate corridor for LRT service. This statement should be included under Item #5, 'Description of the Proposed Project.'"; and

WHEREAS, These comments have been carefully considered; Now, Therefore, Be It

RESOLVED, That Ramsey County Regional Railroad Authority will address the subject of other transit technologies in the Environmental Impact Statement (EIS) in this manner:

> A history of the study of transit technologies in the Twin Cities Metropolitan area will be provided in the EIS. It will include the early 1970's studies by the Metropolitan Transit Commission of the transit family of vehicles, including heavy rail and automated guideway transit (AGT); and the Metropolitan Council's assessment of transit technologies in the Long Range Transit Analysis of 1986.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

5

RAMSEY COUNTY Regional Railroad Authority

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, Ramsey County Regional Railroad Authority has reviewed comments made on the Environmental Assessment Worksheet/Draft Scoping Decision Document for LRT for the Midway Corridor; and

WHEREAS, The City of St. Paul has commented, "The Environmental Impact Statement should consider the no-build alternative including enhancements to the existing modes of transportation."; and

WHEREAS, These comments have been carefully considered; Now, Therefore, Be It

RESOLVED, That Ramsey County Regional Railroad Authority will address the no-build alternative in the Environmental Impact Statement in this manner:

> The transit service to be assessed under the no-build alternative is the 2010 all bus system. The is the Regional Transit Board's vision of the bus transit service that will be in place in the year 2010 and includes enhancements to existing modes of transportation; and Be It Further

RESOLVED, That the LRT alternatives to be assessed will include, in addition to LRT, a bus system custom designed by the Metropolitan Transit Commission staff, in cooperation with the Regional Transit Board, City of St. Paul, BRW and Ramsey County Regional Railroad Authority staff.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

RAMSEY COUNTY Regional Railroad Authority

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, An Environmental Assessment Worksheet/Draft Scoping Decision Document has been prepared for Ramsey County Regional Railroad Authority and Hennepin County Regional Railroad Authority for LRT for the Midway Corridor; and

WHEREAS, Notice of availability of the reports was published in the Minnesota Environmental Quality Board's (EQB) Monitor and the period of comment ended on April 4, 1990; and

WHEREAS, Copies of the reports were forwarded to all agencies listed on the official notification list of the EQB, to all libraries in Ramsey County, and to other interested parties; and

WHEREAS, Press releases were sent to newspapers in the area of the project and those of general circulation about the availability and content of the reports; and

WHEREAS, A scoping meeting to present information on the project and obtain the responses of the public was convened at two times at two different locations on March 27, 1990; and

WHEREAS, Comments on the project have been received from many organizations and individuals and have been considered by Ramsey County Regional Railroad Authority; Now, Therefore, Be It

RESOLVED, That, Ramsey County Regional Railroad Authority adopts the Scoping Decision Document dated April 24, 1990 for the Midway Corridor.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

ALTERNATIVE APPROACHES TO DEALING WITH UNIVERSITY/SHERBURNE ONE-WAY AND LRT TWO-WAY ALTERNATIVE ON THE NORTH SIDE OF UNIVERSITY AVENUE

ALTERNATIVE NO.	CITY OF ST. PAUL ACTION	RCRRA ACTION	INCREMENTAL COST		SCHEDULE IMPLICATIONS
			NOW TO 8/15/90	POST 8/15/90	
1	No Feasibility Study of One-Way Streets	Alternative Not Included in DEIS	$0	$0	None
2	Feasibility Study with City Council Conclusion by 8/15/90	Amend Scoping Document After 8/15/90 If One-Ways Are Preferred Roadway Alternative.	$0	$300,000	Six-Month Delay, If One-Ways Preferred Alternative
3	Feasibility Study with City Council Conclusion by 8/15/90	Include Alternative in Scoping Document Now, No Study Until After 8/15/90	$3,000	$300,000	Five-Month Delay, If One-Ways Preferred Alternative
4	Feasibility Study with City Council Conclusion by 8/15/90	Include Alternative in Scoping Document Now, Complete Limited Study Prior to 8/15/90	$25,000 - 35,000	$225,000	Three-Month Delay, If One-Ways Preferred Alternative
5	Feasibility Study with City Council Conclusion by 8/15/90	Include Alternative in Scoping Document Now, Study LRT Concurrently with One-Street Feasibility Study	$250,000	$0	One-Month Delay

Kathy Despiegelaere

Ramsey County Regional
Railroad Authority
Documentation

Ramsey County Regional Railroad Authority
316 Courthouse, St. Paul, Minnesota 55102 612-298-4145 / FAX 292-6689

John T. Finley, Chairman
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Duane W. McCarty, Vice Chairman
District 1
Warren W. Schaber, Secretary
District 6
Ruby Hunt, Treasurer
District 5
Diane Ahrens
District 4
Hal Norgard
District 7
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District 2

AGENDA

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY MEETING

Tuesday, April 24, 1990

10:30 A.M. - Large Conference Room - 316

1. * Minutes of the Ramsey County Regional Railroad Authority Board Meetings: A. Scoping Document Public Hearing of March 27, 1990. B. Regular Ramsey County Regional Railroad Authority Board Meeting of April 10, 1990.

2. Chairman's Comments

3. * Adopt Scoping Decision Document for Midway Corridor.

4. * Authorize BRW, Inc. to hire Cambridge Systematics as sub-consultant for Midway Corridor LRT patronage forecasts.

5. Update on Legislation - Discussion.

*Action is requested.

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MINUTES

RAMSEY COUNTY REGONAL RAILROAD AUTHORITY

PUBLIC SCOPING MEETING

Tuesday, March 27, 1990

The Public Scoping Meeting for the Ramsey County Regional Railroad Authority to be held in the Large Conference of Room 316 Court House, was called to order by Chairman John Finley at 10:40 A.M.

MEMBERS PRESENT: Chairman John Finley
Commissioner Diane Ahrens
Commissioner Ruby Hunt
Commissioner Duane McCarty
Commissioner Hal Norgard
Commissioner Donald Salverda
Commissioner Warren Schaber

Also Present:* Kris Wendorff represented the County Attorney's Office
Kathryn DeSpiegelaere, Jill Goski, James Tolaas, Frances Glendenning

*Please note - attached and made a part of these minutes are the attendance lists showing persons who attended.

Chairman Finley explained that this is the Scoping Meeting which is required by State of Minnesota for all environmental impact studies. We have the staff and the consultants here. We can take public testimony to determine whether or not we are looking at all of the alternatives in the Midway Corridor. This particular environmental impact statement is looking at the alternatives, and this meeting will be continued until seven o'clock this evening at Concordia College, at which there will be opportunity for other testimony.

Chairman Finley continued, the Environmental Worksheets were developed and was released to the public on February 13, 1990 as required by the Environmental Quality Board, and EQB MONITOR published this hearing and the comment period, which expires on April 4th.

The purpose of this meeting is to provide an opportunity for the public to comment on that Environmental Assessment Worksheet and Draft Scoping which will be included in any further scoping. Comment cards are made available so anyone can fill those out, and submit anything in writing. If there are going to be oral comments during this meeting, the comments will be limited to five minutes, and the people may supplement any of the comments with written remarks which we include as if they were made at this meeting. This will be a regional overview of LRT and the History of the Midway Corridor, where we are on the Environmental Review Process, and then go into public involvement presentation by Jill Goski. Then we will have questions and comments.

With regard to the history of the Midway Corridor, Chairman Finley briefly stated there has been a feasibility study by the Metropolitan Council back in 1981, there was an Alternative Analysis and a Draft Environmental Impact Statement just for University Avenue in 1982 to 1984. Metropolitan Council looked at University Avenue again in the long range transit study in 1986, and then this Board in conjunction with the RTB did an Alignment Alternative which we looked at, there were nine different alignments in 1988, narrowing it down to the three alignments which are currently under study in this Environmental Impact Statement. The Comprehensive Plan which was approved in 1989 also looked at the Midway Corridor.

Chairman Finley gave a regional overview, the Midway Corridor which we are looking at now is the main corridor in the overall regional plan. The Regional Plan consists of several corridors, this has been approved by the Regional Transit Board and Metropolitan Council with the help of the Ramsey County Board, as well as the other seven member boards in the metropolitan area. Each of them had membership on the Advisory Committee which put together this plan which was ultimately adopted by the Regional Transit Board. The ultimate determination by the RTB was that the Midway Corridor be the number one corridor, and the first corridor to be constructed for light rail transit in the metropolitan area. The decision of where it will be built is the decision that will be made by this Ramsey County Regional Railroad Authority, and that is the purpose of this meeting to focus in and look at what alternatives should be considered in our scoping documentation. We are going to be looking at three particular corridors, the three particular alignments within that corridor. He pointed out on the map, the Pierce Butler BN Alignment which is north of University Avenue, along Pierce Butler Road, a combination of Pierce Butler, the rail line, Como Avenue, Washington Avenue, Transit Road in the western part or Energy Park Drive along the corridor. This is a wide scope and we are going to be looking at several different alternatives during this Environmental Impact Statement and the Preliminary Engineering.

The second alignment within this corridor is the University Avenue Alignment, this alignment is going to be looked at as it has in the past, but this time it is going to be focused on a much more of a configuration, as we want to make sure that it can in fact be built there from the standpoint of environment, physical constraint, size, width, just how much room is going to be needed. That will be one of the things that they will be looking at in the preliminary engineering on all of the alignments. The same type of issues will be when we address the I-94 Alignment, we will look at that two ways, one in the middle of the existing freeway, the other is on frontage road. Looking at this continuing across, into Hennepin County, they will also look at taking the Soo Line track which comes up on the western part of it, and all of them will be connecting at Oak Street near University Avenue. The intention of this alignment, and the key to this alignment, the reason it is the number one priority by everyone who has ever looked at it is that it is going to connect the two downtowns, connect the University of Minnesota. There are more people using public transit in this particular area than any other place in the metropolitan area. There is just as much overall travel as any place in the metropolitan area. From the cost per rider basis far exceeds any of the other possible alignments. This is the core of the system, all other

alignments, regardless of where they come from will eminate from the core of that system. So, it is very important that the decision that we make is the decision that is going to hold up for future generations.

At this time Chairman Finley turned the meeting over to Jim Tolaas to give an overview on the actual environmental review process, and what process is taken to meet the requirements of the law.

James Tolaas stated that the Ramsey County Regional Railroad Authority is following the State Environmental Impact Statement Process for its Phase I Preliminary Engineering Impact Statement Studies for the Midway Corridor. For the purposes of this study it is very convenient to view this in four major phases, first phase is the Environmenal Assessment Draft Scoping Decision Documents which was completed the early part of February. The review period itself extends through April 4th, and this meeting as well as this evening's meeting will be part of that process. It provides an opportunity for public input to the Environmental Worksheet Draft Scoping Document so that when we identify the alternatives and issues to be studied in this Impact Statement they truly reflect the needs of this area. Upon compilation and incorporation of those comments and our evaluation of those comments in our scoping document, we will have the authority to adopt that document in the latter part of April, and that will officially begin the Environmental Impact Statement process. That is a more comprehensive view of the issues and alternatives identified in the Scoping Document, and hopefully this will be completed in approximately six months, and will be released about the end of September, we have identified September 24th, then it will be open to public review again, the review process will be extended until December 1st, and upon compilation and evaluation of the comments, the finalized version of the Environmental Impact Statement process is prepared, and concurrently, a section of the preferred alternative will be made at that time. It is hoped that sufficient information and consensus has been achieved by the end of December or early January so that the decision can be made at that time. Due to some of the legal requirements for a public review, the final document and adequacy decisions, the actual completion of the Environmental Process will extend through March of 1991. The last month or two of the process will include a preparation of work plan for the Phase II Preliminary Engineering Study which will hopefully begin sometime in April or May of 1991. Those studies will take the current level of engineering detail which will come out of this study from a 10% level approximately a 30% level, laying the way for final design and subsequent construction.

A question was asked if this is the same process that Hennepin County is going through, and Mr. Tolaas said he is not certain of the exact process they followed, but this one certainly reflects an interest in making sure the public has had a comment opportunity before we make an alignment decision. It is legally possible to make a selection prior to this time, if the consensus is built prior to then.

Chairman Finley added that what we are doing coincidental with this Environmental Impact Statement is as Mr. Tolaas pointed out the first phase of the Preliminary Engineering so that at the same time we are going to end up with Preliminary Engineering and we are going to be completing the Environmental work so that we

have some idea of whether, what is engineering possible in each of these alignments as well as environmentally sound, so we will have both of them coming together at the same time at the end of 1991. We are not wasting, there is no time being lost by us looking at the alternatives.

Chairman Finley called on Jill Goski from the RCRRA staff to address the public participation process we will be going through.

Jill Goski stated that the Ramsey County Regional Railroad Authority has a strong commitment to community involvement, and they have put together programs for public participation for the Midway Corridor. This is a cooperative project between Hennepin and Ramsey County as a portion of the corridor extends into Hennepin County. Ramsey County is responsible for selecting the design in Ramsey County, and Hennepin County is responsible for selecting the design in Hennepin County. They have four groups that have been structured to provide advice to the Rail Authorities on this project, the Midway Corridor Task Force which is comprised of neighborhood representatives from the District Councils as well as business representatives, and their role is to provide advice on the corridor preliminary design. A second group that they have formulated is the Downtown LRT Task Force, and this was formulated with the assistance of the St. Paul Chamber of Commerce. Their responsibility is to provide advice on the downtown preliminary design. A third group is the Midway Corridor Technical Group and they are responsible for providing advice on the technical design aspects and members are from the Met Council, MTC, Mn/DOT, City of Minneapolis, the RTB, City of St. Paul, and the University of Minnesota.

Ms. Goski continued, we also have an Intergovernmental Committee comprised of elected and appointed officials from the municipalities in Ramsey County and adjacent counties, as well as transportation agencies, and they are providing advice on both the corridor and downtown preliminary design. In addition to these structured groups, they have been meeting individually with agencies or combination of agencies as they relate to them, so there is also those types of meetings that are taking place. They also have a group of agencies that have reviewer approval authority, the Capitol Area Architectural Planning Board has approval over the design in the capitol area. St. Paul City Council has approval on the design in St. Paul. They have been working with both the Capitol Area Architectural Planning Board and the St. Paul City Council having meetings with them all along to keep them abreast of what is going on with the project. Likewise, in Minneapolis, the City Council has approval authority over the design in Minneapolis, and the RTB has approval over over the final design in St. Paul and Minneapolis. The Metropolitan Council will review this and comment.

Another thing which Ms. Goski mentioned is that we will be holding Public Forums at strategic points in the project to get public input.

Chairman Finley called upon Dick Wolsfeld from BRW who is the consultant on this particular process, and Dick has been very involved in light rail transit since its inception over the last few years.

Dick Wolsfeld explained the purpose of the Draft Scoping Decision Document is three fold, first, to identify what the project is, identify alternatives, and to define the issues that are going to be analyzed in order to evaluate the alternatives for the project.

Mr. Wolsfeld continued, Chairman Finley talked briefly about the alternatives to serve from the intersection of Oak and Washington to the East Bank of the University of Minnesota, through the City of Minneapolis in Hennepin County, and then the alternatives in Ramsey County and the City of St. Paul, leading into downtown St. Paul. These include a fairly broad corridor on the north, which could include portions of the Burlington Northern, Pierce Butler, Energy Park Drive, an alignment within the right of way of University Avenue, and then an alignment that would follow the Soo Line Railroad, and then probably in the median of I-94, and also other alternatives within the I-94 area.

Relative to the downtown area, the streets for which LRT service is being analyzed, he pointed out these areas, one following Cedar and Minnesota, to follow Cedar and St. Peter. East and West service would be on 5th and 6th Streets, or on a 4th Street semi-transit mall, there still would be room for one lane of traffic on 4th Street to provide access to parking ramps, loading docks that may exist along 4th Street.

There are a series of alternative ways to get from that Midway Corridor to those downtown alignments, which include staying on University Avenue, following Robert Street, making a connection, cutting through the Capitol area, as well as following 12th Street to make that connection.

The most important part of the Scoping Document are the issues which are going to be analyzed, and he showed on the screen the issues, impact on wetlands and vegetation as well as wildlife, there are no wetlands on University or I-94, so it is the northern alignment that has the impact; the impact on soils, park and ride sites, runoff from receiving waters, air quality is a very important impact in terms of what light rail intersects streets, what does that do to traffic situation, also access to park and ride facilities, noises, noise and vibration will be analyzed, cultural resources in terms of looking at historical structures, and looking at parklands both from the impact of taking and from the impact of being adjacent to. There might be a visual impact, looking at traffic impacts, they expect some positive traffic impacts from the people shifting from their automobile to riding LRT, there could be negative impacts at some of the intersection streets in terms of taking away some of the street capacity. We will look at transit services in terms of how LRT relates to the feeder bus system, and what existing bus service can be removed from the street system and replaced, as well as who is going to ride the system, visual impact of the system is a very important issue, then the financial impact in terms of what the costs are in terms of capital cost and operating and maintenance costs, also from the standpoint as to who is going to pay for what those costs are. This also relates to the regional perspective in terms of the RTB activities. Lastly, there are the social and economic

impact, in terms of impact on development, on employment, on housing that might exist.

With these analyses of these issues, the RRA will then look at those alternative alignments within the corridor, and with that information in late December or early January select a preferred alternative.

Chairman Finley thanked Mr. Wolsfeld. He added, following the completion of the Environmental Impact Statement and Preliminary Design at the end of this year we will be making that selection of the alignment, subject to the approval of the Cities of St. Paul and Minneapolis and the RTB. Hopefully, after they approve whatever alignment is selected and funding is made available by the Legislature, either through the RTB or however, the State Legislature will really have to make those determinations as to how to pay for the alignment. The plan is at the present time that the alignment be paid for out of State and Regional Funds, not local or Federal dollars. Hopefully, after all of this is in place, it will take two to three years to construct the alignment, and then we will go on from there, depending upon the success of this particular alignment.

Chairman Finley at this time asked for any comments or questions the public will have, as we would like to limit the persons to five minutes, you are to feel free to supplement this in writing, we will have another meeting this evening at seven o'clock as stated, and you will be permitted to speak again at that time if you are unable to present your comments in the time allotted. He said he would call on the people who have signed up for speaking, and following are the comments.

George Hunkins, 220 West Isabel, St. Paul, MN 55107

Mr. Hunkins understands that the City Council is supportive of the University Avenue alignment, and it seems to him that this makes the best sense, plus, it would socially and economically help the neighborhood. He feels very strongly that the number of stops should be limited, at the most one-half mile. He has made the comment that with our present public transportation now at least in the rush hour we should only be stopping our busses every two or three blocks to expedite the flow of traffic. Financially, how do we pay for it, obviously it has to be subsidized, and it seems that the best way to do it is to put it back on the people who drive the automobiles. We need to get people out of their automobiles, as our environment is suffering, the CO2 is a big pollutant.

Jim Steinworth, 844 Edgerton St., St. Paul, MN. 55101-4118, 776-7487

Mr. Steinworth said he has a group called Concerned Citizens for Light Rail that has been mobilized. After following Ramsey County and Hennepin County for the previous years, he had realized that Ramsey County was somewhat behind in the ball game, but now, he is happy to say that he is quite happy with Ramsey County the way they are getting things on the ball. As far as the Midway Corridor is concerned, he feel very strongly that of the three alignments, the 94 alignment

would be the most economical in the long run, although not the fastest to put in. The priorities being that it should be faster than the bus, either local or express, it should be as close as possible to the ridership which is University Avenue. Air quality is a factor, if we have it off University, we are not going to tie up University traffic and have more stopped or stalling cars. He feels it is important for the people on the freeway to see LRT system in action. Minimal disruption during construction phase, he would not want to see University Avenue disrupted for the years it would take to put this in.

This is a metro system, not a county by county system, and he believes that everyone in the metro area has to realize that they can use this to get from Minneapolis to Saint Paul, and after this line, all over the metro area. We have to have the availablity of long runs or express trains so that they can get to full speed along Highway 94 which they cannot do on University. If we did go on the Burlington Northern tracks, we would miss out on the great potential of ridership that is along University.

George K. Isaacs, 682 West Sextant, Roseville, MN 55113

Mr. Isaacs said he has been pushing light rail for a long time, but as much as he wants to see light rail, he wants to see it done right. He wants to charge the Board with goals in LRT: 1. LRT is designed to move a lot of people in a cost effective manner, it is not a high speed train to go from downtown to downtown in twenty minutes and not carry anything. It is not a development tool which is going to make the resurrection of University Avenue, it may change development from one place to another. The primary purpose of LRT is to move people in a cost effective manner, and you have to take that into consideration when you make your decisions on what alignment. 2. Personally, he is going to speak in favor of the University Avenue alignment. Someone said LRT on University Avenue is like a bus on steel wheels, this is a political utterance, and it is totally without basis. The acceleration of a light rail vehicle is almost twice that of a bus; you don't have to have a stop every corner as you do with the old busses. In the future, as we take a look at our energy proposition, we will have our own city busses stop at every two or three blocks because every time you accelerate or decelerate you are wasting energy. It is very important that this group here through their consulting engineers start looking at what is happening in Europe. That is where we get our light rail vehicles from. He had some articles showing that you do not have to put light rail transit on a high platform in the downtown areas, low floor vehicles, over 330 of them, are now operating in Europe. This provides easy accessibility for the handicapped, for the aged, with the least amount of destruction of the downtown area. He feels that you should charge your consultants to start looking at these, look in Europe to see what is happening in LRT technology. He feels that the idea of a fast run on the BN right of way, Pierce Butler with only two or three stops is going to be throwing money down the drain. If you want LRT to succeed in the Twin City area, the first line has to be successful and cost effective.

Harry Lyon Jr., 2159 South Belmont Lane, North St. Paul, MN 55109

Mr. Lyon introduced himself, he is a Councilperson in North St. Paul, and they are interested in the LRT, and he personally is in favor also. Although, it will not directly benefit us in this link, we will get the benefit of it. He basically supports all the comments that Mr. Isaacs has given, but he does have some question in regard to the location such alternates 3 and 4 because of the impact on present quarters being used now for traffic. You have a limited amount of right of way in there, and as soon as you impact that with another transit system, you are going to further limit any future development of the normal inter-state system, and switching over to the Pierce Butler - BN alignment, that does have some potential, which he hopes will be given some consideration from the fact that you want to draw passengers, riders, and in this area we have more possibility to have park and rides, we have many people who drive part way into the city and park. They might as well park and use our LRT system, and make it more feasible and financially solvent. The Northern Route would also give service up to the State Fair and the U of M Farm Campus. He hopes that it is given serious consideration.

Chairman Finley said he has some written comments by Andy Rossini, and we will make this a part of the record, which includes views with plusses and minuses on each of the corridors. These copies will be circulated to each of the RRA Board members.

Tom Mahowald, 3824 South 47th Avenue South, Minneapolis, MN

Mr. Mahowald has been following the Regional Transit Board's meetings and decision making policies. He would like to compliment Ramsey County Board on its action and the way it had handled itself in the corridor selection of the Midway. Unlike Hennepin County that has very political sides, the decision in corridor selections, he feels Ramsey County has the political process of the people and have tried to let the people make decisions, and let the planners do their action without making it a political field. Hennepin County has very much pushed their particular preference from the beginning, they have not let a fair study. He compliments Ramsey County on bringing out all the decision and discussion without undue influence among the Regional Railroad Authority, and other political people.

Jim Steinworth - spoke for a second time

Mr. Steinworth had a question regarding the priority for an LRT line from the City of St. Paul to the airport. Is there a possibility for a change for that?

Chairman Finley said the Capital City should have come in earlier, not after the Comprehensive Plan was already approved. When he first became involved in LRT, three years ago, there were only three alignments that we even looked at, the Midway Corridor going from Minneapolis to St. Paul, Corridor going down to the Airport out of Minneapolis, and a corridor going back to St. Paul. It was a triangle, and he pointed out on the map that we do not have a triangle now.

Chairman Finley continued, we felt very early that the perception for the benefit of the City of St. Paul that for perception purposes we should be connected to the airport. The studies that have been done have shown that based upon ridership potential, etc. that it is not feasible to connect it in the early stages. We do, however, (he pointed to an area which is a hole in the regional transit plan on the map), but on the Ramsey County plan this hole does not exist. We do have it in our twenty year plan, and the Regional Transit Plan is to be re-evaluated under the terms of that plan every two years, so hopefully, with the groundswell of support, it will be moved up into the Regional Transit Plan as well.

There being no further questions or comments, Chairman Finley declared this Public Scoping Meeting will be continued at seven o'clock this evening at Concordia College.

Ms. DeSpiegelaere reminded the persons present that the comment period is open until April 4th, if you have any additional comments in writing.

Chairman Finley recessed the Ramsey County Regional Railroad Authority Public Scoping Meeting until seven P.M. today, March 27, 1990, to reconvene at Concordia College.

1 B

MINUTES

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

April 10, 1990

The regular meeting of the Ramsey County Regional Railroad Authority was called to order at 10:35 A.M. by Chairman Finley in the Large Conference Room of the Court House, Room 316.

MEMBERS PRESENT: Chairman John Finley
Commissioner Diane Ahrens
Commissioner Ruby Hunt
Commissioner Duane McCarty
Commissioner Hal Norgard
Commissioner Donald Salverda
Commissioner Warren Schaber

Also Present: Ed Glaubitz, James Van Houdt, Terry Lindeke, Robert Clarkson,Hugh Faville, Gary Simpson, Patrick O'Malley, James Tolaas, Jim Steinworth, George K. Isaacs, Karen Tero, Toni Baker, Kathryn DeSpiegelaere, Michele Timmons represented the County Attorney's Office, F.Glendenning

1. Minutes - of the March 27, 1990 Board Meeting.

Commissioner Norgard moved the following recommendation, seconded by Commissioner Salverda.

The Ramsey County Regional Railroad Authority approves the minutes of the regular Ramsey County Regional Railroad Authority Board Meeting held on March 27, 1990, as written.

Roll Call: Ayes - 7, Nays - 0
Motion adopted.

2. Chairman's Comments

Chairman Finley wished to remind the Board Members that we have a Work Session scheduled on Tuesday, April 17, 1990 at three o'clock to go over Scoping Documents and Comments that were received from different cities, agencies, etc.

3. Low Floor Light Rail Transit Vehicles

(Please note, the equipment was not set up at this time, and this matter was discussed at a later time in the meeting. However, the minutes will appear in the order of the agenda.)

George K. Isaacs was present at the meeting to give a slide presentation on the low floor LRV. He gave a little history of its developments in today's world, and in many cases, what the members see today may help them with some of their problems. The option as to whether you have high platform or high platform should still be open, and not be driven politically.

Mr. Isaacs continued, in 1984 the first low floor LRV was put into service in Geneva, Switzerland, the slides showed the attempt to lower the floor level down, basically an intown type of service, it is not a suburban one. But, this is where the concept of low floor started out. The curb is only about four to six inches, he has been there, and there are certain doors they have which make it easy for the pram to get aboard. This is not handicapped accessible, but this is the first attempt at lowering floor accomplished by putting very small wheels on the trailing truck. However, this system though still being used in Geneva, is being changed by what he will show on the next slide.

Grenoble, an Alpine village in France, started out their service in 1987, the first truly low floor light rail vehicle, he showed a slide, the doors come down, and it is about 14 inches above the top of the rail. The next slide gave an idea of the platform, this has a slight grade to get up to the 8 to 8½ inches, and from there you have a ramp that comes out of the LRV for loading. This gives an idea of the minimizing of impact on the downtown area. It is only a short ramp. He showed some similarities to downtown St. Paul. This showed the way people load, it is only a small step up, it is about five inches. For wheelchair access you push a button, and you get this ramp that comes out, it also signals the operator that someone who is either handicapped or with a pram is getting on so that extra cuation is taken to make sure everything is clear before the doors close. This is an Alpine village so they have snow as well as we have.

Commissioner Schaber is concerned about accessibility for wheelchairs. Mr. Isaacs said here again the heighth of the platform can be varied as you wish, he showed a slide with a wheelchair going on board, as it is not that much of a grade. It will depend on what the height of the platform is. Commissioner Schaber asked if there would be a code problem with accessibility. Mr. Isaacs showed a slide of the inside, the handicapped access, signal to the driver, etc. These cares were designed non-couplable because they were designed for specific service in Grenoble. They can be coupled together in trains if that is the desire. They have to build a very long car because they want to operate just single car operation, and such cars as this are now being proposed for other places. This particular one is called the Grenoble car, but it is just one of many.

Mr. Isaacs continued, right now in Europe low floor vehicles are in service in Geneva, Grenoble, Amsterdam, Tourin, Basil, Bremen and other cities. They have built various forms of the low floor LRV, there are nine operating properties. There are six more properties who are planning for low floor vehicles, Melbourne, Australia, they are putting out an order for 130; Brussels in Belgium, Boston, a new start up in France, even in Paris, this will be a light rail feeder to Paris which will use a low floor, and lastly, Milan.

Mr. Isaacs continued, many objections to the low floor is that you can't buy it right off the shelf to do all the things you want to do. The very fact is that development is going ahead in Europe, there are now 330 light rail low floor vehicles in service in Europe, and work is being done - this is the wave of the future as far as Europe is concerned as they are getting older as we are, and the handicapped and elderly have to be taken care of, plus the fact that you can see from the platforms it has a minimal impact in the downtown area. He as an individual would like to see the most cost-effective light rail, and he wishes that you would explore it.

Mr. Isaacs said he told Chairman Finley it would be well worth the while, when you consider the cost of the LRT system, to get some of you people over there to see some of these cars. It would be a very good way of spending the public's money. He really is sincere about this, as the fact is that a lot of things that we hear are bits of information, you should go over and see for yourself. This is the way of the future in terms of being able to penetrate a downtown area that is somewhat old, and still have accessibility for both elderly and handicapped.

Commissioner Norgard would like to know what Boston is doing there. Mr. Isaacs starts out in the tunnel in downtown, and they have four lines. They purchased the so-called standard light rail vehicle which was a disaster built by Boeing. They have since purchased some regular light rail vehicles from Japan, and they are now looking at low floor for this very same reason for accessibility, plus faster loading and unloading, and it will fit their existing system.

Commissioner McCarty understands what Mr. Isaacs is saying, we ought to get out and expand our horizons. Mr. Isaacs said the money invested to do that is very worthwhile, because when you are operating in a vacuum you can make the wrong decision, and in this case would give you ideas.

Mr. Isaacs had one more comment, if you look about grades for LRV stations, go to Pittsburgh, and find out what they have built there, as it is a very hilly place. They have exceeded the 1% in some instances, but again, all these things are possible.

Chairman Finley thanked Mr. Isaacs for the very valuable information furnished today.

Commissioner Hunt has some concern about way back when we took the position on high platforms, and in view of the fact that we have the RTB which is really the coordinating body, she is wondering if we should not be indicating to the RTB that is the decision they should be making, rather than each of the rail authority taking a separate position.

Chairman Finley said that probably now this could be a decision for the RTB with the change in legislation.

Commissioner Schaber asked if the consultant has any change in recommendations on this.

Dick Wolsfeld replied that he has never made a recommendation to anyone.

Commissioner Hunt understands that at one point Hennepin County had not made a decision on high platforms, on this, she feels we were really a little too premature, and she feels that we should pass some kind of a motion to the effect that we feel that the RTB is the agency that should make a determination on what kind of platforms we are going to have, or what kind of vehicles we are going to have.

Commissioner Schaber believes that we did hold out in the resolution that was March 28, 1989, in which we reserved the right to reconsider the high platform decision.

Chairman Finley feels that Commissioner Hunt's suggestion is a good one, to get the RTB to make this decision. Since he has been on the RTB, they have not taken a position. Mr. Isaacs commented that prior to the change in the RTB, they had never any position. The only position that the RTB took when he was on it was the fact that they funded the studies and alternatives in downtown in Minneapolis, but there never was anything with high, low vehicles.

Commissioner Ahren's understanding is that the LRT Advisory Committee is to recommend a coordinated plan, and in looking at the outline, part of that is to draft an LRT Design. If that is correct, she would like to express the concern that she has for this Board as this Coordination Plan is due by July 1st, and they have had one meeting of that Advisory Committee since the first of the year, and they have eleven things to go through which are rather substantive in terms of getting to their recommendation, they have only gotten through Number 1. The next meeting is the end of April which gives them two months to do all of the rest of it. She distributed a listing showing the scope of what they are doing. The Advisory Committee has a lot more responsibility in terms of this Coordination Plan than they did through the prior Finance and Development Plan that they had to bring to the RTB at the end of the year. Commissioner Ahrens thinks this Board needs to know where they are with respect with all they have to do. She has a concern about this as she thinks in order to do the job the Advisory Committee was set up to do, so that the RTB can do its job, and it certainly includes the kind of platform design in this whole thing. She is very frustrated that they have not been able to meet.

Commissioner Hunt added that the meetings have been scheduled, but they have been cancelled on several occasions, Commissioner Derus has cancelled them.

Commissioner Ahrens thinks the point is that the entire Committee has not met, and she does not think they will ever catch up with staff. A meeting has been two to four hours long, and with all the work to come, she does not feel all these things can be done in one meeting.

Commissioner Schaber asked if Hennepin County has not made a decision, and Mr. Wolsfeld said he did not believe they have on either low or high platform. The Cedar and 4th Street Alignment he asked which would work better the high or low platform. Mr. Wolsfeld said certainly the low floor vehicle works, but they have not gotten to the level of detail at the World Trade Center, and where that platform would be, whether the high platform works is still under study. They are in the middle of doing that right now in a more detailed analysis.

Chairman Finley thinks the Coordination Plan work scope went a lot deeper than anyone had anticipated at the time the legislation was drafted a year ago which was to adopt this Coordination Plan. It appears that some of this would be the type of cars, standard design, etc., should be coming through the RTB from the Advisory Committee at some time. He is not sure that we should be doing anything more for it, other than state for the record that this is a regional decision that should be made.

Commissioner Hunt said if this is going to be going through the Advisory Committee, and in view of some of the discussions we have had here today, she would not like to go into the Advisory Committee with some mixed emotions as to the kind of platform we should have, with the official position of this Board being what it is.

Chairman Finley suggested that we draft a resolution that we have taken a position on high platform in the past and feel that the appropriate body should be the RTB and the Advisory Committee to make those decisions, as our decision was made over a year ago, and we feel there should be a new look at by the regional agency. Then, we would be saying don't go high platform, but look at the alternatives, and we feel that the decision should be made elsewhere.

Commissioner Ahrens concern is that unless we say it very directly in terms of whether this is the best system for us, somehow we have to make this very clear, we need to look at this if this the best way.

Chairman Finley is saying would we endorse the low system which we know less about this than we know about the high system, he reiterated, we made a decision back in March, 1989, and since that time legislation has been changed, and we feel that the appropriate agency to take a look at all the systems should be the RTB.

Commissioner Salverda feels that with all the new technology, that we recommend that Mr. Isaacs make a presentation to the RTB, as they should be aware. If the Advisory Committee is not meeting, the RTB should put a little pressure on the Chairman to get this organized.

Commissioner Schaber added that we do not have a strong feeling, if we did we should state it, but in listening to the comments here, he does not know which way we should go, he thinks more information is needed, and that the resolution being suggested is as good as any. Commissioner Schaber asked if we went to a tunnel, would that have any bearing on which way we go, as this may affect Hennepin County.

Mr. Wolsfeld informed the Board that if you are in a tunnel, there is no problem with high platform.

Commissioner Ahrens asked about what Hennepin County is drafting in their plan, and Mr. Wolsfeld said what the RTB was going to do is that Hennepin County is drafting that work with LTK Engineering out of Portland - they will be drafting those specifications, and then they were going to take them and send them to the Joint LRT Advisory Committee to comment on. They are drafting them as though it will be a high platform system.

Commissioner Hunt would like to know why Hennepin was doing this, and Mr. Wolsfeld said they were doing that as part of their followup on engineering activities. They are into the step you would be defining what the vehicle is, what the control system is, the electrification, communication, all of what they call the system part of the project. You would have to define what that is just as you are doing engineering drawings of where it is going to be, you have to define the other components, so the RTB said they would take what you are doing, and will put that on the table for the LRT Advisory Committee to comment on, they were doing that as part of their follow up activities.

Commissioner Hunt again asked about the high and low platform decision by Hennepin County. Mr. Wolsfeld cannot remember whether they did vote once. Commissioner Hunt said they must have taken a position if they ordered an engineering study.

Ms. DeSpiegelaere commented that sometimes the positions are taken, not in a formal sense, as Mr. Wolsfeld has indicated the work has been designed around a high platform system. All of these matters are to be addressed in a Coordination Plan that is to be prepared by the Joint LRT Advisory Committee. As Mr. Wolsfeld mentioned, the staff group and consultants working on this have attempted not to reinvent material that already is available, and Hennepin has spent a considerable sum of money working on some of these issues already, so it was thought at least initially to review that material rather than have it generated by someone else would be appropriate. As far as the low floor vehicle information, she has already passed this along to Dave Minister of the RTB staff.

Commissioner Ahrens suggested that prior to any recommendation on the design standards performance criteria that Mr. Isaacs be requested to make a presentation to the LRT Advisory Committee so that all of them would have access to this kind of information, as this the kind of information that needs to be considered before a decision on high platforms is recommended by the LRT Advisory Committee.

Chairman Finley understands that the motion would be suggest to the LRT Advisory Committee that they have a presentation on the low platform prior to voting on any recommendations regarding the platform.

Commissioner Salverda added that the whole platform technology should be examined.

Chairman Finley does not think we should be telling them what to examine or not examine, that is what the Advisory Committee is called upon to try to do.

Commissioner Ahrens said they are in fact doing what another county wants done, and this is sort of defacto, and they are taking the consultant firm who has been working with Hennepin, and that is what they are going to bring into the Advisory Committee. If we have no other options, and don't know anything else, they may go forward. What we are saying is, we want to have some other options to be considered.

Chairman Finley would like to know if it isn't the staff of the Light Rail Advisory Committee that had made the decisions to do it the way you are doing it. Ms. DeSpiegelaere, said yes, that one program did go to the Joint LRT Advisory Committee, and the RTB as well. Certainly an examination of low floor vehicles is part of their work program, as she mentioned, she already passed the material along to David Minister, and the memo in your documentation today indicates that it really a decision to be made in the Coordination Plan, so it is appropriately addressed and will be.

Commissioner Norgard asked if finances do not come in here to play, but the Legislature may be looking at finance some place along the line.

Commissioner Hunt said we have a motion asking the LRT Advisory Committee to hear George Isaacs presentation on low floor.

Commissioner Ahrens moved the following recommendation, seconded by Commissioner Hunt.

WHEREAS, Ramsey County Regional Railroad Authority on March 28, 1989, adopted a resolution supporting "level boarding of light rail transit vehicles, and because high platforms are most appropriate current technology that provide level boarding supports high platforms for access to light rail transit vehicles"; and further stating that, "if information developed during the preparation of the comprehensive LRT plan and subsequent planning and design efforts indicates that high platforms are not the most prudent type of platform for light rail transit in the Twin City metropolitan area, Ramsey County Regional Railroad Authority reserves to itself the right to reconsider the high platform decision"; and

WHEREAS, The Coordination Plan being prepared by the Joint LRT Advisory Committee will include an examination of vehicles, including the type of boarding and platforms; Now, Therefore, Be It

RESOLVED, That the Joint LRT Advisory Committee is encouraged to schedule a presentation by George Isaacs on low floor vehicles at a meeting of the Committee.

Roll Call; Ayes - 7, Nays - 0
Motion adopted.

4. Downtown St. Paul LRT Alignments

Ms. DeSpiegelaere informed the Board that we have a Downtown LRT Task Force with a rather extensive membership that has been meeting for the past few months at the St. Paul Chamber of Commerce Offices to review information as it is generated on downtown street alignments. Information that Dick Wolsfeld will present to you shows that the areas in which LRT is feasible in downtown are being narrowed rather quickly. At its meeting last week the Downtown LRT Task Force reviewed some of the same information that you will be seeing today. They decided to defer action on eliminataing alternatives until a subsequent meeting. Also, they recommended that meetings with some of the affected business owners would be appropriate and that a forum, a gathering of a large group interested in the downtown subject should be held in the near future. So, they are working on these two.

Dick Wolsfeld, BRW, Inc., addressed the Board, the transparencies which he has for this meeting have already been presented to the Downtown Advisory Committee, and he will try to condense his presentation.

Mr. Wolsfeld went over the process to get from where we left the downtown Comprehensive Plan to where we want to get, to have a preferred alternative in terms of how downtown can be served by LRT, this is a three step process. First, we are going to look at downtown conceptually, and look at what the conclusion of the Comprehensive Plan was, as to what streets downtown are appropriate, and where the streets are going to come into the downtown, to give us an alternative. Then, we will do a fatal flaw evaluation, they will look at four things, the right of way, ability of LRT vehicles to make turns in the downtown, places to put stations which can generally be on 1% grades, and also they look at block size. If you have three vehicles, you need about 300 feet. This fatal flaw evaluation will enable them to narrow those issues and then a detailed evaluation will be done looking at traffic impacts, curbside impacts, station location and access, skyway connections, utility impacts, visual impacts, and how it services development in order to come up with that preferred alternative.

When this fatal flaw evaluation has been completed, and we have gone from 43 alternatives down to about three alternatives, so we will have gone from a fairly large number down to a fairly small number, the minimum will be three, there may be some more.

Mr. Wolsfeld continued, they have progressed farther than he thought they would. The Comprehensive Plan said in the downtown, in looking from 94 to the river, you should look in terms of North-South Streets, look at Cedar and Minnesota, and also look at Cedar and St. Peter, and then East-West look at 5th and 6th Streets, and then look at two way semi-transit mall on 4th Street. So, in theory, you could have four different alternatives of Cedar-Minnesota, 5th and 6th, Cedar and Minnesota and Fourth, and then Cedar and St. Peter at 5th and 6th, and Cedar and St. Peter and 4th Street. This was four alternatives, which then got complicated when they looked at how you connect each of the five corridors that are under consideration into those various alternatives. Furthermore, how are you going to inter-line or inter-connect the corridors, is the Midway Corridor going to be connected with the South, Midway Corridor be connected with the East and Northeast, how is the Northwest Corridor if this is given the same right of way as Midway, that could be inter-connected or interlined. You also have the South and Southwest. If the Midway were interconnected with the South, you would transition through the downtown (he pointed out the areas on the map), whereas if the Midway were interconnected with the North and East, you would then make some revisions, and this would be very different. When the four possibilities are taken times the five different connections, this is how it came out to the 43 different alternatives in the downtown area. This makes a very big difference where you turn on those downtown streets to make sure that you are not knocking down buildings to make the turns. That is how they generated all of these alternatives. He did not go through all 43 alternatives.

Chairman Finley had a question in regard to the Capitol approach as to coming in whether it might be Midway, Northeast, or whatever, are you far enough along to be looking at those as we do have that Capitol Area Committee who is very concerned. There is that architectural committee who is very concerned about the view of the capitol.

Mr. Wolsfeld said that the agreement with the Downtown Advisory Committee was that in terms of driving where LRT would be located in the downtown, we would first look at the level of detail which he pointed out on the diagrams, and how it impacted the system. Then, they would look at how the connections were made to the regional areas, they would consciously look at what is best from a downtown perspective in terms of the street system, and then look at the connections, so there is an interration there between the downtown regional connections downtown, etc.

The A Plan was shown on the overhead projector, showing University, 94, and any of the three shown area potential entry areas into the downtown, it could be on Marion, on Rice, you could stay on University, come down Robert and then connect it to Cedar, Minnesota, turn and go out 5th and 6th. This is one alternative. The next alternative would be to bring the South line in on

in on Cedar and Minnesota and head back to the South, so that would add right on top of that. The only turns then are from the Midway Corridor. Then they add in the Northwest to Northeast, the Northwest would come in the same potential alignment as the Midway, and it would follow the identical routes on Cedar-Minnesota, 5th-6th, and then head out to the candidate alignments for the Northeast Corridor. Lastly, in would come the East, South-Southwest, so we come in 94 go through on 5th and 6th and then out the South-Southwest.

With this buildup of the different interlining options, we can see exactly which vehicles are turning, where the turns are, how many turns there are, for example, for the East South-Southwest there would be no turns in the downtown area, whereas in the Midway there are. When you go to the next one, it is to do the same thing only by taking the 5th-6th down to 4th Street, do that same buildup of adding the South which doesn't change, the Northwest to the Northeast becomes Cedar-Minnesota, 4th, then the South-Southwest very similar - this would be a B option.

When they go to a C, they would use Cedar to 5th and 6th, this gets into the issue of contraflow operations. The objective would be is that whatever the light rail vehicle is going on a one-way street, first all, it runs against the flow of traffic, so vehicles can see the LRT vehicle coming, and LRT drivers can see the vehicles. They would like to have the normal right hand side of the street driving. This means if the one way traffic is southbound, he wants to be northbound with light rail, and he wants to be on the right hand side of the road. That they can do. In this case with Cedar which is southbound in terms of its flow, and the light rail is northbound. When they get over to St. Peter, so you could get better service to the Rice Park area, there the street is also southbound, but we can't run the LRT northbound in both directions, so they have a problem with the light rail in the same direction as the flow of traffic on St. Peter, so now it is on the right hand side, if you would want to make a right turn, you have to look 180 degrees to see if that LRT vehicle is coming up on you, so wherever there are right turns along there there is conflict between the LRT vehicle and the traffic. That is the problem, but they did not consider this to be a fatal flaw. The figure eight operation is very circuitous, and it gets even worse when you bring something in from the south in that you come across to Cedar and Minnesota, you end up to make the South connection, vs.make that more simplistic of Cedar and Minnesota. The same kind of impact exists from the Northwest to the East.

Alternative approaches from the Midway Corridor into the downtown area were shown, using 5th and 6th Streets through the Rice Park area, past the St. Paul Companies, where the new History Center is being built, the tunnel has just been completed, Kellogg through 5th and 6th has been proven very difficult to do, then they would not get very close to the Capitol then. They looked at different entry points into that downtown area. The last alternative was an "L' alternative with different options for each one.

Mr. Wolsfeld continued, after they did those alternatives that were out of the Comprehensive Plan, and they began to see some of the impacts on the downtown street system, at a work session with City staff, it was suggested that where we have a two way semi-transit mall on 4th Street that we look at the same thing as a two way semi-transit mall on Cedar, then take Cedar and Fourth out of the downtown street system and concentrate the light rail on those two streets, as opposed to impacting Cedar and Minnesota or Cedar and St. Peter. If this was done with Wabasha northbound, they would probably make Robert Street one way northbound, and reverse the flow on Minnesota so that it is one way southbound.

In going into the fatal flaw evaluations, they will see whether some of these alternatives will work or will not work. The information from the Comprehensive Plan, they have the right of ways for each one of the streets that were considered, generally there is sixty feet of right away that exists,where there are some additions there may be 70 or 75, because they are urban renewal the building may be set back further and put in a turn lane or two. If the street is in one direction, we want the light rail in another direction in order to keep that right hand side road and opposing traffic. On a semi-transit mall like 4th or Cedar, if you have 60 feet of right of way, 10 foot sidewalk which you retain, light rail takes about 27 feet, 12 feet would remain to provide access to parking ramps, loading docks. So, by going to a 4th Street and Cedar Street semi-transit mall, there still would be one lane of traffic which could provide access to the abutting property. If the access to ramps can be restricted to one side of the street, we can provide that access.

Stations were then discussed, take the 60 feet right of way, 10 feet of side walks, the station is 10 feet wide, but we also need to have access up to the station from a handicapped ramp and/or steps to get up to the platform, this takes 16 feet, you then have 11 feet for the vehicle, they are down to a single traffic lane. So, if we are on 5th - 6th, Minnesota and Cedar, we are going to be down to one traffic lane in each direction wherever we have a station. A station at 5th and 6th by American National Bank, that means that 5th and 6th at those locations, it is down to a single traffic lane in each direction. This is what led the City and the RRA staff and the consultants jointly to conclude that the Cedar Streete - Fourth Street so that they could keep Cedar, Minnesota, Robert, and 5th-6th, you can't take those down to one lane of traffic.

Center platform stations were discussed, this would be 20 feet wide, and then you are down to nine foot sidewalks, this would take the entire block, so even if you are on a semi-transit mall where you are going to have a station, you will find blocks that have no vehicular access. Turns was another issue which was discussed, when you have an outside turn, they can get a 100 foot radius, and the minimum is 82, this would work fine. Inside turns and the inside of this is 75, and the center is 82, you would have to knock the corner of the building down, and take all of the sidewalk. The alternative to that is to stay on one side or the other and then swing out into the other lane of

traffic, and then come back, there are implications to that as you would have to stop the one way traffic when the vehicle comes through the area, so you could shut down the intersection for a time length to allow that vehicle to make a transition from one side to get back into the inside. This could be shut down for a minute to a minute and twenty seconds, so it would have a major impact. Wherever you have an inside inside turn it becomes a problem.

Other issues in the fatal flaw are the grades and block sizes, so they went out and measured on each of the candidate streets, a station cannot be placed at 5% grade. When a vehicle stops on this grade, the car will tend to roll back into the intersection, so you can't have that. So, the standard is that the station should not be on grades of more than 1%. They plotted all the grades and whenever is is over 1 to 1 1/2 they have a major problem. The block lengths were plotted, 320 feet in length, 10 foot sidewalks, 3 vehicles at 90 feet would be 270 feet, there is 30 feet for the driver to give him a little room to stop, so they want 320 feet from curb to curb for a block would be their standard. He showed on the diagrams blocks where there are shorter blocks than 320 feet. Major entrances to parking ramps,loading docks, surface parking lots, and these were shown on the diagrams. If you rigorously apply the 1% grade, no inside inside turns, the 320 foot block length, none of the alternatives could be put at grade in downtown, there would be a violation of one of those rules. They can do mitigation things, like eliminating a right turn lane or other options, but they set those standards and rigorously applied them, none of the alternatives fit in without mitigation.

There are three alternatives that staff feels warrant further study. These are Alternative B with contra flow operation on Minnesota and Cedar, and two-way transit mall on Fourth Street. Problems that need to be overcome are the grade between Sibley and Wacouta of 2.5%, so this will have to be modified, you would have to close Wacouta in order to raise Fourth Street as it goes through the intersection. This is not out of the realm of possibility. Problem is the grades are too steep at Town Square to get a southbound station in so they are going to have to put that southbound station between 5th and 6th. If they can resolve the grade problem, and live with one way traffic in each direction, Cedar and Minnesota that is an alternative.

The second alternative for retention which is the two way transit mall on Cedar, access to World Trade Center parking is a problem. over at Mears Park, then can put the station in the park where we have access right of way, and then they can leave the traffic lanes open. Another alternative would be to take that station out, and have one station in Mears Park, and one station by Town Square. Same grade program has to be worked out on 5th Street although that is not as great, it is 1.6 to 1%, they would work on the access to World Trade Center.

You can see from these alternatives, why the Downtown Committee think it is time to start talking to the individual property owners about the impact these may have on their buildings.

Mr. Wolsfeld continued, the last retention is M in which you would have two way on Cedar, two way on Fourth, they could get a station between the First National Bank and Kellogg Square, there are no accesses in that block, we still have a grade problem 2.5 to 1% that has to be fixed, and they have the access to the World Trade Center that has to be worked on.

These three they feel they should study further, and the rest were recommended for elimination, he discussed the problems with A and G. These were presented to the Downtown Advisory Committee, and as Ms. DeSpiegelaere said their recommendation was to study those three further, and but let them think,since they were ahead of schedule, for another month before they drop them.

The next thing that would be proposed for the three or four alternatives that were retained would be to do a detailed traffic impact analysis, curbside impacts, make sure stations work, impact on utilities, visual impact, and how it relates to the downtown development plans.

Commissioner Schaber would like to know if we eliminated tunneling, as he knows that there is talk within the city about this. Chairman Finley said he did not think that we looked at this in the Comprehensive Plan.

Ms. DeSpiegelaere informed the Board that this was going to be a topic to discuss at the Work Session, and she asked BRW for cost estimates as the City of St. Paul and Capitol Area Board asked that a tunnel be considered.

Chairman Finley added that in the Comprehensive Plan we only looked at it from the surface alignment standpoint, as we really did not have all the details that we are now getting which brings up an option that we may have to consider. He does not think that we really eliminated the tunnel.

Mr. Wolsfeld informed the Board that the Minneapolis City Council a few weeks ago passed a resolution endorsing the tunnel in Minneapolis.

Commissioner Ahrens is concerned that this does have a tremendous impact on the cost, and if it is going to be part of the Central Corridor, it does make a difference in the financing of it, but it has never been clearly stated as to what Minneapolis has decided to do.

Commissioner Hunt said that while we had taken the position on high platforms, it seems high platforms are causing some problems.

Mr. Wolsfeld said what you would like to do is go through downtown on a straight line with no turns, and have all lines come into that junction away from downtown and then go through the downtown with stations, and then you could transfer from any line to any line, it would be simple, Calgary does this, a number of cities do this. The problem in St. Paul is you have the Capitol Area, Downtown, Lower Town, Rice Park, Civic Center, and if not possible, a straight line that would connect more than three out of the four things. If you want to add a fifth one, it makes it more complex. Jim Steinworth asked about the Civic Center and tunneling. Mr. Wolsfeld said once you are underground, whether that is straight or bent, it does not make any difference. When you have portals to a tunnel, that is the only place where you get in and out of a tunnel.

5. Stations, Park/Ride, and Feeder Bus Planning for Midway Corridor

James Tolaas addressed the Committee, obviously for Light Rail Transit to succeed it has to be integrated into the overall transportation system. This provides a general summary of some of the issues that go into location, and spacing of stations, how we are going to address the park/ride facility issue. How we will go about addressing these issues, and how we go about deciding about the feeder network of busses that will support the transit system.

This is general information with coordinated effort on the part of the MTC, RTB, our staff along with the consultants, Metropolitan Council, and this will be an integral part of the rideship forecast that is being prepared for the Midway Corridor.

Commissioner Schaber would like to know if the stations proposed, would this have anything to do with the high platform, low platform decision. Mr. Tolaas said it would not, the stations are ideally located for best coverage. There is one page summary of standards and criteria for LRT Feeder Bus Planning included in your documentation, this provides a general outline of how you go about designing that feeder network. There is some basic philosophy.

Mr. Tolaas continued, perhaps the most controversial issue that is arising is whether a 16A service or portion thereof is maintained if University Avenue is selected as the preferred alternative, this bus route may be maintained fully or in part. The summary discusses this under the first paragraph, the route may be restructured to feed the LRT line. There are also spacing issues identified, for example, what is a reasonable walk to a station. The walk of 1/4 mile is considered reasonable. The preferred alternative if you are looking at University would be looking a 1/2 mile station locations at this time.

From a transit tourist perspective you would not see a duplication of service via bus on University if LRT is installed, according to this criteria. This is a very controversial issue, there are very vocal groups involved who have expressed their desire to maintain 16A bus service.

Ms. DeSpiegelaere mentioned that this Rail Authority has taken a position on stations,last fall you took a position that stations should be placed probably no more frequently than every one-half mile, and that where service is diminished because of LRT, that there ought to be augmentation to bus services so that the transit service to individuals who presently receive it is the same or at an improved level of service.

Chairman Finley asked if you mean that if we went on University Avenue, and we had half-mile station stops, we could maintain the bus. Ms. DeSpiegelaere said that is her belief, but not everyone feels that way. It is a very controversial issue. Right now people who take the University bus have the ability to get on and off at every single block. If LRT is there at half-mile intervals, they would have to walk a distance further. One of the things they are exploring is maintaining some minimal level of service on University. This

has implications for the amount of space that is needed. If you have LRT and bus service, it takes more room.

Mr. Tolaas added that people are beginning to grasp the full implication, and there is additional work to be done there.

6. Bridges along Burlington Northern Right of Way

James Tolaas advised the Board that there are two existing bridges on the Burlington Northern Corridor, there is near Lake Phalen one on Arlington, and one on Maryland Street. These are considered geometrically deficient, and they are also structurally degrading very rapidly. The City of St. Paul has actually initiated the order to remove, and this was stalled off pending some further review, and the Friend of the Park originally objected, as there was concern it would break the continuity of the corridor for future trail use at this time. But, in evaluating the need for pedestrian and light vehicle access that would be associated with the recreational trail, a very light weight prefabricated bridge could be installed. The Parks Department of St. Paul is more or less favoring that approach, it would be easier to maintain, and is not that expensive.

Mr. Tolaas explained further, if the bridges are removed, the corridor would have breaks at Arlington and Maryland Streets, and the City of St. Paul took the approach that the deficiency for geometric reasons predicated on a lot of safety issues, it was too narrow, center support column in the center of the street does not provide adequate lane width for clearance for safety and traffic flow, and has caused a number of accidents. So, they have ordered the removal by the Public Works Department. The original order was delayed pending review of the future use of the trail system, this was sent to the Parks and the Parks staff objected to removal at that point because it would break the continuity of the Burlington Northern line, the one that runs along Phalen, this is part of our Northeast Corridor evaluation. They would break the continuity for a recreational trail. Right now people can pass over the two streets. But, the Parks Department of St. Paul has evaluated it and felt that removal would not be a serious problem if it becomes a trail, they could put a light weight prefabricated structure in for a very reasonable cost, and it would be a lower long term maintenance cost and problems than the original structures.

If we were to choose that alignment at a future time, for its preferred alignment for the Northeast Corridor, those current structures are inadequate anyway, they are deficient structurally, they are degrading very rapidly, and there are liabilities at the present time, so we would propose that those bridges could be reconstructed at any future time that it would be used for LRT. These should be removed, and the City is going to order so.

Commissioner Salverda moved the following recommendation, seconded by Commissioner Ahrens.

WHEREAS, Ramsey County Regional Railroad Authority is negotiating with Burlington Northern for acquisition of right of way from downtown St. Paul to Beam Avenue and for an agreement on the section from Beam Avenue to the north border of Ramsey County; and

WHEREAS, The City of St. Paul Department of Public Works had indicated a desire to have bridges over Maryland Avenue and Arlington Avenue along the Burlington Northern right of way removed; Now, Therefore, Be It

R90-17 RESOLVED, That Ramsey County Regional Railroad Authority will not object to the removal of the two bridges.

Roll Call: Ayes - 7, Nays - 0
Motion carried.

7. Letter to Urban Mass Transportation Administration (UMTA)

Chairman Finley informed the Board that he had made several changes at the RTB, as well as in the Committee, then another at the Board level. The sense of the changes were that Number 1, we added, as we thought it would be a good idea to be accurate with the right amounts in this letter, and also to let UM know that the priorities are going to be reviewed every other year. Currently we added a change to the provision which stated that Hennepin County concurred that the $24 million was for the entire 29 mile System, and that would delete. This letter is substantially cleaned up from the last time we looked at it. The last change was made in the downtown St. Paul cost because it did not provide what we had in our Comprehensive Plan, $47 million, and the letter to UMTA seemed to indicate that downtown St. Paul was $22 million. He felt that sending information like this to UMTA is exactly the reason why UMTA probably wrote the report which they did. We could be off, but at least let's give the right figure. The explanation in the beginning was that only $22 million was related to the Midway Corridor, and if that was the case, then he felt that we should explain that this $22 million was allocated to a corridor based upon our belief. He hasn't seen that final part come back. Ms. DeSpiegelaere said that was in the Chairman's mail today.

Chairman Finley thinks that we should probably sign the letter, we have the cavaets in it, the RTB has approved it.

Commissioner Ahrens left the meeting at this time.

Commissioner Salverda discussed the resolution, the statement that Ramsey County has been assured, it should be a statement as to be assured by whom. Also, in Ms. DeSpiegelaere's memo the last paragraph, he questioned this as well as to statements in the UMTA letter. He also feels that the points should be identified, rather than by an "o". Recommendation was made in regard to Attachment B in the plan, at no point in the plan is there a goal statement as to what this whole thing is about, what the RTB is trying to achieve. He feels that Ramsey County goals are the ones that are driving the system here, so the RTB should have a statement about their goals.

Commissioner Salverda referred to our Page 9 of UMTA's report on the history and status of LRT planning. He would like to see a paragraph in there about Ramsey County goals that is driving our system. These are his critical assessment points, and he shared this with Ms. DeSpiegelaere.

Commissioner Hunt responded that Commissioner Salverda makes some good points, but we have to remember that this came out of the RTB. Ms. DeSpiegelaere said this all came from the RTB.

Chairman Finley said it all came out of the RTB now, as it had been bouncing around the counties since last October, and we have had this before probably a half dozen times, and substantial changes have been made, and we finally said the RTB should do this, and not each of the counties, so that is where it ends up. Because we had had it before so many times and the objections that were raised at those times he brought to the RTB and got them changed. This the way it looks now as this body had said that they did not like all these things.

Commissioner Hunt feels this is the best we can expect out of all this discussion that is going back and forth, but Commissioner Salverda's point is that we can have some control over what we have in this resolution from our RRA as to who has assured us.

Ms. DeSpiegelaere asked if we could discuss this, as she has heard it from RTB staff, she does not know how official it is, and she asked if this has been heard at the RTB board level, that this does not preclude the potential for Federal funding for other Ramsey County corridors.

Chairman Finley-it says that in the document that it does not, that it is going to be reviewed and priorities may be changed. He quoted from page 22 (handwritten number). This is one of the additions that we had installed in the letter. Chairman Finley agreed with Commissioner Salverda that we should change the resolution. The point on the Midway Corridor, we should tell them why we are not asking for the Midway Corridor, as the decision has been made at the Regional level, that we are not seeking it, and we are doing our environmental impact statement based upon the fact that we are not seeking Federal money.

Ms. DeSpiegelaere pointed out on our numbered Page 19, there is the paragraph which talks about the Central Corridor and two town distribution systems should not pursue federal funding to ensure the earliest possible implementation of the highest priority corridor. This position is subject to modification, dependent upon changing federal regulations and funding programs.

Chairman Finley said then this is covered. He suggested that some revision in the WHEREAS clauses in the resolution be made. The letter itself addresses some of those concerns, the format of the letter should not be run back to the RTB.

Commissioner Hunt moved the following recommendation, seconded by Commissioner Salverda.

WHEREAS, The Twin Cities Metropolitan Region desires to maximize federal funding for light rail transit; and

WHEREAS, Ramsey County Regional Railroad Authority has completed a Comprehensive LRT Plan that identifies six corridors in which light rail transit should be considered in the next 20 years; and

WHEREAS, Ramsey County Regional Railroad Authority has adopted seven goals for light rail transit that are:

1. **To integrate a Ramsey County LRT system with other counties' LRT systems, with other transit services, and other transportation services in the metropolitan area.**

2. **To reduce the need for roadway construction or expansion; to assist in relieving congestion on roadways in Ramsey County.**

3. **To enhance economic development in Ramsey County.**

4. **To decrease costs of transportation services in Ramsey County.**

5. **To respond to mobility needs in Ramsey County.**

6. **To reduce environmental impacts associated with the automobile in Ramsey County.**

7. **To promote financing the planning, construction, and operation of an LRT system in Ramsey County with broad-based funding to minimize the impact to Ramsey County taxpayers.**

and;

WHEREAS, The proposed letter to the Urban Mass Transportation Administration is consistent with the above goals and does not preclude the potential for federal funding for Ramsey County light rail transit corridors; Now, Therefore, Be It

RESOLVED, That Chairman John T. Finley is authorized to sign the proposed letter to UMTA that requests federal funding for light rail transit for the Minneapolis Northeast, Hiawatha and South (I-35W) corridors, and Be It Further

RESOLVED, That a copy of this resolution should accompany the letter to UMTA.

Roll Call: Ayes - 6, Nays - 0
Motion adopted.

R90 18

Commissioner McCarty said after reading Secretary Skinner's proposal for Transportation, he feels that we ought to take a strong leadership role in letting our Federal Legislators know that we do not agree with Secretary Skinner's recommendation that the transportation costs be borne by the States. For example, passenger charges at the airport, toll roads, etc. Senator Durenberger has taken a very strong stand against that, and we should have our staff draft some recommendation that we could forward to our representatives in Congress, including the suggestion by NACo. Chairman Finley said when we were in Washington he mentioned this to Sabo and Vento regarding Skinner's recommendations, as he had had an opportunity to read it. The new Federal direction was that they were not going to participate any longer, it talked about partnership, but they would not be participating financially.

8. Update on Legislation

Chairman Finley gave a brief statement, the House has the 3.4 million that was allocated last year for the second half of the biennium, they are fighting to keep it in, and the Senate is deleting it. The bonding bill, Marilyn Langtry had the $1 million, on the floor which passed. This is in the overall bonding bill, but is not supported by some of the people on the Conference Committee, and the $3.4 million which is very important to us because we withdrew our request for the second phase of design on the Midway Corridor, with the understanding that we were going to get $1 million of that.

Chairman Finley has told our Legislators that this $1 million is the most important part as far as Ramsey County is concerned, but in order to participate with the other regional people, we did take a leadership role in getting the million dollars on the bonding bill. Marilyn Langtry did introduce it, got it passed, but she does not think it is very likely it will stay in there.

Chairman Finley made some changes in the actual legislation which Marilyn Langtry will be making as no one had an opportunity to see it when it came out of the revisors to go on the floor.

There being no further matters to come before this Board, Chairman Finley declared the meeting adjourned.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

2

Regional Railroad Authority
Originating Department

K. DeSpiegelaere 4/16/90
Authorized Signature Date

Board Action Requested

Chairman's Comments.

Request Justification

Budgeting and Accounting Ed Stanistreet 4/16/90
County Attorney Dan Mac Kall
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date April 24, 1990	Signature F L Glendenning	Date 4/18/90
Board Date	Signature	Date

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

3

Regional Railroad Authority
Originating Department

K DeSpiegelaere 4/16/90
Authorized Signature Date

Board Action Requested

Adopt Scoping Decision Document for Midway Corridor. **

ACTION IS REQUESTED

Request Justification

See attached:
1. Proposed resolution
2. Memorandum from K. DeSpiegelaere
3. Scoping Decision Document
4. Environmental Assessment Worksheet

** Please note: Additional resolutions as requested at the April 17, 1990 Work Session will be available for the April 24th meeting -

Budgeting and Accounting Ed Glanlitz 4/16/90
County Attorney Dennis Vrooman
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date	Signature	Date
April 24, 1990	J L Glendenning	4/18/90
Board Date	Signature	Date

RAMSEY COUNTY
Regional Railroad Authority

Room 316 Courthouse
15 W. Kellogg Blvd.
St. Paul, MN 55102
Phone 298-4145

John T. Finley, Chairman
District 3
Diane Ahrens
District 4
Ruby Hunt
District 5
Duane W. McCarty
District 1
Hal Norgard
District 7
Donald E. Salverda
District 2
Warren W. Schaber
District 6

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning KD

SUBJECT: Environmental Assessment Worksheet/Draft Scoping Decision Document

DATE: April 16, 1990

The proposed resolution indicates that Ramsey County Regional Railroad Authority adopts the Scoping Decision Document dated April 24, 1990, for the Midway Corridor.

The Environmental Assessment Worksheet and Draft Scoping Decision Document were prepared and circulated in February for the Environmental Impact Statement for the Midway Corridor Light Rail Transit project.

During the comment period which ended on April 4, a Scoping Meeting was convened on March 27 at two times in two different locations.

Comments on the reports have been assembled and carefully considered by Ramsey County Regional Railroad Authority. The comments have resulted in the revised reports attached to this memorandum.

Recommendation:

Approve the proposed resolution.

KD/blk

RAMSEY COUNTY Regional Railroad Authority

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, An Environmental Assessment Worksheet/Draft Scoping Decision Document has been prepared for Ramsey County Regional Railroad Authority and Hennepin County Regional Railroad Authority; and

WHEREAS, Notice of availability of the reports was published in the Minnesota Environmental Quality Board's (EQB) Monitor and the period of comment ended on April 4, 1990; and

WHEREAS, Copies of the reports were forwarded to all agencies listed on the official notification list of the EQB, to all libraries in Ramsey County, and to other interested parties; and

WHEREAS, Press releases were sent to newspapers in the area of the project and those of general circulation about the availability and content of the reports; and

WHEREAS, A scoping meeting to present information on the project and obtain the responses of the public was convened at two times at two different locations on March 27, 1990; and

WHEREAS, Comments on the project have been received from many organizations and individuals and have been considered by Ramsey County Regional Railroad Authority; Now, Therefore, Be It

RESOLVED, That, Ramsey County Regional Railroad Authority adopts the Scoping Decision Document dated April 24, 1990 for the Midway Corridor.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

2

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, Ramsey County Regional Railroad Authority has contracted with BRW, Inc. for Phase I of preliminary engineering and an Environmental Impact Statement for the Midway Corridor; and

WHEREAS, One element of that study is the completion of patronage forecasts for alternative alignments in the Midway Corridor; and

WHEREAS, Three firms submitted proposals in response to this solicitation; and

WHEREAS, Hennepin and Anoka County Regional Railroad Authorities are also seeking patronage forecasts; and

WHEREAS, It is most desirable that patronage forecasting models and methods be consistent among the Ramsey, Hennepin and Anoka county Regional Railroad Authorities; and

WHEREAS, BRW and the staffs of the Ramsey, Hennepin and Anoka County Regional Railroad Authorities have jointly reviewed the proposals for forecasting which have been submitted; and

WHEREAS, the Cambridge Systematics proposal was deemed by all reviewers to be the most responsible proposal for the following reasons:

1. The Cambridge Systematics team members have greater experience with modeling and the computer model for forecasting.

2. The Cambridge firm has experience with the Twin Cities area, while the other firms have no such experience.

3. Because of the experience of the Cambridge firm, total cost to prepare the forecasts could be less than that of other proposers since the number of hours needed to gain experience and expertise will be less; Now, Therefore, Be it

RESOLVED, That BRW is authorized to contract with Cambridge Systematics for patronage forecasting services for the Midway Corridor LRT Environmental Impact Statement at a cost not to exceed $25,000.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

4

Regional Railroad Authority
Originating Department

K. DeSpiegelaere 4/16/90
Authorized Signature Date

Board Action Requested

Authorize BRW, Inc. to hire Cambridge Systematics as subconsultant for Midway Corridor LRT patronage forecasts.

ACTION IS REQUESTED

Request Justification

See attached:
1. Proposed resolution
2. Memorandum from K. DeSpiegelaere
3. Comparison of proposals

Budgeting and Accounting Ed Blaschke 4/16/90
County Attorney
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date	Signature	Date
Committee / Meeting Date April 24, 1990	Signature F L Glendenning	Date 4/18/90
Board Date	Signature	Date

RAMSEY COUNTY Regional Railroad Authority

Resolution
Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date:_____ No._____

WHEREAS, Ramsey County Regional Railroad Authority has contracted with BRW, Inc. for Phase I of preliminary engineering and an Environmental Impact Statement for the Midway Corridor; and

WHEREAS, One element of that study is the completion of patronage forecasts for alternative alignments in the Midway Corridor; and

WHEREAS, Ramsey County Regional Railroad Authority authorized BRW to solicit proposals for a subconsultant who specializes in patronage forecasting to assist in reviewing and commenting on aspects of the forecasts; and

WHEREAS, Three proposals were received and compared and the staff recommendation was to accept the proposal of Cambridge Systematics; Now, Therefore, Be it

RESOLVED, That BRW is authorized to contract with Cambridge Systematics for patronage forecasting services for the Midway Corridor LRT Environmental Impact Statement at a cost not to exceed $25,000.

John T. Finley, Chairman

By_____
Warren W. Schaber, Secretary

RAMSEY COUNTY

Regional Railroad Authority

John T. Finley, Chairman
District 3
Diane Ahrens
District 4
Ruby Hunt
District 5
Duane W. McCarty
District 1
Hal Norgard
District 7
Donald E. Salverda
District 2
Warren W. Schaber
District 6

Room 316 Courthouse
15 W. Kellogg Blvd.
St. Paul, MN 55102
Phone 298-4145

MEMORANDUM

TO: Ramsey County Regional Railroad Authority Commissioners
Terry Schutten, Executive Director

FROM: Kathryn DeSpiegelaere, Director of LRT Planning KD

SUBJECT: Authorization to Hire Subconsultant for Patronage Forecasting

DATE: April 16, 1990

On March 27, 1990, Ramsey County Regional Railroad Authority (RCRRA) adopted a resolution authorizing solicitation of proposals from subconsultants who specialize in patronage forecasting. The resolution stated that BRW and RCRRA should provide information on the prospective vendor so that authorization can be given for contracting for services.

BRW has obtained proposals from three firms: Barton-Aschman, Cambridge Systematics and Peat Marwick. A comparison prepared by BRW of some aspects of the proposals is attached.

Hennepin and Anoka County Regional Railroad Authorities will use the same services. Last week I met with staff members of Hennepin and Anoka Counties. We agreed that the Cambridge Systematics proposal should be recommended for these reasons:

1. The experience of the team members with modeling and the computer model was best.

2. The firm has some experience with the Twin Cities area.

3. Although Cambridge Systematics rate was not the lowest, the overall cost could be considerably lower than that of Barton-Aschman because of the level of experience of the team members.

It is expected that the work to be completed by Cambridge Systematics in reviewing the Midway Corridor LRT patronage forecasts will not exceed $25,000.

Recommendation:

Adopt the proposed resolution.

TRAVEL DEMAND MODELLING PROPOSALS

Firm	Staff	Location	Rate	Modelling Experience	Transplan Experience	UMTA Relationship	Twin Cities Experience	Other
Barton-Aschman	Wes Harper	Chicago	$75	10 Years	Limited	Good	None	
Cambridge Systematics	Earl Ruiter	Boston	$109	25 Years	Moderate	Excellent	Limited	
	Terry Atherton		$109	20 Years	Substantial			
	Erik Sabina		$58	8 Years	Substantial			
Peat Marwick	Jeff Bruggeman	Washington, DC	$150	25 Years	Moderate	Excellent	None	Has worked exclusively with Gordon Schultz, who calibrated Twin City model.
	Bruce Williams		$100	10 Years	Moderate			

3

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

5

Regional Railroad Authority
Originating Department

K. L. Spiegelberg 4/16/90
Authorized Signature Date

Board Action Requested

Update on legislation.

DISCUSSION ONLY

Request Justification

A verbal update on legislation relating to LRT will be provided at the meeting.

Budgeting and Accounting Ed Glaubitz 4/16/90
County Attorney Dennis Mc Call
Risk Manager
Data Processing

Previous Action taken on Request

Date / Time Received By

Comments / Recommendation

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Committee / Meeting Date April 24, 1990	Signature J. L. Glendenning	Date 4/18/90
Board Date	Signature	Date