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Ramsey County Regional Railroad Authority

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Kathy Despiegelaere

Ramsey County Regional
Railroad Authority
Documentation

File
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

Donald Salverda

District 2

AGENDA

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

TUESDAY, OCTOBER 9, 1990

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

1. * Minutes - Regional Railroad Authority Board Meetings:
 - A. Meeting of September 11, 1990
 - B. Meeting of September 25, 1990
 2. Chairman's Comments
 3. Ridership Forecasts for Midway Corridor - Information - Discussion only.
 4. * Discussion/Direction concerning reimbursement of relocation expenses of consultant staff - Midway Corridor Phase I PE/EIS.
 5. Schedule for Midway Corridor Environmental Impact Statement - Discussion only.
 6. * Select the 12th Street/Cedar Street Alignment as the preferred surface alternative and a central Capitol Mall alignment as the preferred tunnel alternative for the purpose of comparing tunnel and surface options for LRT in the Capitol area.
 7. Report on conference on Economic Development and Transportation - Discussion only.
 8. Update on LRT Coordination Plan - Discussion only.
 9. * Ratify Partial Payment No. 4 to SRF, Inc. in the amount of \$12,135.33.
 10. * Ratify Partial Payment No. 11 to BRW, Inc. in the amount of \$142,385.49.
- * Action is required.

1-A

MINUTES

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

September 11, 1990

The regular meeting of the Board of the Ramsey County Regional Railroad Authority was held on Tuesday, September 11, 1990 in the Large Conference Room of 316 Court House. Chairman Finley called the meeting to order at 10:45 A.M.

MEMBERS PRESENT:

Chairman John Finley
Commissioner Diane Ahrens (entered during Item 3)
Commissioner Ruby Hunt
Commissioner Duane McCarty
Commissioner Hal Norgard (entered during Item 3)
Commissioner Donald Salverda
Commissioner Warren Schaber (entered during Item 3)

Also Present:

Jill Goski, Jim Prost, Joe Kreitzer, Jack Militello, Stephanie Eiler, Terry Lindeke, Julian Empson, James Tolaas, Karen Tero, Tom Collins, Hugh Faville, Robert Clarkson, Ed Glaubitz, James Van Houdt, Terry Schutten, Patrick O'Malley, Kathryn DeSpiegelaere, Frances Glendenning, David MacMillan represented the County Attorney's Office

1. Minutes - of the Ramsey County Regional Railroad Authority Board Meeting of August 28, 1990.

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

The Ramsey County Regional Railroad Authority approves the minutes of the regular meeting held on August 28, 1990, as written.

Roll Call: Ayes - 4, Nays - 0
Motion adopted.

2. Chairman's Comments

Chairman Finley had no comments at this time.

3. Results of analysis of economic impacts for LRT in the Midway Corridor with presentation by Jim Prost, BBP.

Chairman Finley wished to acknowledge the presence of Joe Kreitzer and Jack Militello from St. Thomas University.

Chairman Finley said Jim Prost had been hired on a contract, and we have had an opportunity to work with Mr. Kreitzer, Mr. Militello, and with Steve Hoffman (who had to leave), and our staff has worked with them and Mr. Prost on the economic impacts.

Chairman Finley asked the RRA staff to put together a resolution, (a copy of which was distributed to the Board members for review), this expresses our appreciation.

Commissioner Hunt has seen the resolution, and she feels we owe our appreciation to the folks who have helped the staff and this Board in this work.

Chairman Finley then read the resolution, a copy of which will be forwarded to the University of St. Thomas, so that it will become a part of their personnel records, as we feel that you have gone far beyond the call of duty, far beyond what we ever expected at the time that we entered into the contract.

Kathy DeSpiegelaere at this time wished to thank them for all the help.

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

WHEREAS, Ramsey County Regional Railroad Authority is preparing an Environmental Impact Statement and preliminary engineering for light rail transit in the Midway Corridor; and

WHEREAS, One element of the Midway Corridor project is an assessment of the economic development impacts of alternatives being considered; and

WHEREAS, This subject is one which had the potential to be addressed in a manner that may have led to unrealistic or insupportable conclusions; and

WHEREAS, The assistance of the University of St. Thomas was sought by Ramsey County Regional Railroad Authority, through the suggestion of the President of the St. Paul Area Chamber of Commerce, in order to guide the work of the consultant to Ramsey County Regional Railroad Authority preparing information on economic development impacts; and

WHEREAS, University of St. Thomas professors Steve Hoffman, Joe Kreitzer and Jack Militello have assisted RCRRA staff in managing the economic development impact study by guiding the work plan, reviewing information (even with short notice, sometimes in the evening or over holidays, weekends or vacations) and meeting with consultants and staff at frequent intervals; Now, Therefore, Be It

RESOLVED, That Ramsey County Regional Railroad Authority Commissioners:

1. Express appreciation to Steve Hoffman, Joe Kreitzer and Jack Militello for their assistance and advice on the economic development aspects of the Midway Corridor LRT project; and
2. Direct the Chairman of Ramsey County Regional Railroad Authority to forward a copy of this resolution to the President of the University of St. Thomas and request that it becomes part of the personnel records maintained by the University on its faculty.

R90-60

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

Chairman Finley continued, Jim Prost is here, and he has submitted to us a Draft of the Economic/Land Use Impacts of LRT in the Midway Corridor (this draft was distributed to Board members at this time)

Mr. Prost wished to give a brief presentation, they have prepared over the last several months a draft summary of the Economic Development and Land Use Impacts of the construction of LRT in the Midway Corridor. In the process, they have worked closely with Ramsey County staff, and the good help of the people from St. Thomas, and the participation of staff from the City of St. Paul in evaluating the economic/land use impact. This is part of the draft EIS that is being prepared, and was done under a sub contract through BRW.

Mr. Prost explained that his firm specializes in public and private development advisory services, and within the firm he specializes in transit impact evaluations. Over the last twenty years he has been involved in evaluating transit impacts from Portland, Maine to Portland, Oregon, to Miami, to San Diego to China.

In studying this particular corridor which has some very unique aspects, they evaluated four alternatives, no-build alternative, a Burlington Northern/Pierce Butler Route alignment, a University Avenue alignment; and a Soo Line/I-94 alignment.

The no build alternative alternative is defined as enhanced bus MTC improvements as planned, the planned widening and reconstruction of I-94, and the year 2010 regional all-bus system option.

The four basic conclusions from the study Mr. Prost summarized, firstly, in looking at the construction, they evaluated the impact that would happen during the construction of the LRT, and from their analysis of the experience of construction impacts in the Twin Cities, other cities, and other transportation related projects, and from experience in other areas, they expect that LRT will create a short term negative impact as a result of construction. They do not believe that these construction period impacts will be severe, they will be short term, they will peak during the peak construction period, and they will not have an aggregate long term negative impact.

Secondly, they looked at the impact in the long term, what happens in the year 2010, assuming we have light rail in the Midway Corridor, and what they have assumed is that there will be a long term, positive impact upon existing uses and new development in the corridor. They do not believe that there is a large impact, but there is definitely a positive long term impact as a result of transit in the Corridor. The various alignment alternatives have differential impacts, they believe that they will be based on evaluation of MTC data, and other regional and local projections, there will be continued growth in the corridor under the no build alternative. They believe there will be enhanced

economic development opportunities, although not to a large extent as a result of any of the three alignments, either the Pierce Butler, the one on University Avenue, or the I-94. These alignments, however, have differential impacts, the impacts are different in the short term construction period, they are different in the long term, they will affect the neighborhoods, affect different land uses, in fact residential development different than non-residential, certain types of business. Basically, what they see here is a series of tradeoffs involved, one alternative may have a more positive impact because of one aspect for short term, one may have impact because of long terms. Basically, what we have is a series of tradeoffs, and he would be happy to discuss this, there may be tradeoffs which have policy implications, he cannot evaluate the differential impact of the short term versus the long term. From an economic standpoint it is not possible for them to say that there is a particular preferred alignment among the four alternatives. Basically, there is a series of information that will have to be considered as part of the draft EIS, to be evaluated, without weighing these tradeoffs, they cannot make a preferred alignment decision.

Mr. Prost, in getting to some of the details of the impact evaluation, summarized briefly the basis of their data. One, they did take extensive field surveys in the corridor, evaluated what exists in the corridor, how land uses and development would be differentially impacted by the alignment, what land is available for development opportunities may be created, we defined primary impact zones around stations based on 1/4 mile radius. They tried to evaluate what might happen in particular station areas. They supplemented the field surveys with a series of interviews, conducted approximately fifty key leadership interviews, these were with both public and private sector representatives, elected officials, realtors, academicians, people involved in development of the community, for a variety of reasons, we needed to have information as to what is happening in the corridor to try to ascertain what the private sector development reaction to transit may be, to try to understand what development projects are proposed and planned in the corridor.

Mr. Prost had mentioned earlier, they did an extensive case study evaluation. trying to get a handle on what construction period impacts are. Then they looked at various case studies of other transit systems as to what the impact of similar transit systems may be, Buffalo, Portland, Calgary, San Diego and Pittsburgh, and Sacramento. Every corridor is unique, but there can be analgous situations that can be used as to what transit may or may not do in a corridor similar to the Midway Corridor. They also looked at available data, preliminary ridership data, economic projections, the number of units which are in these impact areas, demographic projections, type of commercial development that would be impacted, to come up with our evaluation.

The next step is that we have a Public Forum this evening, they will get input from that, this all will help them to define and finalize their report which will then be part of the draft EIS, which will then go through the normal review process.

Chairman Finley thanked Mr. Prost for his presentation, he had some of the previous correspondence, and he is asking about severe impact. You are talking about 20 to 30% of the businesses along University Avenue may not survive the construction period, and yet on your conclusions you say there is not a severe impact. Chairman Finley feels this is severe if he would be one of the 20 to 30%.

Mr. Prost explained there are a lot of terms and we try to define them. The analysis does not pretend to mean that an individual business might not be severely impacted, they might not in fact go out of business as a result of the construction periods. Impacts in aggregates, however, they do not believe the impacts are severe. They try to differentiate the impacts on University Avenue by types of land uses, and by location, they perceive that convenience type retail, people who shop on an impulse, a dry cleaner, barber shop, neighborhood grocery store, if I am at all inconvenienced, I am not going to go to those stores. What they said was not that 20 to 30% of the businesses would be closed, what we said is that these types of businesses, the ones that are most severely impacted, which would be the little neighborhood convenience stores, particularly those having limited off street parking, could experience losses of 20 to 30% during a construction period, which they would hope would be for a narrow period of time. They don't believe, however, that comparison, a Target Store, or an auto dealer, some place where you would make a purposeful trip, would be significantly impacted providing that you could still have access, still have off-street parking. The proportion of retailers within that corridor who are the type who would be most severely impacted are relatively, 20 to 30%, are of the type that might be most severely impacted. Most of the inventory is general merchandise, regional retail that would receive less of an impact.

Chairman Finley noticed in scanning the findings, that Mr. Prost did not have, they are saying that the retail in downtown may or may not be, there is going to be a positive impact. Is it more positive with a surface or a tunnel alignment, or did you consider that.

Mr. Prost replied that they assumed it would be a surface alignment in the downtown, they have not evaluated a tunnel alignment.

Commissioner Ahrens mentioned the issue Chairman Finley raised, because she drives University Avenue a lot, and there has been a great deal of effort recently put in on the part of many people to get businesses along University Avenue and the ones that have developed lightly at least in the area between Lexington and the Capitol, these have been small, Southeast Asian, small, small businesses, just starting up. When we talk about the impact not being severe, but then we say 20 to 30% effective, it is very clear, you would not have to see their balance sheet, to know they would not survive this kind of thing. The effort of the community which they are making to try to get these kinds of businesses to help these people, the impact could be severe on certain kinds of businesses. In the hearing tonight it is very important that there be clarity here, in terms of total picture there may not be, but in terms of certain kinds of businesses, yes, we have to say it would be severe. It is important that we make this clear and be very upfront when we have the hearing tonight. She has a real concern about University Avenue Corridor because

if you could look down fifty years, and say oh, fifty years, but those first three years when those little businesses are trying to develop after we have made such an effort to bring them in there, she does not see anyway they would survive the construction period of any length of time, six months maybe, but not any more. It is important that we not minimize this in terms of the way we see this.

Mr. Prost agrees with what Commissioner Ahrens is saying, the impacts of the construction period of the alignment, the impacts of the construction of the alignment on those businesses are most severe as a result of the University alignment, these impacts in themselves are most severe on the types of neighborhood, convenience, marginal businesses, where a 5% decrease in sales can mean the difference between being a viable business and not being viable business. He does not mean to diminish the impact it may have on individual businesses, but wishes to say that the aggregate and in the long term, it will be beneficial, but it is not to say that there will not be short term impacts and these could be extremely severe in case of neighborhood business.

Chairman Finley, just to follow up, while we are on this, on the long term, are you saying that they are going to benefit if LRT gets on it, what about them if they are in the middle of a between stations without a street going through, which will inconvenience the people from the South, who have to go all the way around to get to the North, or vice versa. Is there an economic impact on the long term especially for the small, convenience type person, as you can't stop and run in, and with no parking. Have you looked at that.

Mr. Prost said that transit will tend to concentrate activities around the stations, the 1/2 mile spacings are relatively close, he would rather be a business at the station than one a 1/4 mile station. Chairman Finley then asked if he would rather be in business today on University, than one in between the stations after they are built.

Mr. Prost replied that what happens is there are opportunities that are created as a result of transit, and it is up to be as an entrepreneur to react to those opportunities. He thinks Chairman Finley is absolutely right, he would not want to be in between those stations.

Commissioner Hunt would like the definition of short term. Mr. Prost said they are talking about the construction period, three years, the long term period is the year they are talking about as 2010.

Commissioner Schaber asked if Mr. Prost could explain that downtown St. Paul can be expected to experience a positive benefit, but relatively less benefit from LRT. Mr. Prost said they are trying to differentiate the various impacts from LRT that happen in downtown St. Paul based upon our their conclusion that retail uses are more positively impacted than office uses as a result of LRT, and this relates to the nature and the type of ridership, and linkages to Minneapolis downtown. This is not to say that there will not be a positive impact on office, but they think the impact will be more positive on retail.

Commissioner Schaber added that they also mention that there is a negative if you use University Avenue. Mr. Prost said they say it will be less of a positive impact for office if you use University Avenue, with regard to downtown St. Paul because of the extra time it takes to get from downtown St. Paul to downtown Minneapolis. Not that there will be a negative impact, but there will be less positive. They think that the retailers will be more positively impacted, we are not talking about large differences, they think there is potentially a small, positive benefit downtown retail as a result of LRT, they say that this benefit is slightly greater from a retail perspective; if you would use the University Avenue alignment, they think the impact on the office segment in downtown St. Paul would slightly more benefitted if you had either the BN, Pierce Butler or I94 alignments.

Chairman Finley said one of the concerns we had, he thinks they have addressed it in the summary, but possibly not in the verbal presentation, is it his understanding that regardless of the alignment chosen, that there will be no serious impact on the retail or existing businesses, or residential, in the other two alignments, for example, if we put it on I-94 it is not going to negatively impact the businesses on University or the residences, or the businesses along Pierce Butler, the same would be true regardless of which of the three alignments, it would not negatively impact the other two alignments. He thinks that this was one of the concerns that the businesses on University Avenue had, was the negative impact if we moved it off of that. Is the reason for that because you are still going to have the bus, and the other mass transit available on, for example, University, if it were on one of the other two alignments.

Mr. Prost said there are two reasons, there still is access, you still can drive, you can still use transit, and also the level of impacts that are created by any of these corridors are not large, they are not talking about major, major development occurring that is going to pull development off of one alignment to another, the scale of development that would occur is relatively small.

Chairman Finley would like to know what they see as far as development, as far as Pierce Butler and I 94 for positive new development. Mr. Prost said Pierce Butler they think new developments would be concentrated around the stations, there are opportunities around several of the stations on the Pierce Butler alignment for small scale revitalization, redevelopment. The I-94 alignment because of the nature of the alignment this creates a lot less possibilities for direct transit related new development.

Chairman Finley commented that although there will be some development regardless of the choice, it is not significant, regardless of the alignment, on the pro side, you say if we take University, take Pierce Butler or I-94, the growth at any of those is not going to be significant in Mr. Prost' opinion. Mr. Prost said significant is always hard to define, but that is generally correct.

Chairman Finley asked about the statement, the greatest long term economic developments on existing uses can be expected to be on University, why would they say this, as this is the most built up, he would think that the most would be on the others.

Mr. Prost said this is existing development, he thinks what they are saying is that it serves existing development more because it has more stations, there is more existing development with regard to square feet of existing office space, existing commercial space, residential dwelling units that are in close proximity to the stations, so it does provide better opportunities for development activity around those stations.

Chairman Finley again said his concern is that the opposite is true if you are inbetween the stations, it isn't the greatest improvement if you have inbetween the stations the existing use is no longer as good as it was before because I now do not have parking, and now have to go four to six blocks around on Sherburne or Aurora to get to the other side of the street.

Mr. Prost said, again he thinks that this would be much truer if the station spacings were greater. The station spacings are close so there is not anyone who is terribly underserved. Obviously, the closer to the station you are, the more beneficial it is, the more removed you are from the station, the less beneficial that is, but because of the close station spacings, the degree of concentration is less, as there is more stations, and the degree of negative impact between stations is also less. Again, this is because you are not all that far from the station.

Chairman Finley understands what we are going to be doing today is that we have a meeting at four o'clock, and then this evening you will be at the Forum to answer questions for the citizens. Are there enough copies of this draft report available for the people who have been invited to the forum at St. Thomas. Ms. DeSpiegelaere said they will have a few hundred there tonight.

Chairman Finley noticed in scanning the summary, did you deal with which alignment, as you said you can't make a recommendation based upon economic impact for any of the three alignments as it is minor regardless of where it is, both positive and minor negative aspects, based upon economic impacts. He asked if this is correct. Mr. Prost said yes.

Chairman Finley asked about the transit user, did he get into that at all, or just try to keep the focus on economic development, so really it was a land use issue. Mr. Prost said their focus of analysis was on the economic development, not transit as far as the rider is concerned.

In developing the opinions which Mr. Prost had regarding the economic impact on land use, both existing, future, and during construction, Chairman Finley asked if he formulated any opinion as to who would be the new customer to the business. If there was to be a positive impact, it would appear to him that more people would be stopping at his store today then there was before if it is going to be positive. Mr. Prost said this is correct.

Mr. Prost explained that the nature of this is not that they have assumed that there is any net new growth for the region. They do not assume that people are going to move from Chicago to Minneapolis-St. Paul because we have a Midway Corridor. They did not look at the regional system, they just looked at the one. They perceived that the corridor basically will represent a reconfiguring or reallocation of the development activities toward the corridor. This means there will be less outflow of retail expenditures, where retail expenditures was in the corridor. From inflow expenditures potentially the biggest transfer that they may see are the opportunities that may be created for office developments within that corridor. These office developments might otherwise have happened at more suburban locations. So there would be some transfer from suburban locations to the corridor.

Commissioner Hunt asked in other areas where LRT has taken place, has there been a reassessment of the land values, does the governmental unit increase the value of the land around the stations? Mr. Prost said this depends on various situations, it will depend on how the public assesses and taxes that is a policy decision.

Commissioner Hunt had another question regarding possible office development, what about multiple housing units for folks who would find it convenient to get to the downtowns by transit rather than automobile. Mr. Prost said there are opportunities. The character of the corridor is fairly well established as an essentially commercial corridor. They do not think that transit will have enough of an impact to create a totally different character of the corridor, it will still be basically a commercial corridor, there is not much residential development projected for the entire region, so we do not have much development opportunities, impacts are much more on the commercial rather than the residential.

Commissioner Hunt would like to know if his experience has been this in other communities where LRT is taken place. Mr. Prost said it is where the market demands are, if you have a stronger residential market, transit will tend to concentrate and build on that residential market. It does intend to reinforce the various markets that do exist.

Chairman Finley asked if the existing residential dwellings would be increased in value as a result of being close to the LRT. Mr. Prost thinks there would be a modest increase in value as the result of being located within a quarter of a mile of a transit station, the transit representing a fixed investment, so it does enhance the values to a small degree.

There being no further questions, Chairman Finley wished to thank Mr. Prost on behalf of the Board for this study, and for coming to this meeting to try to answer our questions, as we are going to be called upon to support this.

*Commissioner McCarty had left the meeting during this discussion.

Commissioner Ahrens wished to say after there has been so much discussion and concern on the part of some of the Members of the City Council with respect to economic development relating to LRT, she suggested that we make a special effort to call them to remind them about this Forum, Hearing. It is important that they get their questions out.

Chairman Finley appreciated Commissioner Ahrens' suggestion, we should get a special memo out to the City Council members reminding them about our meeting tonight, these can be hand delivered to their offices.

Commissioner Salverda mentioned that when preparing a report, it is much easier to locate something which is numbered rather than having the "o" to indicate the statement.

Chairman Finley suggested on the report that they have a heading for example, University Avenue, and then list the three paragraphs following, and for Pierce Butler have this heading, then the paragraphs would follow. This would flow a little bit easier.

4. Update on Ridership Forecasts for Midway Corridor - Discussion.

Kathy DeSpiegelaere informed the Board that the ridership forecasts are close to completion, but we are not absolutely certain that there are final.

Chairman Finley mentioned a contract for ridership forecasts on the Hiawatha Corridor which was to be done by the Metropolitan Council. He had informed the RTB that they did not have ours completed yet. He explained where we are at.

Ms. DeSpiegelaere does expect to have that information for the next RRA Meeting.

5. Authorize staff to negotiate a contract for the South Corridor LRT Study with BRW for an amount not to exceed \$170,425.

Chairman Finley noted in the resolution he had Ms. DeSpiegelaere add, as he is getting very concerned as well as Ms. DeSpiegelaere is, of the manpower available by BRW. We have heated up so much, Anoka and Hennepin County, and their work for the LRT Advisory Committee, that he is very concerned about being spread so thin that they can't do a job. We added that this approval, there is a caveat that BRW must demonstrate that it has added additional staff to perform the work in a timely and efficient manners, as we are concerned. If we approve this, with that caveat, that before this contract is signed that they demonstrate that. He asked that Ms. DeSpiegelaere track this.

Commissioner Ahrens is concerned about the way this resolution was drafted, as it seems to her that it needs to be contingent on the fact that Dakota County would also approve the contract. This is the leg which will be going to go to Dakota County, she does not see much point in not going to the border.

Ms. DeSpiegelaere explained that the recommendation is for a contract for the entire corridor, not just Ramsey County portion. Dakota is actually the lead agency on this project, and their Board is considering this today.

Commissioner Hunt suggested that we add to the resolution, subject to the concurrence with the other bodies.

Commissioner Schaber has two concerns, he does not know why we are doing it in the first place as we still have not determined who is going to run the LRT, and if we do vote in favor of it, is this the total cost, or just our portion of that, how is that determined.

Ms. DeSpiegelaere responded to the second question, this is the total cost of the project, it would be divided between Dakota and Ramsey Counties, not just on geographic area, but this will be used for a complexity factor for example, the downtown area, which might be more difficult so we might use a larger proportion of the costs. They intend to work out an agreement with Dakota County as to exactly what the share is. This is the cost for both Dakota and Ramsey.

The first question as to why we are doing this now, Ms. DeSpiegelaere said this corridor was identified in the Comprehensive Plan as the second priority corridor for LRT in Ramsey County. The RTB has identified it in Group C as a corridor that should be considered within the next ten years for light rail transit. It is the only Group C corridor for which an EIS has not been initiated. To keep this corridor competitive with the progress on the other Group C corridors, we feel we will need an EIS.

Commissioner Hunt added, in all the discussion that has been held at the LRT Advisory Committee, and the proposals for implementation, all of the proposals provided that the County should do the preliminary kind of work that goes into the LRT before you get to the implementation stage.

Commissioner Ahrens said in order to keep the only Corridor in Ramsey County in Group B competitive with the others she thinks it is important that we move ahead. The indications have been that the Group B Corridors will be implemented or under construction based on how far they are along, or how able they are to move into that construction phase. If we do not move ahead with this, we are going to be dropped back to No. 5, which may mean that we are looking at a ten to twenty year construction. For that reason she feels we should go ahead with this.

Commissioner Schaber understood there had been some discussion in regard to eliminating B and C Groups.

Chairman Finley explained they had tried to combine these groups, but they lost the vote on these. Now, there has been some reconsideration by some of the people, but it has not come back to the RTB, and it may not until the Coordination Plan. There is some pressure on the other side of the river for this now.

Commissioner Ahrens feels that the issue would probably be the same whether they were separate or combined. The funding will come based on how far along the planning process was, and if we don't get in the ballgame, we will be out.

Chairman Finley said that is correct, it will probably be that way, as we have to take them on some type of an order, and those that are ready will be ready. One benefit that we have is that it is not going to be at this point anyway in the Federal bureaucracy where the other three B Corridors are, and this may end up being a plus, if the Midway Corridor is successful.

Commissioner Schaber stated his concern is that we continue to make incremental decisions, we never bite the big bullet at some point in time, and we keep doing all these small, little incremental decisions, and yet we haven't come down and said we are going to or we are not going to build. The push now seems to be from some people that the responsibility should be transferred to Mn/DOT. He hates to see the counties spend these dollars if it is going to be changed, and the responsibilities go to someone else.

Commissioner Hunt commented, in a sense you might say now that what is taking place now, and it is true this incremental expenditure of funds is really complying with what the Legislature said should be done. It is going to be up to the Legislature to make the decision this next session.

Commissioner Schaber agrees with Commissioner Hunt, but he would like to know why we can't wait until the session to let them make a decision before we spend another \$170,000 on something. We are not talking small dollars in this issue at all.

Chairman Finley can say the other B Categories are substantially further along than \$170,000, in fact Hiawatha Corridor is in the Federal EIS process. He realizes this is a lot of money. We fought so hard to get this line where it is so that we have a spoke coming out of St. Paul. He is more interested in this line than any other line, as it really makes us in or out of the system.

Commissioner Schaber would rather see this line built than the one between Minneapolis and St. Paul, he would like to see more spokes coming into downtown St. Paul from the East. We are making another \$170,000 decision without biting the bullet on the big one.

Chairman Finley thinks we bit the bullet, it is just someone else has veto power. We have said this is our Comprehensive Plan, this is our order that we are going to go with, this is how much we think it is going to cost, and how it should be funded. We have done all those things, and now we are just

proceeding to implement that which we have already done just from the County perspective. The only problem is that the Legislature may or may not change that process. We have done exactly that, this B Category is as a result of this Board's activity in saying that this should be in our Comprehensive Plan as the second line to build.

Commissioner Ahrens wished to clarify as there has not been a recommendation as to who should build the thing, but in all of the proposals which they have heard, and which are coming today under Item 7, the corridor planning still remains the responsibility of the County Regional Railroad Authorities. If we go with what is being proposed to be recommended by any of the Transit Board, the Highway Department, the MTC, or on a Joint Powers Agreement, the planning still remains with the RRA.

Chairman Finley added that the Legislature may not pay any attention to those that we have at the present time.

Commissioner Hunt said in reference to Item 7, she does think that any of those recommendations deal with Mn/DOT taking over any more than the implementation and construction, not the planning.

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

WHEREAS, A request for proposals for consultant services for an LRT study for the South Corridor was issued; and

WHEREAS, A staff committee of five has reviewed the proposals, listened to presentations from the two firms which submitted proposals, and made a recommendation that the firm of BRW, Inc. be offered a contract; Now, Therefore, Be It

RESOLVED, That Ramsey County Regional Railroad Authority staff is authorized to negotiate a contract with BRW, Inc. for an LRT study for the South Corridor with the caveat that BRW must demonstrate that it has added sufficient staff to perform the work in a timely and efficient manner, subject to concurrence by Dakota County Regional Railroad Authority.

R90-61

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

6. Approve Community Participation Program for South Corridor LRT Study and authorize nominations to be selected for membership to South Corridor Task Force.

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

WHEREAS, Ramsey County Regional Railroad Authority and Dakota County Regional Railroad Authority are initiating an Environmental Impact Statement for LRT for the South Corridor; and

WHEREAS, A community participation program for the South Corridor has been proposed; Now, Therefore, Be It

RESOLVED, That the community participation program for the South Corridor is adopted; and Be It Further

RESOLVED, That authorizations for nominations to the South Corridor LRT Task Force may be solicited by Ramsey County Regional Railroad Authority from groups in Ramsey County identified in the program.

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

R 90-62

*Please note - the regular meeting had been recessed, to be resumed after the lunch hour, to meet at 1:30 P.M. to discuss Item 7. However, the minutes will appear in the normal agenda order. The meeting was resumed at 1:40 P.M.

7. Update on LRT Coordination Plan

Chairman Finley said the LRT Coordination Plan which we are going to discuss, to narrow it down, and he asked that Commissioners Ahrens and Hunt discuss this. This has been discussed between the three of them, as they sit on the LRT Advisory Committee, their recommendation from that Committee goes to the RTB, of which he is a member.

Commissioner Hunt added to Chairman's Comments, that then this recommendation from the RTB will be referred to the Legislature. Chairman Finley said that is correct.

Chairman Finley is leaning towards the Joint Powers Agreement between the counties, and he feels that is the best way to go. We have the ability within our Public Works Department to do the engineering type thing. He feels that all the counties could be involved in it for essentially overall policy, but then it should be structured so that only the counties in which a particular alignment crosses boundary lines would be involved in the detail of the design and the actual construction. He feels that Mn/DOT could play a role in the construction of the lines through a contract with the Joint Powers. This is where he is coming from. He feels the Joint Powers, between the counties, for an example on the first alignment, this would be Hennepin and Ramsey would deal with it, and they would contract for whatever work is to be done. If we were on the second line, going out to Anoka, it would be Hennepin and Anoka who would deal with the details of the alignment. Who we contract with could be Mn/DOT, depending upon where the alignment goes within a particular corridor, could be someone else, but it would be up to the counties to determine, those directly affected, those types of issues. This is where he is coming from, it is sort of a hybrid of all of the proposals, a little bit of a hybrid.

Chairman Finley has conveyed this to Commissioners Ahrens and Hunt, and they will speak for themselves, as they feel it should go to Mn/DOT, however, he does not agree. The reason is that he feels that we have made tremendous commitments to the public, he does not think the history - there is a history of Mn/DOT being involved with constituencies and presentation to community groups, forums, in the manner in which we have conducted this project so far. They have been extremely cooperative again in the last year, but he does not think that they would continue the commitments that we have set forth as far as public input. He does not think their history has been that. He does not know if they even know how to do that. Chairman Finley does not feel that RTB, which was the initial draft recommendation to the LRT Advisory Committee, should be the one. He had originally thought that RTB should do it, but he does not think they should, they do not have the capability, they do not have the staff. We would be building a whole new bureaucracy for the construction and implementation of LRT. They do not have engineers, they do not have soil people, the types of people you need to construct a project.

Chairman Finley continued, the counties do through Public Works, Mn/DOT does through their design and implementation staffs. So, RTB, in his opinion is third place of the three.

Commissioner Hunt realizes this was a lot of material which the members had to go through, but she would like to call attention to the Mn/DOT Task Force Report on Page 12, this is the key. You will notice that the counties play the lead role in corridor planning, they have approval authority on the project planning and pre-engineering, final design, and a regional system planning. So, it isn't as though the counties would not be playing a major role with Mn/DOT in the whole scheme of things.

Commissioner Hunt thinks this lays out each body's role, and she thinks this is the appropriate role for counties. From the standpoint of Mn/DOT being the lead agency in certain areas, she thinks they would be in a good position to work with the City, which is going to be a key player somewhere along the line, with the kinds of approvals that have to be given. This gives the system the regional kind of approach which she thinks the Legislature was hoping to achieve in the restructuring of the RTB, and the last legislation which laid out what should be done before this next session of the Legislature.

Commissioner Ahrens is very strongly on the side of having Mn/DOT construct the system. Page 12 pretty well lays out as to who would be the lead, who would do what, and it leaves a very key role for the local Regional Railroad Authorities. At the last LRT meeting they had a three hour presentation, and each of the prospective entities that could be the policymakers and provide for the construction made a presentation. She thought that Mn/DOT's was the best presentation, and they did answer some of the basic concerns she had about Mn/DOT. It was pretty clear that they certainly have the capacity to do this.

Commissioner Ahrens' concern, as she was involved in 35E for over a period of ten years, was how they deal with the community. She had her fears addressed both in terms of what she saw in the matrix and in the presentation, because it is clear in the matrix the corridor planning and the approval of the final design, etc. will rest with the counties. We have our own system of community participation. Page 16 was referred to, they address their weaknesses and their strengths. It was a weakness that Mn/DOT cannot represent local interests as well as counties. The response was that they intended to utilize the public involvement structure that we have established, and supplement that as needed. This is in writing. She did catch what she thought was a very significant change in attitude on the part of staff of Mn/DOT with respect to community participation. She thinks they learned a lot from 35E, they learned that a community, even little neighborhoods, can bring things to a halt for ten years if they decide to do that.

Commissioner Ahrens feels very comfortable with the Mn/DOT proposal. There is another thing that she feels even more uncomfortable with is that she and Commissioner Hunt have been involved in the closest thing to a Joint Powers Agreement that they could find in respect to the issue in the LRT Advisory

Committee. All the players are there, they have been working with that for a year. Another kind of Joint Powers Agreement would be very similar with what we have going now in terms of the Advisory Committee. Her experience in that has been so negative that frankly, she does not feel that it is very productive, or at the very best that it would be a constant fight and struggle if we have a continuance, or even a modified continuance of that kind of structure. She feels that this is what the Joint Powers system suggests.

Commissioner Ahrens feels we should be very up front with this group, however, and say that the votes are not there. The votes as they see it are now there in the LRT Advisory Committee for a Joint Powers Agreement. She also thinks that the leadership of the Legislature is on the side of Mn/DOT, this is what she has been told. Even though we would be in the minority, she would like to stand up and say that we do not agree with the Joint Powers Agreement, and we support the Mn/DOT approach. This may not change any votes at the Advisory Committee level. She does not know what will happen at the RTB, but she does think when it gets to the Legislature that they will hear what Ramsey County did, and perhaps even be appreciative.

Commissioner McCarty would like to know what was the tenor of the Advisory Committee.

Commissioner Hunt said it was to go with the Joint Powers Agreement.

Chairman Finley added it would be probably fair to say that on the Advisory Committee Joint Powers would probably be unanimous except for Commissioners Hunt and Ahrens.

Commissioner Hunt pointed out that she and Commissioner Ahrens would feel that it is their responsibility to represent the point of view of the County Board, as that is what they have done all along when we have come to this Board, and asked for direction. If this Board wants to go contrary to what Commissioner Ahrens and she are recommending, she would not feel uncomfortable at all in presenting that as the view of Ramsey County. She feels that is what her role, what her response should be. We will report what the majority of the Board says.

Chairman Finley feels so strong that the counties should do it because that is where the impetus is. You have to remember the history of LRT, the Legislature gave the LRT planning to the Metropolitan Council. It went nowhere. Then, it went to the counties, and it was jerked from the counties when only Hennepin County was involved, and it was given to the RTB. It went nowhere. It was in 1987 that they came back, they took the power away from the RTB to plan or design LRT in the metropolitan area, and gave it to the counties. He feels very strongly that the reason that the Legislature set up the structure exactly the way they did do it was not so that there would be Mn/DOT. What they did is set it up for the counties to come back in with a plan for the development, the funding, and a suggested coordination plan - not the RTB, not Mn/DOT, not anyone else. This was that the counties do it as no one else was able to do it.

No one else did it, everyone sat on their hands. it was not until the counties did it. For the counties then to take a backseat and to take the flak under the Mn/DOT proposal for determining the corridors, and then have nothing to say about how it is going to run after that - he does not think it is fair.

Chairman Finley certainly would not to be involved in the planning of corridors, and then have some other bureaucratic agency, which is not represented by elected officials at all, come in and start taking property, condemning, etc., with the county no longer having anything to say. If you look at the matrix, we do the corridor planning, we take all the heat, we go to all the meetings, we tell the people all the problems, and then they come in and design it, and do it the way they want. We have all experienced the Highway Department, or the Department of Transportation. They have had a recent dedication to LRT, very, very recent. He thinks if we were to go in this direction, we would be much better off being out of the business entirely. If Mn/DOT is going to do it, they should plan the corridors, decide the alignment and construct them. This would be the proper way, in his opinion, for Mn/DOT to go. The counties would step aside, don't put five cents in, don't spend our time planning, or anything else. That is not what their proposal is.

Chairman Finley feels what we are going to do is turn it over to a bureaucracy, except that we will be on the front end, we will go to all the meetings, and do all the planning, and take all the flak, and they will do the construction the way they please, in the same manner as they have done all the rest. He feels very strongly, and he will represent his feelings at the RTB Board as he thinks that is what he was appointed by the Metropolitan Council for which is to represent the best interests of the City of St. Paul constituency. In his opinion, the planning and construction should be done by the counties.

Commissioner McCarty referred to Page 12, the matrix shows the counties having the participatory role in the financial management and funding acquisition, what does that mean in the terms of cost control. Will they hand us a bill, and we must pay.

Chairman Finley explained that we would pay 10%. Then, Commissioner McCarty said who will decide about the other 90%. Chairman Finley said financial management is with Mn/DOT.

Commissioner Norgard was concerned as we just had a consultant here who told us absolutely nothing, as he did not think it was a good presentation. We have been going through this thing, many different phases, he does not know where we are going. He listened to the turnkey, Hennepin wants turnkey, we don't want turnkey. He wonders how the two counties will get together. The City of St. Paul does not like the County. Someone above all of us has to take over, it is just not going to work. The bottom line must be the Legislature. You also have to raise money, somebody will have to run it.

Chairman Finley said the Legislation calls for MTC to run it.

Commissioner Norgard feels you can say who is going to run it, but who is going to give them the money. Who is going to raise the dollars. He does not see any coordination, there are really only two counties in the ballgame, the rest might be on the fringe.

Commissioner Norgard again mentioned the consultant who spoke today, he did not hear him say anything. Chairman Finley explained that the City did not believe what we said, so we hired a \$30,000 consultant to tell us.

Commissioner Norgard did not hear any recommendations coming from that report.

Commissioner Schaber said he has been raising almost every meeting the issue of incremental decision making as opposed to biting the bullet, and finally doing that. Hopefully, we may be coming to that point very quick. You make some excellent points, some logical, legitimate concerns about counties' involvement or non-involvement in the process, but his concern is very frankly the fact that he thinks the only place that this whole process should be at is with Mn/DOT. He would not be even adverse to taking us totally out of the process. He does think that we do serve a real purpose by doing the basic planning, doing the basic corridor alignments, taking the heat for it, there is no question about that as it comes with the job. But, it gives the basic, we know where the basic corridor alignments should go, and we have to make those kinds of determinations. He really feels that light rail should be part of a total transit system. This total transit system includes freeways, feeder buses, basic buses, and obviously light rail. The only organization that he can see that has the ability to make that kind of determination for the seven county metro area is Mn/DOT. They have been quite responsive in the freeway construction lately, they have turned themselves around from an image standpoint to the fact that they do take into consideration concerns of not only citizens, but governmental units as well.

Commissioner Schaber is afraid in particular of Joint Powers with the efforts of the counties, the fact that we are basically at loggerheads going into it, as he does not support turnkey, he does not think our Board supports turnkey. The other county is adamant that there will be turnkey. Turnkey has not worked wherever it has been tried. He also supports the fact as the agency to run the thing once it is built, is that MTC has as pretty good expertise in this area as anyone, so it could coordinate well with Mn/DOT to make it work. This is not a perfect decision, but of all the decisions or options that we have in front of us, to him, it is the best one, if we lose, we lose. He feels very, very strongly that this is the way we should go.

Chairman Finley wished to add when you talk about coordinating the transit system, that is not Mn/DOT's role, that is the RTB's role, specifically by Statute. They alone are the ones to coordinate transit within the seven county metropolitan area, not Mn/DOT, they have no role in that at all.

Chairman Finley continued, Mn/DOT rolls into the planning done by the RTB. There are 590 miles of roads under RTB's jurisdiction for transit planning, and the Metropolitan Council. To think that Mn/DOT plays a role in transit planning, they do not. The plan calls for the RTB to continue in that, and the MTC in the operations.

Commissioner Salverda came to meeting feeling frustrated that we are being forced into a decision on this without having more time to analyze everything. In the reading he did prior to it, he thought the Mn/DOT recommendation was the best, and he thought maybe he would be the only person voting like that. He has heard the comments from Commissioners Ahrens and Hunt, and he appreciates the Chairman's comments being on the RTB. It is a statewide issue, we are talking about the lead agency, and Mn/DOT has the experience, all the players are involved, so it is a total team effort. He also is not too confident with Joint Powers Agreements. The Metropolitan Council is evidently totally out of it, which is option 4, from the sounds of things. He would go along with the Mn/DOT recommendation.

Chairman Finley's biggest concern is that it is being looked at as opposed to structure, looking more at the personnel - person, people involved - and he is trying to get beyond that and look at the structure of a Joint Powers Agreement. He is not looking at who can scream louder at a meeting, but who are the governmental agencies who are going to be making the decisions, and that is where he is coming from. He is afraid we are worrying about who is going to be sitting in the chairs, election processes take their toll, and they make changes, powers change. He is talking about a structure to build a system, and the votes to be taken by representatives of governmental units, elected governmental units, and that is why he feels so strongly. He thinks we should be involved in it. If the Legislature wants to change, they can do whatever they want to, which is very typical of them, they very well may want Mn/DOT because that is an arm of their elected body, but they are not going to make that decision because the Commissioner is this person or that person, he would hope. He does not think that we should get bogged down on that either.

Chairman Finley thinks it is very important that we look at it from the structure standpoint. He does not see it working with your bureaucracy in place. He could see it possibly working with the present people who are sitting at Mn/DOT, but that is not a reason for doing it just because we have people today in a chair that may or may not like LRT. We have to look at it from the standpoint that it is a governmental agency of the State government.

Commissioner Ahrens discussed the issue about who determines the funding, if you look on Page 12, you will see that the funding acquisition would be a responsibility of the RTB under the matrix. On the same page it deals with Joint Powers involvement, the same thing. Chairman Finley pointed out that it is not with RTB. Commissioner Ahrens then talked about financial administration, this would be with Mn/DOT and Joint Powers Board.

Commissioner Ahrens feels that funding, which is the primary one, this is how you raise the money is with the RTB. This would be if it were under Joint Powers, it is not with the County. The issue does not change with who raises the money.

Chairman Finley said that the cost management and acquisition is with Mn/DOT on the one, the funding acquisition is merely who is going to get the funds, but who is going to spend the funds is the issue.

Commissioner McCarty feels we will have someone else handing us the bill under Mn/DOT's plan, and we will not have a whole lot to say about it, where does our representation go.

Commissioner Ahrens understands they do not hand out the bill, it is funded on a regional system, that has already been agreed to, we are not funding this first segment in the Central Corridor.

Chairman Finley stated, don't tie the first segment, we are talking about a coordination plan for a system, not one line, we are talking about a system, we don't want to get into just Minneapolis to St. Paul, we are talking about a coordination plan for the light rail system in seven county metropolitan area - this is what we are talking about. This is two different things. It is very important to keep those distinct. If we were talking about a line running down I-94 between Minneapolis and Saint Paul, he would probably say, let's contract with Mn/DOT, but we are not. We are talking about a seven county, Light Rail Transit System, costing \$2 billion dollars.

Commissioner Ahrens said we are talking about the first segment which is going to be funded on a regional basis, maybe even statewide, but it is not going to be on a county by county basis. That is the first segment. You are right, second, or Stage B and C, it has been agreed that this is still a fairly loose issue as to how that is going to be funded. It could be funded partially on a property tax basis, it could be funded in other ways, the only thing that has really been agreed upon is that the first segment is not going to be funded by Ramsey County and Hennepin County property tax owners.

Chairman Finley insisted this is not what we are looking at.

Commissioner McCarty understands what Commissioner Ahrens is saying, but that is even worse in his mind because now you have no guarantees for the future at all. If we have a sales tax, that is fine, now we are taking care of Stage A, but when we get to B and C we have lost control. All we are saying is that we will share 10% of the bill, and we have no guarantee that they won't come back and say the only authority we have is the property tax, what will that 10% be?

Commissioner Hunt thinks the Chairman is getting beyond what is a known factor at this point, the final determination is going to be made by the Legislature. As far as this being a system, in reference to the Chairman's comments, this is going to be a system, but most people, including the Chairman of the RTB, indicate that this first line is going to be extremely important from the standpoint of being looked as a pilot project, it is very important that it be successful. She thinks it has more chance of success if it is done by a regional agency such as Mn/DOT, which she thinks has the credibility and confidence of the Legislature, than if you are going to have to iron out the details of a Joint Powers Agreement.

Chairman Finley said that Mn/DOT is not a regional agency, it is a State Agency. The financial plan which was recommended by the Legislature calls for 10% of the system to be outside of the core line to be paid by the counties. You have to take everything in totality, and it does not make any difference, the fact is the Legislature is going to make up their own mind, regardless of what we recommend. Commissioner Hunt is absolutely right, but the point is that what is going there as it stands right now is a funding mechanism in which the counties pay 10%. We did not support that, but that is what is going outside of the first line.

Commissioner Schaber said of the options shown, and he does not think any of them are perfect, he still feels that the Mn/DOT option is the best. He would almost like to see some modifications in that. Right now we have to deal with what is in front of us.

Commissioner Norgard feels if you are going to make LRT go, if you believe in it, and think it is necessary, you are going to have to go with something big. There are so many arguments both ways, you have to be able to control that Legislature. Someone has to do it, and he does not think that the individual counties or cities are going to do it. You have to go with the people who are in the business. He disagree with Commissioner Schaber, it certainly is not the best thing, but if we really believe in it, we have to go with Mn/DOT and hope that they can work with the local communities the best way they can.

Commissioner McCarty said the most we can hope for is to end up on the back end of things, and hope that this participatory 10% we have in the funding should ^{not} come down on us in the future, the most we can hope for is that we will be obstructionists, if we can't come up with or agree with the 10%. He had thought yesterday that Mn/DOT should take this thing, but they ought to take the funding as well, take over the whole works, this gives us the bad end of the deal. If we are going to do the thing, let's do it, if we are not, let's not. This will be nothing but trouble in the future.

Chairman Finley agrees, he would rather be out, than be in under Mn/DOT's proposal.

Commissioner Salverda feels there are checks and balances in the systems, and again it is a total team effort, and all we are calling for is the lead design, construction agency. You have to look at the big picture also

and he thinks they are the best of the four recommendations here.

Chairman Finley feels that the elected officials could contract with them to do exactly what they want to do, which would be the Joint Powers.

Commissioner Ahrens wished to state before she makes a motion, she appreciates the discussion, everyone has been very thoughtful and has looked at the material, and tried to understand the issue, but however the vote comes out, she will vote in accord with what this Board instructs her to vote, and she will not offer her personal opinion, even though she may not agree with it. She is sure this is true for Commissioner Hunt as well. We have at these LRT meetings represented this County Board as best we could in terms of what you have instructed us to do, and they intend to do that on this issue as well.

Commissioner Hunt wished to add that when Commissioner Ahrens and she do represent this Board, if it is a split vote, they will certainly point out the fact that it is a split vote.

Chairman Finley said that is very well and good, but then you should carry that forward to represent the will of the powers that be that the Legislature asked for the recommendations of the Regional Transit Board in recommending the coordination plan, the development and financial plan go to the RTB, and this Board could not then, as a part of the system go contrary to what the RTB is recommending to the Legislature. He does not believe that the RTB is going to be recommending that to the Legislature, regardless of how he votes at the RTB.

Commissioner McCarty commented that he has heard that Commissioners Ahrens and Hunt are two of the most highly respected members of that committee, and his vote in no way reflects on their activities.

Commissioner Hunt pointed out that Mn/DOT did not request to be considered part of the implementation strategy on LRT. The only reason Mn/DOT responded with this material was because they were listed by the consultant as one of the possibilities for the implementation of light rail. It is not as if Mn/DOT was out there lobbying to become the implementing agency, they were listed by the consultants as one of the possibilities. So, as a result, their Committee directed that each of the staffs come up with a proposal as to how they would implement if they were selected. She wished to make this clear, so it would not be assumed that this was a turf kind of effort on the part of Mn/DOT.

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

290-63
WHEREAS, A Coordination Plan is being prepared for the Twin Cities Metropolitan Area that will recommend which organization should design and construct light rail transit; Now, Therefore, Be It

RESOLVED, The Ramsey County Regional Railroad Authority endorses the Minnesota Department of Transportation as the organization that should design and construct light rail transit.

Ayes - 5, Nays - 2 (Finley, McCarty)
Motion adopted.

8. Update on progress on acquisition of Burlington Northern right-of way - Discussion only.

Chairman Finley said this is an update on the progress of the acquisition of the Burlington Northern. We have a letter from David MacMillan which is included in your packet, this essentially is update in which he says he may be coming back to us in the future, but not yet.

David MacMillan addressed the Board, this has been a learning experience dealing with the railroad. You may wonder how Hennepin County manages to get through some of their negotiations. One of the things they do in Hennepin is take a lot of risks which to this point we have been unwilling to take. They do not do any extensive title work, or intensive survey work, and sometimes they may be left with pieces of property that may have real gaps in the title, and real problems may occur. This is a risk that we have been unwilling to undertake.

Chairman Finley commented that he thinks this is a wise decision not to take those risks. He asked that Mr. MacMillan keep the Board informed as they go along.

9. Select St. Peter and Sixth Streets as Preferred Tunnel Alignment in Downtown St. Paul to Compare to Surface Alignment of Cedar and Fourth Streets.

Chairman Finley said what is being asked, and this has been through the Downtown Committee and also through the Intergovernmental Committee, is that if there was going to be a tunnel in downtown St. Paul, this one fits better than the others. If this is approved, that the next part of it is to then start comparing the surface alignment which is Fourth and Cedar with the Tunnel Alignment as to its overall impacts. This will be coming back to this Board.

Commissioner Schaber asked about dollar figures at this point. Kathy DeSpiegelaere said cost figures should be available later this week. The Downtown Task Force will be receiving these at the meeting a week from Thursday.

Chairman Finley said this would include the effect on business, etc., there are several criteria that are being used to evaluate the difference between service and tunnel alignment. These were ranked by the Downtown Task Force, and now the impacts are being prepared by BRW. These will be brought back to the Downtown Task Force and to this Board.

Commissioner Schaber asked about soil borings. Ms. DeSpiegelaere replied that they are not doing soil borings at this time, this would be a more extensive study. They are doing cost estimates comparing surface versus tunnel and some other criteria.

Without soil borings, Commissioner Schaber would like to know how you are going to get any quantitative ideas as to what the cost is going to be. You need to go down and look underneath, how you would know that cost, as that has been the major concern that we have been told about the issue of tunneling in downtown St. Paul is the fact that there is considerable rock formation.

Ms. DeSpiegelaere explained that there is no question that soil borings would give more accurate cost estimates. When you initially considered whether or not to assess a tunnel alignment, BRW had given an estimate of \$1 million to assess what the cost of the tunnel would be, including soil borings. You will be getting cost estimates, but they are not as accurate. There are some things that can be stated without soil borings, such as the cost of a station in a tunnel which BRW staff says will cost about \$20 million.

Commissioner Schaber is concerned how a decision can be made for above ground as opposed to underground without having that information.

Chairman Finley said there are some geology reports that they are going to use. Ms. DeSpiegelaere confirmed this, they have some geologic information that is available. Chairman Finley added then they would be able to tell us where the rock formations are, whether we are on rock or sand.

Commissioner Schaber commented that Hennepin County has sandstone, and we have hard rock. The variable in Hennepin County is much less than in Ramsey County. He would be more comfortable sitting on the Hennepin County Board as they know basically there is sandstone over there all the way. To make a guess, he is not sure that you can make that same type of estimate with any way near the assurances of what is down there. He is surely not going to vote for something like this which we could be off by \$50 million. You cannot ask him to make that vote unless you have that information.

Chairman Finley informed the Board that this will be coming back, at that time we will have to look at assumptions and what they are based upon for those cost estimates. Maybe there may not be enough information for that decision. At this point we are just being asked to select that, if it was in the tunnel, where would it be.

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

WHEREAS, Ramsey County Regional Railroad Authority has directed BRW, Inc. to prepare a comparison of tunnel to surface alignments for LRT for the Capitol area and for Downtown St. Paul; and

WHEREAS, Information has been developed by BRW, Inc. and a recommendation made that the tunnel alignment in Downtown St. Paul to be considered further should be St. Peter and Sixth Streets and this recommendation has been endorsed by the Downtown LRT Task Force; Now, Therefore, Be It

P90-6d
RESOLVED, That Ramsey County Regional Railroad Authority approves St. Peter and Sixth Streets as the preferred LRT tunnel alignment for Downtown St. Paul for the purposes of comparison to the preferred LRT surface alignment of Cedar and Fourth Streets.

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

Please note:

Items 1, 2, 3, 4, 5, 6, 8, and 9 were considered in this order. However, it was necessary to recess the meeting and reconvene at 1:30 P.M. in the afternoon, at which time Item 7 was discussed. The minutes for the meeting will appear in the normal agenda order.

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

1-B

MINUTES

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

September 25, 1990

The regular meeting of the Ramsey County Regional Railroad Authority was held on Tuesday, September 25, 1990 in the Large Conference Room of 316 Court House. Chairman Finley called the meeting to order at 11:20 A.M.

MEMBERS PRESENT:

Chairman John Finley
Commissioner Ruby Hunt
Commissioner Hal Norgard
Commissioner Duane McCarty (entered during Item 2)
Commissioner Donald Salverda
Commissioner Warren Schaber

MEMBERS ABSENT:

Commissioner Diane Ahrens

Also Present:

Marit Smaby-Nowlin, Karen Tero, James Tolaas, Jill Goski, Mary Lou Grahek, Terry Schutten, Terry Lindeke, Ben Sebesta, Robert Clarkson, Ed Glaubitz, Hugh Faville, Frances Glendenning, David MacMillan represented the County Attorney's Office

1. Minutes - A. Minutes of the Special Ramsey County Regional Railroad Authority Board Meeting of August 28, 1990; B. Minutes of the Regular Ramsey County Regional Railroad Authority Board Meeting of September 11, 1990.

Chairman Finley informed the Board that 1 - B Minutes of the September 11, 1990 Meeting are not available at this time, but will appear on the agenda for the next meeting.

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

The Ramsey County Regional Railroad Authority approves the minutes of the Special Ramsey County Regional Railroad Authority Board Meeting held on August 28, 1990, as written.

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

2. Chairman's Comments

Chairman Finley wished to report that the Downtown Task Force of which the County's representatives, Commissioners Ruby Hunt and John Finley, were in attendance at last week, recommended that there be a surface alignment in

downtown St. Paul. Also, he mentioned that the five members of the City staff and City Council who are members of the Task Force were not present for this decision. So, he assumes that we will be getting a resolution from them why did we do that without any input from the City. When this comes to us, the Board will know why we took the action with proper notice to everyone. In fact, a special memo was sent to the City members four weeks ago asking that they please attend the last two meetings which are very, very important.

Commissioner Hunt wished to point out that the Task Force decision was unanimous.

Chairman Finley added that it was unanimous, and some of the members had been very much in support of the tunnel at the start, but the data and information was so overwhelming that it was unanimous for surface alignment

Commissioner Schaber asked if we will still be going into the costs of the tunnel. Chairman Finley said we will be getting into that, the Task Force did have the costs as well. So, when this comes to us, we will give that whole report at our next meeting. As Ms. DeSpiegelaere was not going to be here today, and he thought it should go to the Intergovernmental Committee before it comes to us, he suggested it be on our next agenda.

Chairman Finley discussed his visit to Long Beach, it was an Economic Development Conference in relationship to Transit, not just Light Rail. This was the subject matter of a two day seminar which Ms. DeSpiegelaere and he attended last week. This was probably the best seminar he has gone to since he has been on the Board regarding any subject, as far as real solid basic information.

While at the Conference, they rode the new line from Long Beach to LA, and their ridership is about three times what they anticipated since it has been opened in July. Their ridership was anticipated at about 6700 to 8500 daily, and now they are running about 30,000. This is the only way they can move.

Chairman Finley mentioned one of the good points that was done at the Seminar was on the alternatives to the automobile was the just the environmental effects on the economic development, and the cost of congestion is over \$5 million per day to the City of Los Angeles, of loss productive time of people sitting in their cars. It was information like this as to what congestion costs and the cost of pollution - this cost you cannot even put dollar figures on it. The cost of pollution is driving people away from certain urban areas that don't want to be working because of the pollution that is being generated. So, it has an adverse economic effect again because people (the businesses) are moving out of the climates where the congestion is causing such pollution that besides the delay in time, they also do not want to be working in those areas, so that is starting to have an effect in Southern California.

Chairman Finley added, there were a lot of California speakers at this Conference, but there were also some from other parts of the California. Jim Bellus from the St. Paul Port Authority happened to be on one of the panels talking more about travel from the standpoint of the river, and the economic development that has been generated by the Port Authority, more of river transit, but the airport as well.

When Ms. DeSpiegelaere returns from her vacation this week, Chairman Finley said she would be giving a written report as well, so you will be getting some further information.

Commissioner Hunt informed the Board that Commissioner Ahrens and she had attended the meeting of the Capitol Area Planning Board, and we will be getting a recommendation from them on a preferred surface alignment and a preferred tunnel alignment. They are spending a good deal of time, and they are being very conscientious with what they are coming out with.

3. Update on Coordination Plan for LRT

Commissioner Hunt said the last thing that came out of our last meeting was that the LRT Advisory Committee agreed with Ramsey County's recommendation that we consider the 1% for transportation purposes, and it pretty much went through without any debate so to speak. It was a major accomplishment. From starting from the time when the group had not even wanted to take another look at it, after the staff made its presentation, they agreed with the 1% recommendation.

Commissioner Hunt added, the Advisory Committee also voted against this Board's recommendation that it be the Mn/DOT that be the construction agency. It was about a nine to four vote.

Commissioner Norgard had heard a comment that it has to be connected with the Department of Transportation or this will not go. He does not know if this means anything.

Chairman Finley thinks it will be how everything fits together, as even in the Mn/DOT proposal that was approved, the counties have a very significant role in it. That is what this Board voted for, but which he voted against. Under the County's Joint Powers Mn/DOT has a very significant role, it is really just a matter of degree when you really analyze all of this, but someone has to be in charge. This is where it breaks down, but in any event, there is going to be a very significant role that is going to be played by all of the actors, regardless of how the legislation comes out.

Chairman Finley mentioned that Dakota was going to get down, which was really encouraging from the standpoint of commitment from some of the members of their Board, they were going to get right down to the nitty gritty of saying the Highway Department should handle roadbeds, etc., and the County should handle other things. In a way, it was significant because it showed

that they had enough interest in it to really look at breaking the projects down, but they decided against doing it because it is a little too difficult, it is very difficult to cover every contingency and resolution.

Commissioner Hunt wished to add that the proposal that did go through, as she understands it, the proposal which was approved was for the Joint Powers Agreement which had a whole host of folks involved in it, in addition to the seven counties. In the Joint Powers there would also be the Met Council, the MTC, and others as she understands it, so it isn't is not just a simple thing for the counties where the line was going to be placed, it would be a whole host of characters. Chairman Finley understands that Mn/DOT would also be a part of it.

4. Approve publicity plan for Midway Corridor, and approve budget transfer of \$48,500 to fund this program.

Jill Goski addressed the Board, this is a more detailed explanation of the publicity plan for the Midway Corridor that they had outlined at the Work Session in September. They project having public forums in November, and then public hearings in January and February. Several people have indicated that we need to have a more intense publicity effort tied to these forums because of the significance of the decision that will be made by the RRA. They have outlined newspaper ads, both before the Forums and before the Public Hearings. Also, there is a brochure to be developed and distributed door to door to the residents, and also mailed to non-resident property owners in the Midway Corridor area.

The costs are outlined in the documentation, with the total \$48,465.

Commissioner Norgard asked if we would be able to accomplish this mission before the Legislature meets in regard to the decision.

Commissioner Hunt asked about the forums, and Ms. Goski said this will be in November based on the EIS schedule now, the public hearings would be in January and February based on a certain schedule.

Chairman Finley explained that we would not be able to speed this up, under the legal part of it. What is being asked is to make the decision and the draft, because the legal notices and everything carry into the session. So, we are being asked to vote on the draft which is before all the notice requirements, etc.

Jill Goski added that the public hearings are actually mandated, these are related to the EIS process. The forums are meetings that we have elected to have in addition to hearings to get this information out to the public ahead of time.

Commissioner Hunt's question is do we make an official effort to ask the City of St. Paul what their official position is. They will probably get the regular meeting notice, but is that adequate.

Chairman Finley said we always make an effort to do this.

Commissioner Hunt feels there should be a more assertive way of requesting the City Council and the Mayor's input, as the fact that no one came, including staff, to that last meeting even though staff had been to previous Downtown Task Force meetings. It seems we have to explore what is going on in the City at this point so we do not end up with some surprises.

Chairman Finley added there will not be any surprises, it will be as we had anticipated, we will get blindsided. He commented that there is no one here from the City at this meeting today.

Commissioner Hunt thinks that the Chairman of the RRA should have a conversation with the Mayor and ask that there be some official representation there.

Chairman Finley stated that he has never tried harder to communicate with the City of St. Paul than this RRA has, on any issue, on any issue including anything that Ramsey County has ever been involved in. It is impossible, and they do not have a cohesive position, so you are dealing with eight individuals, the Mayor and seven Council people.

Commissioner Hunt thinks that if the forum we have at St. Thomas on the economic impacts is any kind of example of public participation, she thinks it is extremely important that the City be there so that they can see what the point of view is of the public.

Chairman Finley said he had sent a special message to the members of the Council to remind them, and two members showed up.

Ms. Goski informed the Board that she has also been working with Larry Soderholm of the Planning and Economic Development on the Forum. He worked with us on the Economic Impact Forum, so he is aware of what our plan is, has been carrying this information to other people.

Chairman Finley will attempt to talk to the Mayor about this.

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

Ms. Goski added that she has been working with the Public Information person on this, Marit Smaby Nowlin; in fact, she has been involved in developing this plan, and she is going to continue to work with us.

WHEREAS, The Draft Environmental Impact Statement for the Midway Corridor will be completed in December, 1990, and Ramsey County Regional Railroad Authority plans to notify the public of the information in the report and requests public comments; Now Therefore, Be It

RESOLVED, That the publicity plan for the Midway Corridor is approved; and Be It Further

RESOLVED, That Ramsey County Regional Railroad Authority approves the following budget transfer of \$48,500:

TRANSFER FROM APPROPRIATION

<u>Org. #</u>	<u>Account No.</u>	<u>Account Title</u>	<u>Amount</u>
59103	020102	Consulting Services	\$48,500

TRANSFER TO APPROPRIATION

<u>Org. #</u>	<u>Account No.</u>	<u>Account Title</u>	<u>Amount</u>
59103	020194	Public Information Services	\$48,500

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

5. Update on Ridership Forecasts for Midway Corridor - Discussion only.

James Tolaas informed the Board that they are substantially complete, and the final refinement of the documentation will be at the next RRA meeting, when the entire package will be presented.

Chairman Finley said the Metropolitan Council is working on this.

Mr. Tolaas added that the ridership numbers for this corridor are going to be the best numbers that have been generated in this region to date, and so they have had a number interactions with Met Council, RTB staff, our staff, the consultants, and an oversight consultant from a ridership firm to assure that these numbers are credible. We have asked for a very careful qualification of accuracy. The plus and minus may be about 20%, assume the input variables are correct.

6. Approve adjustments to the 1990 Ramsey County Regional Railroad Authority Budget in the amount of \$3,418,000 in accordance with budget transfer, Exhibit A.

James Van Houdt has handled this, it is more of a accounting thing putting this into Phase II Project.

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

WHEREAS, The 1990 Ramsey County Regional Railroad Authority budget identified major project areas in the Contingent Account series within the 59101 - Ramsey County Regional Railroad Authority budget; and

WHEREAS, The projects identified are eligible for State grant assistance; and

WHEREAS, State grant provisions require separate accounting of costs incurred in each work area; and

WHEREAS, Regional Railroad Authority staff have prepared attached Exhibit A documenting budget adjustment recommendations which establish cost center 59105 - Phase II Preliminary Engineering - Midway Corridor; Now, Therefore, Be It

RESOLVED, That the Ramsey County Regional Railroad Authority approves the budget adjustment, in the amount of \$3,418,000, as follows:

1990 RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

TRANSFER TO MINNESOTA GRANT ACCOUNTS:
ADMINISTRATIVE ACCOUNT:

REDUCE ESTIMATED REVENUE:

59101 121067 Minnesota DOT LRT Grant
59101 121068 Minnesota Rail Bank

359,000
750,000

1,709,000

INCREASE ESTIMATED REVENUE:

59105 121067 Minnesota DOT LRT Grant

1,709,000

TOTAL ESTIMATED REVENUE ADJUSTMENTS:

1,709,000

1,709,000

TRANSFER FROM APPROPRIATION:

59101 061002 Phase II PS-Midway Corridor

1,418,000

1,418,000

GRANT ACCOUNT:

TRANSFER TO APPROPRIATION:

PHASE II FS-MIDWAY CORRIDOR

59105	020102	Consulting Services	2,940,000
59105	020174	County Attorney	50,000
59105	020176	Executive Director	15,000
59105	020179	Budgeting & Accounting	10,000
59105	020185	Data Processing	1,500
59105	020191	Project Management	148,000
59105	020202	Postage	1,500
59105	020401	Publishing Minutes	4,000
59105	020501	Printing & Stationery	10,000
59105	021226	Committee Compensation	1,000
59105	021407	Travel	12,000
59105	021408	Volunteer Expense	1,000

TOTAL APPROPRIATIONS:

1,418,000

1,418,000

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		Board Action Requested
Originating Department		
John T. Finley /s/	10/1/90	
Authorized Signature	Date	CHAIRMAN'S COMMENTS
Request Justification		

Budgeting and Accounting <i>Ed Glantz</i>		Date / Time Received By
County Attorney		
Risk Manager		
Data Processing		
Previous Action taken on Request		

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date

Committee / Meeting Date

October 9, 1990

Board Date

Signature

J. L. Glendenning

Signature

Date

Date

10/1/90

Date

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

3

Regional Railroad Authority

Originating Department

R. Haspielbauer
Authorized Signature

10/1/90
Date

Board Action Requested

Information on ridership forecasts for
Midway Corridor

DISCUSSION ONLY

Request Justification

- See attached:
1. Memorandum from David Warner, BRW
 2. Memorandum from Steve Wilson, Metropolitan Council
 3. Memorandum from Terry Atherton, Cambridge Systematics

Budgeting and Accounting

Ed Beaulieu *10/3/90*

County Attorney

David MacInnis

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

October 9, 1990

Board Date

Signature

Signature

Date

10/1/90

Date



MEMORANDUM

DATE: September 28, 1990

TO: Kathryn DeSpiegelaere, Director of LRT Planning
James Tolaas, Project Manager
Ramsey County Regional Railroad Authority

FROM: David M. Warner, PE

RE: Transit Ridership Forecasts
Midway Corridor LRT Environmental Impact Statement and
Preliminary Engineering

SUMMARY

Transit ridership forecasts prepared by the Metropolitan Council for the four Midway Corridor Study alternatives (three Build LRT Alternatives and the No-Build Alternative) have been reviewed by BRW, Inc. and by Cambridge Systematics, Inc. under contract to the Ramsey County Regional Railroad Authority (RCRRA), the Hennepin County Regional Railroad Authority (HCRRA) and BRW, Inc. The forecasts of daily transit ridership are shown in Table 1 of this memorandum. These forecasts are for a stand-alone Midway Corridor LRT line. No other LRT services are included.

The consultant team recommends that the RCRRA and the HCRRA accept these forecasts for use in further development of specific alternative features and in the assessment of environmental impacts for presentation in the Draft Environmental Impact Statement.

This recommendation does not mean that the forecasts will not ever change. Data from the 1990 Census and from the 1990 Travel Behavior Inventory, changes in LRT alignment or station locations, the addition of other LRT services in the metropolitan area, or updated information on travel costs could all affect the forecasts. The forecasts will be updated as additional information becomes available.

Attached to this memorandum is a report by the Metropolitan Council which describes the forecasting process and results, and a memorandum from Cambridge Systematics which describes their review of the forecasts and their recommendation regarding their use.

BACKGROUND

Transit ridership forecasts are essential components of the analysis and comparison of the four alternatives under consideration in the Midway Corridor Study. Estimates of future bus and light rail transit ridership are used to estimate capital and operating costs and to measure alternative performance.

The purpose of this memorandum is to present the forecasts, and to provide sufficient additional information so that those reviewing and using the forecasts will have a basic understanding of what went into the preparation of the forecasts, how the forecasts will be used, and the degree of confidence that should be given to the forecasts.

Supplementing this memorandum is a document prepared by the Metropolitan Council regarding the preparation of the forecasts, as well as a report from Cambridge Systematics, Inc., subconsultant to BRW, Inc., the RCRRA and the HCRRA, regarding their evaluation of the Metropolitan Council forecasts.

MIDWAY CORRIDOR TRANSIT FORECASTS

The basic forecasts prepared by the Metropolitan Council are shown in Table 1. For the purpose of comparison, the table shows LRT ridership and bus ridership for key parallel transit lines. The comparison provides an understanding of how travel patterns would change under each of the alternatives. Several key observations can be made:

- o Transit ridership in the corridor will increase by 17 to 29 percent between the Year 1988 and the Year 2010. The higher level increase would be the result of the higher level of service which can be provided by light rail transit.
- o In an area with a high level of existing transit service, many of the people who are able and willing to use public transportation are already using the bus. Therefore, LRT constructed in the area with the lowest level of existing transit service, the BN/PB area, would attract the highest number of new transit users.
- o Even with light rail transit service on University Avenue, it would be necessary to continue to run an I-94 express bus service to provide the same level of downtown to downtown service currently available to transit users.
- o The need for bus service on University Avenue must be evaluated for the situation where LRT service is provided on I-94, and certainly for the situation where LRT service is provided on University Avenue.

TABLE 1
MIDWAY CORRIDOR TRANSIT RIDERSHIP FORECAST SUMMARY

Route	1988 Base	2010 All Bus	2010 LRT Ridership I94/Soo Line	University	BN/PB
Route 16 A/E	21,800	25,600	2,600	1,700	11,300
Route 94 B/D	5,900	6,800	- -	3,900	- -
LRT	- -	- -	32,400	30,000	24,300
Sum	27,700	32,400	35,000	35,600*	35,600*
New Transit Riders (LRT Compared to 2010 All Bus)			3,000	2,200	2,500

* Includes diversions from bus routes outside the corridor

Comparison with Previous Forecasts

The LRT forecasts presented here for the Year 2010 are generally lower than the forecasts for the Year 2000 previously published in the University/Southwest AA/DEIS (1985) and in the Midway Corridor Planning Analysis (1988). The reasons for the differences are discussed in the attached Metropolitan Council document. To summarize, there are two main reasons for the difference:

- o The central cities of the region are expected to lose population between now and the Year 2010. The losses now expected are more severe than those previously expected to occur by the Year 2000. This is mitigated somewhat by growth expected in downtown employment, but the significant growth in travel is expected in non-work, non-downtown oriented travel.
- o The travel model developed for use in these forecasts more accurately predicts the amount of work and non-work travel. The old travel model underpredicts work travel and overpredicts non-work travel. The net result in the Midway Corridor is that the old travel model would have overpredicted Midway Corridor LRT ridership by about 8,000 trips per day.

FORECAST PREPARATION

Responsibilities

The forecasts were prepared under the overall supervision of BRW, Inc. Most of the work was conducted by subcontractors to BRW on either the HCRRRA Part A

contract, the HCRRA/ACRRA Northeast Corridor contract, or the RCRRA/HCRRA Midway Corridor contract. For the Midway Corridor forecasts:

1. Mode choice model development and refinement were the responsibility of COMSIS Corporation and Richard H. Pratt, Inc., under the HCRRA Part A contract. Within the HCRRA Part A contract, Barton Aschman Associates prepared the 2010 All-Bus Transit Network.
2. Responsibility for model processing and analysis was originally assigned to Barton Aschman Associates and COMSIS. In order to expedite forecast processing, however, that role was assumed by the Metropolitan Council. BRW provided some staff support to the Council.
3. Cambridge Systematics, a modeling consultant, was retained by BRW at the direction of the RCRRA and HCRRA to review forecasts for the Midway Corridor.

Modeling Process

The ridership forecasts were prepared using a set of computer models developed for the Twin Cities metropolitan area. The forecast preparation process consists of four steps:

1. Trip table generation - The Metropolitan Council prepares a series of tables which describe the number of person-trips which will be made between each combination of traffic analysis zones and/or external cordon stations in the Twin Cities area. The forecast of future trips is based on forecasts of future population and employment levels and distribution which are developed in a cooperative effort by the Council and metropolitan area communities.
2. Mode choice - A mode choice computer model predicts the mode of travel which would be chosen for any given trip based on travel time and travel cost factors of transit and competing modes. (As part of the HCRRA Part A Preliminary Design project, the HCRRA and the RTB jointly funded development of a new mode choice model. This included a survey of transit travel in the metropolitan area, an attitude survey of non-transit users, and development of the mode choice computer model. (The model is based on one used in the Washington, DC, metropolitan area.)
3. Assignment - Assignment is a computerized process in which each transit trip is allocated (or assigned) to the transit route which will result in the lowest overall travel time.

4. Mode of access - This model determines how trips using each LRT station will travel to or away from the station; the options are walk, drive and drop off/pickup, drive and park, and bus. The model was developed by COMSIS and R.H. Pratt as part of the HCRRA Part A contract.

Assumptions

In addition to basic socioeconomic inputs, the travel model requires input regarding travel costs and other travel-related variables. In February 1990, representatives of the Anoka, Carver, Dakota, Hennepin, Scott, Ramsey and Washington County Railroad Authorities, the Regional Transit Board, the Metropolitan Transit Commission, the Metropolitan Council, COMSIS, R.H. Pratt, BRW and SRF met and formed a consensus regarding these travel model inputs. Those assumptions are described in the accompanying report from the Metropolitan Council.

USE OF FORECASTS

The number presented in Table 1, and other data derived from those numbers, will be used throughout the environmental impact statement and preliminary design process for two main purposes:

1. To determine the required size of transit system components, including:
 - o Number of vehicles (buses and LRV's) required on each transit route during different periods of the day.
 - o LRT and bus headways (time between buses or LRV's).
 - o Number of park-and-ride spaces required at each LRT station.
 - o Number of drop-off/pickup spaces required at each LRT station.
 - o Number of bus waiting spaces needed at each LRT station.
 - o Number of LRV's in a train.
 - o LRT platform size (maximum number of people expected to be on the platform at one time).
2. To assess the performance of various corridors and each of the alternatives within the corridors. In addition to the actual patronage forecasts, various ratios may be used, including:
 - o Riders per route mile.
 - o New riders per route mile.
 - o Passenger miles per route mile.
 - o Operating cost per passenger.
 - o Operating cost per passenger mile.
 - o Operating cost per route mile.
 - o Capital cost per passenger.
 - o Capital cost per passenger mile.

- o Capital cost per route mile.
- o Annualized capital cost per passenger.
- o Annualized capital cost per passenger mile.
- o Annualized capital cost per route mile.
- o Operating revenue per route mile.
- o Operating revenue per passenger mile.

REASONABLENESS OF FORECASTS

Whether the forecasts presented here for the Midway Corridor are reasonable or not can be addressed from two different viewpoints. The first is a technical viewpoint. An attached report from Cambridge Systematics discusses the forecasts from a technical viewpoint. Cambridge Systematics has found that the inputs were properly used, that the computer models seem to be running properly, and that the Metropolitan Council has operated the models properly and has correctly interpreted and reported the results. From a technical point of view, the forecasts appear sound.

The forecasts also appear sound from a non-technical point of view. The forecasts seem to make sense. As examples:

- o The all-bus forecast reflects a modest growth from existing ridership which parallels the growth expected in overall travel in the corridor.
- o The LRT alternatives are forecast to have higher transit ridership than the all-bus alternative, but the number of new transit riders is modest, reflecting the fact that the Midway Corridor currently experiences a high level of transit service.
- o Among the LRT alternatives, the alignments with the highest level of service, and which are located closer to potential users, are forecasted to carry the highest number of riders.
- o The assumptions used in the travel model are reasonable. The model assumes that most costs will increase only as fast as inflation. The exception is downtown parking cost, which is expected to grow faster than inflation as the CBD's are more densely developed.

The "accuracy" of the forecast model depends largely on the calibration of the model. Calibration is a step in which coefficients used in the model (rather than the data inputs such as population, employment, auto operating cost, etc.) are adjusted such that the model is able to predict a known outcome.

Calibration was accomplished by adjusting model coefficients until the model could replicate actual 1988 transit ridership data collected in an on-board survey of transit riders. The 1988 On-Board Survey included interviews of a statistically significant number of bus riders on every bus route in the metropolitan area. Interviewees responded to questions regarding trip origin and destination and demographic information. The survey generated trip table represents actual 1988 transit demand.

The calibrated mode split model, using 1988 socioeconomic data, was able to "predict" 1988 total transit work trips within two percent of actual, total transit home-based other trips within one percent, total transit non-home based trips within less than one percent, and total transit trips within one percent (Table 2 of attached Metropolitan Council report). The model was also able to accurately predict transit travel to downtown St. Paul, and downtown Minneapolis, as well as transit travel by market segments (such as groups with different levels of auto ownership).

One potential weakness of the model is that it is not designed to account for what is perceived by some to be a higher level of attractiveness of light rail transit when compared to bus transit.

The model should also be able to predict major components of future transit ridership with a very high level of accuracy provided that forecasts of data inputs such as population, employment, auto operating cost, etc. are accurate, and provided that travel behavior patterns remain the same. Under those conditions, it would be reasonable to expect that the model would be able to predict future transit travel as well as it predicted known travel patterns during the calibration process.

It is unlikely, however, that all the required conditions will be met. What is most likely is that some of the forecasts of socioeconomic factors will be too low and some will be too high. It is also likely that travel behavior will change in some ways which would tend to increase transit travel and in some ways which would tend to decrease transit travel. It may be that LRT will attract more riders than a comparable bus service. There is no way to know exactly what the changes may be, or even state unconditionally that changes will occur.

Confidence in the results of the forecasting process can be stated in two ways. If the model inputs and travel behavior factors are accurately predicted, then the results should be as accurate as the calibration. Alternatively, if model inputs and travel behavior factors do change as they are likely to do, the results predicted today will be less accurate, but it should be reasonable to expect that total transit ridership would be within about twenty percent of actual.

Kathryn DeSpiegelaere
Jim Tolaas
September 28, 1990
Page 8

As more and more detailed information is sought from the forecasts, the reliability of the results decreases. For example, confidence level in the forecast of total transit ridership would be greater than the confidence level in an estimate of the number of people expected to walk to the Dale Street station.

FACTORS WHICH MAY AFFECT FORECASTS IN THE FUTURE

It is reasonable to expect that these forecasts will be refined as the project proceeds. The reasons for future changes are discussed in detail in the attached Metropolitan Council report. It is not expected that significant changes in the forecasts will occur unless significant changes in primary model inputs occur.

DMW/ch
Attachment
cc: File 41-8927

September 13, 1990

**MIDWAY CORRIDOR LIGHT RAIL TRANSIT STUDY
BACKGROUND PAPER ON FORECAST ASSUMPTIONS AND DIFFERENCES**

**PREPARED BY
STEVE WILSON
METROPOLITAN COUNCIL**

INTRODUCTION

This memorandum will describe the main input assumptions used in the current study, and how they relate to those used in the 1985 University Avenue Corridors Study (Alternatives Analysis/Draft Environmental Impact Statement or AA/DEIS).

The Midway Corridor Study forecasts differ significantly from previous forecasts for several reasons, which can be classified as:

1. Changes in input assumptions.
2. Changes in the type or structure of the forecast model used.

Although other studies have been conducted for the corridor, they used more simplified "sketch planning" forecasting techniques which, in two cases, were based on the work done in the AA/DEIS.

DEMOGRAPHIC ASSUMPTIONS

Demographic assumptions, primarily population, household, and employment projections, affect the level and distribution of trips being made in and within the Metropolitan Area. Forecasts for communities are prepared and then translated into information for over 1000 transportation analysis zones in the region.

The current Midway Corridor Study uses a set of assumptions known as the "2010F" forecasts. The forecast procedure followed that used by the Metropolitan Council and Minnesota Department of Transportation for previous highway and transit projects. Demographic forecasts for the Year 2010 were prepared by the Metropolitan Council and submitted to each community in the region with a request for review. The number of trips estimated to be made is generated using formulas derived from the region's 1982 Travel Behavior Inventory.

The previous study (AA/DEIS) used a Year 2000 forecast horizon prepared in 1983. Preliminary 1980 census results were available at that time. The estimates of tripmaking patterns were based on models developed in the 1970s.

Although detailed comparisons are not readily available, Table 1 shows the general differences in demographic assumptions. Some of the major conclusions that could be drawn from the table are that: the central cities are losing and will continue to lose population; the downtowns continue to grow, but other areas are growing more rapidly; that regional travel is increasing, but primarily for non-work trips and to non-downtown locations.

The net impact in the Midway Corridor would appear to be that the growth in downtown employment and overall travel is being diluted by other market forces to slow the growth of the corridor. However, the corridor, while not growing as fast as others, is and will continue to be a larger transit market.

Further review would be needed to determine the specific impact of the different demographic assumptions on the transit ridership forecasts.

TRANSPORTATION ASSUMPTIONS

The transit ridership model predicts ridership based on comparisons of the time and cost of riding transit versus driving or riding in a car.

Auto operating costs, measured in out-of-pocket costs (primarily gas, tires, oil, etc.) were estimated to be about 9.5 cents per mile in 1988 (adjusted for inflation), the base year for the forecasts. The Year 2010 forecast is assumed to be the same value. While gas prices may rise over the long-term, the technology exists to dramatically improve the fuel efficiency of automobiles. It is therefore assumed that market forces will respond and that fuel price increases will be balanced by comparable improvements in vehicle efficiency. As a point of reference, auto operating costs are now 25 percent lower than they were 20 years ago, despite two energy crises in the 1970s and including the current (August 1990) price increases. The 1985 study estimated that by the Year 2000 auto operating costs would be about 22 cents per mile, a figure now considered unrealistically high.

Transit fares are also assumed in this study to keep pace with inflation. The only difference in assumptions between the past and current studies is that in 1988 the region went to a two-tier fare structure, rather than the previous four-zone system. The fare structure was designed to be "revenue neutral"; therefore, it is unlikely that it has any significant impact on ridership forecasts.

Parking costs are assumed to increase over today's levels in two ways: 1) they will increase in proportion to employment density in the downtowns; 2) they will increase slightly faster than inflation (about 1.5 percent per year). The AA/DEIS conservatively assumed parking costs would not increase above the rate of inflation. Furthermore, a more geographically constrained area where parking costs would exist was used. Therefore, the current forecasts generate significantly more parking-cost-related ridership than the AA/DEIS.

Highway Networks incorporate assumptions regarding future highway systems. These assumptions affect the competitiveness of the automobile with transit, as well as bus speeds. The forecast highway systems are similar for the current study and the 1985 AA/DEIS.

The transit network describes the configuration of transit routes, including the LRT, as well as the frequency of service.

The "background" transit networks are not significantly different between the past and current studies. The regional transit system has not changed significantly over the past ten years. However, differences do exist in feeder bus and LRT system configurations.

The current feeder bus system has similar service levels, but is geographically more extensive than that for the AA/DEIS. While on one hand it may be carrying more riders to the LRT from more distant areas, it may also be "forcing" some of those riders in a way that saves some operating cost but loses some riders.

The LRT system in the AA/DEIS only looked at University Avenue alignments, with 1/4 mile and 1 mile stop alternatives. The Route 94D express bus was maintained in the peak for the 1/4 mile option. The current University Avenue alternative, with 1/2 mile stops, also includes the 94D bus.

The downtown St. Paul configuration is similar to the previous study, although the current location of the east/west portion on Fourth Street is one block less accessible to the core of the downtown.

The downtown Minneapolis portion of the alignment is significantly different than the AA/DEIS. The AA/DEIS alignment assumed an east/west route through downtown Minneapolis on Fifth/Sixth Street, which is approximately the middle of downtown. The current tunnel alignment more directly serves the "spine" of development along Nicollet, but the eastern portion of downtown is not as well served as before.

MODEL STRUCTURE

The single greatest factor in the difference between the current study's ridership forecast and the AA/DEIS is the structure of the forecast model.

The model used in 1985 study was developed in the mid-1970s, using data from the 1970 travel behavior inventory. It was considered state-of-the-art at the time, and its structure was often copied by other urban areas.

The current model was completed in mid-1990, using data from an extensive ridership study funded by the Hennepin County Regional Railroad Authority and Regional Transit Board. It reflects current forecast "theory" in many ways. One important distinction between the old and new models is the built-in consideration of park-and-ride type behavior, critical to designing modern transit services. Furthermore, newer data processing techniques enable more detailed analysis than before.

A comparison of the old and new models, along with the 1988 transit survey, is shown in Table 2. The comparison was made using the closest possible input assumptions between the models, including identical assumptions regarding high-way speeds, parking costs, demographics and travel behavior, etc.

Table 2 clearly shows that the old model (now 15 years old) has fallen out of calibration and no longer accurately reflects people's transit choices. A review of the table shows that, relative to the on-board survey, the new models are quite accurate. However, the old models:

- o Under-forecast work trip transit riders to the downtowns by 37 percent
- o Were fairly accurate in predicting work trip ridership to other parts of the region

- o Over-forecast non-work ridership to the downtowns by 54 percent
- o Over-forecast non-work ridership to other parts of the region by 79 percent

Because the old model is not consistently over-predicting or under-predicting ridership, it is difficult to generalize on the impacts across all corridors in the region.

However, given the importance of both non-work and non-downtown travel to the ridership in the Midway Corridor, it is clear that the tendency of the old model would be to over-forecast ridership. Using the relationships among work, non-work, downtown-oriented and non-downtown-oriented travel known for the corridor; it can be speculated that the old forecast models would have produced results about 25 percent higher than the new models, or roughly 8,000 daily LRT riders.

FUTURE MONITORING AND UPDATING OF FORECAST

Forecasting ridership is much like forecasting the weather: one needs to expect that the forecasts will change as conditions change. Furthermore, as in the weather forecasting field, new techniques are developed to present a better understanding of the forecasts.

The current Midway Corridor forecasts are based on the best information and techniques currently available. Since the assumptions are held constant across the three different alignments, the forecasts are quite valid for use in selecting an alignment -- if assumptions are wrong (high or low) they will not change the relative differences among the alignments.

However, the forecasts will change over time for a number of reasons:

- o Engineering refinements to the alignments may significantly alter the characteristics of the alignment, necessitating forecast revisions.
- o The current model assumes this corridor as a "stand alone" LRT line, and the ridership will change as other corridors are added to the system's forecasts.
- o The 1990 Census will provide new detailed information on demographics, which can be used to update forecasts.
- o The region's 1990 Travel Behavior Inventory, being conducted in conjunction with the census, will provide updated forecasting capabilities over the next couple of years.
- o Input assumptions, such as parking costs, transit fares and fuel costs will be monitored over time and forecasts will be revised when warranted.

It is therefore important to accept and use these forecasts, but to acknowledge that they are not now, and never will be "final."

TABLE 1
COMPARISON OF SOCIOECONOMIC/TRAVEL FORECASTS

	1985 AA/DEIS		Current Study	
POPULATION	1980	2000	1988	2010
Region	1.98 million	2.43 million	2.20 million	2.58 million
St. Paul	270,000	261,000	265,000	253,000
Minneapolis	371,000	371,000	356,000	340,000
EMPLOYMENT				
Region	1.04 million	1.36 million	1.19 million	1.60 million
St. Paul (Total)	175,000	187,000	184,000	196,000
Downtown St. Paul	56,000	68,000	52,000	66,000
Minneapolis (Total)	273,000	282,000	288,000	300,000
Downtown Mpls.(core)	110,000	128,000	120,000	149,000
REGIONAL DAILY TRIPS (Millions)				
Work Trips	1.14 million	1.50 million	1.47 million	1.78 million
Nonwork Trips	4.33 million	5.04 million	6.62 million	8.07 million
Total	5.47 million	6.54 million	8.09 million	9.85 million
DAILY WORK TRIPS TO:				
Minneapolis and St. Paul Downtowns (Combined)	95,000	119,000	159,000	176,000
Total Region	1.14 million	1.50 million	1.40 million	1.66 million
DAILY NONWORK TRIPS TO:				
Minneapolis and St. Paul Downtowns (Combined)	88,000	215,000	217,000	298,000
Total Region	4.4 million	5.0 million	6.2 million	7.6 million
TOTAL DAILY TRIPS TO:				
Minneapolis and St. Paul Downtowns (Combined)	88,000	215,000	380,000	298,000
Total Region	4.4 million	5.0 million	6.2 million	7.6 million

TABLE 2
COMPARISON OF 1988 TRANSIT RIDERSHIP AND ESTIMATES

	ON BOARD SURVEY	"OLD" MODEL	"NEW" MODEL
WORK TRIPS			
Minneapolis CBD	58,900	40,100	58,800
St. Paul CBD	20,800	9,400	21,100
Rest of Region	37,500	39,000	39,200
TOTAL REGION	117,100	88,500	119,100
HOME BASED OTHER			
Minneapolis CBD	11,600	23,200	12,600
St. Paul CBD	5,500	5,300	3,600
Rest of Region	41,800	75,000	42,600
TOTAL REGION	58,900	103,500	58,800
NON-HOME BASED			
Minneapolis CBD	4,600	4,900	5,500
St. Paul CBD	1,100	1,800	1,600
Rest of Region	15,300	27,200	13,900
TOTAL REGION	21,000	33,900	21,000
TOTAL TRIPS			
Minneapolis CBD	75,100	68,200	76,900
St. Paul CBD	27,400	16,500	26,300
Rest of Region	94,600	141,200	95,700
TOTAL REGION	197,100	225,900	198,900

NOTE: "Old" Model (1970 calibration data) and "New" Model (1988 calibration data) use the same socioeconomic data, trip tables, transit fares, parking and auto operating cost bases. They use different transit networks and model structure.



MEMO TO: Dave Warner, BRW

FROM: Terry Atherton, Cambridge Systematics

DATE: September 27, 1990

RE: Midway Corridor LRT Ridership Forecast Assessment

The purpose of this memo is to provide an assessment of the reasonableness and accuracy of the Midway corridor LRT ridership forecasts prepared by the Metro Council. This assessment addresses both the absolute magnitude of these ridership forecasts and their relative magnitudes among the three alternative alignments currently proposed. As part of this assessment the following areas are discussed:

- The forecasting methodology and input variables;
- Forecast results;
- Comparisons with current LRT operational experience in other urban areas;
- LRT service and operational assumptions; and
- Conclusions and recommendations.

Forecasting Methodology and Input Variables

The methodology used to forecast LRT ridership is based on a travel demand modeling procedure that is widely used and accepted as the state-of-the-practice. This general procedure includes the following four steps:

- **Trip generation** - Population, employment and other socioeconomic data are used to predict the total number of trips produced by and attracted to each traffic zone.
- **Trip distribution** - Based on general levels of travel impedance, trip ends (i.e., productions and attractions) are assigned to specific zone-to-zone movements (i.e., trip tables).
- **Mode split** - Trips between each pair of zones are split between available modes of travel (e.g., drive alone, shared ride, transit) based on the level of service attributes of each mode and socioeconomic characteristics of travellers.
- **Assignment** - Trips by each mode are assigned to specific highway facilities or transit routes.

The methodology used to forecast LRT ridership incorporates the last two steps: mode choice and assignment. The trip tables produced in trip generation and trip distribution remain fixed for each of the 2010 bus and LRT alternatives.

The forecasting procedure explicitly recognizes three distinct trip purposes: home-based work, home-based other, and non-home-based. The model used to represent mode choice decisions for home-based work travel is formulated as a nested logit model, which represents the leading edge of the state of the practice in travel demand forecasting. This model was calibrated using data collected in 1988.

The mode split procedure for home-based other and non-home-based travel is a distance-based factoring procedure. While this procedure accounts for the relative transit levels of service offered during the peak and off-peak periods, it does not account for other factors influencing mode choice for these trip purposes and had to be modified to reflect the unique characteristics of the Midway corridor (i.e., the large number of school trips associated with the University).

The assignment of transit trips to specific lines was performed using the all-or-nothing transit assignment module in TRANPLAN, a standard micro-computer based transportation planning software package. The output of this automated assignment process had to be adjusted to compensate for the over-assignment of transit trips to express (versus local) service. The same procedure that was developed as part of the previous alternatives analysis study was used in this effort.

Overall, while a number of potential improvements in the forecasting procedure can be identified, the procedure is better than most that are typically used in studies such as these.

Key inputs to the forecasting process are the land use, population and employment forecasts which determine the total number and distribution of trips in the region. Metro Council forecasts for these input variables have been approved at the local level and regionally accepted. Nonetheless, given the importance of these variables, it would be useful to test the sensitivity of LRT ridership to alternative levels and patterns of growth.

Forecast Results

Transit ridership forecasts for the Midway corridor are summarized in Table 1. As a first step in assessing the reasonableness of the LRT ridership forecasts it is useful to understand the changes in total transit ridership in the corridor with and without the proposed LRT alternatives. As shown in Table 1, transit ridership for the Midway corridor is projected to increase from 27,700 in the 1988 base year to 32,400 for the 2010 all bus scenario. This 17 percent increase in transit ridership seems to be quite reasonable given that the total number of trips areawide is projected to increase by 22 percent over the same period.

Relative to the 2010 all bus scenario, the implementation of LRT service is projected to increase corridor transit ridership by 9.3 percent for the I-94/Soo line alignment, 6.8 percent for the University Avenue alignment, and 7.7 percent for the BN/Pierce Butler alignment. These increases are in general consistent with the improvements in level of service resulting from

TABLE 1

Midway Corridor Transit Ridership Forecasts

			LRT Alternatives		
	1988 Base	2010 All Bus	I-94/Soo Line	University Avenue	BN/Pierce Butler
Corridor Ridership					
Bus	27,700	32,400	2,600	5,600	11,300
LRT	-	-	32,400	30,000	24,300
Total	27,700	32,400	35,000*	35,600*	35,600*
New Transit Riders					
Number			3,000	2,200	2,500
Percent Increase Relative to 2010 All Bus			9.3%	6.8%	7.7%

* Includes diversions from bus routes outside the corridor.

each of the alternative LRT alignments. (Specific changes in levels of service associated with each of the LRT alignments are presented in Table 2).

Comparisons with Existing Operational Experience

As an additional reasonableness check selected descriptive statistics derived from the ridership forecasts were compared with corresponding values reported for several urban areas with LRT systems currently in operation. These statistics included:

- The split of LRT ridership between work and non-work related purposes;
- Mode of arrival distribution;
- A productivity measure defined as passenger trips divided by revenue vehicle miles; and
- The number of new transit riders resulting from the implementation of LRT service.

The first two measures listed above were obtained by contacting transit operators directly. Information was obtained from the following seven operators:

- Greater Cleveland Regional Transit Authority;
- Regional Transit Authority of New Orleans;
- Niagara Frontier Transportation Authority (Buffalo, New York);
- Port Authority of Allegheny County (Pittsburgh, PA);
- Sacramento Regional Transit District;
- San Diego Trolley; and
- Tri-Met (Portland, OR).

The productivity measures were calculated using annual operating statistics published by APTA. To develop the corresponding statistics for the three LRT alignments, it was necessary to estimate annual ridership and annual revenue vehicle miles for each. Annual ridership was represented by multiplying the daily ridership forecast by 295. The calculation of annual revenue miles was based on the assumption that the following service would be provided during a normal weekday:

- Two-vehicle trains operating at 7.5 minute headways during the two 3-hour peak periods;
- One-vehicle trains operating at 7.5 minute headways during the 6-hour midday period; and

- One-vehicle trains operating at 15 minute headways during the 6-hour evening period.

In addition, it was assumed that one-vehicle trains would operate at 15-minute headways for 18-hour periods on weekends and holidays.

The trip purpose and mode of arrival distributions associated with the LRT ridership forecasts are presented in Table 3. Figure 1 presents the ranges observed for these statistics and the location of the forecast results within these ranges. As shown, reported values for the proportion of LRT ridership for home-based work travel ranged from about 20 to 70 percent, with a mean value of 50 percent. The corresponding values for the ridership forecasts for all three alignments fall within this range. The value for the BN/Pierce Butler alignment is very close to the mean of reported values, while the value for the University Avenue alignment is in the lower end of the range. (The latter most likely reflects the non-work related attractions along University Avenue that are served by that alignment).

As shown in Figure 1, the distribution of LRT ridership by mode of arrival ranges from about 40 to 75 percent for walk, 1 to 30 percent for auto, and 10 to 30 percent for bus. The corresponding numbers were not directly available for the LRT forecasts. What was available was access mode at the production end of the trip, whereas the figures reported by transit agencies represented access at both the production and attraction ends of the trip. For purposes of comparison, it was assumed that attraction end access would be 90 percent walk and 10 percent bus. (More accurate figures are currently being developed by the Metro Council). As shown in Figure 1, with the exception of bus access for the BN/Pierce Butler alignment, the mode of arrival distributions associated with the forecasts are within the range of operational experience, although auto access for all three alignments seems to cluster at the low end of the range, and should be examined in more detail.

The productivity measures associated with LRT operations in eleven cities are presented in Table 4. As shown, this measure ranges from a value of 3.8 passengers per revenue vehicle mile for Cleveland to 18.1 for Boston, with a mean value of 7.8. The values calculated based on the LRT forecasts for the three alignments are very close to this mean value (8.7 for I-94/Soo Line, 8.0 for University Avenue, and 6.5 for BN/Pierce Butler).

Increased transit ridership accompanying the implementation of LRT service has been reported in several before-and-after studies. Unfortunately, there are a number of factors which limit the usefulness of this information for the purpose of assessing the reasonableness of the increase in transit ridership predicted for the Midway corridor LRT alternatives.

For example, many sources report only changes in aggregate ridership without explaining the factors underlying these changes. In areas experiencing strong upward or downward trends in transit ridership, changes due to the implementation of rail service could be masked. For example, the report prepared by Don Pickrell for UMTA ("Urban Rail Transit Projects: Forecast versus Actual Ridership and Costs"), notes that for Miami, Buffalo, and Sacramento, cities which had been experiencing downward ridership trends, ridership actually declined over the period during which rail was introduced.

TABLE 2
Changes In Levels-Of-Service
Relative To 2010 All-Bus

	LRT Alternatives					
	I-94/Soo Line		University Avenue		BN/Pierce Butler	
WALK ACCESS NETWORK						
Change in:						
Walk Time (Minutes)	-0.79	(-5.8%)	-0.98	(-7.1%)	-1.05	(-7.7%)
First Board Time (Minutes)	-0.55	(-5.4%)	-0.57	(-5.5%)	-0.36	(-3.5%)
Transfer Time (Minutes)	-	-	-0.03	(-0.4%)	-0.01	(-0.1%)
In-Vehicle Time (Minutes)	-0.71	(-2.3%)	-0.39	(-1.3%)	-0.47	(-1.5%)
Number of Transfers	+0.03	(+4.3%)	+0.02	(+2.8%)	+0.05	(+6%)
AUTO ACCESS NETWORK						
Change in:						
Walk Time (Minutes)	-0.57	(-6.8%)	-0.64	(-7.6%)	-0.82	(-9.8%)
First Board Time (Minutes)	-0.51	(-5.0%)	-0.44	(-4.3%)	-0.52	(-5.0%)
Transfer Time (Minutes)	-0.21	(-2.9%)	-0.19	(-2.7%)	-0.29	(-4.1%)
Auto Connect (Minutes)	+0.26	(+16.9%)	+0.18	(+11.4%)	+0.32	(+21.1%)
In-Vehicle Time (Minutes)	-1.35	(-4.4%)	-0.77	(-2.5%)	-1.13	(-3.7%)
Number of Transfers	-0.02	(-2.0%)	-0.02	(-2.6%)	-0.01	(-1.9%)

TABLE 3
LRT Ridership Forecasts

	LRT Alternatives					
	I-94/Soo Line		University Avenue		BN/Pierce Butler	
LRT Ridership						
Work	12,960	(40%)	7,800	(26%)	11,664	(48%)
<u>Non-Work</u>	<u>19,440</u>	(60%)	<u>22,200</u>	(74%)	<u>12,636</u>	(52%)
TOTAL	32,400		30,000		24,300	
Mode of Arrival						
Walk	22,030	(68%)	22,500	(75%)	13,360	(55%)
Auto	1,950	(6%)	1,200	(4%)	2,190	(9%)
Bus	8,420	(26%)	6,300	(21%)	8,750	(36%)

Figure 1. LRT Ridership Characteristics: Midway Corridor Projections Versus Existing Systems

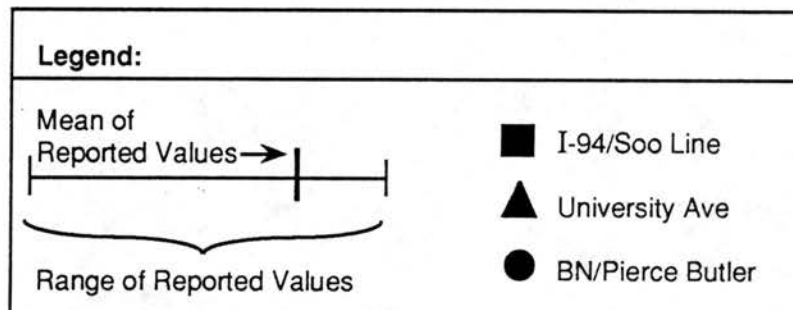
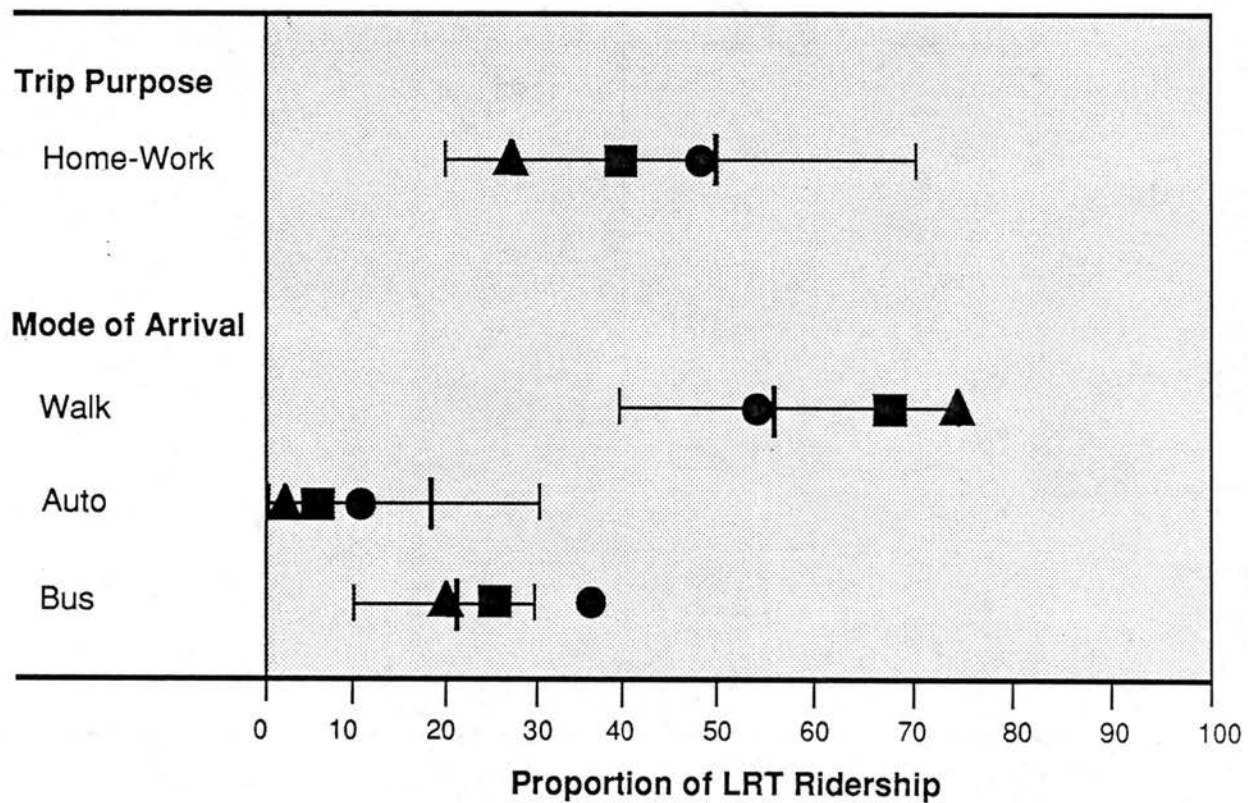


TABLE 4

Comparisons of LRT System Productivity Measures

System	Passengers/Revenue Vehicle Mile
Boston	18.1
Buffalo	8.1
Cleveland	3.8
New Orleans	12.3
Pittsburgh	3.7
Portland	4.0
Sacramento	3.9
San Diego	4.6
San Francisco	9.7
Seattle	7.3
Toronto	10.5
AVERAGE	7.8
I-94/Soo Line	8.7
University Avenue	8.0
BN/Pierce Butler	6.5

In other cases, the introduction of LRT represents a much greater improvement in service levels than those predicted for the Midway corridor. In Calgary, for example, the transit mode share for a particular screenline increased by over 70 percent after 18 months of LRT operation. However, the feeder bus service for the LRT represented an 80 percent increase in capacity relative to the all bus service existing prior to the implementation of LRT. In the Midway corridor, there is little increase in feeder bus service for the LRT alternatives.

LRT Service and Operational Assumptions

The assumptions regarding LRT station spacing and frequency of service used to develop these forecasts are well within the range of existing operational experience. LRT travel times between stations are based on very detailed engineering estimates accounting for the effects of acceleration, deceleration and the distance between stations. Twenty-second dwell times were used based on the assumption of high platform operation.

The procedure for representing walk access to LRT stations is identical to that used to represent walk access for bus. This involves developing for each zone estimates of the following:

- The proportion of population in the zone that is within one-quarter mile walk distance of a transit station;
- The proportion of population in the zone that is within one mile walk distance of a transit station; and
- The average walk distance.

The software developed to apply the mode choice model then uses this information to develop different market segments based on the short versus long walk access distances. The same procedure is applied for all transit modes. All bus and LRT stations have auto connections to zones within about three-miles of the station.

The bus systems proposed in conjunction with each of the LRT alignments seem to reflect a desire to reduce bus capital and operating costs while at the same time maintaining existing service levels on established routes. For example, proposed total bus miles are reduced by 12.7 percent for the I-94/Soo line alignment, 15.7 percent for the University Avenue alignment, and 9.5 percent for the BN/Pierce Butler alignment. For the most part, these reductions occur on those routes paralleling the proposed LRT service. In general, while some lines have been rerouted to serve LRT stations better, there is no significant increase in service on the north-south routes that feed into the LRT stations. In general, it would seem fair to characterize the proposed feeder bus system as reasonable, but somewhat conservative.

Measures representing the level of feeder bus service proposed for the three LRT alignments are presented in Table 5. As shown, the peak and midday bus requirements and bus miles associated with the I-94/Soo line alignment are somewhat lower than the other two alignments. To a large extent, this reflects fewer opportunities to tie in existing routes to the LRT system in the southern portion of the corridor.

TABLE 5
Feeder Bus Service Measures

	LRT Alternatives		
	I-94/Soo Line	University Avenue	BN/Pierce Butler
Bus Requirements			
AM Peak	36	42	43
Midday	20	22	24
Bus Miles	4,472	5,247	6,146

TABLE 6
Parallel Bus Service in Corridor

	LRT Alternatives		
	I-94/Soo Line	University Avenue	BN/Pierce Butler
Route 94 B/D			
Frequency	-	4/hour (Peak only)	-
Ridership	-	3,900	-
Route 16 A/E			
Frequency	4/hour	2/hour	6/hour
Ridership	2,600	1,700	16,600

The two major bus routes paralleling the LRT alignments are the Route 94 which operates on Interstate 94 and provides very good express service between the Minneapolis and Saint Paul downtown areas, and the Route 16 service which provides very frequent local service along University Avenue. Table 6 presents the proposed operation of these routes for each of the three proposed LRT alignments.

As shown, Route 94 express service is essentially replaced by the LRT in the I-94/Soo line and BN/Pierce Butler alignments, some service is retained in the University Avenue alignment. The I-94/Soo line and BN/Pierce Butler alignments provide end to end travel times comparable to that provided by the Route 94 express service and therefore these two alignments are a suitable substitute for the Route 94 express service. The end-to-end travel time for the University Avenue alignment is considerably longer due to the increased number of stations associated with this alignment. As a result, if service were not also provided, transit ridership in the corridor would most likely decrease significantly.

Some degree of service is maintained on Route 16 in all three LRT alignments. Frequencies are lowest (two buses per hour) for the University Avenue alignment, since the LRT is located along the same road with this option. Frequencies are highest (six buses per hour) for the BN/Pierce Butler alignment since the LRT is located on average about two-thirds mile north of Route 16/University Avenue service. Any reduction in Route 16 service would result in many people having to walk this distance to use transit, which in turn would lead to a significant decrease in corridor transit ridership.

Conclusions and Recommendations

For the most part, the LRT ridership forecasts for the Midway corridor have been developed using widely accepted travel demand forecasting procedures and reasonable assumptions based on currently available information. While the feeder bus system and parallel bus service levels have been tailored to the specific circumstances of the three LRT alignments, these differences are for the most part entirely justified. In all other respects the assumptions used to develop the forecasts are consistent between the all bus and LRT options, and among the three LRT alignments. With the exception of some of the mode of arrival measures, the results of the forecasts are generally consistent with existing operational experience with LRT systems. Based on this, I would recommend that these forecasts be accepted, with the qualification that the mode of arrival for all three alignments should be examined in more detail.

I would also recommend that at some point in the LRT planning process a series of sensitivity tests be performed to develop an understanding of the implications of the uncertainty associated with key variables which serve as inputs to the LRT ridership forecasting process. Candidate variables for sensitivity tests include the following.

- The level and distribution of population and employment;
- The degree of highway congestion;
- Parking availability and costs;

- Gasoline prices; and
- Auto fuel efficiency.

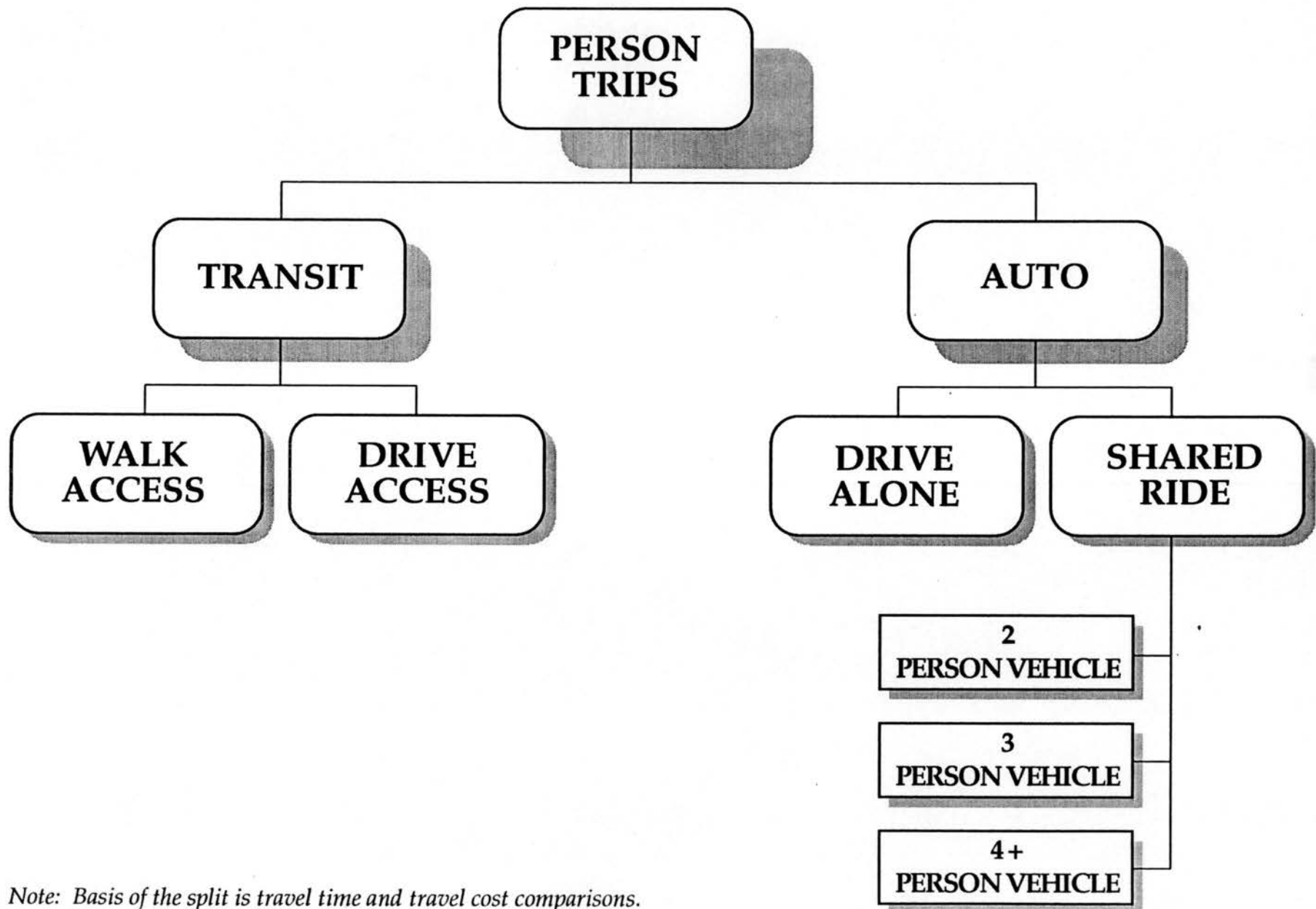
If there is an opportunity to develop an additional round of LRT forecasts, I would recommend that the following enhancements to the current LRT forecasting process be considered:

- The use of an equilibrium assignment procedure (versus the 'all-or-nothing' procedure currently used) for estimating highway travel times;
- The use of weights for various components of transit travel time in the path building and assignment that are consistent with the weights used in the mode choice models;
- Developing separate models to represent mode choice for various non-work related trip purposes; and
- Updating population, employment and socioeconomic inputs with 1990 Census data when available.

OVERVIEW OF PATRONAGE FORECASTS

- **Overview of Patronage Forecasting Model**
- **Input Data**
- **Forecasts for 2010**
- **Comparison to Previous Forecasts**
- **Evaluation**
- **Factors That Could Change Forecasts**
- **Sensitivity Analysis**
- **Non-User Survey**
- **Use of Forecasts**
- **Conclusions**

OVERVIEW OF PATRONAGE FORECASTING MODEL



Note: Basis of the split is travel time and travel cost comparisons.

OVERVIEW OF PATRONAGE MODEL (Cont.)

- **Calibration Phase**
 - **Variables**
 - **Socioeconomic**
 - **Travel Times by Mode**
 - **Travel Costs by Mode**
 - **Coefficients**
- **Limitations**
 - **Model Does Not Specifically Recognize Quality, Reliability, or Image of Modal Alternatives**
 - **Difficult to Forecast Twenty Years**
 - **Reliability**
 - **Ridership by Alignment: +/- 20%**
 - **Comparison Among Alignments: +/- 5%**
 - **Characteristic at a Station: +/- 50%**
- **Responsibility for Forecasting**
 - **Data Collection: Barton-Aschman**
 - **Model Development: Comsis and R.H. Pratt**
 - **Network Definition: MTC (Feeder Bus) and LTK (LRT Travel Times)**
 - **Model Application: Metropolitan Council**
 - **Management: BRW**
 - **Technical Review: Cambridge Systematics**

FORECASTING INPUT DATA

- Socioeconomic

Variable	1988	2010
St. Paul CBD Employment	51,500	65,900
St. Paul Employment	183,600	196,150
St. Paul Population	265,000	253,000
Minneapolis CDB Employment	120,300	149,100
Minneapolis Employment	288,000	300,000
Minneapolis Population	355,800	340,000

Source: Metropolitan Council

FORECASTING INPUT DATA

• Travel Times - Central Corridor

Route	"In Vehicle" Travel Time/Minutes	
	Downtown to Downtown	DTN St. Paul to U of MN
Route 16	49	32
Route 94B	32	--
Route 94D	23	--
LRT (I-94/Soo)	28	16
LRT (University)	37	26
LRT (PB/BN)	35	23

FORECASTING INPUT DATA

• Travel Cost

Item	1988	2010
Out-of-Pocket Auto Operating Costs	9.5 cents/ mile	9.5 cents/ mile
Downtown Daily Parking Costs		
– St. Paul Core	\$4.00	\$5.70
– St. Paul Fringe	\$2.90	\$4.70
– Minneapolis Core	\$6.40	\$10.10
– Minneapolis Fringe	\$3.20	\$5.70
Bus Fare (Base)		
– Peak	\$0.75	\$0.75
– Off-Peak	\$0.50	\$0.75

FORECASTS FOR 2010 FOR CENTRAL CORRIDOR (DAILY)

Route	1988	2010 All Bus	2010 LRT		
			I-94/Soo	Univer- sity	PB/BN
LRT	--	--	32,400	30,000	24,300
Route 16 A/E	21,800	25,600	2,600	1,700	11,300
Route 94 B/D	5,900	6,800	--	3,900	--
Total	27,700	32,400	35,000	35,600	35,600

GENERAL TRAVEL TYPES SERVED

- 50 Percent of LRT Trips Have One or Both Ends in Downtown St. Paul
 - St. Paul CBD To/From U of M 2,900
 - St. Paul CBD To/From Midway Area 4,000
 - St. Paul CBD To/From Minneapolis CBD 9,100
- 35 Percent of LRT Trips Have One or Both Ends in Midway Area
 - Midway Area To/From Minneapolis CBD 4,200
 - Midway Area To/From U of M 1,900
 - Within Midway Area 1,000
 - Midway Area To/From St. Paul CBD 4,000
- 44 Percent LRT Trips Have One or Both Ends in University of Minnesota Area
 - U of M To/From Minneapolis CBD 9,200
 - U of M To/From Midway Area 1,900
 - U of M To/From St. Paul CBD 2,900
- 71 Percent LRT Trips Have One or Both Ends in Downtown Minneapolis
 - Minneapolis CBD To/From U of M 9,200
 - Minneapolis CBD To/From Midway Area 4,200
 - Minneapolis CBD To/From St. Paul CBD 9,100

NOTE: These percentages are relatively independent of alignment.

COMPARISON TO PREVIOUS FORECASTS

Forecast Description	Value
University/Southwest AA/DEIS (1985) Alignment on University Avenue	46,100
Midway Corridor Planning Analysis (1988) Mid-Range Used in RTB's Development and Financial Plan	
- University Avenue (Yr. 2000, 1 mile sta.)	41,800
- Burlington Northern (Yr. 2000)	37,200
- I-94 (Yr. 2000)	42,500

Comments:

- Loss of population between Year 2000 and 2010
- New model more refined in work and non-work travel forecasts.
Relative to old model: more work and less non-work.
- Growth in travel is primarily non-work and non-downtown oriented.

EVALUATION

- **Technical (Completed By Cambridge Systematics)**
 - "Overall, while a number of potential improvements in the forecasting procedure can be identified, the procedure is better than most that are typically used in studies such as these."
 - "... a nested logit model, which represents the leading edge of the state of the practice in travel demand forecasting."
- **Logical**
 - all-bus forecast reflects the growth in overall travel in corridor
 - highest ridership alignments are closest to potential users
 - cost assumptions relative to inflation are reasonable
 - growth in total ridership reflects high current ridership in the corridor

FACTORS THAT COULD CHANGE FORECASTS

- **Price of Gasoline Relative to Inflation**
- **Price of Parking Relative to Inflation**
- **Population/Employment Projections**
- **Roadway Travel Times**
- **Marketing of Transit Mode**
- **Bias to LRT Due to Quality and Reliability of Service**
- **Vehicle Fuel Efficiency**
- **Transit Fares**

SENSITIVITY ANALYSIS

Value	Relative Weight of Model Coefficients
Wait Time - Transit	450
Walk Time - Transit	450
Transfer Time - Transit	450
Number of Transfers	450
Terminal Time - Highway	450
In-Vehicle Time	200
Transit Fares	32
Parking Cost	80
Highway Operating Cost	25

NON-USER SURVEY

- **For Trade-Offs Between Travel Time and LRT System Access, Favor Access. Minimize Transfer and Wait Time**
- **Provide Adequate Park-Ride Capacity in Order to Build Patronage**
- **People Favor the Reliability of LRT. A 100% Reliable System Could Increase Transit by 30%.**
- **People Are Sensitive to Real Direct Out-of-Pocket Costs. A \$1.00/Day Increase in Commuting Cost Would Result in a 20% Increase in Ridership**
- **Commuters from Suburbs Respond More Favorably to LRT Than Commuters from City**
- **People Like the Idea of LRT. The Number of Riders Depends on Quality of Service Between Origin/Destination.**

USE OF TRANSIT RIDERSHIP FORECASTS

- **Sizing of Transit System Components**
 - **Fleet Size**
 - **Service Frequency**
 - **Park-Ride Spaces**
 - **Bus Bays in Stations**
 - **Drop-Off/Pick-Up Spaces**
 - **Vehicles/Trains**
- **Costing of LRT System**
 - **Capital Cost**
 - **Operating/Maintenance Cost**
- **Performance Indicators for Comparative Evaluation**
 - **Riders/Route Mile**
 - **New Riders/Route Mile**
 - **Operating Cost/Passenger**
 - **Capital Cost/Passenger**
 - **Etc.**

CONCLUSIONS

- Significant effort went into the forecasting process and the process is state of the art.
- Forecasts as presented should be used in the evaluation process to assist in the selection of a preferred alignment.
- Forecasts will be revised as conditions change; conditions will change
- Forecasters are conservative after problems of 1970's and 1980's
- Recent experience in cities with LRT is positive relative to ridership
- The transit patronage forecasting process has limitations
- BRW would place a range of -5% to +20% on the aggregate forecasts

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

4

Regional Railroad Authority

Originating Department

K. DeSpiegelaere

Authorized Signature

10/1/90

Date

Board Action Requested

Discussion/Direction concerning reimbursement of relocation expenses of consultant staff - Midway Corridor Phase I PE/EIS

ACTION IS REQUESTED

Request Justification

- See attached:
- 1) Proposed resolution
 - 2) Memorandum from K. DeSpiegelaere
 - 3) BRW letter regarding D. A. Herbert relocation
 - 4) Bechtel letter to Dave Warner, BRW, Inc.
 - 5) Contract language - Page 7 Agreement No. RCRRA-89-003

Budgeting and Accounting

Ed Glantz 10/3/90

County Attorney

Will Marshall

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

October 9, 1990

J. L. Glendinning

10/1/90

Board Date

Signature

Date



Resolution

Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: _____

No. _____

WHEREAS, Bechtel Civil, Inc., subconsultant to BRW, Inc. has played a major role in engineering studies for the Midway Corridor; and

WHEREAS, The work performed relied on other study elements and frequent interaction with BRW's staff and others in the St. Paul/Minneapolis area; and

WHEREAS, Bechtel Civil, Inc. and BRW, Inc., have indicated that it was less costly to temporarily relocate specific staff members to BRW's office in Minneapolis than to send those individuals back and forth on business trips; and

WHEREAS, Agreement RCRRA-89-003 provides for the reimbursement of direct costs, including travel expenses, providing appropriate approvals are obtained and expenses are documented correctly; and

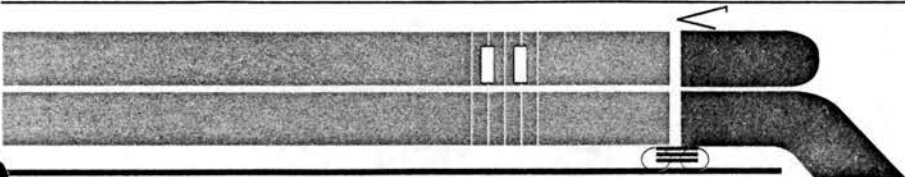
WHEREAS, Documentation received by the Authority does support the consultant position that costs for relocation are less than recurring travel expenses but it was not submitted for approval, in accordance with contract provisions, prior to incurring staff relocation costs; Now, Therefore, Be It

RESOLVED, That the Ramsey County Regional Railroad Authority authorizes reimbursement for direct costs relating to temporary relocation of Bechtel Civil, Inc. staff to Minneapolis to provide engineering services for Phase I PE/EIS Studies for the Midway Corridor - Agreement RCRRA-89-003, subject to submission of detailed invoice documentation of all costs incurred; and Be It Further

RESOLVED, That BRW, Inc. shall provide documentation for any similar requests for reimbursement of major direct expenses prior to their being incurred and in accordance with contract provisions.

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

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MEMORANDUM

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

FROM: Kathryn DeSpiegelaere, Director of LRT Planning *KD*

DATE: September 28, 1990

SUBJECT: Direct Expenses
Phase I PE/EIS - Midway Corridor
Contract No. RCRRA-89-003

Bechtel Civil, Inc., subconsultant to BRW, Inc. is seeking reimbursement of temporary relocation expenses for staff assigned to the Midway Corridor project. Although the expenses identified are reasonable in principle, documentation was not provided, nor RCRRA approval granted, prior to the relocation of specific Bechtel staff. The attached documentation from Bechtel and BRW provides the rationale and cost summary for their requests.

The contract for Phase I studies in the Midway Corridor does provide for reimbursement of direct expenses, including travel expenses. It was recognized at the time of contract negotiation that the consultant team headed by BRW, Inc. included national engineering firms to provide special expertise in the areas of LRT planning and engineering. Periodic travel to and from the Twin Cities was anticipated, rather than staff relocation.

There are two separate requests concerning relocation expenses. The first relates to Mr. D. A. Herbert who was relocated to Minneapolis prior to his involvement on the Midway Corridor. Mr. Herbert was working in the Twin Cities and had incurred expenses before we were apprised of his role or Bechtel's policy concerning relocation. He has played a role in three regional projects and his expenses have been split according to job hours incurred against each. The share of expenses attributed to the Midway Corridor is \$4,449. A letter from BRW is seeking approval at this time. The second request relates to two additional employees which were moved to Minneapolis specifically for Midway Corridor work. Our staff was apprised verbally of intent to relocate these individuals, in lieu of recurring business trips, and had verbally indicated agreement with the approach subject to their submission of written documentation supporting the purpose of relocation and the associated cost savings. That documentation was not received prior to employee relocation. The attached letter from Bechtel to BRW indicates an estimated cost of \$8,436 per person.

Recommendation:

1. Authorize reimbursement of direct expenses incurred by Bechtel Civil, Inc. for the temporary relocation of staff to BRW's office in Minneapolis subject to provision of detailed documentation of all costs incurred.
2. Request BRW to provide documentation in the future before expenses are incurred, in accordance with the contract.



MEMORANDUM

DATE: July 31, 1990

TO: Kathy DeSpiegelaere, RCRRA
Ken Stevens, HCRRA
Tim Yantos, ACRRA

FROM: Richard P. Wolsfeld *RPW*

SUBJECT: Distribution of Relocation Expense for D. A. Herbert

Attached is a memo from David Herbert relative to his relocation expenses. He has allocated the costs to the three projects on which he is working. It is expected that Mr. Herbert will be in Minneapolis for at least 12 months and that he would have expended considerably more dollars by renting an apartment and travelling to/from Washington.

Your approval of the charges as noted on the memo is requested. When Mr. Herbert leaves the Twin Cities, no costs will be incurred.

APPROVED:

Kathy DeSpiegelaere
RCRRA

Ken Stevens
HCRRA

Tim Yantos
ACRRA

RPW/njr
P418923C
P418914B1
P418964B

Bechtel

Interoffice Memorandum

To: R. P. Wolsfeld

File No. 207/1

Subject: Distribution of relocation
expense for D.A. Herbert

Date: 7/26/90

From: D.A. Herbert **DAH**

Of: Transportation

At: 5W Ext: 463

cc: P. Bay
D. Moore
D. Warner
J. Thatcher
K. Addison, Vienna

Per your request, we have reviewed our work effort for the three active LRT subcontracts for the year 1990. An assessment was made as to the actual and projected jobhours that would be personally charged to each project. The percentage represented for each project was then determined, with the following result:

Anoka/Hennepin Northeast Corridor	14.6%
Ramsey Midway Corridor	36.9%
Hennepin Prelim. Engineering, Ph.B	48.5%

A separate sub-job number was set up to capture all relocation expenses incurred as determined in accordance with the standard Bechtel employee relocation reimbursement policy. The total expenses are \$12,178.00. Applying the percentages determined above result in the following amounts:

Anoka/Hennepin Northeast Corridor	\$1778.00
Ramsey Midway Corridor	\$4449.00
Hennepin Prelim. Engineering, Ph.B	\$5906.00
TOTAL	\$12,178.00

If you concur with these determinations, we will direct our accounting department to prepare the appropriate invoices.



Bechtel

8618 Westwood Center Dr., Suite 300
Vienna, Virginia 22182-2282

August 2, 1990

David Warner
BRW, Inc.
700 Third Street South
Minneapolis, MN 55415

Dear Mr. Warner:

Subject: Ramsey County Midway Corridor LRT Contract -
Temporary Assignments

In order to progress our work under TASK 4.0 Route Engineering and Design, it has been necessary to have additional full-time Bechtel staff in the BRW Minneapolis office for a period of approximately three months. We reviewed the schedule and the work that must be performed and concluded that no combination of business trips to Minneapolis and work in a Bechtel regional office would provide the necessary coordination and continuity with the rest of the project team that is required, especially with CADD personnel. It is also essential to have a close relationship and a rapid response capability to support the DEIS preparation. We therefore have selected Mr. Dan Reagan and Mr. Jonathan Nicol to work full time on the Midway Corridor project.

For an assignment of this duration, it is Bechtel's policy to transfer the employee on a temporary assignment rather than on a continuing business trip basis. This is less costly to the Client and provides better conditions for the employee, and thus a better work product. A copy of the Bechtel standard temporary assignment policy was previously furnished to you.

The following per-person estimated cost comparison demonstrates the cost savings of the temporary assignment over a three month period:

Business Trip

Travel: 6 rd trips @\$540	=	3240
Hotel: 72 nights @\$60	=	4320
Meals: 72 days @\$23.00	=	1656
Airport Prkg. & Misc.		
travel expense 5 @\$25.00	=	125
Travel to/fm home		
6 @\$20.00	=	120
Automobile rental:	=	2016
TOTAL	=	\$11,477

Temporary Assignment

Travel: 3 rd. trips @\$540	=	1620
Hotel: 5 nights @\$60.00	=	300
Furn. Apartment 3 mo @\$800	=	2400
Subsistence: 80 @\$23.00	=	1840
Utilities: 3 @\$50.00	=	150
Airport parking & misc.		
travel exp 2 @\$25.00	=	50
Travel to/fm home 3 @20.00	=	60
Automobile rental	=	2016
TOTAL	=	\$8436



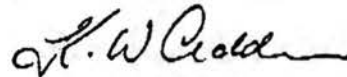
Bechtel Corporation Civil Company

5

David Warner
Page 2

We foresee a further need for additional technical specialists to provide on-site expertise in certain other Tasks; for example, an estimator to work with us on TASK 7.1 Cost Analysis. However we feel that such needs will be of relatively short duration and can best be handled on a business trip basis.

Sincerely,



Kenneth W. Addison
Manager Transit & Railroad Projects

cc: D.W. White
D.A. Herbert

B. PAYMENTS FOR SERVICES OF THE CONSULTANT UNDER SECTION II

Compensation for performances of professional services identified in Section II shall be made in accordance with established hourly billing rates set forth in Exhibit B and reimbursable expenses, subject to prior written approval of such services or expenditures by the RCRRA. Total payments to the CONSULTANT for work described in Section II shall not exceed figures authorized by the RCRRA through the date of invoice.

C. REIMBURSABLE EXPENSES

The following reimbursable expenses representing actual expenditures made by the CONSULTANT, his employees, or his professional consultants specifically for the project are not included in Basic Services and shall be paid for as reimbursable expenses subject to the provisions of this agreement and approval of the RCRRA:

1. The actual costs incurred by the CONSULTANT in retaining the services of subconsultants for disciplines which are not available within the CONSULTANT'S firm and are necessary to accomplish the work required by the agreement.
2. Transportation expense, including mileage at the rate of \$0.26 per mile, equal in amount to employee reimbursement up to the current rate allowable under the Minnesota Travel Regulations (1988), for services provided in connection with Sections I and II.
3. Fees paid, in the name of the RCRRA, for seeking approval of authorities having jurisdiction over the project.
4. Graphics, printing, special mailings, aerial photographs, presentation, and reproduction expenses when requested by the RCRRA.
5. Other special travel and expenses connected therewith required in connection with the project and authorized by the RCRRA.

D. INVOICE DOCUMENTATION

1. Professional services fees shall be documented with a payroll cost breakdown including the name of employee, his classification, current hourly billing rate, hours worked, and total cost for each period.
2. Claimed expenses shall be supported with necessary documentation to show that such costs are allocable to the project and reasonable in amount. All major expenses, those in excess of \$1,000 per occurrence, shall be approved by the RCRRA prior to their being incurred.
3. Overtime premium pay for work or services performed by the CONSULTANT or his subconsultants will not be authorized. Hours

RCRRA-89-003

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

5

Regional Railroad Authority

Originating Department

K. DeSpiegelaere

Authorized Signature

10/1/90

Date

Board Action Requested

Schedule for Midway Corridor Environmental
Impact Statement

DISCUSSION ONLY

Request Justification

See attached memorandum from K. DeSpiegelaere and attachment.

<u>Budgeting and Accounting</u> <u>Ed Blawie</u> <u>10/3/90</u>		<u>Date / Time</u> <u>Received By</u>
<u>County Attorney</u> <u>David M. Moll</u>		
<u>Risk Manager</u>		
<u>Data Processing</u>		
<u>Previous Action taken on Request</u>		

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date

Signature

Date

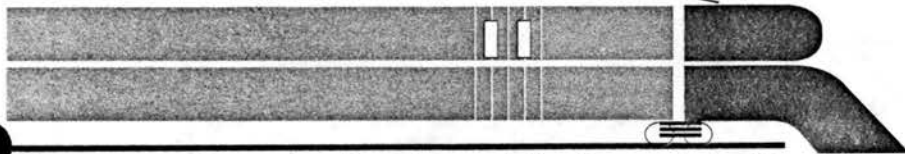
Committee / Meeting Date
October 9, 1990

Signature
F. L. Glendinning
Signature

Date
10/1/90

Board Date

Date



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 *LD*

SUBJECT: Midway Corridor Environmental Impact Statement Schedule

DATE: October 1, 1990

The Midway Corridor Draft Environmental Impact Statement was scheduled to be released in September, 1990. The delay in obtaining ridership forecasts for the corridor has delayed the completion of the report. The report is now scheduled to be released on December 21, 1990.

Two
~~Three~~ forums in the corridor will be scheduled in early December and public hearings will be held in February, 1991.)

It is possible for Ramsey County Regional Railroad Authority to indicate a preferred alternative in the Draft Environmental Impact Statement that will be released on December 21 for the Midway Corridor, Capitol area and Downtown St. Paul.

A copy of the project schedule is attached.

Recommendation:

For your information.

KD/blk
Attachment

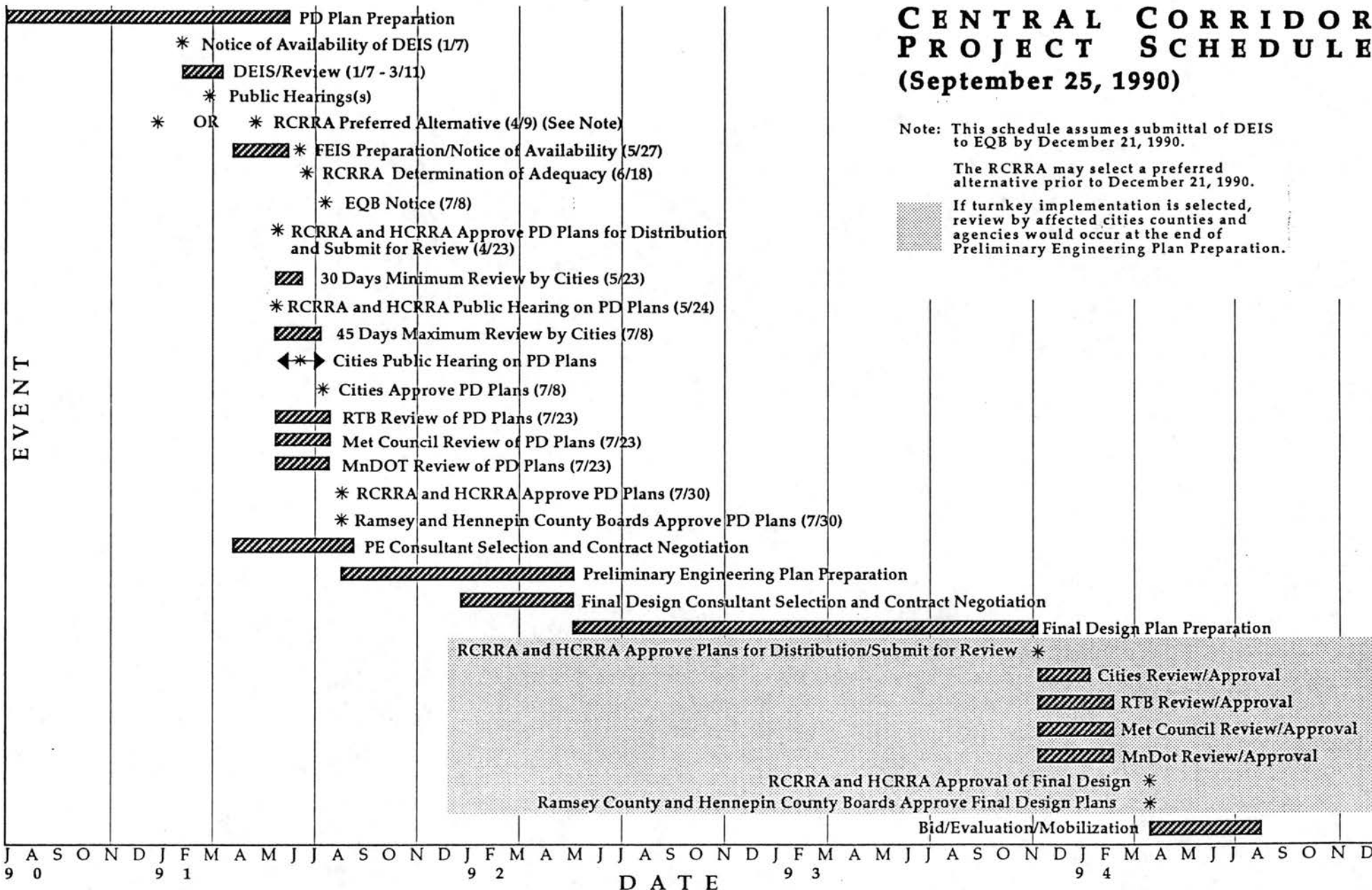
Dec 10 + 13

CENTRAL CORRIDOR PROJECT SCHEDULE (September 25, 1990)

Note: This schedule assumes submittal of DEIS to EQB by December 21, 1990.

The RCRRRA may select a preferred alternative prior to December 21, 1990.

If turnkey implementation is selected, review by affected cities counties and agencies would occur at the end of Preliminary Engineering Plan Preparation.



Note: The above schedule is for the Midway Corridor (East Bank to Downtown St. Paul portion of the corridor.)

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

6

Regional Railroad Authority

Originating Department

K. DeSpiegelaere 10/1/90
Authorized Signature Date

Board Action Requested

Select the 12th Street/Cedar Street alignment as the preferred surface alternative and a central Capitol Mall alignment as the preferred tunnel alternative for the purpose of comparing tunnel and surface options for LRT in the Capitol Area.

ACTION IS REQUESTED

Request Justification

See attached: Proposed resolution
Memorandum from K. DeSpiegelaere
Memorandums from BRW, Inc. (3)

Budgeting and Accounting

Ed Blawie 10/3/90

County Attorney

[Signature]

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

October 9, 1990

Signature

Date

10/1/90

Board Date

Signature

Date



Resolution

Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: _____

No. _____

WHEREAS, Phase I Preliminary Engineering/Environmental Impact Statement studies for the Midway Corridor include the study of light rail transit alignments in the Capitol Area; and

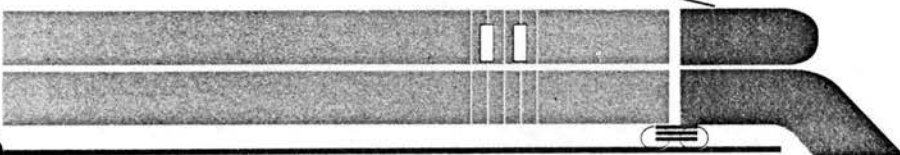
WHEREAS, by amendment to the Midway Corridor contract, alignment studies were expanded to include evaluation of tunnel alternatives and a comparison of surface and tunnel alternatives in the Capitol Area; and

WHEREAS, BRW, Inc. has completed the analysis of surface and tunnel alternatives in the Capitol Area and recommended selection of 12th Street/Cedar Street as the preferred surface alternative and a central Capitol Mall alignment as the preferred tunnel alternative for the purpose of comparison of tunnel and surface options in the Capitol Area; Now, Therefore, Be It

RESOLVED, That the Ramsey County Regional Railroad Authority approves the 12th Street/Cedar Street alignment as the preferred surface alternative and a central Capitol Mall alignment as the preferred tunnel alternative for the purposes of comparing tunnel and surface options in the Capitol area.

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

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Ruby Hunt, Treasurer

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Diane Ahrens

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Donald Salverda

District 2

MEMORANDUM

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

FROM: Kathryn DeSpiegelaere, Director of LRT Planning *KD*

DATE: September 28, 1990

SUBJECT: Capitol Area Alignment Evaluation
Preferred Surface and Tunnel Alternatives

Analysis of surface and tunnel alignment alternatives in the Capitol Area is continuing. Three technical memorandums summarizing analysis results are attached. Preferred alignments for surface and tunnel options are recommended.

The recommended preferred surface alternative is the 12th Street/Cedar Street alignment. This alignment approaches the Capitol Area on the west via Rice, Marion, or the parking area north of the Kelly Inn, depending on which of the three alignments is chosen in the overall corridor. Two stations would serve the Capitol Area - the first on Rice Street or just north of the Kelly Inn and the second on Cedar, just south of I-94.

The recommended preferred tunnel alternative traverses the mall with one centrally located subway station. The exact alignment and station location within the mall varies depending on which overall corridor alignment is chosen but access from the surface and to Capitol Area pedestrian tunnels would be near the center of the mall.

Throughout the analysis process, there has been regular coordination with staff and advisors to the Capitol Area Architectural and Planning Board (CAAPB). Analysis results have also been presented to a committee of the full CAAPB assigned to transportation issues. At the last meeting of that committee six of the ten member CAAPB were present and voted unanimously to endorse the recommended preferred alignments for surface and tunnel options. A meeting has also been held with Department of Administration staff and Ramsey County Regional Railroad Authority staff to review the proposed LRT alignments.

Recommendation:

Select the 12th Street/Cedar Street alignment as the preferred surface alternative and a central Capitol Mall alignment as the preferred tunnel alternative in the comparison of tunnel and surface options for LRT in the Capitol Area.

KD:pah



BRW, INC.

THRESHER SQUARE

700 THIRD STREET SOUTH

MINNEAPOLIS, MINNESOTA 55415

PHONE 612/370-0700 FAX 612/370-1378

PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN

MEMORANDUM

DATE: September 13, 1990

TO: Jim Tolaas

FROM: Peter Smoluchowski
Steve Riley

RE: Capitol Area Tunnel Alignments

INTRODUCTION

Three potential LRT short tunnel alignments were initially identified for the Capitol Area: two located beneath the Capitol Mall and one located behind the Capitol Building under University Avenue. Connections to any of the potential Midway Corridor alignments can be accommodated by all three. The potential short tunnel alignments are illustrated in Figures 1, 2, and 3.

Once identified, the tunnel options were then analyzed with respect to the following factors:

- o Service to the Capitol Area
- o Connections with:
 - Downtown St. Paul
 - Midway Corridor
- o Construction Feasibility

A primary consideration was the provision of a station in the center of the Capitol Area, with an at-grade entrance on the Mall and connections to the existing pedestrian tunnel system, in order to maximize service to the Capitol Building and State office buildings.

As a result of this analysis, it is recommended that two of the three tunnel options be retained for further consideration, and that the third be eliminated.

A summary of the analysis follows.

ALTERNATIVES RECOMMENDED FOR FURTHER STUDY

It is recommended that two short tunnel options which locate stations under the center of the Capitol Area be retained. In addition to providing convenient access to all facilities in the Capitol Area, these options would not present the construction feasibility problems inherent with a tunnel under University Avenue.

Both of these tunnel options would provide for connections with the existing pedestrian tunnel system. The choice of which alignment is selected will depend upon the choice of alignments in the overall corridor.

The northern short tunnel option (Figure 1) provides for connections with either the Burlington Northern/Pierce Butler Route or University Avenue alignments. The tunnel portal on University Avenue would be located between Marion and Rice Streets. The alignment would pass under the Capitol Mall on a diagonal, with a station entrance immediately north of Constitution Avenue, and would reemerge on Cedar Street between Constitution and Columbus Avenues.

The southern short tunnel option (Figure 2) would link with the Soo Line/I-94 Corridor alignment. A tunnel portal may be provided in the Sears parking lot, or further to the west within the I-94 right-of-way. The alignment would cross under the Capitol Mall in front of the Veterans Service Building, and a station entrance would be provided immediately south of Constitution Avenue. The alignment would portal on Cedar Street, immediately south of Columbus Avenue.

These two short tunnel options provide for connection with the Downtown at-grade alignment on Cedar Street. Adjustments in these alignments would be necessary to provide a connection to the preferred Downtown tunnel alignment, although the stations and at-grade entrances to the stations would remain in approximately the same locations.

ALTERNATIVE PROPOSED TO BE ELIMINATED FROM FURTHER CONSIDERATION

Following an initial analysis, it is recommended that the University Avenue Short Tunnel (Figure 3), which would be located on the north side of the Capitol Building, be eliminated from further consideration.

This tunnel option would include a portal on University Avenue, west of Rice Street. A station would be provided below University Avenue, with access from the street level immediately north of the Capitol Building, on the south side of University Avenue. The tunnel would reemerge on Robert Street and connect back to Cedar Street via Columbus Avenue.

A station in this location would not meet the objective of providing centralized service to the Capitol Area, and service to the new Minnesota History Center would not be possible.

Jim Tolaas
September 13, 1990
Page 3

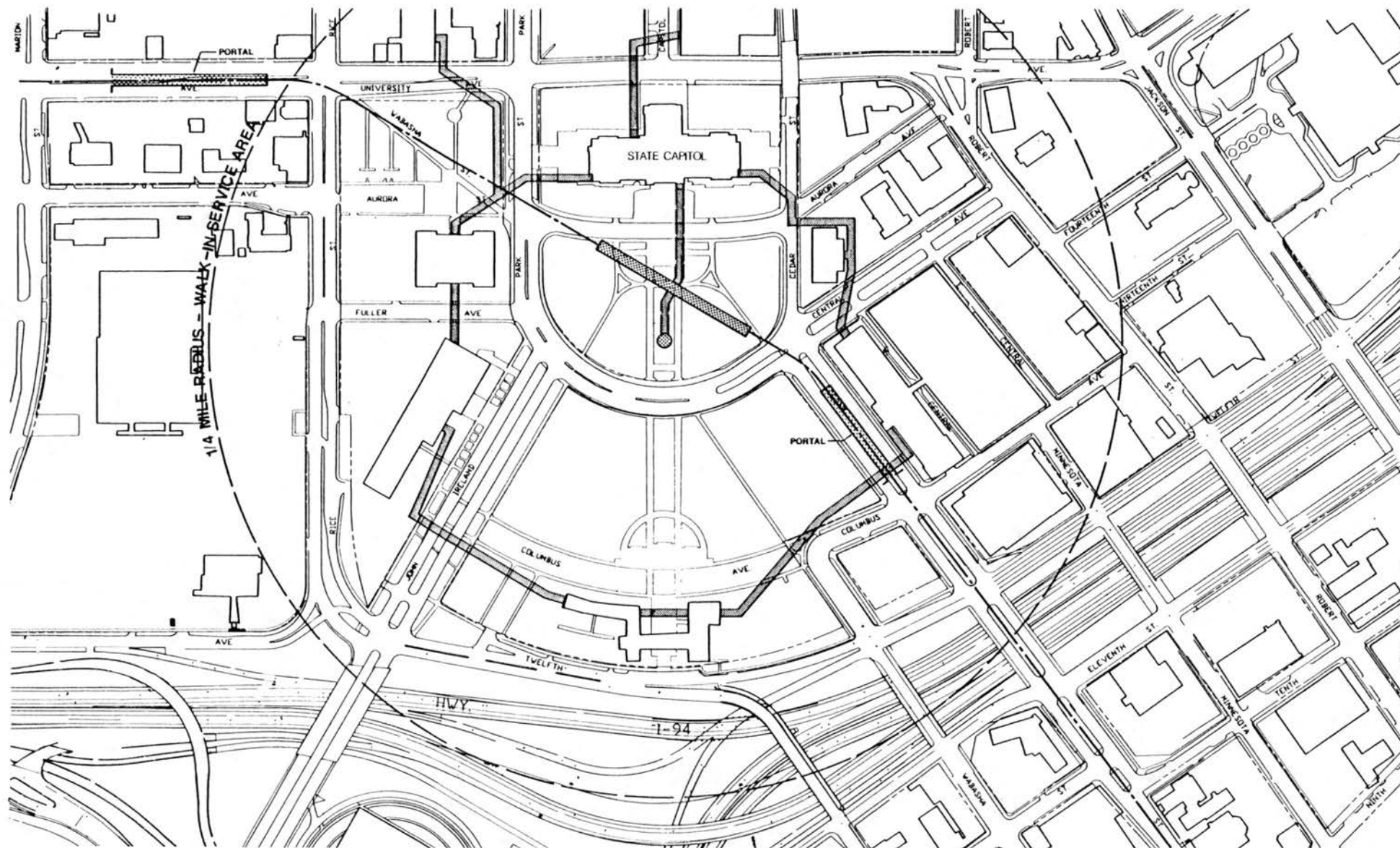
In addition, this tunnel option presents a number of construction feasibility issues, particularly with respect to utility conflicts on University Avenue, and would require a more circuitous and difficult connection back to Cedar Street and the Downtown at-grade alignment.

CONCLUSION

It is recommended that two of three identified short tunnel options (Figures 1 and 2) be retained, with the preferred option dependent upon the Corridor alignment chosen. Both options provide for a station centrally located on the Capitol Mall. These options assume connection with an at-grade Downtown alignment, although adjustments can be made to provide a connection with the preferred Downtown tunnel option.

It is recommended that the University Avenue short tunnel (Figure 3), located on the north side of the Capitol Building, be eliminated because of concerns over service to the Capitol Area and construction feasibility.

SR/ch
cc: File #62-9004

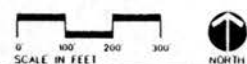
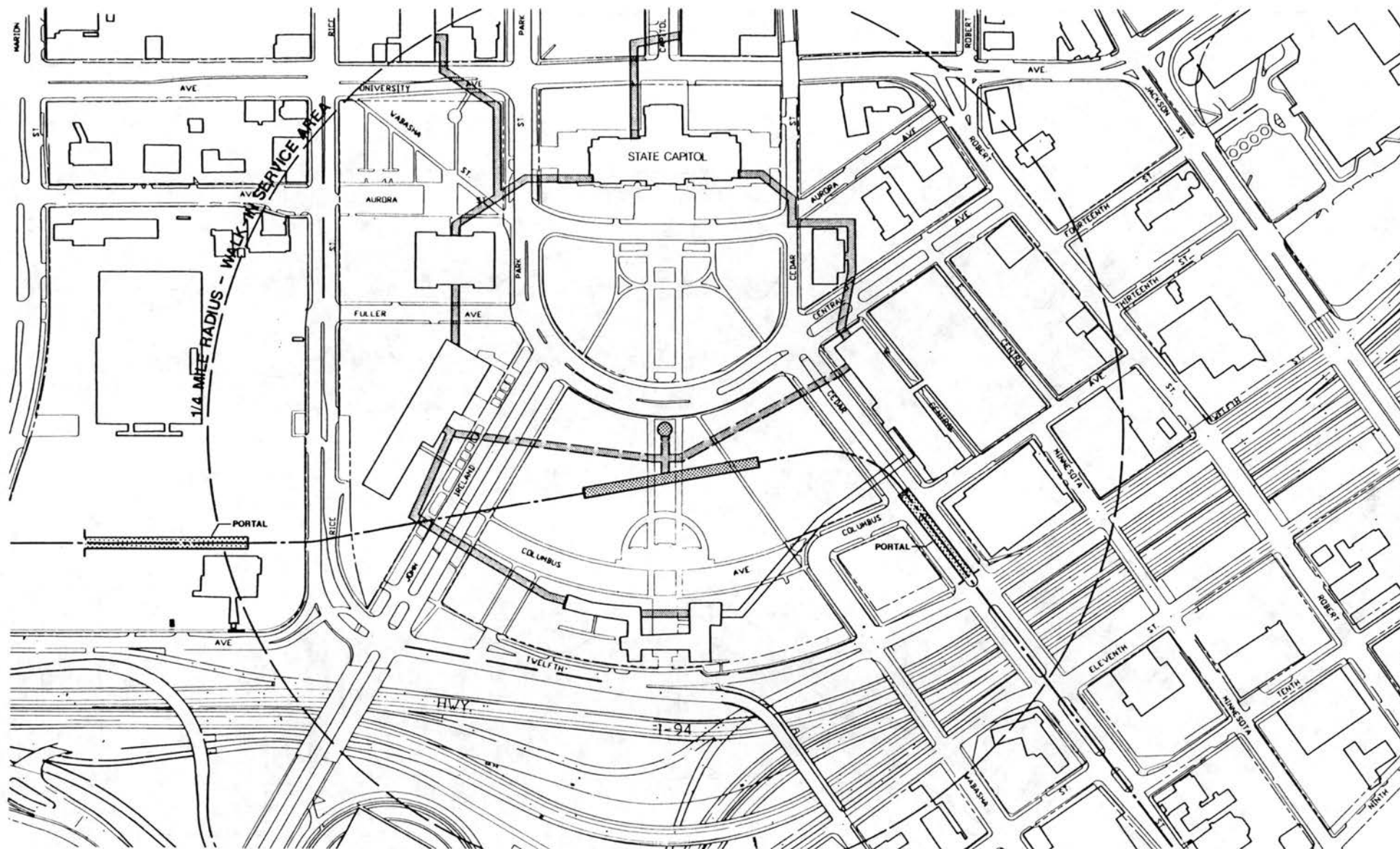


— CAPITOL AREA TUNNEL SYSTEM



Figure 1
BRW

CAPITOL AREA LRT ALIGNMENT STUDY
CAPITOL AREA SHORT TUNNEL STUDY



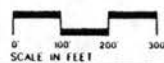
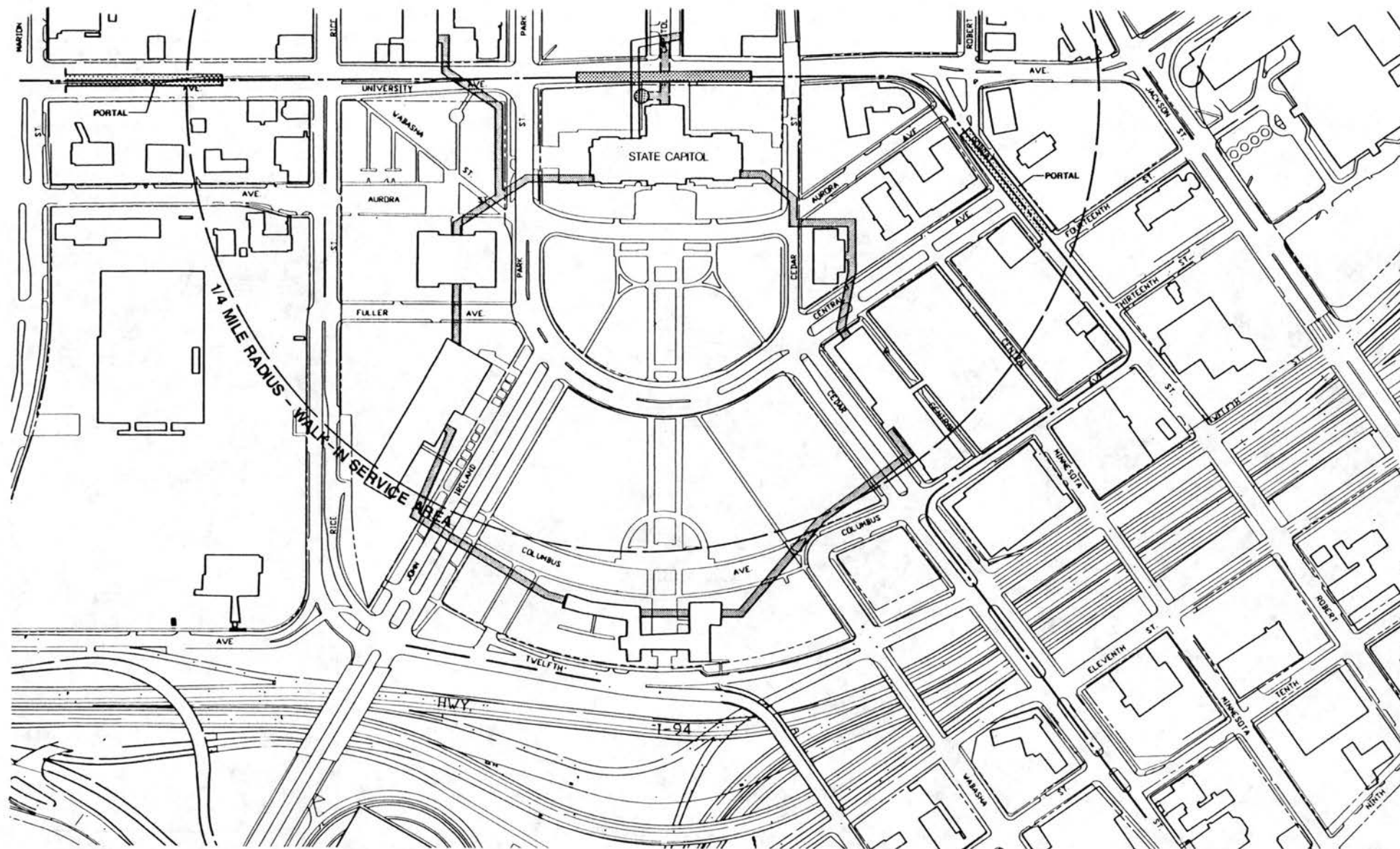
 CAPITOL AREA TUNNEL SYSTEM



Figure 2

BRW

CAPITOL AREA LRT ALIGNMENT STUDY
CAPITOL AREA SHORT TUNNEL STUDY



— CAPITOL AREA TUNNEL SYSTEM



Figure 3



CAPITOL AREA LRT ALIGNMENT STUDY
CAPITOL AREA SHORT TUNNEL STUDY



BRW INC

THRESHER SQUARE

700 THIRD STREET SOUTH

MINNEAPOLIS MINNESOTA 55415

PHONE 612 370-0700 FAX 612 370-1378

PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN

DATE: July 27, 1990

TO: Jim Tolaas

FROM: Peter Smoluchowski
Stephen Riley

RE: Stage II Analysis of Capitol Area LRT Alignments

MEMORANDUM

The Capitol Area LRT Alignment selection process consists of four parts, as outlined in Figure 1: Identification of a universe of alternatives; Stage I analysis (initial screening); Stage II analysis (detailed analysis); and selection of an alternative (or alternatives).

STAGE I ANALYSIS

The Stage I analysis, completed in June 1990, was used to screen the universe of eight Alignment Alternatives A through H (Figure 2) based on urban design considerations and a threshold level of a five percent grade for the alignment. Solutions involving trenching were considered in this analysis.

Based upon the Stage I analysis, five alignment alternatives (Alternatives B, E, F, G, and H) were selected for detailed analysis in Stage II of the selection process (See Figure 2A.). A tunnel option was recently added at the request of the Capitol Area Architectural and Planning Board (CAAPB) and will be subjected to the Stage I and Stage II Analyses.

ELIMINATED ALTERNATIVES - STAGE I ANALYSIS

Alternative A (Figure 3)

This alignment is located east of the Capitol Mall on Robert Street and runs behind the Capitol on University Avenue. The alternative was eliminated because the grades on Robert Street reach 6.3 percent, exceeding the maximum of 5 percent. Trenching was not a viable solution for overcoming these grade problems.

Alternative C (Figure 5)

This alignment runs directly across the Capitol Mall from Cedar Street to Rice Street. The alignment was eliminated because grades across the Mall exceeded five percent, and because of the alignment's visual impact on the Mall. Trenching was not a viable option.

Alternative D (Figure 6)

This alignment runs across the Capitol Mall through the proposed Minnesota Vietnam Veterans Memorial (MVVM) site from Cedar Street to Rice Street or Marion Street. This alignment was eliminated because of negative impacts both on the Mall and the proposed MVVM site.

INITIAL STAGE II ANALYSIS

Initial efforts in the Stage II Analysis portion of the selection process have focused on:

- o Urban Design and Traffic Impacts of Alignments and Stations
- o Costs
- o Service/Circulation Implications
- o Midway and Downtown Connections
- o Development and Redevelopment Opportunities
- o Compatibility with, and Enhancement of, CAAPB Plans

Based upon review of these issues, two basic alignment alternatives have been retained for more detailed analysis using the Stage II selection criteria (Figure 2B):

- o University Avenue
- o Twelfth Street

Both of these retained alignment alternatives provide for linkages to either the Burlington Northern/Pierce Butler Route, University Avenue, or Soo Line/I-94 Midway Corridor alignment alternatives; as well as to the Cedar-Fourth Street Transit Mall in Downtown St. Paul.

ELIMINATED ALTERNATIVES - INITIAL STAGE II ANALYSIS

Alternative E (Figure 7)

The alignment is located along Columbus Avenue from Cedar Street, traveling across the lower Capitol Mall area. This alternative has been eliminated because of urban design and traffic considerations.

The alignment would interrupt the Mall visually and would run directly through the center of the "Court of Honor" in front of the Veterans Administration Building. In addition, this alternative would require a separate traffic signal where the road crosses John Ireland Boulevard. Potentially significant traffic impacts would be created by locating an additional traffic signal in such close proximity to the already complicated intersection of John Ireland Boulevard, Rice Street and Twelfth Street. During certain hours, there may be insufficient space for the queuing of vehicles between the signalized intersections, resulting in conflicts and delays.

Alternative F1 (Figure 8)

This alternative would cross I-94 just east of John Ireland Boulevard using a new bridge and would connect with Cedar Street in Downtown St. Paul via Tenth Street. This alignment alternative has been eliminated because of cost considerations, service implications, and urban design concerns.

The costs of constructing a new bridge would be high and would not be offset by any mitigating circumstances. Indeed, the inability to provide for a Cedar Street station immediately south of Eleventh Street makes this alternative less desirable than F3. Finally, a new bridge may create visual conflicts with the integrated package of bridges and accessways being constructed to facilitate traffic in and around the new Minnesota History Center.

Alternative F2 (Figure 8)

This alternative would cross I-94 along the Wabasha Street bridge and has been eliminated because LRT service on Wabasha would require that the bridge over I-94 be closed to vehicular traffic. This would result in potentially significant traffic impacts since Wabasha is one of only two downtown streets providing bridges over both the Mississippi River and I-94.

Alternative G (Figure 9)

Potential alignments for this alternative include Tenth or Eleventh Street from Cedar Street passing to the north of the new Minnesota History Center, under John Ireland Boulevard and continuing to I-94. This alternative has the least visual impact on the Capitol Mall area, but has been eliminated because of service implications. Convenient LRT service to the Capitol Area cannot be provided under this alternative.

RETAINED ALTERNATIVES - INITIAL STAGE II ANALYSIS

Two generalized alignment alternatives have been identified which use either University Avenue or Twelfth Street (Figure 2B) with variations on these alignments dependent upon which of the Midway Corridor alignments is chosen. Each of the retained alternatives provides for two stations serving the Capitol Area.

University Avenue

This alignment runs behind the Capitol on University Avenue and connects to Jackson Street on the east end of the Capitol Area. This alternative was originally eliminated because grades on Jackson Street reach 5.3 percent and 5.7 percent on University Avenue. At the request of the CAAPB, solutions involving major trenching along University Avenue were examined and retained.

Jim Tolaas
July 27, 1990
Page 4

This alternative provides for linkages with the Burlington Northern/Pierce Butler Route and University Avenue Alignments with a split, far-side platform station on University Avenue at Rice Street. Linkage with I-94 would be via Rice Street, with a station immediately west of the Transportation Building.

Each of the University Avenue Alternatives would include a Jackson Street Station, but would not include a Cedar Street station at Eleventh Street.

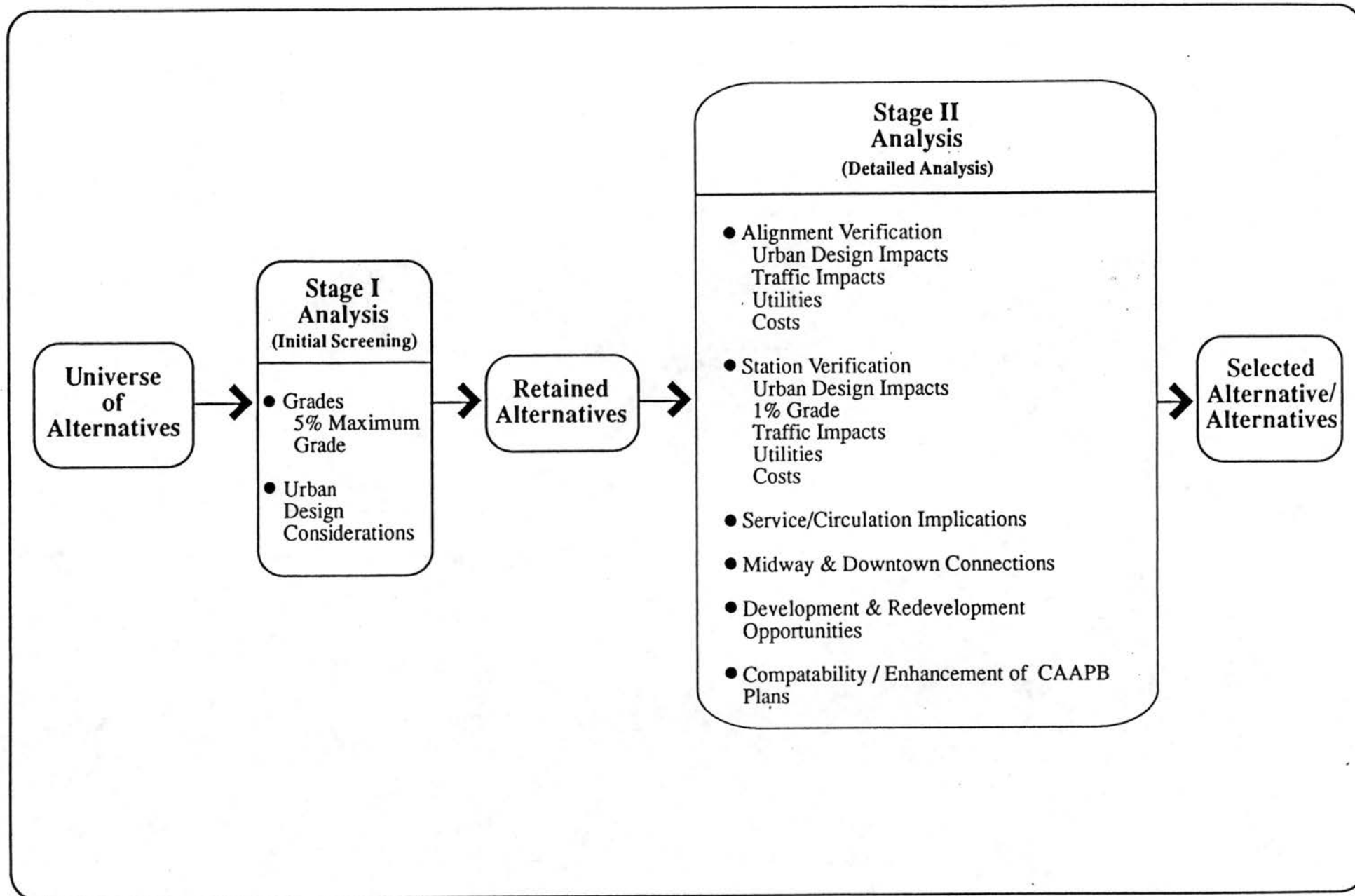
Twelfth Street

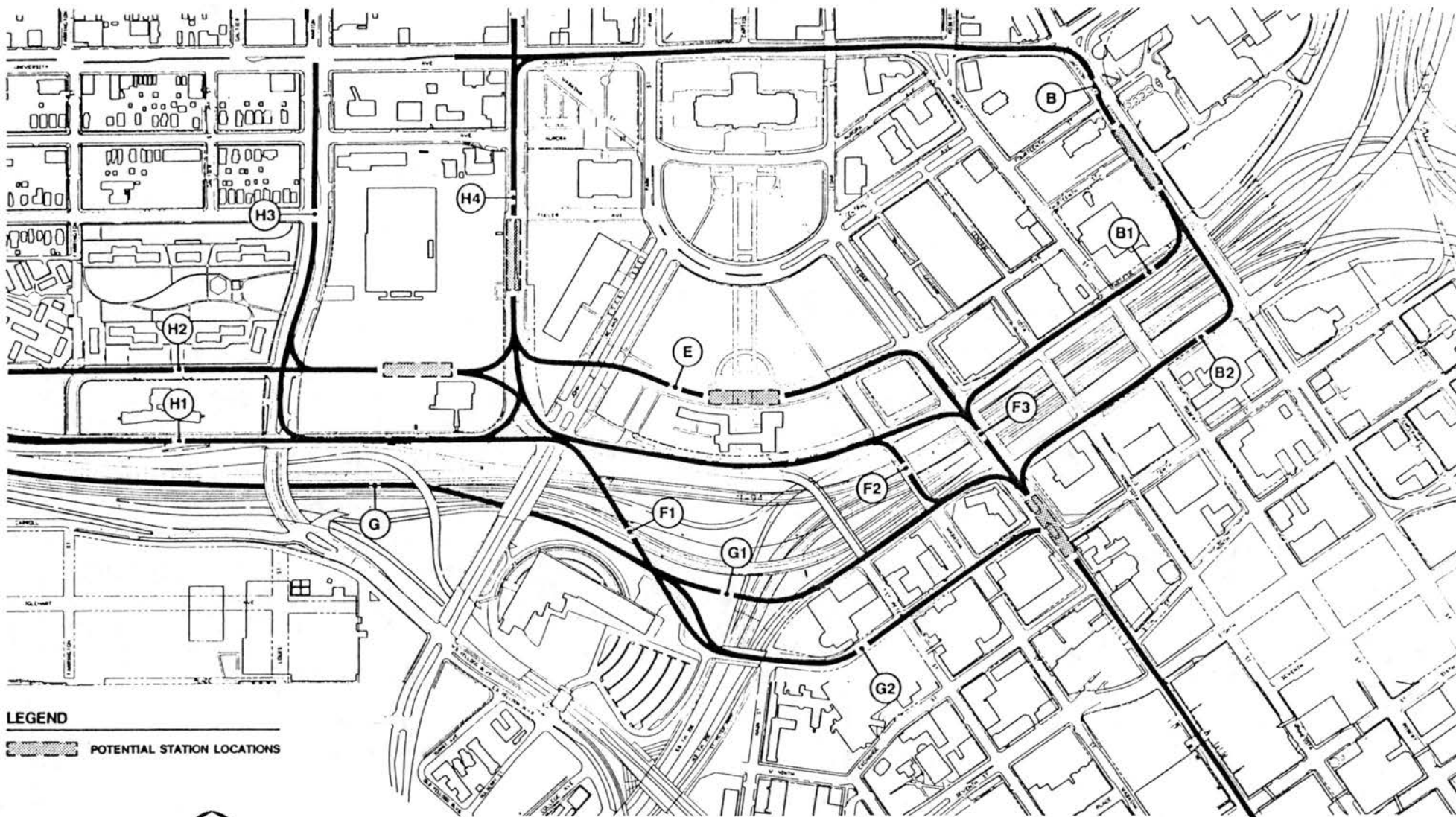
This alignment would follow Twelfth Street along the south side of the Veterans Services Administration Building and would link to any of the proposed Corridor alignments via either Rice Street or Ravoux Street. The Twelfth Street alternatives include stations on the west side of the Capitol Area, either on Rice Street or in the Sears parking lot, and along Cedar Street at Eleventh Street.

CONCLUSION

The retained University Avenue and Twelfth Street alternatives will be subjected to more detailed study using the Stage II Analysis criteria as outlined in Figure 1. The tunnel options will also be further refined using the Stage I and Stage II Analysis criteria.

SR/lm
cc: File 62-9004





LEGEND

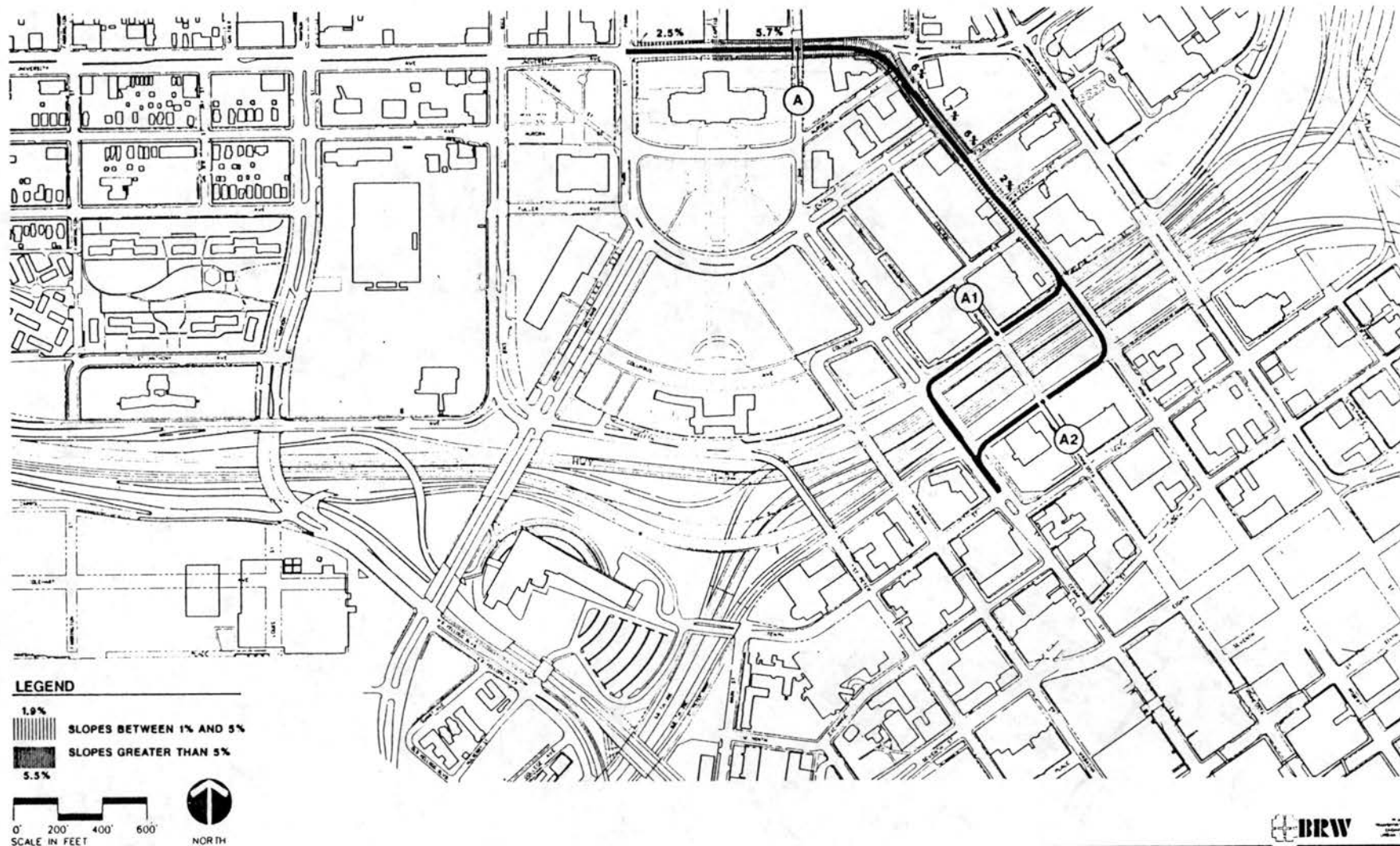
 POTENTIAL STATION LOCATIONS

0' 200' 400' 600'
SCALE IN FEET



CAPITOL AREA LRT ALIGNMENT STUDY
RETAINED ALTERNATIVES - B,E,F,G,H

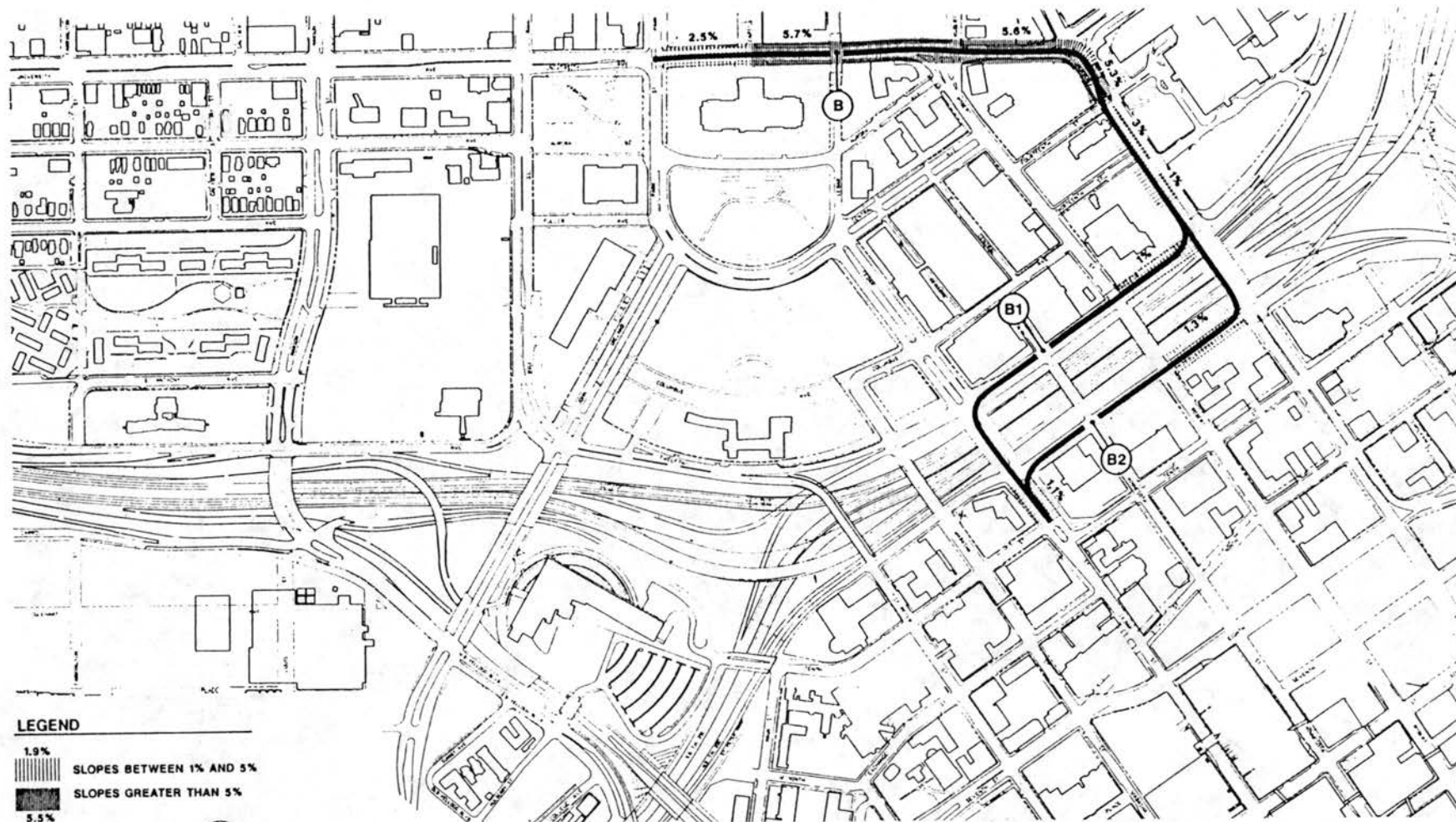
Figure 2A



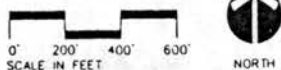
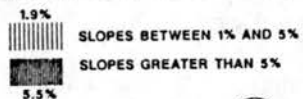
CAPITOL AREA LRT ALIGNMENT STUDY
ALTERNATE A



Figure 3

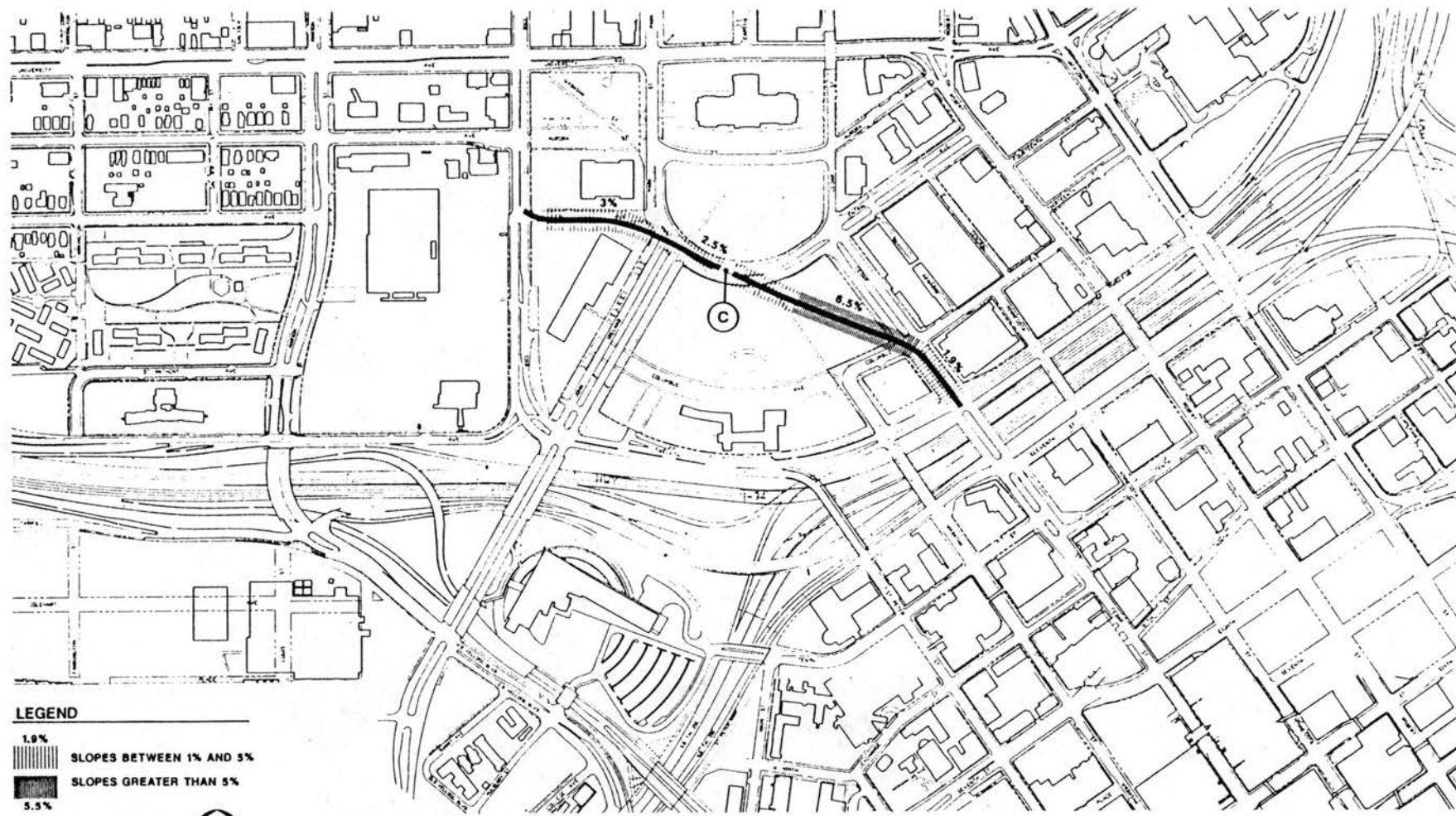


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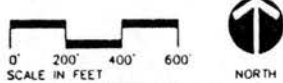
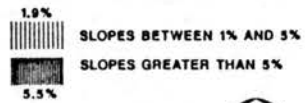


CAPITOL AREA LRT ALIGNMENT STUDY
ALTERNATE B

Figure 4

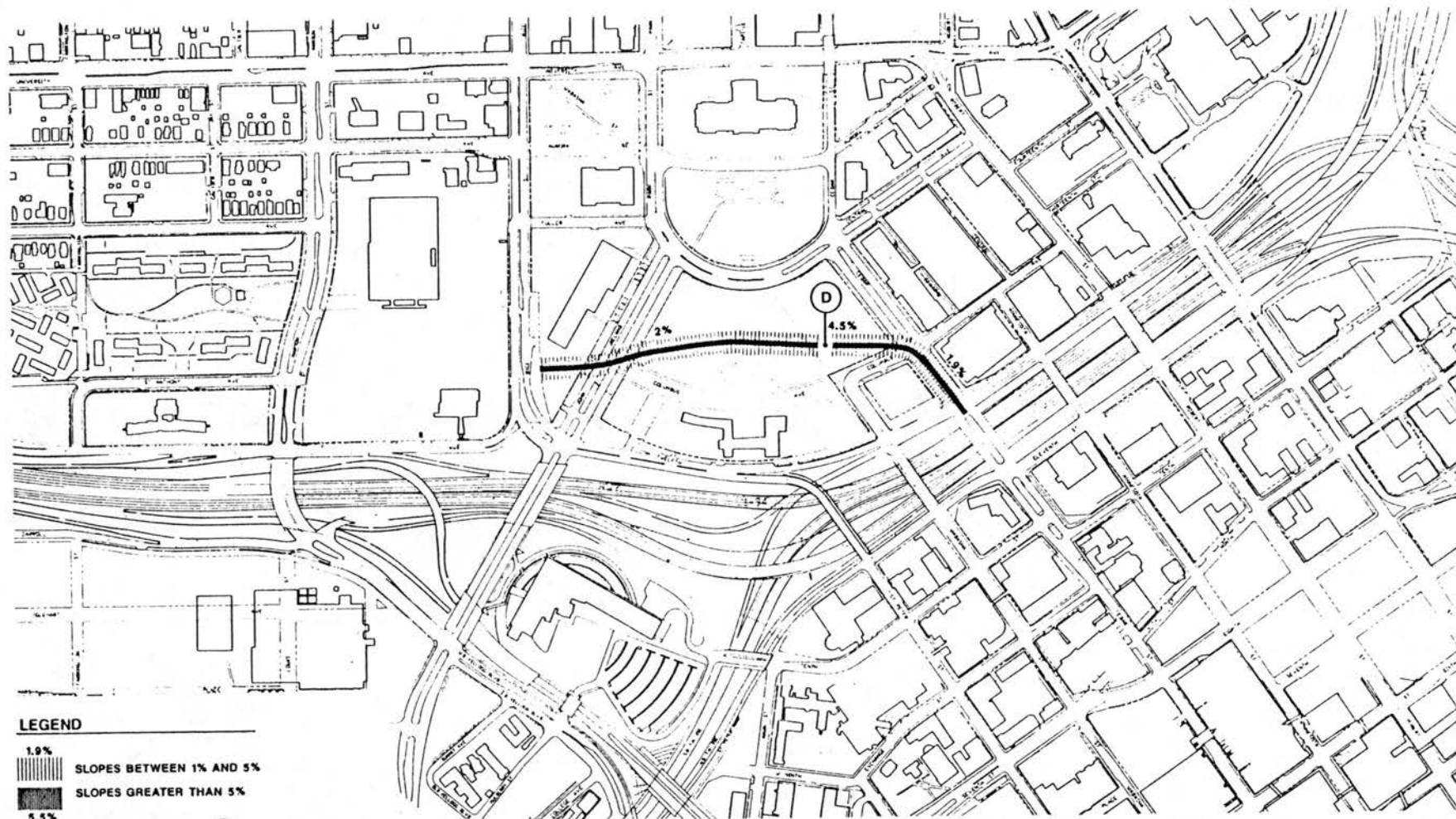


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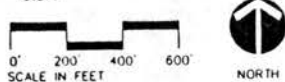
CAPITOL AREA LRT ALIGNMENT STUDY
ALTERNATE C

Figure 5



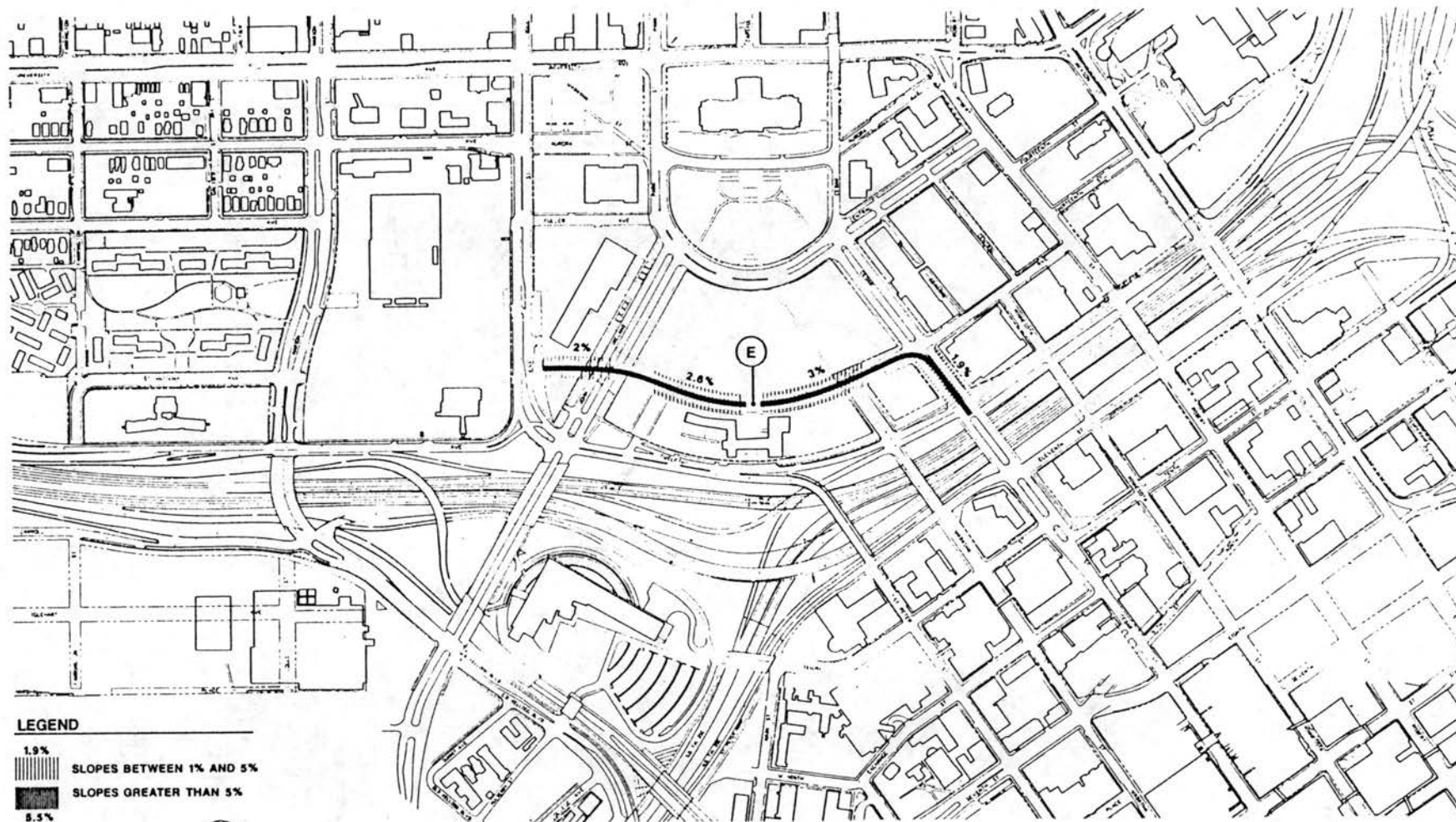
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- 1.0%
 SLOPES BETWEEN 1% AND 5%
 SLOPES GREATER THAN 5%
 5.5%

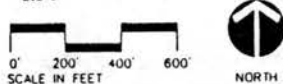
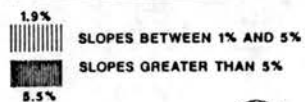


CAPITOL AREA LRT ALIGNMENT STUDY
 ALTERNATE D

Figure 6

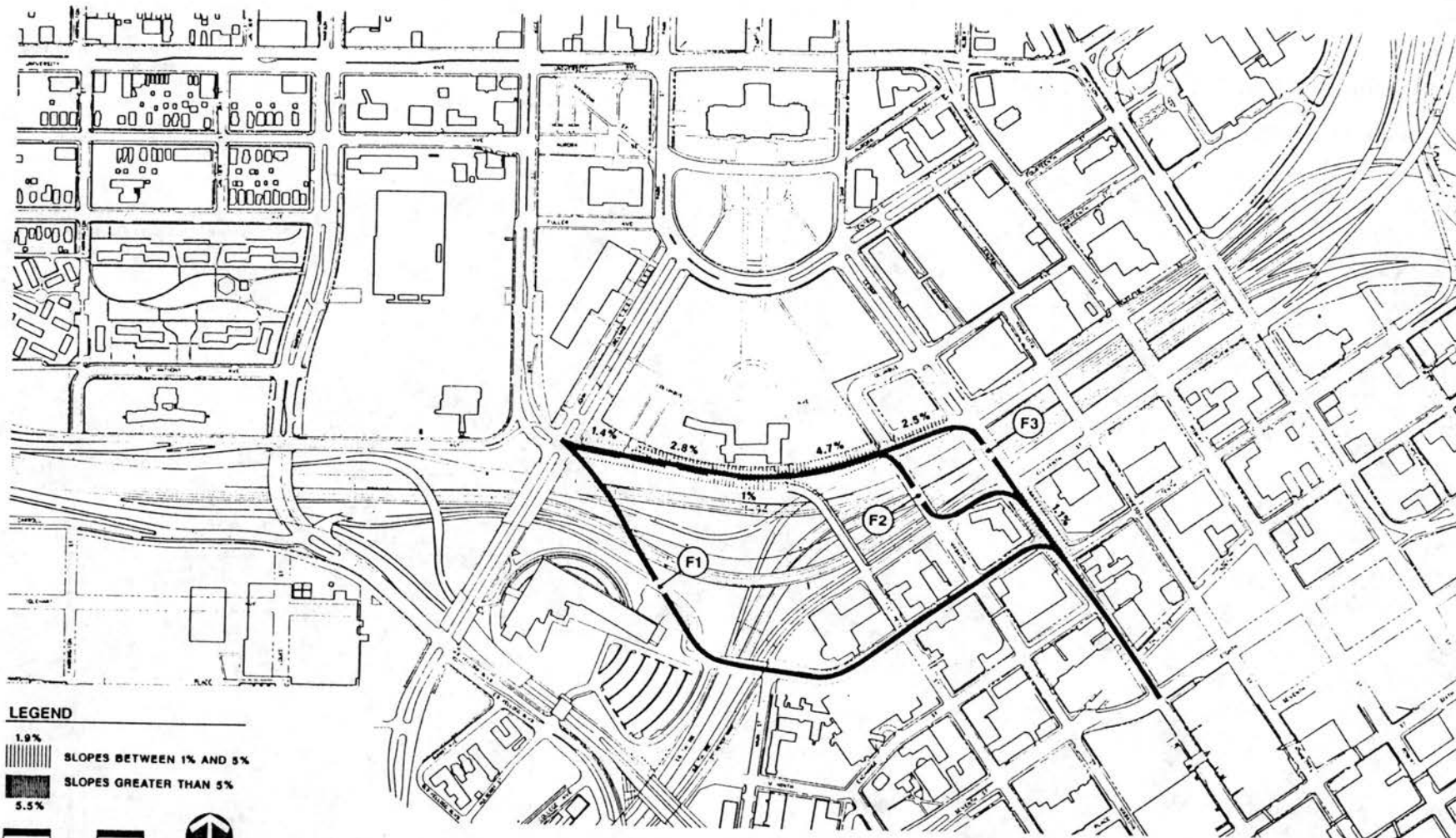


LEGEND



CAPITOL AREA LRT ALIGNMENT STUDY
 ALTERNATE E

Figure 7



LEGEND

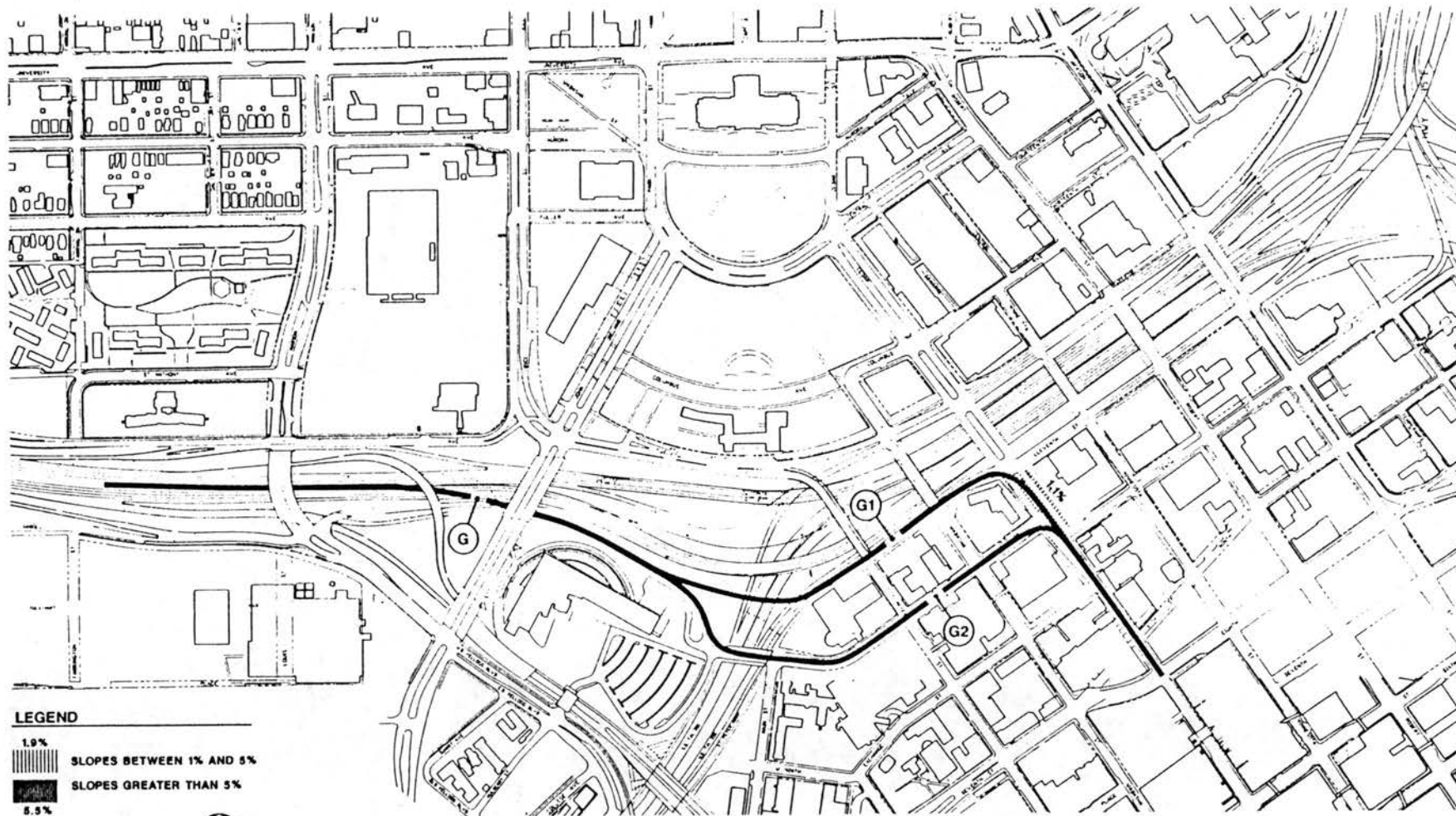
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0' 200' 400' 600'
 SCALE IN FEET
 NORTH

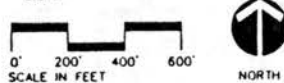
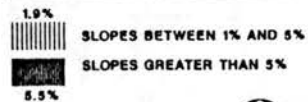


CAPITOL AREA LRT ALIGNMENT STUDY
 ALTERNATE F

Figure 8

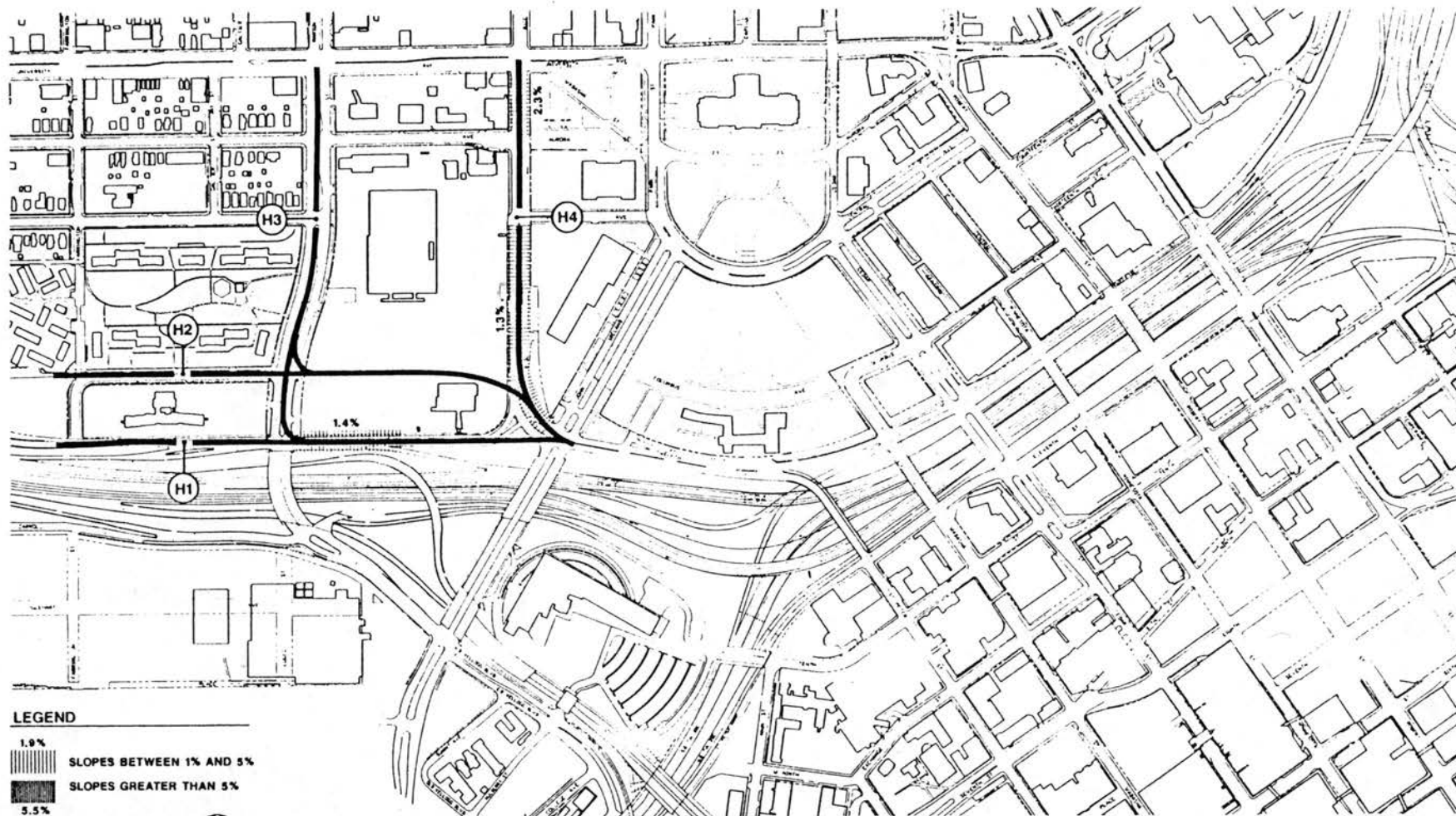


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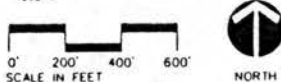
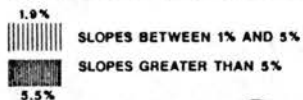


CAPITOL AREA LRT ALIGNMENT STUDY
ALTERNATE G

Figure 9



LEGEND



CAPITOL AREA LRT ALIGNMENT STUDY
ALTERNATE H

Figure 10



MEMORANDUM

DATE: September 17, 1990

TO: Jim Tolaas

FROM: Peter Smoluchowski
Steve Riley

RE: Capitol Area LRT Surface Alignments: Summary of Issues and Concerns
Related to the University Avenue Alignment

The Capitol Area LRT Alignment selection process consists of four parts, as outlined in Figure 1: Identification of a universe of alternatives; Stage I analysis (initial screening); Stage II analysis (detailed analysis); and selection of an alternative (or alternatives).

Previous memos have detailed the results of the Stage I and initial Stage II analysis, with the resulting selection of the University Avenue/Jackson Street and 12th Street alignments (Figure 2) for further study as part of the Stage II analysis. This memo details our reasons for recommending that the University Avenue/Jackson Street alignment be eliminated from further consideration.

CONCERNS WITH UNIVERSITY AVENUE SURFACE ALIGNMENT

This alignment would follow University Avenue, connecting with any of the three Midway Corridor Alignment alternatives, and would be located in a trench on the north side of the Capitol Building. Vehicular traffic would remain at the existing grade. The alignment would turn south on Jackson Street with a station north of 12th Street. The alignment would cross the Jackson Street Bridge and connect with the Downtown Transit Mall on Cedar Street via either 11th, Tenth, or Ninth Streets.

The following issues and concerns have been identified with respect to the University Avenue LRT Surface Alignment:

1. Traffic Impacts. Levels of Service (LOS) have been calculated for intersections on University Avenue and Jackson Street with and without LRT. Levels of Service (LOS) refer to expected congestion with LOS A being the best and LOS F, the worst. The alignment raises the following concerns:
 - o The geometry of the LRT alignment at the intersection of University Avenue and Jackson Streets would preclude eastbound vehicular traffic from continuing along University Avenue. Vehicles would need to turn south onto Jackson Street, increasing traffic levels on Jackson. Through traffic along Jackson Street would also be impacted.
 - o Loss of traffic lanes on Jackson Street Bridge would be unacceptable given the existing and forecasted traffic volumes.
 - o Widening of the Jackson Street Bridge would create difficulties in transitioning the bridge lanes to the Jackson Street right-of-way north of 12th Street.
 - o Levels of Service (LOS) at Jackson Street and 11th Street would be in the unacceptable LOS F category. Eleventh Street serves as a major accessway to I-35E and I-94.
 - o Levels of Service (LOS) at the intersection of University Avenue and Jackson Street and at the Jackson Street and 12th Street intersection would also be in the unacceptable LOS F category.
2. Construction and Maintenance Costs of a Trench. Construction costs are very high, nearly approaching the cost of a tunnel. Maintenance costs of a trench (removal of snow and trash for instance) are also high.
3. Impacts on Views and on Plans for North of the Capitol Building. Construction of a trench along University Avenue for LRT would preclude views toward the Capitol by LRT patrons. Since vehicular traffic would remain at the present grade, there would not be an opportunity for the creation of a pedestrian plaza north of the Capitol Building.
4. Travel Time. The more circuitous route would add three minutes of the travel time to the I-94 alignment and two minutes for the BN/Pierce Butler and University Avenue alignments. While this is a particular concern on a system-wide basis, it is also of direct concern for riders on the west side of Capitol Area who are attempting to go downtown.

5. Economic Development Considerations. Implementation of this alignment alternative may result in negative economic development impacts for the Downtown Area and the east side of the Capitol Area which would not be offset by the modest positive economic development impacts generally attributed to LRT development.

The significant traffic impacts which would result along Jackson Street and 11th Street could lead to accessibility problems for parcels along, and in proximity to, Jackson Street, thus limiting the development potential of these properties. Traffic congestion concerns could negatively impact plans for future State Office Buildings on the east side of the Capitol Area and plans for state parking facilities accessible from Jackson Street.

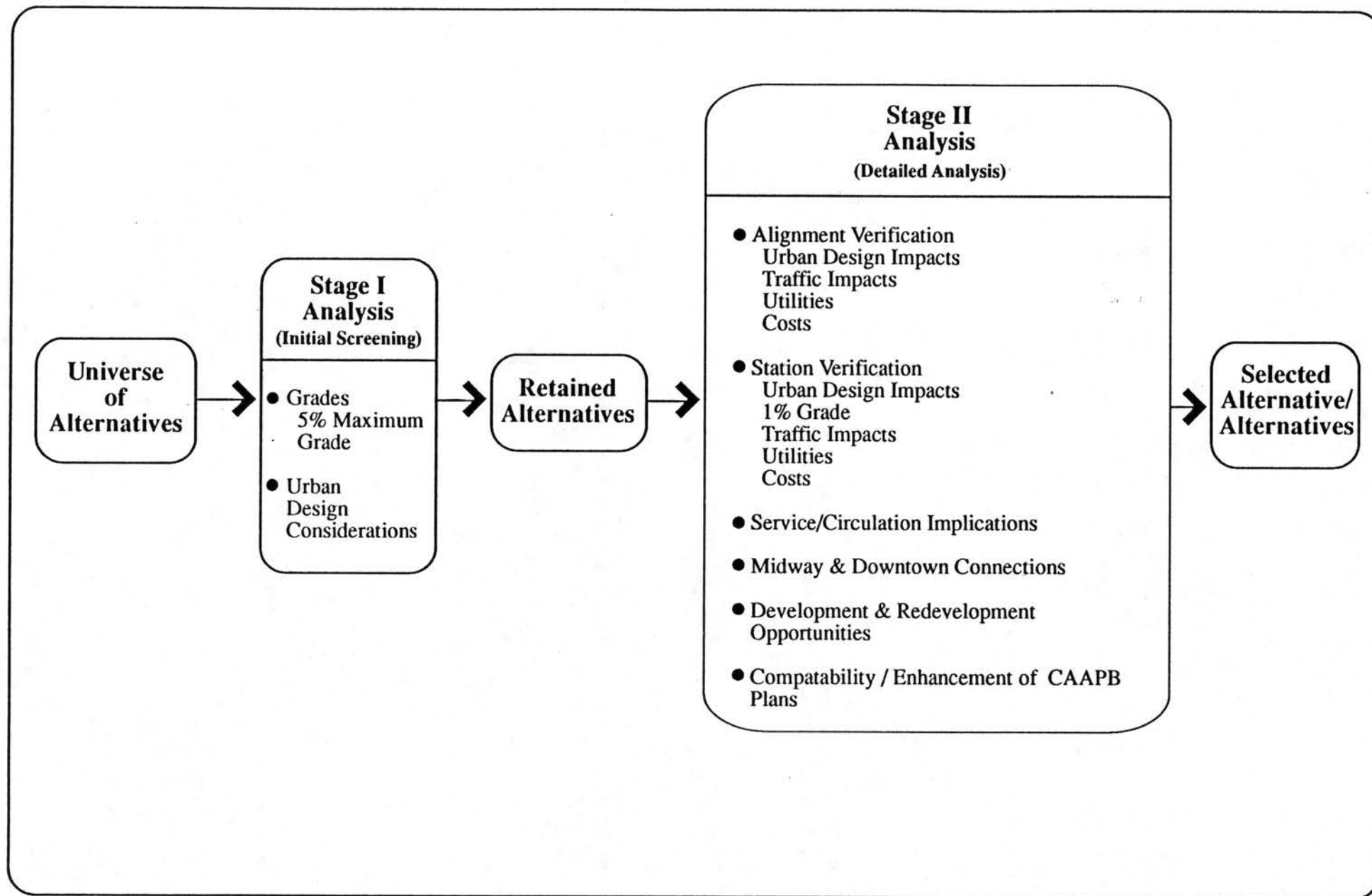
In addition, the severe congestion which would result at the Jackson Street Bridge, and at 11th Street, which serves as an accessway to I-35E and I-94 for a substantial number of Downtown workers, could constrain development opportunities throughout the Downtown area.

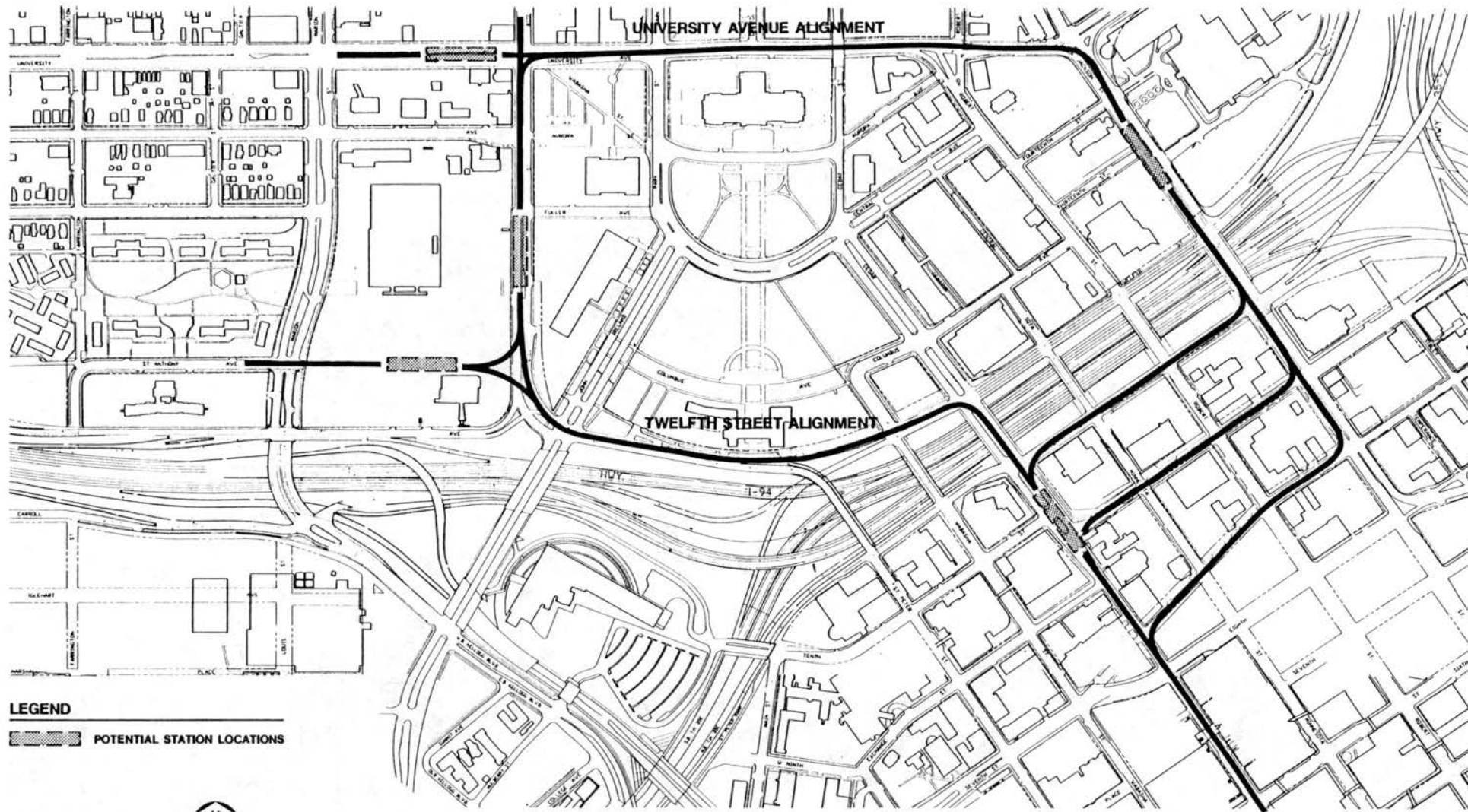
RECOMMENDATION

Based upon the issues and concerns identified, it is recommended that the University Avenue/Jackson Street Surface LRT alignment be eliminated from further consideration.

In a memo to you dated July 27, 1990, we detailed our reasons for recommending that the 12th Street alignment be retained for further consideration. It is our continued recommendation that this surface alignment be retained.

Once a preferred tunnel alignment (or alignments) is selected, the 12th Street LRT alignment will be compared with the preferred tunnel alignment in the Capitol Area.





LEGEND

 POTENTIAL STATION LOCATIONS

0' 200' 400' 600'
SCALE IN FEET

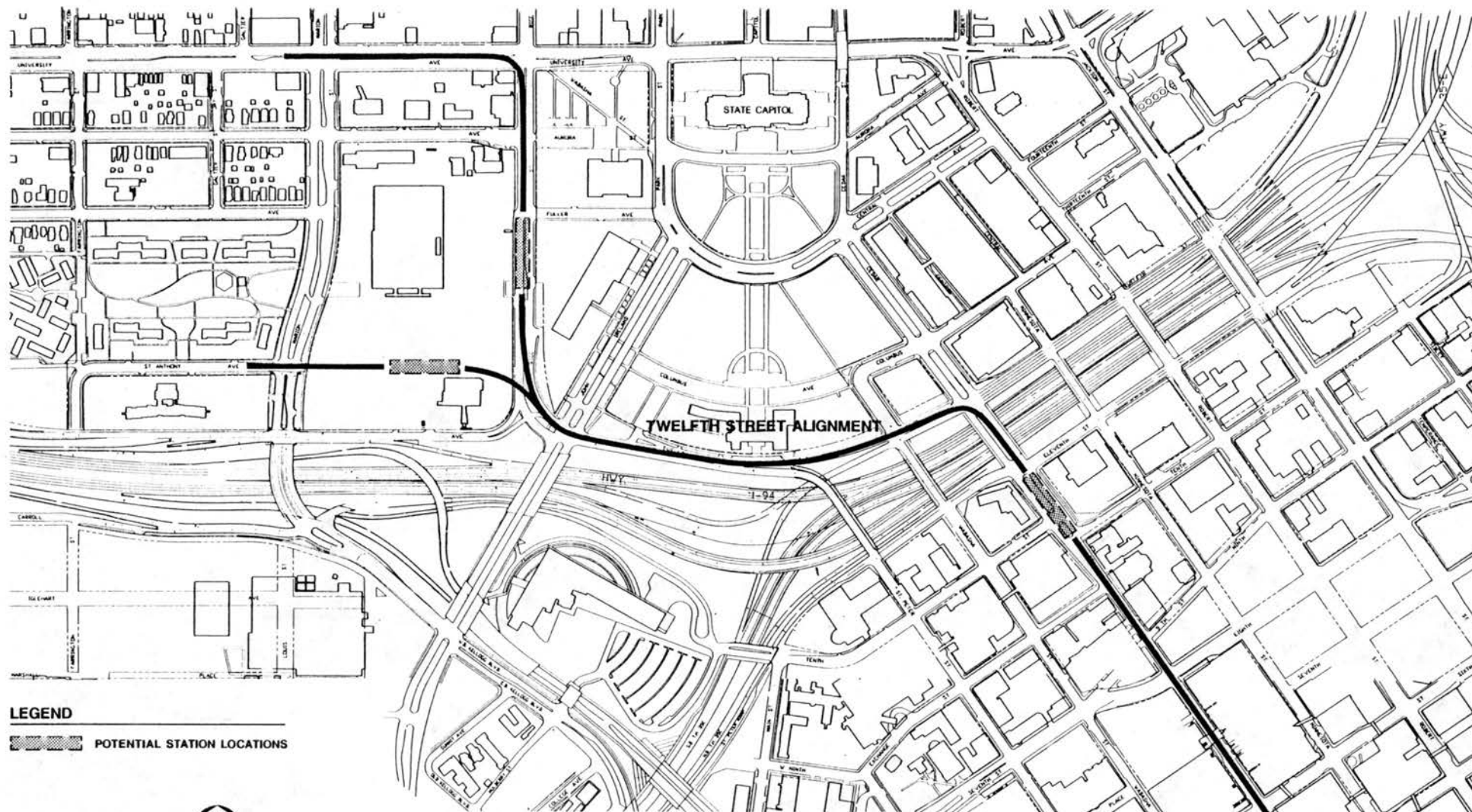


BRW

PLANNING
TRANSPORTATION
ENGINEERING
ARCHITECTURE

CAPITOL AREA LRT ALIGNMENT STUDY
RETAINED ALTERNATIVES-
UNIVERSITY AVENUE, TWELFTH STREET

Figure 2



LEGEND

 POTENTIAL STATION LOCATIONS

0' 200' 400' 600'
SCALE IN FEET



CAPITOL AREA LRT ALIGNMENT STUDY
RETAINED ALTERNATIVE-
TWELFTH STREET

Figure 3

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

7

Regional Railroad Authority
Originating Department

K. DeSpiegelaere
Authorized Signature

10/1/90
Date

Board Action Requested

Report on conference on Economic Development
and Transportation

DISCUSSION ONLY

Request Justification

See attached: Memorandum from K. DeSpiegelaere with attachment

Budgeting and Accounting

County Attorney

Risk Manager

Data Processing

Previous Action taken on Request

Ed Blauitz 10/3/90

Date / Time

Received By

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date

Committee / Meeting Date
October 9, 1990

Board Date

Signature

Signature

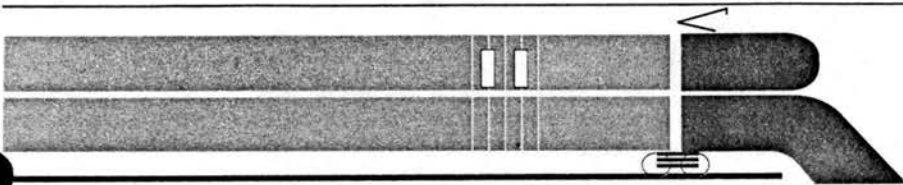
Signature

Date

Date
10/1/90

Date

F. L. Henderson



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 *K/D*

SUBJECT: A conference report -- Transportation Linkages: Accessing Opportunities for Economic Development

DATE: October 1, 1990

Commissioner Finley and I attended a conference on Economic Development and Transportation sponsored by the National Council for Urban Economic Development, on September 16-18, 1990. The conference was held in Long Beach California, at a site adjacent to the newly opened Los Angeles LRT Blue Line.

Conference speakers included:

Rosemary Scanlon, Chief Economist of the Port Authority of New York and New Jersey advised that we stop thinking about what transportation systems (roads, airports and transit) will cost and think about the physical condition of U.S. cities today. Transportation should be thought of as a life support system for cities.

She commented on the current policy of declining to build our way out of congestion. Purgatory is not a policy. What is the true cost of congestion as measured by air pollution and the cost of waiting by those using transportation systems? Rail systems such as those in San Francisco, Washington, D.C. and Portland have made major contributions to their metropolitan areas.

James Beall, Councilmember, City of San Jose, commented on the increasing local funding contribution to regional transportation systems. In California in recent years, the local contribution is 50% or more of the costs for transportation in general and an even greater percentage for transit. Local governments cannot wait for the state to take action. When a tax increase is passed, there has to be an urgency to delivering the project. San Jose delivered LRT five years ahead of the time Caltrans (the State Department of Transportation) said they (Caltrans) could do it.

Michael Conlon, Principal with Keyser Marston Associates, has worked on San Francisco's BART commuter rail system in the area of development at station areas and was previously Executive Director of the Long Beach Redevelopment Agency. He said the failure rate in joint development (public/private partnership development at transit stations) is 80 to 90%. Although BART has 250,000 passengers per day, there is very little BART-related economic development, and that is a typical track record for transit systems in California. It is difficult to acquire land around stations at a price that is reasonable and difficult to find a way to provide all the parking that is needed for the developments.

The Blue Line

While we were in Long Beach, we toured the Los Angeles Blue Line with an employee of the Rail Construction Corporation who formerly worked for the California Department of Transportation (Caltrans). I also talked to a transit supervisor, an employee of the Southern California Rapid Transit District (SCRTD) that operates the LRT system and buses. The 22-mile LRT line opened this summer and cost \$877 million to construct. It was funded by a local sales tax of 1/2%. Of the sales tax revenue, 35% is dedicated to the construction and operation of the rail transit system. The proposed system is 150 miles.

The Blue Line is located between two downtowns, Long Beach and Los Angeles, and runs along Southern Pacific railroad right of way, directly adjacent to an operating freight line. It is a high-platform system. The predominant adjacent land use is single family homes. The Blue Line is exceeding its projected ridership by three times. They expect to have 35,000 riders by the end of the first year of operation. Fifty percent of the LRT riders are not former transit users, far exceeding their projections of the number of new transit riders. I observed a varied socioeconomic group using the LRT line.

The LRT line was constructed by the Rail Construction Corporation, a subsidiary of the Los Angeles County Transportation Commission (LACTC). Information on the structure of LACTC is attached. In response to questions about who should implement LRT, the responses were that the appropriate agency is doing that in Los Angeles. Quick reactions and a single focus agency are needed. Neither Caltrans (equivalent to Mn/DOT) nor SCRTD (equivalent to MTC) were thought to be suitable because they are too slow and implementing LRT is not their primary purpose. Either they wouldn't give LRT sufficient priority or the other services they provide, such as bus service, would be likely to suffer, it was thought.

This line differed from others I have seen because security is a priority for the system. Each station has closed circuit TV cameras and each station has a minimum of one armed law enforcement person present. Those who violate transit laws, by not having a ticket or by crossing the street where LRT operates at a non-crosswalk location are subject to a \$90 fine for the first offense, \$210 fine for the second offense and go to jail for the third offense. The theory is to train citizens that the transit system is not friendly to those who violate the law.

Recommendation:

For your information.

KD/blk

FACT SHEET



**Rail
Construction
Corporation**



a Subsidiary of
the Los Angeles County
Transportation Commission

RAIL CONSTRUCTION CORPORATION 818 West Seventh St., Suite 1100, Los Angeles, California 90017 (213) 623-1194

LOS ANGELES COUNTY TRANSPORTATION COMMISSION (LACTC)

THE RAIL CONSTRUCTION CORPORATION (RCC)

The LACTC sets policies and funds, the county's streets and highways, buses, rail transit, shuttle and social-service (paratransit) transportation.

Among its most visible responsibilities are overseeing the Southern California Rapid Transit District (SCRTD), the second largest all-bus transit system in the U.S.; and development of an extensive 150-mile rail transit network.

LACTC's principal source of funds, for internal operations and for financing transportation projects and operations, is Proposition A monies. Proposition A, passed by county voters in 1980, increased local sales taxes by one half cent and provides about \$370 million annually. LACTC obtains additional federal and state funds.

Created by the Legislature in 1976, LACTC is governed by an 11-member board comprised of:

- five L.A. County supervisors:
- mayor of Los Angeles;
- two members appointed by the mayor of Los Angeles-- one a member of the city council and the other, traditionally, a private citizen;
- one member of the Long Beach City Council;
- two city council members appointed by the L.A. County City Selection Committee to represent the other 84 cities in the county.

Committees, composed of commissioners appointed by the chair-person, oversee LACTC's staff efforts and report recommendations directly to the board.

(MORE)

RCC

The RCC is an LACTC subsidiary. Activated in 1989, RCC has complete control of all Los Angeles county rail design, construction and related activities. Three of the seven-member RCC board members are appointed by the LACTC and three by the SCRTD, which operates the regional bus system and will operate rail lines in the system as they are completed. A majority of the six members appoints the seventh.

The RCC board members are:

David E. Anderson, RCC chairman, former president and chief executive office of GTE California and GTE Illinois. He was responsible for the reorganization and modernization of GTE's telephone operations in California.
(LACTC appointee)

Ernest M. Camacho, owner of a Pasadena-based civil engineering firm holding major contracts through the Department of Defense. As owner of Pacifica Services, Inc., Camacho was the 1990 recipient of the "Established Company of the Year" award from the Latin Business Association.
(LACTC appointee)

Donald F. McIntyre, who will retire in 1990 as Pasadena's city manager, where he has served since 1979. He has worked for 30 years in city manager positions in California and Michigan. (LACTC appointee)

Robert E. Kruse, an engineer and president of Kruse Construction of Sun Valley. His company has built heavy construction projects valued at more than \$100 million, including the Oakland Wye for the Bay Area Rapid Transit System (BART) and two stations with connecting tunnels for the Metropolitan Transit Authority in Washington, D.C.
(SCRTD appointee)

James T. Pott, a development consultant and owner of James Pott & Co., he has served as director of Santa Clara County Transportation Agency. He has managed transportation consultation projects. (SCRTD appointee)

Herbert L. Carter, Ph.D., executive vice chancellor of the California State University systems. He guides policy formulation and program planning for the 19-campus system.
(SCRTD appointee)

Judith Hopkinson, president of Berkeley Development Corporation, a real estate development firm, headquarters in West Los Angeles.

(MORE)

LACTC MEMBERS AND ALTERNATES

Supervisor Edmund D. Edelman
Councilman Ray Grabinski
Supervisor Peter F. Schabarum
Supervisor Kenneth Hahn
Supervisor Deane Dana
Supervisor Michael D. Antonovich
Mayor Tom Bradley
Councilman Richard Alatorre
Councilmember Christine E. Reed
Councilwoman Jacki Bacharach
Carole Stevens
Jerry B. Baxter, Director, Caltrans

LACTC Executive Director Neil Peterson
RCC Acting President Edward McSpedon

Richard Callahan
Clarence Smith
Mike Lewis
Walter H. King
Barna Szabo
Bill Korek
Ray Remy
Councilman Michael Woo
Councilman Robert White
Councilman Harold Croyts
Eduardo Bermudez

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

8

<u>Regional Railroad Authority</u> <u>Originating Department</u> <u>K. Holsiegers</u> <u>10/1/90</u> <u>Authorized Signature</u> <u>Date</u>	<u>Board Action Requested</u> <u>Update on LRT Coordination Plan</u> DISCUSSION ONLY
---	--

Request Justification

A verbal report will be given on progress on the LRT Coordination Plan and activities of the Joint LRT Advisory Committee

<u>Budgeting and Accounting</u> <u>Ed Blauht</u> <u>County Attorney</u> <u>Risk Manager</u> <u>Data Processing</u> <u>Previous Action taken on Request</u>	<u>Date / Time</u> <u>Received By</u>
--	--

Comments / Recommendation

Documentation certified complete for:

Committee / Meeting Date

Signature

Date

Committee / Meeting Date
October 9, 1990

Signature

Date

Board Date

Signature

Date

F. L. Glendenning

10/1/90

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

9

Regional Railroad Authority

Originating Department

K. Hespigelane
Authorized Signature

9/30/90
Date

Board Action Requested

Ratify Partial Payment No. 4 to SRF, Inc.
in the amount of \$12,135.33.

ACTION IS REQUIRED

Request Justification

Ramsey County Regional Railroad Authority has contracted the professional services of SRF, Inc. for the purposes of conducting Alignment Studies for the Northeast Corridor. Contract No. RCRRA-90-001 governs the performance of services and terms of payment. Payment in the amount of \$12,135.33 for the period ending August 31, 1990, has been issued in accordance with contract provisions and Rail Authority Resolution No. R90- . 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. 4
- 3) SRF, Inc. Invoice No. 4 and attachments

Budgeting and Accounting

Ed Glauity 10/3/90

County Attorney

North Marshall

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

October 9, 1990

Board Date

F. L. Glendenning
Signature

10/1/90

Date



Resolution

Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: _____

No. _____

WHEREAS, The Ramsey County Regional Railroad Authority has contracted for the professional services of Strgar-Roscoe-Fausch, Inc. for the purpose of conducting alignment studies for the Northeast Corridor; and

WHEREAS, Ramsey County Regional Railroad Authority Agreement Number RCRRA-90-001, govern the performance of services of and terms of payment to Strgar-Roscoe-Fausch, Inc.; and

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

WHEREAS, To ensure timely payment for services rendered in accordance with Agreement No. RCRRA 90-001, the Ramsey County Regional Railroad Authority authorized (Resolution R90-) the Director of Light Rail Transit Planning to process payments to Strgar-Roscoe-Fausch, Inc. for work completed and invoiced in accordance with the agreement; and

WHEREAS, Resolution R90- 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, Strgar-Roscoe-Fausch, Inc. Invoice No. 4, Partial Payment No. 4, and attachments thereto, provide the correct documentation of payments due Strgar-Roscoe-Fausch, Inc. through August 31, 1990; Now, Therefore, Be It

RESOLVED, Payment to Strgar-Roscoe-Fausch, Inc. in the amount of \$12,135.33 for Ramsey County Regional Railroad Authority's share of services rendered through August 31, 1990 is hereby ratified.

John T. Finley, Chairman

By _____
Warren W. Schaber, Secretary

ACCOUNTS PAYABLE

(1) CHARGE TO: Dept. Regional Railroad Authority Date September 24, 1990
 Appropriation Item Consulting Services

For Accounting Use Only

Claim #		Date Paid	
CA	PA017	1	
1-2		3-7	
8		9-14	

(3) Code

RFC	Fund	Dept	Object	Amount
	591	59107	020102	\$12,135.33

WARRANT NO.

\$12,135.33
Total

(4) PAY TO: 2
 8 First Name & Initial STRGAR-ROSCOE-FAUSCH, INC. 9-22
 Last Name or Firm Name 23-52
53-76
3 One Carlson Parkway North, Suite 150
 8 Address 9-32
Minneapolis, MN 55447
 City State Zip Code 33-54 55-59

Soc Sec No
OR
Fed Tax ID 60-71

(5) On Check Stub Put: 4 Partial Pymt 4; Inv. No. 4; NE Corr. Alignment Study
 9-60
5 Agreement PA017; Acct. 59107-020102; 8/31/90
 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: [Signature]

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.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

PARTIAL PAYMENT NO. 4

PREPARED BY: 

PROJECT: NORTHEAST CORRIDOR ALIGNMENT STUDY
CONTRACT AGREEMENT NUMBER RCRRA-90-001

ENTERED BY: 

PROJECT COST CENTER: 59107 AGREEMENT NO: PA017

DATE: 21 SEPT 90

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

CONTRACTOR: STRGAR-ROSCOE-FAUSCH, INC.
ONE CARLSON PARKWAY NORTH, SUITE 150
MINNEAPOLIS, MN 55447

ACCOUNT NUMBER 59107-020102	PERCENT COMPLETED	26.0%
TOTAL VALUE OF WORK CERTIFIED - 31 AUG 90		\$63,601.53
LESS 5% RETAINAGE		\$3,180.08
AMOUNT DUE		\$60,421.45
LESS PREVIOUSLY APPROVED PAYMENTS:		\$48,286.12
ALLOWABLE PAYMENT FOR THIS PARTIAL:		<u>\$12,135.33</u>

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.

9/21/90 K. W. Spieschneider
DATE DIRECTOR, RC REGIONAL RAILROAD PLANNING

9/24/90 Charleen Zimmer
DATE CONSULTANT

PREVIOUS PARTIALS:

PARTIAL PAYMENT NO. 1	\$1,571.89
PARTIAL PAYMENT NO. 2	\$18,865.32
PARTIAL PAYMENT NO. 3	\$27,848.91
PARTIAL PAYMENT NO. 4	\$12,135.33
PARTIAL PAYMENT NO. 5	\$0.00
PARTIAL PAYMENT NO. 6	\$0.00
PARTIAL PAYMENT NO. 7	\$0.00
PARTIAL PAYMENT NO. 8	\$0.00
PARTIAL PAYMENT NO. 9	\$0.00
PARTIAL PAYMENT TOTAL:	\$60,421.45

SUMMARY OF AGREEMENT

ORIGINAL AGREEMENT AMOUNT:	\$244,865.00
LESS TOTAL PARTIAL PAYMENTS (INCLUDES THIS PAYMENT)	\$60,421.45
AMOUNT REMAINING ON AGREEMENT	<u>\$184,443.55</u>

Monthly Progress Report

STRGAR-ROSCOE-FAUSCH, INC.
One Carlson Parkway North, Suite 150
Minneapolis, MN 55447

8/31/90

RE: NORTHEAST CORRIDOR LRT ALIGNMENT STUDY

SUMMARY OF WORK CONDUCTED THROUGH 8/31/90:

1. Began work on feeder bus planning and forecasting.
2. Prepared evaluation criteria for comparison of alignments.
3. Revised station locations for purposes of feeder bus planning.
4. Continued engineering feasibility study of downtown connections.
5. Prepared for and attended committee meetings and other meetings as requested by RCRA staff.
6. Project management.

To the best of our knowledge, this constitutes completion of 30% of our portion of the project.

STRGAR-ROSCOE-FAUSCH, INC.
Consulting Engineers-Land Surveyors
One Carlson Parkway North, Suite 150
Minneapolis, MN 55447

Telephone: (612) 475-0010

Refer to File: 0901380
Invoice Date: 8/31/90
Invoice No.: 4
Period Ending: 8/31/90

Ms. Kathryn DeSpiegelaere
Director of Light Rail Transit Planning
RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY
Room 316 Courthouse
15 West Kellogg Blvd.
St. Paul, MN 55102

re: NORTHEAST LRT CORRIDOR STUDY
Agreement No. RCRRA-90-001

Summary of professional engineering services rendered during August:

	CURRENT PERIOD	CUMMULATIVE TO DATE
Total Labor and Overhead	12,088.82	60,649.10
Total Direct Non-Salary Costs	685.22	2,952.43
TOTAL FEE EARNED	12,774.04	63,601.53
Less 5% Retainage	638.70	3,180.07 ⁸
TOTAL	12,135.34	60,421.46 ⁵
 TOTAL AMOUNT DUE THIS INVOICE	 12,135.34 ³ =====	

COMMISSION # 901380
 NORTHEAST LRT CORRIDOR STUDY
 PERIOD ENDING AUGUST 31, 1990

EMPLOYEE	CLASSIFICATION	RATE/HR	HOURS	AMOUNT
P. Fausch	Principal	85.00	1.0	85.00
C. Zimmer	Principal	80.00	27.5	2200.00
J. Kern	Associate	80.00	69.5	5560.00
J. Kranig	Associate	75.90	1.0	75.90
W. Gardner	Trans. Planner	63.82	19.5	1244.49
F. Loetterle	Trans. Planner	44.15	2.0	88.30
D. Paulu	Sr. Technician	39.60	23.0	910.80
J. VanBeck	Technician	35.71	4.0	142.84
V. Martinez	Technician	35.51	6.5	230.82
W. Baker	Technician	34.65	9.5	329.18
L. Grover	Technician	33.00	11.0	363.00
L. Williams	Technician	28.05	10.0	280.50
J. Lubenda	Admin. Assistant	44.55	8.6	383.13
B. Bersie-Ashfeld	Word Processor	41.25	2.2	90.75
L. Charlev	Word Processor	27.72	1.5	41.58
K. Dooley	Clerical	26.23	1.0	26.23
D. Roscoe	Clerical	18.15	2.0	36.30
-----	TOTALS -----		199.8	12088.82

DIRECT NON-SALARY COSTS (SUMMARY)
PERIOD ENDING AUGUST 31, 1990

NORTHEAST LRT CORRIDOR STUDY

CAT #	CATEGORY	
1	MILEAGE	113.36
2	PARKING	31.00
9	SPECIAL DELIVERY	50.65
10	POSTAGE	19.75
13	IN-HOUSE COPY DUPLICATION	63.00
17	PRINTING	164.95
21	FILM & DEVELOPING	75.26
22	SUPPLIES	18.76
51	CPP 10 X 12 PAPER	115.20
53	CPP 20 X 24 PAPER	9.78
56	CPF 10 X 12 FILM	22.56
80	BRUNING BOND PRINTS	0.95

TOTAL DIRECT EXPENSES

685.22

DIRECT NON-SALARY COSTS (DETAILS)
PERIOD ENDING AUGUST 31, 1990

CAT.	DATE	SOURCE	NO. ORGS	NO. EACH	LENGTH	WIDTH	TOTAL COPIES	NO. STATS	NO. UNITS	MILES	AMOUNT	TOTAL CHARGE
1	1	C Zimmer								185.0		48.10
1	31	C Zimmer								135.0		35.10
1	31	J Kern								66.0		17.16
1	31	V Martinez								33.0		8.58
1	31	J Lubenda								6.0		1.56
1	31	D Roscoe								11.0		2.86
2	13	Accounts Payable									5.50	5.50
2	13	Accounts Payable									11.25	11.25
2	31	Accounts Payable									0.50	0.50
2	31	Accounts Payable									13.75	13.75
9	20	Accounts Payable									50.65	50.65
10	31	In-House									19.50	19.50
10	31	In-House									0.25	0.25
13	30	In-House	1	50			50					5.00
13	30	In-House	1	90			90					9.00
13	31	In-House	1	50			50					5.00
13	31	In-House	10	44			440					44.00
17	10	Accounts Payable									145.85	145.85
17	22	Accounts Payable									19.10	19.10
21	20	Accounts Payable									75.26	75.26
22	13	Accounts Payable									7.84	7.84
22	13	Accounts Payable									10.92	10.92
51	6	In-House						2				9.60
51	8	In-House						4				19.20
51	28	In-House						18				86.40
53	28	In-House						1				9.78
56	21	In-House						2				11.28
56	28	In-House						2				11.28
80	22	In-House			36.0	42.0	1					0.95

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

10

Regional Railroad Authority

Originating Department

K. LeSpiegel 9/30/90
Authorized Signature Date

Board Action Requested

Ratify Partial Payment No. 11 to BRW, Inc.
in the amount of \$142,385.49

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 \$142,385.49 for the period ending July 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. 11
- 3) BRW, Inc. Invoice No. 59179 and attachments

Budgeting and Accounting

Ed Glauert 10/3/90

County Attorney

Wendell M. Miller

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

October 9, 1990

Board Date

Signature

F. L. Glendinning

Signature

Date

10/1/90

Date



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 July 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 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. 59179, Partial Payment No. 11, and attachments thereto, provide the correct documentation of payments due BRW, Inc. through July 31, 1990; Now, Therefore, Be It

RESOLVED, Payment to BRW, Inc. in the amount of \$142,385.49 for Ramsey County Regional Railroad Authority's share of services rendered through July 31, 1990 is hereby ratified.

John T. Finley, Chairman

By _____
Warren W. Schaber, Secretary

ACCOUNTS PAYABLE

(1) CHARGE TO: Dept. Regional Railroad Authority Date 9/19/90
 (2) Appropriation Item Consulting Services

For Accounting Use Only

Claim #		Date Paid	
CA	PA800	1	
1-2		3-7	
8		9-14	

(3) Code

WARRANT NO.

RFC	Fund	Dept	Object	Amount
	591	59103	020102	\$142,385.49

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

\$142,385.49
Total

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

Soc Sec No
OR
Fed Tax ID 60-71

(5) On Check Stub Put: 4 Partial Pymt 11; Inv. 59179; Phase I PE/EIS--Midway Corridor
5 Agreement PA800; Acct. 59103-020102; 7/31/90
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: K. Desjardins

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.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

PARTIAL PAYMENT NO. 11

PREPARED BY: 

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

ENTERED BY: 

PROJECT COST CENTER: 59103

AGREEMENT NO: PA 800

DATE: 17 SEPT 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	58.4%
TOTAL VALUE OF WORK CERTIFIED - 31 JULY 90		\$816,250.19
LESS 5% RETAINAGE		\$40,812.51
AMOUNT DUE		\$775,437.68
LESS PREVIOUSLY APPROVED PAYMENTS:		\$618,012.91
ALLOWABLE PAYMENT FOR THIS PARTIAL:		<u>\$157,424.77</u>

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.

8/21/90 K. K. Spiegel
DATE DIRECTOR, RC REGIONAL RAILROAD PLANNING

9/18/90 David M. Hume
DATE CONSULTANT

PREVIOUS PARTIALS:	RCRA SHARE	HCRA 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	\$55,234.37	\$7,274.62	\$62,508.99
PARTIAL PAYMENT NO. 7	\$74,637.71	\$9,938.04	\$84,575.75
PARTIAL PAYMENT NO. 8	\$75,747.93	\$10,078.03	\$85,825.96
PARTIAL PAYMENT NO. 9	\$107,136.59	\$14,316.72	\$121,453.31
PARTIAL PAYMENT NO. 10	\$107,744.28	\$13,616.50	\$121,360.78
PARTIAL PAYMENT NO. 11	\$142,385.49	\$15,039.28	\$157,424.77
PARTIAL PAYMENT TOTAL:	\$688,695.35	\$86,742.33	\$775,437.68

SUMMARY OF AGREEMENT

ORIGINAL AGREEMENT AMOUNT:	\$1,398,039.00
LESS TOTAL PARTIAL PAYMENTS (INCLUDING THIS PAYMENT)	<u>\$775,437.68</u>
AMOUNT REMAINING ON AGREEMENT	<u>\$622,601.32</u>



MINNEAPOLIS • DENVER • PHOENIX • TUCSON • ST. PETERSBURG

INVOICE
59179

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: July 31, 1990

JOB NO: 41-8923 through
41-8939, 62-8944,
62-8954, 26-8956,
62-9004 through
62-9010, 26-9001
through 26-9003

INVOICE PERIOD: July 1 - July 31, 1990
INVOICE DATE: July 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	\$ 149,879.46	\$ 575,063.02	\$ 724,942.48
o Less 5% Retainage	7,493.58 ⁹⁷	28,753.16 ⁵	36,246.74 ^{7.12}
o Due This Billing	\$ 142,385.88 ⁴⁹	\$ 546,309.86 ⁷	\$ 688,695.74 ³⁶
Hennepin County RRA	\$ 15,830.82	\$ 75,476.89	\$ 91,307.71
o Less 5% Retainage	791.54	3,773.88 ⁵	4,565.42 ³⁹
o Due This Billing	\$ 15,039.28	\$ 71,703.01 ⁴	\$ 86,742.29 ³²

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, PE
Senior Associate

DATE: August 13, 1990
TO: Jim Tolaas
Ken Stevens
FROM: Jennie Thatcher
RE: Billing Adjustments

MEMORANDUM

Two billing errors in labor rates are being corrected this month. The first error is in the labor rates for our project number 26-9007. The computer did not pick up the correct billing rate schedule and, therefore, the June 30, 1990, invoice was underbilled as follows:

Name	Billed	Should Be	Difference
Jensen, Steve	\$ 55.76	\$ 176.80	\$ 121.04
Thomas, Mike	<u>72.37</u>	<u>245.96</u>	<u>173.59</u>
Total	\$ 128.13	\$ 422.76	\$ 294.63

The second adjustment is for the Network Coder labor rates on our Job Number 41-8927 for Laurie Anderson and Kathy Hanson. Per the May 17, 1990, letter and subsequent approval of the labor rates, the Network Coder rate is to be billed at \$20.75, with an additional rate of \$2.08 if the coders stay with the project until completion. From now on, adjustments will appear in hand written form directly on the labor breakdown report. Credit for April through June billings will be adjusted as follows:

Name	No. of Hours	Originally Billed	Should Be	Difference
Anderson, Laurie	360.0	\$12,168.00	\$ 7,470.00	\$ (4,698.00)
Hanson, Kathy	<u>410.0</u>	<u>13,858.00</u>	<u>8,507.50</u>	<u>(5,350.50)</u>
Total	770.0	\$26,026.00	\$15,977.50	\$(10,048.50)

Both adjustments will be reflected in the July invoice under the correct job numbers and tasks. Please call if you should have any questions.

JT/lp

ATTACHMENT NUMBER 1 TO AGREEMENT RCRA - 89003
COST DETERMINATION BY WORK TASK FOR RCRA AND HCRA
INVOICE PERIOD : JULY 1, 1990 - JULY 31, 1990
FILENAME: 89003_1

WORK TASK	JOB NUMBER	LABOR \$	DIRECT EXPENSES \$	TOTAL	RCRA ALLOCATION AMOUNT %	RCRA ALLOCATION AMOUNT	HCRA ALLOCATION AMOUNT %	HCRA ALLOCATION AMOUNT
0 PROJECT MANAGEMENT	41-8923	\$4,994.60	\$160.37	\$5,162.97	89%	\$4,595.04	11%	\$567.93
1 PROJECT INITIATION	41-8924	\$0.00	\$0.00	\$0.00	88%	\$0.00	12%	\$0.00
2 COMMUNITY PARTICIPATION PROGRAM	41-8925	\$7,173.40	\$833.67	\$8,007.07	90%	\$7,206.36	10%	\$800.71
3 SYSTEM PLANNING AND ENGINEERING	41-8926, 41-8937, 62-8944, 62-9009, 26-8956, 26-9002	\$51,557.40	\$289.36	\$51,846.76	88%	\$45,625.15	12%	\$6,221.61
4 ROUTE ENGINEERING AND DESIGN	41-8927, 41-8938, 62-9004, 62-9010, 26-9001, 26-9003	\$25,760.62	\$1,967.05	\$27,727.67	88%	\$24,400.35	12%	\$3,327.32
5 PROTOTYPICAL STATION ZONE DESIGN	41-8928, 41-8939, 62-9005, 62-9014	\$811.20	\$0.00	\$811.20	90%	\$730.08	10%	\$81.12
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, 62-9015, 26-9007	\$39,900.17	\$367.54	\$40,267.71	88%	\$35,435.58	12%	\$4,832.13
11 SELECT LOCALLY PRE- FERRED 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
13 CAPITOL AREA TUNNEL	26-9005, 41-9023, 62-9029	\$5,519.02	\$30.96	\$5,549.98	100%	\$5,549.98	0%	\$0.00
14 DOWNTOWN AREA TUNNEL	26-9004, 41-9022, 62-9016	\$26,310.44	\$26.88	\$26,337.32	100%	\$26,337.32	0%	\$0.00
TOTAL		\$162,026.85	\$3,683.83	\$165,710.68		\$149,879.86		\$15,830.82

MEMORANDUM

DATE: August 22, 1990

TO: Jim Tolaas
Ramsey County Regional Railroad Authority
316 Courthouse
15 West Kellogg Boulevard
St. Paul, MN 55102

FROM: David M. Warner, PE 

RE: MIDWAY CORRIDOR LRT PE & EIS
PROGRESS REPORT
Reporting Period: July 1 - 31, 1990

WORK COMPLETED DURING THIS REPORTING PERIOD

1.0	Project Initiation Activities	Estimated Completion	100%
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2.0	Community Participation Program	Estimated Completion	75%
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- o Midway Corridor Task Force
- o Newsletter Production of Issue No. 8.
- o Technical Group MCTG meeting held July 11, 1990.
- o Downtown LRT Task Force DTF meetings held July 12 and 26, 1990. Meetings held with downtown building owners.
- o Intergovernmental Committee IC meeting held July 17, 1990.
- o Capitol Area group Meeting held July 19, 1990.
- o City of St. Paul Several meetings held with Staff.

Mr. Jim Tolaas
August 22, 1990
Page 2

- o Tunnel Coordination Group TCG meeting July 13, 1990.
- o Other Met with Prospect Park Neighborhood group July 18, 1990.

3.0 System Planning and Engineering	Estimated Completion 95%
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- o Corridor Alignments Continued development of alternative alignments in Capitol Area connecting corridor alignment alternatives to Downtown alternatives.

4.0 Route Engineering and Design	Estimated Completion 60%
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- o Base Mapping Base mapping is complete.
- o Ridership Forecasts Progress on ridership forecasts is documented in twice-weekly progress reports. Please refer to them for up-to-date information.
- o Plan Preparation Preparing plan and profile drawings of all three alignments.

Work on Pierce Butler Route alignment was temporarily halted at the direction of RCRRA staff.
- o Coordination Maintained contact with City of St. Paul, Soo Line Railroad, Mn/DOT to discuss issues related to alignment design.

5.0 Prototypical Station Zone Design	Estimated Completion 10%
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- o Station Layout Preliminary work on station site selection and typical layout.

6.0 Support Facilities	Estimated Completion %
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7.0 Cost Analysis	Estimated Completion 20%
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8.0 Finance and Management Analysis	Estimated Completion 2%
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Mr. Jim Tolaas
August 22, 1990
Page 3

9.0	Implementation Planning	Estimated Completion	%
10.0	Environmental Studies	Estimated Completion	70%
o	Data Collection	Continued collection data from various sources for use in EIS preparation.	
o	Environmental Setting	Submitted sections Chapter 4 of EIS to RCRRA and HCRRA for review.	
o	Environmental Impacts	Submitted sections Chapter 5 of EIS to RCRRA and HCRRA for review.	
11.0	Locally Preferred Alternative Report	Estimated Completion	%
12.0	Phase II Preliminary Engineering Work Program	Estimated Completion	%
13.0	Capitol Area Tunnel Analysis	Estimated Completion	20%
o	Alternatives Identification	Developed station concepts.	
14.0	Downtown Area Tunnel Analysis	Estimated Completion	30%
o	Alternatives Identification	Developed station concepts and alignment alternatives.	

PLANNED WORK EFFORT FOR NEXT REPORTING PERIOD

Finalize identification of University alignment.

Complete preliminary design plans for identified alignments.

Begin cost estimates.

Complete ridership forecasts.

Continue preparation of DEIS sections.

Mr. Jim Tolaas
August 22, 1990
Page 4

PROBLEMS ENCOUNTERED

Ridership forecasts are late in completion because of problems with new model components (See ridership progress reports.).

Resolution of alignment issues delays production of preliminary design plans for University Avenue alignment.

PROJECT COMPLETION/BUDGET REPORT (as of 7/31/90)

o	Contract Amount	\$1,598,039.00	
o	Amount Spent	\$816,250.59	
o	Percent Spent	51.1%	
o	Percent Complete	50.9%	(See attachment.)

JM/blp

cc: Kathy Despiegelaere, Director of LRT, RCRRA
Ken Stevens, LRT Director, HCRRA
Project File: 41-8923 - Midway Project Management

Ramsey County Regional Railroad Authority
 Light Rail Transit
 Preliminary Engineering and Environmental Impact Statement

PROJECT COMPLETION REPORT

August 28, 1990

Work Task	Percent of Total Project	Percent of Task Complete	Percent of Project Complete
0 - Project Management	4.7%	75%	3.5%
1 - Project Initiation Activities	0.8%	100%	0.8%
2 - Community Participation Program	6.4%	75%	4.8%
3 - System Planning and Engineering	9.0%	95%	8.6%
4 - Route Engineering and Design	26.0%	60%	15.6%
5 - Prototypical Station Zone Design	4.1%	10%	0.4%
6 - Support Facilities	1.7%		
7 - Cost Analysis	4.4%	20%	0.9%
8 - Finance and Management Analysis	1.7%	2%	0.0%
9 - Implementation Planning	2.0%		
10 - Environmental Studies	23.3%	70%	16.3%
11 - Select Locally Preferred Alternative	0.8%		
12 - Work Program - Phase II Preliminary Engineering	1.7%		
13 - Capitol Area Tunnel Study	3.0%	20%	0.6%
14 - Downtown Area Tunnel Study	10.4%	30%	3.1%
Total	100.0%		50.9%

BRW, INC.

JULY 31, 1990
INVOICE NO. DRAFT
JOB NO. 04189.23

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PRINCIPAL			
WOLSFELD, RICHARD	17.5	135.20	2,366.00
SR. ASSOCIATE			
WARNER, DAVID	33.0	78.00	2,574.00
TECHNICIAN I			
ACHLAND, CAROL	0.6	26.00	15.60
RONHOUE, NANCY	0.2	26.00	5.20
SCHODENBERG, KATHY	1.3	26.00	33.80
SUBTOTALS	2.1		54.60
TOTALS	52.6		4,994.60

TOTAL LABOR 4,994.60

TOTAL THIS JOB \$ 4,994.60

HIGHWAY LET SYSTEM ENG

JOB NO. 02489.01

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

BRW. INC.

INVOICE NO. DRAFT

JOB NO. 04189.23

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PRINCIPAL			
ERICKSON, GARY	9.5	135.20	1,284.40
ASSOCIATE			
BERTELSEN, JOHN	15.5	72.80	1,128.40
PROFESSIONAL II			
SKOW, BRADLEY	127.0	57.20	7,264.40
PROFESSIONAL I			
KLEIN, JAMES	25.0	44.20	1,105.00
TECHNICIAN III			
PATRICK, CHRISTOPHER	3.0	36.40	109.20
SHARROW, JOSEPH	107.0	36.40	3,894.80
SUBTOTALS	110.5		4,612.20
TECHNICIAN II			
BLUM, BARBARA	3.2	35.80	114.56
TECHNICIAN I			
JENSEN, KENNETH	0.2	26.00	5.20
KRUEGER, DUFF	2.0	26.00	52.00
MULITOR, LINDA	0.3	26.00	7.80
POPE, LEZLIANNE	0.5	26.00	13.00
SCHODENBERG, KATHY	0.7	26.00	18.20
WINFREV, MARK	3.0	26.00	78.00
SUBTOTALS	6.7		174.20
TOTALS	302.4		15,255.76

TOTAL LABOR 15,255.76

TOTAL THIS JOB \$ 15,255.76

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MIDWAY LET DWGTH SVS PLN

JOB NO. 02690.02

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

BRH, INC.

INVOICE NO. DRAFT

JOB NO. 04189.23

	HOURS	RATE	AMOUNT
ASSOCIATE			
BERTELSEN, JOHN	26.0	72.80	1,892.80
JAHN, BERNARD	3.5	72.80	254.80
SUBTOTALS	29.5		2,147.60
PROFESSIONAL II			
SKOW, BRADLEY	33.0	57.20	1,887.60
TECHNICIAN III			
CODZENOVY, SCOTT	17.5	36.40	637.00
GILBERT, GREGORY	75.0	36.40	2,730.00
SUBTOTALS	92.5		3,367.00
TECHNICIAN I			
JENSEN, KENNETH	1.3	26.00	33.80
SCHODENBERG, KATHY	1.4	26.00	36.40
SUBTOTALS	2.7		70.20
TOTALS	157.7		7,472.40

TOTAL LABOR 7,472.40

TOTAL THIS JOB \$ 7,472.40

MIDWAY LRT DWMTH TUNNEL

JOB NO. 02690.04

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PRINCIPAL			
ERICKSON, GARY	14.5	135.20	1,960.40
PROFESSIONAL II			
FISCHER, DOUGLAS	45.9	57.20	2,624.00
TECHNICIAN II			
BLUM, BARBARA	2.0	35.80	71.60
MCNELIS, JOHN SCOTT	45.8	35.80	1,648.04
SUBTOTALS	47.8		1,615.64

ERM, INC.

INVOICE NO. DRAFT

JOB NO. 04189.23

TECHNICIAN I

JENSEN, KENNETH	0.2	26.00	5.20
LAYER, JULIE	0.8	26.00	20.80
SUBTOTALS	1.0		26.00

TOTALS	108.3		6,176.04
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TOTAL LABOR 6,176.04

TOTAL THIS JOB \$ 6,176.04

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MIDWAY LRT CAP TUNNEL

JOB NO. 02690.05

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PRINCIPAL			
ERICKSON, GARY	6.0	195.20	811.20
ASSOCIATE			
JANN, BERNARD	1.0	72.90	72.90
PROFESSIONAL II			
FISCHER, DOUGLAS	16.0	57.20	915.20
TECHNICIAN II			
BLUM, BARBARA	2.2	33.80	74.36
MCHELIS, JOHN SCOTT	45.7	33.80	1,544.66
SUBTOTALS	47.9		1,619.01

TECHNICIAN I

JENSEN, KENNETH	0.2	26.00	5.20
KRUEGER, DUFF	1.0	26.00	26.00
LAYER, JULIE	0.2	26.00	5.20
SUBTOTALS	1.4		36.40

TOTALS	72.3		3,454.62
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TOTAL LABOR 3,454.62

TOTAL THIS JOB \$ 3,454.62

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BRW, INC.

INVOICE NO. DRAFT
JOB NO. 04189.23

MIDWAY LRT EIS-ENGINEER

JOB NO. 02690.07

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PROFESSIONAL II			
THOMAS, MICHAEL	12.5	57.20	715.00
TECHNICIAN I			
JENSEN, KENNETH	0.2	26.00	5.20
TOTALS	12.7		720.20

TOTAL LABOR 720.20

TOTAL THIS JOB \$ 720.20

MIDWAY LRT-COMMUNITY PAR

JOB NO. 04189.25

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PRINCIPAL			
WOLSFELD, RICHARD	8.0	135.20	1,081.60
SR. ASSOCIATE			
WARNER, DAVID	9.0	78.00	702.00
PROFESSIONAL I			
COLBURN, ELIZABETH	84.5	44.20	3,734.90
HORWITZ, BARBARA	10.0	44.20	442.00
SUBTOTALS	94.5		4,176.90

BRW, INC.

INVOICE NO. DRAFT

JOB NO. 04189.23

TECHNICIAN III

NAME	HOURS	RATE	AMOUNT
PATRICK, CHRISTOPHER	2.0	36.40	72.80

TECHNICIAN II

HAWKINS, TOM	9.0	33.80	304.20
WICKLUND, DAVID	5.5	33.80	185.90
SUBTOTALS	14.5		490.10

TECHNICIAN I

ASHLAND, CAROL	2.8	26.00	72.80
BEVER, GINA	0.2	26.00	5.20
BUCKLEY, SUSAN	0.5	26.00	13.00
DEWEY, PAMELA	0.3	26.00	7.80
HARRICK, CLAUDIA	3.6	26.00	93.60
HENDERSON, JANE	1.6	26.00	41.60
HUFFMEISTER, JEAN	1.5	26.00	39.00
HOVERSON, TERESA	0.5	26.00	13.00
JENSEN, KENNETH	0.1	26.00	2.60
KRUEGER, DUFF	0.4	26.00	10.40
MERRILL, GREGORY	1.1	26.00	28.60
MOLITOR, LINDA	3.9	26.00	101.40
MURPHY, JAMES	2.0	26.00	52.00
POPE, LEZLIANNE	0.4	26.00	10.40
ROHMBOVE, RANDY	0.7	26.00	18.20
SCHODENBERG, KATHY	0.7	26.00	18.20
CHAM, KATHRYN	0.5	26.00	13.00
THURY, TAMI	4.0	26.00	104.00
SUBTOTALS	25.0		650.00

TOTALS	153.0		7,173.40
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DIAL LABOR 7,173.40

TOTAL THIS JOB \$ 7,173.40

MIDWAY LRT-SYSTEM PLAN.

JOB NO. 04189.26

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

SR. ASSOCIATE	HOURS	RATE	AMOUNT
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BRW, INC.

INVOICE NO. DRAFT

JOB NO. 04189.13

PRESTON, EDWARD	20.5	78.00	1,599.00
WARNER, DAVID	8.0	78.00	624.00
SUBTOTALS	28.5		2,223.00
ASSOCIATE			
MOORE, DOUGLAS	0.5	72.80	36.40
PROFESSIONAL II			
HEWITT, WILLIAM	53.5	57.20	3,060.20
HOLSTEIN, JEFFREY	5.5	57.20	314.60
RUSCO, BRENT	22.0	57.20	1,258.40
SMITH, WILLIAM	57.0	57.20	3,254.40
SUBTOTALS	138.0		7,893.60
PROFESSIONAL I			
CULLEN, SANDRA	58.0	44.20	2,563.60
TECHNICIAN III			
PATRICK, CHRISTOPHER	2.0	36.40	72.80
TECHNICIAN II			
LAMPPA, JASON	29.5	33.60	997.10
TECHNICIAN I			
HIGHLAND, CAROL	1.4	26.00	36.40
BUCKLEY, SUSAN	0.3	26.00	7.80
DANEY, DAVID	4.0	26.00	104.00
DUNNOM, JAMES	4.0	26.00	104.00
GREEN, KENT	9.5	26.00	247.00
HENDERSON, JANE	0.7	26.00	18.20
HOBLEY, MARK	4.0	26.00	104.00
JENSEN, KENNETH	1.1	26.00	28.60
KOLA-BANKOLE, FELICIA	0.5	26.00	13.00
KRUEGER, DUFF	0.4	26.00	10.40
MCKENZIE, BRYAN	6.0	26.00	156.00
MERRILL, GREGORE	4.4	26.00	114.40
MURTHA, IV, THOMAS	5.0	26.00	130.00
ROMHOUE, NANCY	0.2	26.00	5.20
SUBTOTALS	41.5		1,079.00
TOTALS	298.0		14,865.50

TOTAL LABOR 14,865.50

TOTAL THIS JOB \$ 14,865.50

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BRW, INC.

INVOICE NO. DRAFT

JOB NO. 04189.23

MIDWAY LRT-ROUTE ENG.

JOB NO. 04189.27

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PRINCIPAL			
WOLSFELD, RICHARD	2.5	135.20	338.00
SR. ASSOCIATE			
WARNER, DAVID	34.0	76.00	2,652.00
ASSOCIATE			
MOORE, DOUGLAS	0.5	72.80	36.40
TECHNICIAN II			
HANSON, KATHY	128.0	20.75	2,656.00
TECHNICIAN I			
ASHLAND, CAROL	0.8	26.00	20.80
HARRICK, CLAUDIA	1.0	26.00	26.00
JENSEN, KENNETH	3.3	26.00	85.80
KORHONEN, NANCY	1.0	26.00	26.00
SUBTOTALS	61		158.80
TOTALS	171.1		7,511.40

TOTAL LABOR 7,511.40

TOTAL THIS JOB \$ 7,511.40

MIDWAY LRT-ENVIRON. STDY

JOB NO. 04189.33

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

BRW, INC.

INVOICE NO. DRAFT
JOB NO. 04189.23

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PRINCIPAL			
WOLSFELD, RICHARD	3.5	135.20	473.20
SR. ASSOCIATE			
WARNER, DAVID	14.0	76.00	1,092.00
ASSOCIATE			
HEPPELMANN, TONY	11.0	72.80	800.80
HAU, RICHARD	4.0	72.80	291.20
SUBTOTALS	15.0		1,092.00

SR. PROFESSIONAL

RUEHR, ERIK	5.0	67.60	338.00
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PROFESSIONAL II

KUNKEL, BETH	1.0	57.20	57.20
HILES, MARK	45.0	57.20	2,574.00
SMITH, WILLIAM	93.0	57.20	5,319.60
TRDE, WILLIAM	2.0	57.20	114.40
SUBTOTALS	141.0		8,065.20

PROFESSIONAL I

GEORGESEN, TIM	90.0	44.20	4,000.00
GREEN, ROBERT	100.5	44.20	4,441.10
HINKER, CHRISTIAN	70.5	44.20	3,116.10
RINGROSE, MICHAEL	12.0	44.20	530.40
WITZIG, JEANNE	8.5	44.20	375.70
SUBTOTALS	286.5		12,663.30

SR. TECHNICIAN

BARTEL, DAVID	16.0	41.60	665.60
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TECHNICIAN III

PATRICK, CHRISTOPHER	111.5	36.40	4,058.60
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TECHNICIAN II

ANDERSON, BETTY	8.0	33.80	270.40
HANSON, KATHY	5.0	33.80	169.00
HAWKINSON, TOM	0.3	33.80	10.14
LAMPPA, JASON	22.5	33.80	760.50
SUBTOTALS	35.8		1,210.04

TECHNICIAN I

ASHLAND, CAROL	1.4	26.00	36.40
SEVER, GINA	4.0	26.00	104.00
BUCKLEY, SUSAN	1.3	26.00	33.80
DANEV, DAVID	4.5	26.00	117.00
DURDON, JAMES	4.5	26.00	117.00

BRW, INC.

INVOICE NO. DRAFT
JOB NO. 04189.23

HAMRICK, CLAUDIA	5.1	26.00	132.60
HENDERSON, JANE	0.5	26.00	13.00
JENSEN, KENNETH	1.1	26.00	28.60
KRUEGER, DUFF	1.0	26.00	26.00
MCKENZIE, BRYAN	3.0	26.00	78.00
MERRILL, GREGORE	6.3	26.00	163.80
MURTHA, IV, THOMAS	4.5	26.00	117.00
NIHART, JAMES	149.8	26.00	3,894.80
ROTHOUDE, HANCV	0.7	26.00	18.20
SCHODHEMBERG, KATHV	0.7	26.00	18.20
WINFREV, MARK	111.0	26.00	2,886.00
ZIMMERMAN, MICHAEL	4.5	26.00	117.00
SUBTOTALS	303.9		7,901.40

TOTALS	932.2		37,559.34
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TOTAL LABOR 37,559.34

TOTAL THIS JOB \$ 37,559.34

MIDWAY LRT DWNTN SYS PLS

JOB NO. 04189.37

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PROFESSIONAL II			
HOLSTEIN, JEFFREY	4.0	57.20	228.80
HILES, MARK	25.5	57.20	1,458.60
SUBTOTALS	29.5		1,687.40

PROFESSIONAL I

CULLEN, SANDRA	20.7	44.20	914.94
HINKER, CHRISTIAN	13.0	44.20	574.60
SUBTOTALS	33.7		1,489.54

TECHNICIAN III

PATRICK, CHRISTOPHER	14.5	36.40	527.80
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TECHNICIAN II

ELLINGSON, RITCH	1.0	33.60	33.60
FAGRELIUS, CAROLE	6.5	33.60	217.40

BRW, INC.

INVOICE NO. DRAFT
JOB NO. 04189.23

LAMPFA, JASON	35.0	33.80	1,284.40
SUBTOTALS	47.5		1,605.50

TECHNICIAN I

BEYER, SIMA	0.6	26.00	20.60
BUCKLEY, SUSAN	0.6	26.00	20.60
COLEBURN, WILLIAM	8.0	26.00	208.00
DUNDON, JAMES	2.5	26.00	65.00
GREEN, KENT	17.0	26.00	442.00
KOLA-BANKOLE, FELICIA	4.3	26.00	111.80
KRUEGER, DUFF	1.8	26.00	46.80
LEE, GREGORY	16.0	26.00	416.00
MCKENZIE, BRYAN	17.5	26.00	455.00
MERRILL, GREGORE	1.4	26.00	36.40
MURTHA, IV, THOMAS	4.5	26.00	117.00
NIHART, JAMES	4.3	26.00	111.80
ROHNHOVE, NANCY	3.3	26.00	85.80
SCHODENBERG, KATHY	0.3	26.00	7.80
WOLSFELD, KATHERINE	8.0	26.00	208.00
SUBTOTALS	90.5		2,353.00

TOTALS	215.7		7,663.24
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TOTAL LABOR 7,663.24

TOTAL THIS JOB \$ 7,663.24

MIDWAY LRT DWNTX RTE ENG

JOB NO. 04189.38

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PRINCIPAL			
WOLSFELD, RICHARD	14.5	135.20	1,960.40
TOTAL LABOR			1,960.40

TOTAL THIS JOB \$ 1,960.40

BRW, INC.

INVOICE NO. DRAFT
JOB NO. 04189.23

MIDWAY LAT DWTN TUNNEL

JOB NO. 04190.22

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PRINCIPAL			
WOLSFELD, RICHARD	3.5	135.20	473.20
PROFESSIONAL II			
WILES, MARK	114.5	57.20	6,549.40
RUSCO, BRENT	35.0	57.20	2,002.00
SUBTOTALS	149.5		7,024.60

TECHNICIAN III

PATRICK, CHRISTOPHER	27.0	34.40	928.80
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TECHNICIAN I

ASHLAND, CAROL	0.8	26.00	20.80
BEVER, SINA	0.5	26.00	13.00
HENDERSON, JANE	2.8	26.00	72.80
KOLA-BANKOLE, FELICIA	5.8	26.00	150.80
WIMART, JAMES	12.6	26.00	327.60
KORHOUDE, NANCY	0.9	26.00	23.40
WINFREY, MARK	15.0	26.00	390.00
SUBTOTALS	38.4		998.40

TOTALS	218.4		11,005.80
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TOTAL LABOR 11,005.80

TOTAL THIS JOB \$ 11,005.80

DRW, INC.

INVOICE NO. DRAFT

JOB NO. 04169.23

RCRRA SYSTEM PLAN/ENG

JOB NO. 06289.44

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
PROFESSIONAL II			
GUNDERSON, ROBERT	1.5	57.20	85.80
RILEY, STEPHEN	11.5	57.20	657.80
SUBTOTALS	13.0		743.60

TECHNICIAN I

HENDERSON, JANE	0.5	26.00	13.00
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TOTALS	13.5		756.60
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TOTAL LABOR			756.60
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TOTAL THIS JOB \$ 756.60

MIDWAY LRT ROUTE ENG DSG

JOB NO. 06290.04

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
SR. ASSOCIATE			
OMBLUCHOWSKI, PETER	78.5	78.00	6,123.00
SR. PROFESSIONAL			
MALLOY, STEPHEN	114.5	67.60	7,740.20
STROM, RICHARD	134.5	67.60	9,092.20
SUBTOTALS	249.0		16,852.40

PROFESSIONAL II

BRW, INC.

INVOICE NO. DRAFT

JOB NO. 04187.73

RILEY, STEPHEN	50.5	57.20	2,744.60
WICHMAN, TODD	39.0	57.20	2,230.80
SUBTOTALS	89.5		4,975.40
PROFESSIONAL I			
HORWITZ, BARBARA	1.5	44.20	66.30
TECHNICIAN III			
HANSON, KENTON	1.5	36.40	54.60
TECHNICIAN II			
BLUM, BARBARA	2.6	33.80	87.88
HAWKINS, TOM	0.3	33.80	10.14
WICKLUND, DAVID	16.0	33.80	540.80
SUBTOTALS	18.9		638.82
TECHNICIAN I			
ASHLAND, CAROL	1.7	26.00	44.20
BEVER, GINA	2.0	26.00	52.00
BILGUTAY, ANAY	0.6	26.00	15.60
GUNDERSON, ANJA	0.7	26.00	18.20
HENDERSON, JANE	1.6	26.00	41.60
JENSEN, KENNETH	0.8	26.00	20.80
KRUEGER, DUFF	1.5	26.00	39.00
MCCORMICK, ANGELA	0.3	26.00	7.80
MERRILL, GREGORE	0.6	26.00	15.60
MOLITOR, LINDA	1.7	26.00	44.20
SHAW, KATHRYN	0.5	26.00	13.00
SUBTOTALS	12.2		317.20
TOTALS	431.1		28,007.72

TOTAL LABOR 28,007.72

TOTAL THIS JOB 5 28,007.72

MIDWAY LRT STATION DESIGN

JOB NO. 04290.05

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

HOURS RATE AMOUNT

BRW, INC.

INVOICE NO. DRAFT
JOB NO. 04189.23

PRINCIPAL			
JARVIS, PETER	6.0	135.20	811.20
		TOTAL LABOR	811.20

		TOTAL THIS JOB \$	811.20
			=====

MIDWAY LRT DWRTX SYS PLN

JOB NO. 04290.09

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
SR. ASSOCIATE			
SMOLUCHOWSKI, PETER	16.0	76.00	1,216.00
PROFESSIONAL II			
RILEY, STEPHEN	12.0	57.20	686.40
WICHMAN, TODD	35.5	57.20	2,030.60
SUBTOTALS	47.5		2,717.00
PROFESSIONAL I			
HORNITZ, BARBARA	0.5	44.20	22.10
SR. TECHNICIAN			
BLANKENSHIP, TIMOTHY	2.0	41.60	83.20
TECHNICIAN III			
HANSON, KENTON	0.5	36.40	18.20
TECHNICIAN II			
WICKLUND, DAVID	39.0	33.80	1,318.40
TECHNICIAN I			
ASHLAND, CAROL	1.4	26.00	36.40
SEVER, GINA	1.2	26.00	31.20
CUNNEL, DUNCAN	2.0	26.00	52.00
MERRILL, GREGORE	0.3	26.00	7.80
MOLITOR, LINDA	0.2	26.00	5.20
PIETZ, BRENDA LEE	1.5	26.00	39.00
SUBTOTALS	6.6		171.60
TOTALS	111.1		5,544.50

ERH, INC.

INVOICE NO. DRAFT
JOB NO. 04189.13

TOTAL LABOR 5,544.00

TOTAL THIS JOB \$ 5,544.00
=====

MIDWAY LRT CULTURAL RES

JOB NO. 06290.15

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
ASSOCIATE			
HUDAK, JOSEPH	4.5	72.80	327.60
SR. PROFESSIONAL			
HUDAK, CURTIS	2.0	67.60	135.20
PROFESSIONAL II			
BAILEY, THOMAS	15.0	57.20	858.00
TECHNICIAN I			
JERSEY, KENNETH	0.2	26.00	5.20
TOTALS	21.7		1,326.00

TOTAL LABOR 1,326.00

TOTAL THIS JOB \$ 1,326.00
=====

MIDWAY LRT DWTX TUNNEL

JOB NO. 06290.16

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL

	HOURS	RATE	AMOUNT
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BRW, INC.

INVOICE NO. DRAFT

JOB NO. 04109.23

SR. ASSOCIATE			
SMOLUCHOWSKI, PETER	27.5	78.00	2,145.00
PROFESSIONAL II			
RILEY, STEPHEN	16.5	57.20	943.80
TECHNICIAN II			
JASHDOCH, JAY	169.0	39.80	6,712.20
TECHNICIAN I			
ASHLAND, CAROL	1.1	26.00	28.60
HAMRICK, CLAUDIA	0.4	26.00	10.40
HENDERSON, JANE	1.0	26.00	26.00
HOFSTED, PHILIP	9.0	26.00	234.00
JENSEN, KENNETH	0.1	26.00	2.60
MOLITOR, LINDA	1.0	26.00	26.00
SUBTOTALS	12.6		327.60
TOTALS	225.6		9,126.60

TOTAL LABOR 9,126.60

TOTAL THIS JOB \$ 9,126.60

MIDWAY LRT CAP TUNNEL

JOB NO. 06290.29

PROFESSIONAL SERVICES FOR THE PERIOD ENDING JULY 31, 1990

PROFESSIONAL PERSONNEL	HOURS	RATE	AMOUNT
SR. ASSOCIATE			
SMOLUCHOWSKI, PETER	11.5	78.00	897.00
PROFESSIONAL II			
RILEY, STEPHEN	18.0	57.20	1,029.60
TECHNICIAN I			
ASHLAND, CAROL	0.7	26.00	18.20
HAMRICK, CLAUDIA	3.5	26.00	91.00
HENDERSON, JANE	0.5	26.00	13.00
SCHODDENEERS, KATHY	0.6	26.00	15.60
SUBTOTALS	5.3		137.80
TOTALS	34.8		2,064.40

BRW, INC.

INVOICE NO. DRAFT

JOB NO. 04189.23

TOTAL LABOR 2,064.40

TOTAL THIS JOB \$ 2,064.40

INVOICE TOTALS

TOTAL LABOR 173,451.72

TOTAL CONSULTANTS

TOTAL EXPENSE

TOTAL FEE

TOTAL INTEREST

173,451.72

BRW, INC.

BILLING SUMMARY

CURRENT PERIOD COSTS

	-- LABOR --		-- EXPENSES --	
	HOURS	AMOUNT	REIMB.	DIRECT/IND
TOTALS	3560.7	53,487.31	3,694.12	

COSTS THIS RUN

TOTAL LABOR	173,451.72
TOTAL CONSULTANTS	
TOTAL EXPENSE	
TOTAL FEE	
TOTAL INTEREST	

** END OF BILLING RUN **

ATTACHMENT B - DIRECT COST AND SUBCONTRACTORS

AGREEMENT NO HCRRRA-89003

INVOICE PERIOD : 1 JULY 1990 - 31 JULY 1990

FILENAME: 89003_B

OTHER DIRECT NON-SALARY COSTS

BRW GRAPHIC REPRODUCTION DEPARTMENT	\$650.52
AUTO/MILEAGE	479.59
OUTSIDE REPRODUCTION/PHOTO	417.26
COMPUTER RENTAL	1,685.40
POSTAGE/DELIVERY	429.12
LIBRARY/REFERENCE	21.94

TOTAL	\$3,683.83
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SUBCONTRACTORS

NONE THIS MONTH	\$0.00
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BRW, INC.
THRESHER SQUARE, 700 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415

PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN

GRAPHIC
REPRODUCTION
DEPARTMENT

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

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

41-8923 through 41-8936,
62-8944

Project Name: Midway LRT

CAMERA DEPARTMENT

Date	Quantity	Description	Unit Price	Total
7/9/90	13	Base Map Overlays	\$ 4.35	\$ 56.55
7/9/90	6	Base Map Overlays	2.25	13.50
7/12/90	1	Graphics for Presentation	1.25	1.25
7/12/90	6	Graphics for Presentation	1.35	8.10
7/12/90	1	Graphics for Presentation	4.35	4.35
7/12/90	1	Graphics for Presentation	2.25	2.25
7/12/90	1	Graphics for Presentation	1.25	1.25
7/12/90	1	Graphics for Presentation	9.00	9.00
7/17/90	2	Base Map Overlays	2.00	4.00
Subtotal Camera Department				\$ 100.25

XEROX DEPARTMENT

Date	No. Orig.	No. Copies	Description	Unit Price	Total
7/3/90	6	54	DTF Agenda/Minutes/Handouts	\$.04	\$ 12.96
7/3/90	28	52	DTF Agenda/Minutes/Handouts	.04	58.24
7/3/90	1	48	IC Agenda/Minutes/Mtg. Notice	.04	1.92
7/3/90	7	72	IC Agenda/Minutes/Mtg. Notice	.04	20.16
7/3/90	9	30	Tech Group Agenda/Handout	.04	10.80
7/5/90	1	20	Base Map Overlays	.04	0.80
7/6/90	7	3	IC Ctte List/Forum Minutes	.04	0.84
7/11/90	8	95	MCTF Minutes/Handouts	.04	30.40
7/11/90	4	75	MCTF Minutes/Handouts	.04	12.00
Subtotal Xerox Department				\$	148.12

TOTAL DUE THIS INVOICE



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

PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN

GRAPHIC REPRODUCTION DEPARTMENT

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

41-8923 through 41-8936,
62-8944

Project Name: Midway LRT

CAMERA DEPARTMENT

Date	Quantity	Description	Unit Price	Total
7/18/90	1	Stat for Xeroxing	\$ 1.25	\$ 1.25
7/18/90	1	Stat for Xeroxing	.90	0.90
7/18/90	1	Stat for Xeroxing	2.25	2.25
7/18/90	1	Stat for Xeroxing	12.25	12.25
7/19/90	1	Graphics for Presentation	1.25	1.25
7/19/90	1	Graphics for Presentation	9.00	9.00
7/20/90	9	Overlays for EIS	2.25	20.25
7/20/90	6	Overlays for EIS	4.35	26.10
7/24/90	1	Overlays for EIS	4.35	4.35
Subtotal Camera Department				\$ 177.85

XEROX DEPARTMENT

Date	No. Orig.	No. Copies	Description	Unit Price	Total
7/12/90	1	85	MCTF Council Notice	\$.04	\$ 3.40
7/19/90	9	13	Presentation Handouts	.04	4.68
7/19/90	6	47	DTF - Agenda/Minutes/Handouts	.04	11.28
7/19/90	1	60	DTF - Agenda/Minutes/Handouts	.04	2.40
7/19/90	5	47	DTF - Agenda/Minutes/Handouts	.04	9.40
7/20/90	4	54	DTF Minutes	.04	8.64
7/23/90	70	75	MCTF Handouts	.04	210.00
7/24/90	2	95	MCTF Agenda/Handouts	.04	7.60
7/24/90	11	75	MCTF Agenda/Handouts	.04	33.00
Subtotal Xerox Department				\$	438.52

TOTAL DUE THIS INVOICE



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

PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN

GRAPHIC
REPRODUCTION
DEPARTMENT

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

JOB NO.
41-8923 through 41-8936,
62-8944

Project Name: Midway LRT

CAMERA DEPARTMENT

Date	Quantity	Description	Unit Price	Total
7/24/90	2	Overlays for EIS	\$ 2.25	\$ 4.50
7/26/90	1	Stat for Xeroxing Handouts	1.25	1.25
7/26/90	1	Stat for Xeroxing Handouts	.90	0.90
7/27/90	5	Stats for Xeroxing Handouts	1.25	6.25
7/27/90	5	Stats for Xeroxing Handouts	.90	4.50
7/27/90	5	Stats for Xeroxing Handouts	1.25	6.25
7/27/90	5	Stats for Xeroxing Handouts	.90	4.50
7/31/90	1	Tunnel Alignment Stats	2.25	2.25
7/31/90	3	Tunnel Alignment Stats	1.25	3.75
Subtotal Camera Department				\$ 212.00

XEROX DEPARTMENT

Date	No. Orig.	No. Copies	Description	Unit Price	Total
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Subtotal Xerox Department \$ 438.52

TOTAL DUE THIS INVOICE \$ 650.52



Resolution

Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: _____

No. _____

WHEREAS, The Ramsey County Regional Railroad Authority has adopted the position that Mn/DOT is the preferred organization to lead final design and construction of LRT; and

WHEREAS, The proposal from Mn/DOT provides for participation and decision-making by Regional Railroad Authorities and other appropriate agencies (see attached matrix); and

WHEREAS, The Ramsey County Regional Railroad Authority's position is different than that of the majority of members of the LRT Advisory Committee; Now, Therefore, Be It

RESOLVED, That the Ramsey County Regional Railroad Authority requests that its position become a formal part of the LRT Coordination Plan.

These
not
scanned - see
note
8/8/07
AJT

Withdrawn

John T. Finley, Chairman

By _____
Warren W. Schaber, Secretary

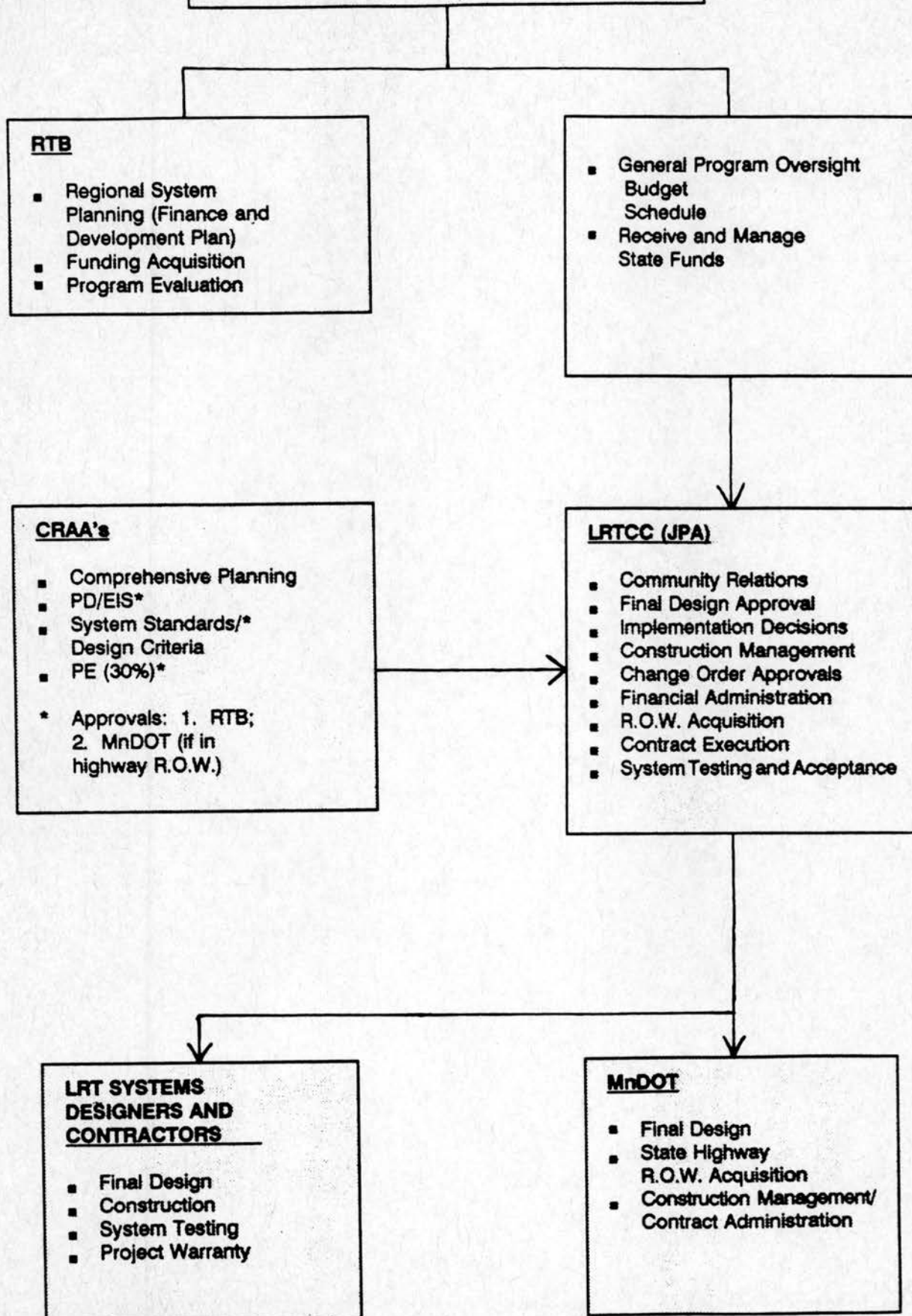
RESPONSIBILITY MATRIX

with Mn/DOT as Lead Design/Construction Agency

	= LEAD ROLE
	= APPROVAL AUTHORITY
	= PARTICIPANT

ACTIVITY	AGENCY							COMMENTS
	Mn/DOT	RTB	MET COUNCIL	CRRA's	MTC	LOCAL JURISDICTIONS	ADVISORY GROUPS	
REGIONAL SYSTEM PLANNING								Develop System Plan & Updates
CORRIDOR PLANNING								EIS Process (10%)
PROJECT PLANNING/PRE-ENG.								Layouts, Design Study Reports (30%)
FINAL DESIGN								(100%)
R/W ACQUISITION								
CONST. MANAGEMENT								
SYSTEM TESTING								Safety, Pre-Revenue Testing
OPERATING/STAFF								Training & Gearing Up for Operation
MAINTENANCE								Vehicles, Lines, Park & Ride Lots, Sidewalks, etc.
FINANCIAL MANAGEMENT								Design & Construction
FUNDING ACQUISITION								Federal, State, Local Funds
MARKETING								Obtaining Support for the System
SYSTEM EVALUATION								

LEGISLATURE



L.R.T. CONSTRUCTION COMMISSION

(FORMED BY JOINT POWERS AGREEMENT)

MEMBERSHIP:

MnDOT
CRRA's
RTB
MTC
CITIES

VOTING:

CRRA's - one vote each, two votes
when corridor commences final design
MTC - one vote
MnDOT - non-voting, ex-officio
RTB - non-voting, ex-officio
CITIES - non-voting, ex-officio (if corridor
under construction is located within
jurisdiction)

Corridor-specific subcommittee will be
established with membership of affected
CRRA's.

STAFFING:

Commission has own staff, including an
executive director, consisting of CRRA's
staff, agencies' staff and new staff.

Responsibility Matrix

LRT Construction Commission (Joint Powers)

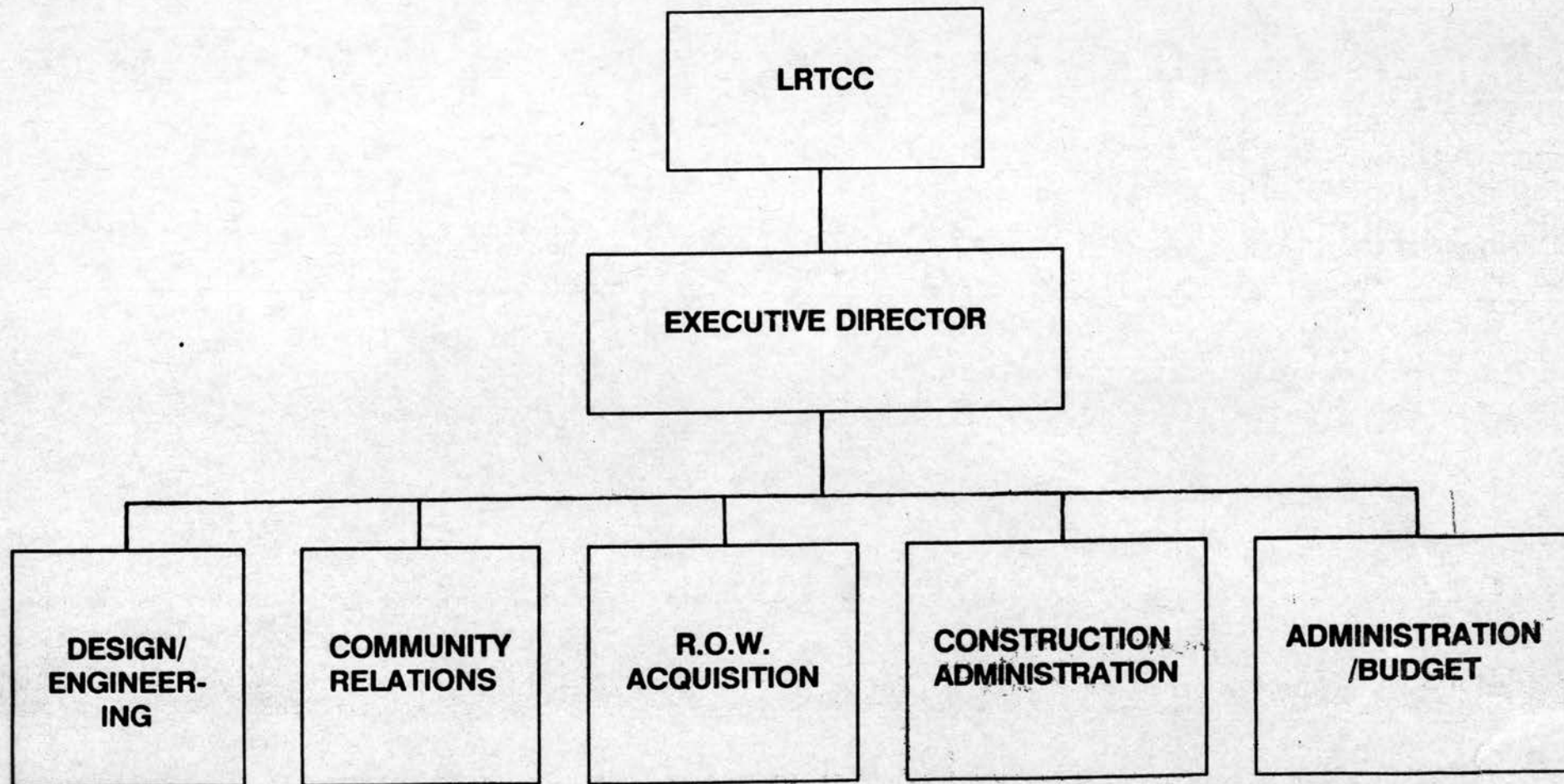
Legend

-  = Lead Role
-  = Approval Authority
-  = Advise
-  = No Involvement

LRT Implementation Activities	Participants							
	LRTCC (JPB)	Mn/DOT	RTB	Metro Council	CRRA's	MTC	Local Jurisdictions	Advisory Groups
Funding Acquisition (Legislation)								
Regional System Planning								
General Program Oversight								
Corridor Planning								
Preliminary Design (10%)/E.I.S. *								
System Standards/Design Criteria								
Preliminary Engineering (30%) *								
Final Design (100%) *								
R.O.W. Acquisition *								
Construction/Management *								
System Testing								
Operating/Maintenance								
Marketing								
Regional LRT Evaluation								

* Depending on Corridor

PROPOSED ORGANIZATION STRUCTURE for the LRTCC (JPB)



file

Kathy Despiegelaere

Ramsey County Regional
Railroad Authority
Documentation

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

Ramsey County Regional Railroad Authority

316 Courthouse, St. Paul, Minnesota 55102 612-298-4145 / FAX 292-6689

AGENDA

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

TUESDAY, OCTOBER 23, 1990

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

1. * Minutes of the Ramsey County Regional Railroad Authority Board Meeting of October 9, 1990
2. Chairman's Comments
3. * Designate Cedar and Fourth Streets as the preferred location for LRT in Downtown St. Paul for purposes of Draft Environmental Impact Statement for Midway Corridor.
4. * Authorize acquisition of Burlington Northern right of way in St. Paul and Maplewood by eminent domain.
5. * Update on LRT Coordination Plan
6. * Quarterly Report of Payments for RCRRRA July to September 1990.

* Action is Requested.

MINUTES

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

October 9, 1990

The regular meeting of the Board of the Ramsey County Regional Railroad Authority was held on Tuesday, October 9, 1990, in the Large Conference Room of 316 Court House. Chairman Finley called the meeting to order at 10:45 A.M.

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

MEMBERS ABSENT: Commissioner Hal Norgard

ALSO PRESENT: Karen Tero, James Van Houdt, Vern Wehlage, Robert Clarkson, Gary Simpson, Mark Filipi, John Jamieson, Terry Lindeke, Patrick O'Malley, Richard Chin, James Tolaas, Jill Goski, David Minister, Stephanie Eiler, Steve Wilson, Hugh Faville, Nacho Diaz, Dick Wolsfeld, Kathryn DeSpiegelaere, David MacMillan represented the County Attorney's Office, Frances Glendenning

1. Minutes - Regional Railroad Authority Board Meetings, A. Meeting of September 11, 1990, and B. Meeting of September 25, 1990.

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

The Ramsey County Regional Railroad Authority approves the minutes of the Board Meetings - A. held on September 11, 1990, and B. September 25, 1990, as written.

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

2. Chairman's Comments

Chairman Finley mentioned that the Downtown LRT Forum will be held today at 3:30 P.M. at the World Trade Center, Room 400. We will be discussing the LRT, the downtown recommendation that has been made by the LRT Task Force, which, as you know, recommended the surface alignment. As Mr. Wolsfeld pointed out at the meeting, none of the City Council representatives, the three City Council Members who were appointed to that Task Force, nor the City staff was there to vote. The only people there were all of the property owners, representatives, the Chamber of Commerce representatives, BOMA representatives, people most directly affected which are the business people

downtown, and Commissioner Hunt and himself as the Ramsey County representatives. This was a unanimous vote that if we go to a surface alignment the City chose not to participate in those discussions. Of course, then, the next thing we will hear is from the newspaper as to what they thought about it, rather than participating in the process.

Commissioner Hunt wished to add that she approached that Committee with mixed views on it, and she would have been inclined to support the tunnel had all things been equal, but after the presentation, and after the figures were shown on the tremendous cost difference, the fact that there were some negatives to the underground approach, she did not have any qualms whatsoever in supporting the surface alignment. She thinks that is true of the members of the Committee, as she knows that there were some members of the Committee who would have liked to have had a tunnel for various and sundry reasons. But, they were all convinced that the cost and some of the other matters were determining their position.

Chairman Finley agrees. It probably would have been a very close vote, except for the information that was received, which swung it to a unanimous vote from the other way, with no discussion whatsoever. So, there was no persuasive discussions one way or the other by the members of the Committee. In fact, Mr. Bach who is the Chairman of the Committee, Chairman Finley commended him as he has never seen a more democratic process. The way he did it was a raise of hands for the tunnel first without having motions, seconds, and persuasive arguments. Mr. Bach said, based upon the presentations, he would like to see a show of hands, and then he took surface alignment. Because we were on tape, he believes we actually voted verbally. It was a very fair way because Commissioner Hunt and he being the elected officials, we may have been able to persuade one or two one way or the other, but no one did participate in these discussions one way or the other, other than asking for technical information from the consultants to bolster their position, or to answer any questions. The representatives from the Capital Area Architectural Board were there and supported non-tunnel in downtown St. Paul.

Commissioner Schaber said what bothers him is that Councilperson Dimond indicated the process was flawed, and he did not understand where the flaw was. Chairman Finley commented that it probably was the fact that Councilperson Dimond did not show up at the meetings.

Commissioner Schaber is not sure about this part of the issue, the flaw, how do we respond to this, do we just say that the process is not flawed. This does not mean anything. You have to elicit more specifics from the person who is making those comments initially so that some one can then make a response that addresses not just the broad generic, general statement of the flaw, but addresses more specific points. We are sitting here, and it has been repeatedly happening to us that people are making very broad statements about the RRA, and now he hears this particular system is flawed, but we can't really respond to it. It is very frustrating to be in this position.

Commissioner Hunt thinks that it should be borne in mind that Tom Dimond has now taken a formal position in opposition to LRT. So, this has to be kept in mind that he is not in support of LRT, and it is unfortunate that he is the one who seems to be speaking up from the City Council, and unless the City Council changes its position, he is really not speaking for the City Council on this, or the Mayor.

Chairman Finley thinks that is part of the problem, it has been similar in other areas in which there are just statements and there are not supporting data. He debated an hour with Councilperson Dimond on television, and most of his data came from one newspaper article from the CHICAGO TRIBUNE, this was an article based upon an UMTA report which was eight months old, and has been castigated by every city and town in North America that has LRT system.

Commissioner Schaber said maybe we have been wasting too much time on this one individual, but he was at a meeting on the East side of St. Paul where Councilperson Dimond suggested, and he was adamant that we had to look at going down Arcade Street as a possible alignment for light rail. Yet, when he suggested to him which side of the business area did he want to bulldoze down, or do you want to do both sides, who is going to pay those costs. Then, he comes charging on that this is what has to be done, and then when you come to him and say, look at the practical issue here, Arcade is not that wide, you are going to have to take another 100 feet, on one side of the other. This would mean that you are going to wipe out one side of the business district going down Arcade Street, which side would he choose, then there is a backoff. He is starting to grate.

Chairman Finley added that the same has been true of University Avenue, they have been adamant in their positions instead of participating in the process, they keep voting it, even though the process is going on in trying to evaluate the criteria of the three alignments, they have voted three different times for the University alignment, without knowing what the environmental impacts are going to be. That is the reason for the study to begin with. Chairman Finley agrees we have wasted entirely too much time on Mr. Dimond.

Commissioner McCarty feels that Mr. Dimond has consistently come from a limited base of knowledge and he does not feel that we should waste time sweeping up after his misstatements.

Chairman Finley reiterated that we do have a meeting of the LRT Forum today to try to get input from other people, and provide additional information, or any information needed today at 3:30 p.m.

3. Ridership Forecasts for Midway Corridor - Information

Chairman Finley said that we have been waiting for these Ridership Forecasts since June, and he noted the presence of Nacho Diaz at this meeting. There is an extensive memorandum from Dave Warner explaining what the forecast provides. Now we will be able to interpolate from these forecasts the

environmental impacts that they will have based upon the projected ridership. As you can see the ridership figures are fairly level as far as overall ridership, if you look at Page 17 which is the overall LRT, Bus and All Bus Systems. The three proposed routes for LRT range from 35,000 on I-94, and 35,600 on University or Pierce Butler. The modular is based on a plus or minus - the Chairman asked Ms. DeSpiegelaere what this would be.

Ms. DeSpiegelaere said in meeting with the consultant on the forecasts, the aggregate, the total numbers are plus or minus 20%. We are prepared to give you a presentation on this.

Commissioner Schaber had a question as to how Pierce Butler was arrived at, this is up. What does this mean. Chairman Finley said on Page 17, this is shown.

Dick Wolsfeld feels that Commissioner Schaber's question will be answered in the presentation. He will be talking about the model that was used, the input data, and then the forecasting which we have been discussing for the 2010 for both parallel bus service as well as LRT. Then, he will compare those to previous forecasts that have been made in the corridor. We will do some evaluation and then talk about what could change those forecasts, and some sensitivity analysis has been done which we will talk about. There is also a non-user survey which has been completed. We will explain how we will use the forecasts, and some conclusions.

Mr. Wolsfeld explained that the model that was used to make the projections starts with the total person trip travel between some fairly small traffic analysis zones. Then, this model divides those trips into transit trips, auto trips, and further divides the transit trips into those who would walk to the stations versus those who would drive to the stations. It divides the auto trips into those that drive alone, those who would share rides, and it even gets down to the size of the car pools. How the model does that division between transit and auto is based on travel cost and travel times, and a comparison of those, but this is the basic structure of the model. It starts with total travel in the corridor, then divides it.

The development of the model, the first phase is to do what is called the calibration, this is simply to develop the input variables and these coefficients that drive the equations in the model to make sure that you can replicate what the transit service is today. 1988 was their base year, they put in the 1988 population, 1988 employment, and then with a set of coefficients there is a process to be able to try to calibrate or to forecast what actually happened in 1988. This is the first process.

Mr. Wolsfeld mentioned about the models, there are limitations, as these models only recognize travel time, whether you would be riding a helicopter, a limousine, a bus, or lrt vehicle, the model does not know the difference. So, this only relates to time and cost, it does not take into account quality, reliability, or image of the system. This is a little bit of a false statement in that the

co-efficients that one uses kind of reflect those characteristics, but there is no specific input, or specific element of the model for that. Secondly, it is obviously difficult to forecast anything in a twenty-year time period. We are talking about where people are going to live, where they are going to work, what the price of gasoline is going to be, what a transit fare is going to be, what travel times are going to be on highway system in the year 2000, and those are fairly difficult variables to forecast.

The question was asked about reliability, and you have been told before that the aggregate number that is given for the corridor, the 30,000 or 35,000, this number is plus or minus 20%. If you get down when you are comparing one alignment to another, then we are down to a plus or minus 5 in terms of differences, and then if you say, tell me how many people want to park and ride at the Snelling Avenue Station, that ability of this model is plus or minus 50%. So, the reliability, the number differs upon the characteristic that we are talking about.

Mr. Wolsfeld explained who did the work, there was an onboard origin destination survey done by Barton-Aschman, the specific model was developed by Comsis and R. H. Pratt (both of Washington, D.C.). The network definition was done by the Metropolitan Transit Commission, and LTK did the LRT travel times. The model application, the work of after all this input data was generated and actually running the computer models, was done by the Metropolitan Council. BRW provided overall project management. Ramsey County retained a firm Cambridge Systematics, which did a technical evaluation of the results. These were the players who were involved in developing these forecasts and the roles they had.

The next thing Mr. Wolsfeld talked about was the Input Data, this is a very important point relative to the forecast. The jobs and the population is obviously a major determinant of those forecasts. You can see from the chart shown here that in 1988 compared to the year 2010, employment in the downtown is expected to grow from 51,000 up to 65,000 or 66,000. Overall employment within the City is expected to grow modestly from 183,000 to 196,000. However, population in the City is expected to decline from 265,000 to 253,000. At the other end, employment in downtown Minneapolis is expected to grow from 120,000 to close to 150,000, a healthy increase. Employment in the City is expected to grow, although in terms of absolute numbers the increment is about the same, and the Minneapolis population is also expected to decline. We have a situation where employment in the two downtowns is expected to grow, that is also driving employment within the cities, and the population is expected to decline. Those numbers are prepared by the Metropolitan Council as part of their ongoing regional planning process. This is very important input.

Travel times was the next input which Mr. Wolsfeld discussed. You have seen most of the data which he projected on the screen where it compares the travel times of the alternative modes and of the LRT. Route 16 is forecasted to take 49 minutes to go from downtown to downtown which is about what the schedules say the travel time is. To go from downtown St. Paul to the University of Minnesota is 32 minutes on Route 16, downtown to downtown 9 B

which swings up through the Capitol is 32 minutes, downtown to downtown express is 23 minutes. For light rail transit downtown to downtown travel is 28 minutes on 94 Soo Line, 37 minutes on University, and 35 minutes on BN-Pierce Butler. From downtown to the University it is 16, 26, and 23 minutes. Relative to the 16 route on 94 Soo Line we dropped that travel time in half, the others it is incremental. The assumption is made that essentially the travel times that exist today on those published route schedules, that those same travel times will be experienced in the year 2010. So, there is not a significant degradation of those values over time, even though they do forecast some increased congestion on the road system in the year 2010.

Chairman Finley said as recently as two or three weeks ago when we were looking at some of the input we had, if his memory serves him correctly, I-94 Soo was 26 minutes, BN-PB was 27 minutes, and University at 38 or 39 minutes. This was just two weeks ago. How could this change so dramatically especially with PB-BN in two weeks.

Mr. Wolsfeld replied that there is no change, the difference is those were not downtown to downtown numbers, those might have been a different reference system. There are also five stations in the downtown area, so depending upon whether you went to the center of downtown St. Paul to 7th and Marquette in Minneapolis, versus if you went all the way to Lowertown or if you went down to the Convention Center in Minneapolis, you could get different travel times.

Chairman Finley said Pierce Butler is about seven or eight minutes more, University and Soo Line are only one or two minutes difference, than from what we just got two weeks ago.

Mr. Wolsfeld will check on this, but he would suspect the numbers may be wrong, or there is a different definition from point to point, or the other number may have been wrong - but the data base they are using is the same.

Commissioner Schaber asked about downtown to downtown, what do you mean. Mr. Wolsfeld is not exactly sure from which station to which station, but Steve Wilson who gave him the numbers can probably answer that.

Mr. Wilson said it would roughly be from City Center to Town Center, the cores of downtown.

Commissioner Schaber said then that whenever we look at data from now on that will be the criteria that we will use, so that next time we will not be looking at different areas downtown.

Chairman Finley would like to know what they used for the Capitol area then as to the route from downtown to downtown.

Mr. Wilson's recollection is that on the I94 alignment it would basically come off the freeway alignment, roughly, would skirt 12th Street, and the University BN would come off Rice. They were figuring that the 12th Street

alignment would be the likely option.

Mr. Wolsfeld added that these alternatives do not have a tunnel in the Capitol area. When this work started, there was no discussion of tunnels in the Capitol area. This alignment assumes, for University it is University, for the 94 it is on 12th Street down Cedar.

Commissioner Hunt asked if the tunnel or no tunnel would make any difference in travel time. Mr. Wolsfeld replied that it is within the range of one minute.

The third category of input data relates to cost, and the cost items that go into it are obviously the auto costs, and the costs of transit. The assumption is for the cost of the automobile it is 9½¢ per mile of travel, this is the cost assumption relative to driving your automobile, it is essentially the operating cost of the vehicle. The assumption is that relative to inflation for the year 2010, the cost of driving an automobile will be exactly the same as inflation. It is not projected to go faster. Obviously, if the cost of gasoline goes at a greater rate than inflation, that assumption is incorrect. The second assumption relates to downtown parking costs. Here the assumption is that parking costs will increase faster than inflation, so where it is to park in the core of St. Paul today it might be \$4.00 per day, to do that in the year 2010 in 1988 dollars it is projected to go to \$5.70. Similarly on the fringe, it is \$2.90 today, and in 1988 dollars it is expected to be \$4.70. The same thing is in Minneapolis in terms of core parking in 1988 dollars in the year 2010, it is expected to cost \$10.00 to park your car. On the fringe it is expected to cost \$5.70. These are the assumptions made relative to auto driving, the cost to operate your automobile, and if you have a destination of either of those two downtown areas, that is the parking costs we will assume. So, you can take the number of miles you have driven, add the parking cost, and that is the auto operating cost that is used in the model.

The bus fares are under the assumption that they will increase at the rate of inflation. He does not believe that bus fares have been increased for a period of the last six or seven years. So, actually the bus fares are cheaper than, if we had a 1981 number the last time it was done, if it was 75¢ in 1981, actually in 1981 dollars, it is 60¢ today. The price has actually dropped. The offpeak there it is assumed that the offpeak will be 75¢. These values were selected last March by a team representing the staffs of the RRA, Metropolitan Council, RTB, and all the consultants that we have listed. So, it is collective opinions of those groups.

Commissioner Schaber asked if they took the bus fares times two. Mr. Wolsfeld, said yes, but for an automobile trip it is the mileage times two.

Chairman Finley suggested that a note be made on this, this is a good point, it is easy to take a round trip at 9.5¢ per mile round trip.

Chairman Finley had a question about the bus, what about the public subsidy

of the cost per trip that is paid for through the RTB and within the budget. Shouldn't that be a component here because on the automobile that is a private expenditure, on the bus it is a private and public expenditure when you are really relating cost of operating an LRT versus a bus. The cost per bus ride, is about \$10.00. Mr. Wolsfeld believes it is \$2.00+, but he thinks the answer to that is that from the user's standpoint if I have to make a decision whether I drive my car and park or ride the transit, it would cost 75¢ to ride transit, it would cost 9½¢ per mile plus the parking fee. The public policy issue of who is paying subsidies to make that cost to the user different, the user might recognize that. In terms of his decision to ride or not ride the model says that is not an impact.

Commissioner Schaber asked if the 9½¢ per mile, obviously this does not tally what you do with the IRS or anyone else, so this is kind of critical as to what you are including that cost.

Mr. Wolsfeld said it is essentially the auto operating costs. Again, the theory is that if I have an automobile available to me, the fact of the insurance, the depreciation, replacement, this is just the operating cost portion the gas and maintenance.

The three inputs are the socioeconomic, travel times and the cost, these are the important elements.

Mr. Wolsfeld discussed what the model tell us after they did that and ran those numbers. These show for the Central Corridor, the different routes, 1988, the 2010 all bus, and then light rail along the three alignments which are being considered. This was shown on a chart.

The highest LRT ridership occurs on the I-94 Soo Line Alignment by 2010 LRT, this is between 32,000 and 33,000, University Avenue it is 30,000, and on the BN-PB it is 24,000 to 25,000. You saw the differences in travel time obviously there is also a difference in access to origins and destinations, but when the model trades off, those travel time, travel costs and proximity to those jobs and people, this is what it says relative to the number of people that would ride LRT. Mr. Wolsfeld then discussed what would happen on the parallel bus service, and on the 16 Service there is between 21,000 and 22,000 rides a day, expected to increase between 25,000 and 26,000 by 2010, the essential variable that is driving that is downtown parking costs. With the 94 Soo Line alignment, the ridership on 16A would drop from the 21,000 today down to 2600 per day. If the LRT is on University that drops even further for those intermediate stops, and when the LRT is on PB there is about 11,300 rides on the 16 service. So, you can see how that would vary. What this would say though is that even with 2600 some very limited service, probably 30 minute service probably would still operate on that route. There are a lot of bus routes in the metropolitan area that carry between 1500 and 3000 rides per day.

Commissioner Ahrens asked what the spacing of service stations would be on the 11,000 figure, does that assume a 15 minute, or what does that assume.

Mr. Wolsfeld said the headway or service that is being assumed is identical on all light rail transit, it is $7\frac{1}{2}$ minutes in the peak periods, 15 minutes in the off peak which is 9:00 to 3:00, and then it is 30 minute service from 6:00 P.M. to 1:00 A.M. There are actually three different services assumed.

Commissioner Ahrens was asking about the bus, and Steve Wilson said the bus alternatives were 15 minutes for the I-94, 30 minutes for University, and 10 minutes for the BN.

Chairman Finley asked then if the bus on University Avenue would carry 11,300 people at 10 minute intervals. What are the intervals at present on University Avenue? Mr. Wolsfeld said that they were seven.

Commissioner Ahrens next question was, if we choose I94 you have a much higher utilization plus a 15 minute which drops the cost of the bus service, in contrast to BN which has a much lower usage, but you would have to invest in the bus service - are the costs in all that comparison?

Mr. Wolsfeld thinks these questions illustrate some experience and some work on the regional development and finance plan, where in many cases they presented riders per total cost, per capital cost, operating costs - to say that there is 30,000 riders and 24,000 riders or 2600 versus 11,000, without putting the cost to provide that service right along side of it to make those comparisons, you may get an incomplete picture, and that is one of his conclusions - it is too early to draw conclusions about efficiencies of systems which would imply how many people use it, and the cost. This is only to tell you about how many people would use it. It is not to say what it would cost to provide that service to get people to use it. This says nothing about costs, and yes, we are going to get to it, but not today.

The next is 94, this is 5900 today, and it is expected to grow to 6800 in the year 2010, the 94 service would be removed with both the 94 Soo Line and the BN PB alignment. Limited 94 service would remain if it was located on 94, so there is no 94 service, as he pointed out on the slide, then you get the total ridership in terms of the total transit ridership, which you can see from the three components is essentially the same, 27,700 today with 32,400 with 2010 all bus.

The next chart showed some characteristics about the riders in terms of where they are coming from, and where they are going to. This chart says that 50% of the trips have one or both ends in downtown St. Paul, so if you have 30,000 rides that means approximately 15,000 of those trips have one or both ends in downtown. There are 9100 that are going from downtown to downtown, 4000 that are going from the Midway Area to downtown, and 2900 going from downtown to the University. 35% have one or both ends in the Midway area, so this is the Midway area to downtown Minneapolis, Midway area to University, within the Midway Area, and then that 4,000 that goes from the Midway area to downtown St. Paul. 44% of the trips have one or both ends in the University of Minnesota Area.

Mr. Wolsfeld continued, 71% have one or both ends in Downtown Minneapolis. These percentages you can draw some conclusions about those, the trips have two ends. When you look at just St. Paul, and look at the total ridership, you draw a conclusion about one or both of those ends to do that. Another way to present that is to say that there are 32,000 trips, and there is a beginning and end to each one of those, there is 64,000 trip ends, and these are really trip ends. We have given you both some percentages as well as some absolute values, he is giving the Board caution about that. Generally those percentages are independent of the alignment. The characteristics from 94 and University are a little different, but they are about the same. The characteristics are a little different for BN-PB, but it is not that the 94 Soo Line is serving a dramatically different market than University is. The markets are very, very similar that are being served.

Commissioner Schaber would like to know if that would apply also to the bus, and Mr. Wolsfeld said it would. If you added all the buses together, obviously the 94 service which is downtown to downtown. If you take 94 which is downtown to downtown market, which is base of 20,000 to 25,000 and now the downtown market is 9100 compared to 30,000 and 32,000, the approximate percentage of downtown to downtown travel is about the same. The travel to the University of Minnesota on a relative basis is about the same. The difference is the mode that is serving the trip versus the dramatic change in the type of trip.

Mr. Wolsfeld continued, there have been some previous forecasts which obviously will be compared in 1983, 84, and 85 - there was an alternatives analysis draft EIS that was done based on the year 2000 projections, the price of energy they thought back then that the predictions were that it would increase faster than inflation. There was not a significant decline in population forecasted between the two cities, that ridership forecast was 4600. In the regional development and finance plan which was based upon some 88 study those numbers were dropped down to the 37,000 to 42,000 range depending upon which alignment was chosen, they were still based on the year 2000 socioeconomic characteristics, and the comments he would make about those is that there has been a significant change in population from the year 2000 to 2010. Also, the model that is being used in the forecasting model, the developers of that think it is more sophisticated in terms of sorting between travel that is related to work, and travel that is related to non-work trips. Also, the growth and travel is primarily non-work, non-downtown oriented which is a more difficult market to attract with transit.

The evaluation of these - Cambridge Systematics has been working on the evaluation, and there are two comments that he quoted out of their memorandum, "Overall, while a number of potential improvements in the forecasting procedure can be identified, the procedure is better than most that are typically used in studies such as these". Their second comment, "...a nested logit model, which represents the leading edge of the state of the practice in travel demand forecasting." In the memo which Dave Warner wrote there are some comments in terms on logic in terms of what percentage increases are occurring, how does that relate to the percentage increase in travel, what do we expect relative to

inflation, and some comments about that, again our thinking may change from day to day depending upon what happens in the Middle East, but the basic assumption is that the cost of petroleum products is going to be the same as inflation. If we do not believe that, and we think that the price of operating the car is going to go faster than inflation, that is a factor that could significantly change these numbers. If you look at what happened to the MTC's ridership from 73, the oil embargo up to 81, and then what happened from 81 to 89, we are up to 90 million rides, we are down to 70 million rides. He thinks the price as well as the availability of petroleum products have a lot to do with it.

What other things could change, obviously the price of gas, parking costs, population employment projections, if the roadway travel times again begin to deteriorate, the marketing of the mode in terms of how well or not well that is done, bias of light rail due to the quality and reliability of service. If you look at what is happening in the cities around the country who have built light rail systems, their ridership is growing, and if you ask people why, they say that quality image and reliability is a very important factor. We do not directly account for that. Vehicle Fuel Efficiency - generally what has happened is that the average miles per gallon for cars has gone up as the price has gone up with it, and also transit fares. Another factor that is not on the list is the system assumes only downtown Minneapolis to downtown St. Paul service. If we plugged in the St. Paul NorthEast, South, or Hiawatha, a 35W, a Northwest or Northwestern and Northeast line, he thinks these numbers could change fairly dramatically because of the major generators that exist in that area.

Mr. Wolsfeld continued, they are going to use these numbers for the following things, the first is to size the system components, the number of vehicles, the park and ride, the bus bays and the stations. Secondly, they are going to use this to cost the system. Obviously the vehicle requirements have a cost implication, and operating and maintenance cost. They are going to use it to have performance indicators in order to do comparative evaluation. So, you will see some riders per route mile, new riders per route mile, operating cost per passenger, and capital cost per passenger, the variables that the people who serve on the RTB Committee are very familiar with.

The conclusions Mr. Wolsfeld now discusses, a significant effort went into the process. With the model development, the data collection, we are probably approaching \$750,000 to \$1 million of expenditures to develop these forecasts. So, this was not an insignificant effort. The forecasts as presented should be used in the evaluation process to assist in the selection of a preferred alignment. The two key points are the numbers are ready to be used, and also it is going to assist you, there is also data that you will need. The forecasts will change, they are going to change as conditions change. The Metropolitan Council revises socioeconomic forecasts every five years, people perception about what is going to happen to the price of travel relative to inflation could change. What happens to the competing roadway systems - this could change.

So, those variables change, the forecasts will change. People that do this were heavily criticized in the late 80's for inaccurate forecasts, they overprojected, the Pico Report which has been mentioned, they have been very gunshy, so you can be assured that the forecast they will give is not going to be too high. The numbers that we have here represent a situation which has to be taken into context of what has happened over the past five or ten years.

Recent experience in cities that have built LRT systems would not support what forecasters are saying today. San Diego opens in 1981 with 11,000 rides, they are now up to 30,000 rides. Sacramento has had dramatic increase in ridership over the past three or four years. So, there are stories upon stories where systems have been built, quality, reliability and image are important factors, and that is working.

The next point is that this process has limitations and it has to be recognized that there are limitations in terms of that process, and lastly, he thinks the Metropolitan Council staff agrees with this, is that he would personally place a range of -5 to +20 on those aggregate forecasts that are prepared. This is from the outside, looking at, and watching what is going on.

Mr. Wolsfeld then distributed a handout, which included all the material that was shown.

Commissioner Schaber said the new transit rider information bothers him, he would expect the BN to draw more than that. He understands University and I-94. Mr. Wolsfeld tended to agree with that comment. Again, he mentioned the reliability of their ability to forecast the number of new riders, the plus or minus on that is much higher than the plus or minus on the individual numbers. In terms of the ability to forecast there could be a significant difference.

Steve Wilson commented that they are continuing to look at the BN, you have to look at where are markets, there are not a lot of employment concentrations and stations - there are tradeoffs.

Chairman Finley said that one of the things on the PB was the connection to Westgate and the closeness to Energy Park as employment centers, this would seem to indicate that there would be an increased ridership of a new type of riders, more so than where you have existing public transportation.

Chairman Finley thanked Mr. Wolsfeld for the presentation.

4. Discussion/Direction concerning reimbursement of relocation expenses of consultant staff - Midway Corridor Phase I PE/EIS.

Chairman Finley said we have a proposed resolution, and asked Ms. DeSpiegelaere if we should know about these expenses before the fact, rather than after the fact. Ms. DeSpiegelaere said that is correct, we would like to be informed in advance.

Chairman Finley said this would be similar to change orders, we like to have those up front, rather than at the end.

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

WHEREAS, Bechtel Civil, Inc., subconsultant to BRW, Inc. has played a major role in engineering studies for the Midway Corridor; and

WHEREAS, The work performed relied on other study elements and frequent interaction with BRW's staff and others in the St. Paul/Minneapolis area; and

WHEREAS, Bechtel Civil, Inc. and BRW, Inc., have indicated that it was less costly to temporarily relocate specific staff members to BRW's office in Minneapolis than to send those individuals back and forth on business trips; and

WHEREAS, Agreement RCRRA-89-003 provides for the reimbursement of direct costs, including travel expenses, providing appropriate approvals are obtained and expenses are documented correctly; and

WHEREAS, Documentation received by the Authority does support the consultant position that costs for relocation are less than recurring travel expenses but it was not submitted for approval, in accordance with contract provisions, prior to incurring staff relocation costs; Now, Therefore, Be It

RESOLVED, That the Ramsey County Regional Railroad Authority authorizes reimbursement for direct costs relating to temporary relocation of Bechtel Civil, Inc. staff to Minneapolis to provide engineering services for Phase I PE/EIS Studies for the Midway Corridor - Agreement RCRRA-89-003, subject to submission of detailed invoice documentation of all costs incurred; and Be It Further

RESOLVED, That BRW, Inc. shall provide documentation for any similar requests for reimbursement of major direct expenses prior to their being incurred and in accordance with contract provisions.

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

R90-67

5. Schedule for Midway Corridor Environmental Impact Statement

Chairman Finley said, as you can see because of the ridership delays, the whole ^{process} has been delayed, but this is the new schedule.

Ms. DeSpiegelaere said this is the new schedule, some of the key days, the report is now scheduled to be released in late December, this will enable us to have forums in December, the public comment period would extend from January 7th to March 11, 1991. After the comment period, the RRA will prepare the final EIS based on what occurred during this period.

We have scheduled two public forums, one on December 10th, and one on December 13th in the Midway Corridor.

The Draft EIS will be done on December 21st. Because of the EQB deadline for publication in their newspaper, it would be noted on January 7th, but the report will be available December 21st.

Ms. DeSpiegelaere said the Board may during the process in which the DRAFT EIS is prepared indicate a preference for alternative, you may not make that final decision until the final EIS is ready.

Commissioner Schaber would like to know if the Board will get before then the figures that were mentioned by Commissioner Ahrens for those kinds of figures between the different alternatives, and systems, and what those costs are going to be.

Ms. DeSpiegelaere said all of the information will be available to this Board by the first weekend in November.

Chairman Finley understands that the Board will have all the information, around the first week in November, and an alignment could be chosen before it is all bound up in December. Ms. DeSpiegelaere said in order to incorporate that in the printed document, this would have to be done in mid-November.

Chairman Finley commented that the schedule included in the documentation is for the whole project, is there a schedule for just that portion of it between now and the end of the year.

Ms. DeSpiegelaere said she could do that, and forward it to the Members rather than wait until the next meeting.

6. Select the 12th Street/Cedar Street Alignment as the preferred surface alternative, and a Central Capitol Mall alignment as the preferred tunnel alternative for the purpose of comparing tunnel and surface options for LRT in the Capitol area.

Ms. DeSpiegelaere addressed the Board, this was worked out with the Capitol Area Architectural Board, and Commissioners Ahrens and Hunt were at that meeting as well.

James Tolaas addressed the Board, earlier studies identified two major surface alignment approaches for the Capitol area. The first was the north side of the Capitol, on University Avenue, going down Jackson, and cutting back to Cedar, the second was a southerly alignment which would go along Rice Street, north of the Kelly Inn to go 12th Street to Cedar. Earlier we had indicated some concerns for traffic and other factors in the area along University and Jackson. What they found was that there were significant traffic impacts, in the area he pointed out on the map, there is a trench behind the Capitol which affects pedestrian movements, esthetics of people riding the train. The traffic impacts are actually a negative aggregate economic development on the side which he pointed out. The travel time is more circuitous. For all those reasons, they felt that the area he pointed out was not the preferred, and the Capitol Area Board selected this particular alignment to be used in subsequent analysis.

In reference to the tunnel options, there are really two major approaches, there are actually three, two of which are a crossing of the mall area, one showed connection to University, one showed the connection sweep over to the west to connect with I-94. A third alternative was a northerly alignment on University going down Robert, and then back to Cedar. That, too, caused significant concerns both for the structural impacts to the Capitol building, and it was a more circuitous route, adding travel time and did not serve the Capitol area as well as the stations. For those reasons the Capitol Area has directed us to recommend a preferred alternative crossing the mall area via either up to the northern alignments or to the west of 94.

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

WHEREAS, Phase I Preliminary Engineering/Environmental Impact Statement studies for the Midway Corridor include the study of light rail transit alignments in the Capitol Area; and

WHEREAS, by amendment to the Midway Corridor contract, alignment studies were expanded to include evaluation of tunnel alternatives and a comparison of surface and tunnel alternatives in the Capitol Area; and

WHEREAS, BRW, Inc. has completed the analysis of surface and tunnel alternatives in the Capitol Area and recommended selection of 12th Street/Cedar Street as the preferred surface alternative and a central Capitol Mall alignment as the preferred tunnel alternative for the purpose of comparison of tunnel and surface options in the Capitol Area; Now, Therefore, Be It

RESOLVED, That the Ramsey County Regional Railroad Authority approves the 12th Street/Cedar Street alignment as the preferred surface alternative and a central Capitol Mall alignment as the preferred tunnel alternative for the purposes of comparing tunnel and surface options in the Capitol area.

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

R 90-68

7. Report on Conference on Economic Development and Transportation - Discussion

Chairman Finley had mentioned at the last meeting verbally, he and Kathy DeSpiegelaere attended this conference. It was probably the best conference that he has attended since being on the Board as far as information and on a particular subject as far as the substance and how it relates. It was overall transit including airports, highways, not just LRT, but how it affects the economic development in a particular area.

For example, Jim Bellus was on one of the panels about transportation on the river, and it encouraged economic development and discouraged it in certain instances. It was very good, one of the things that was pointed out, that when we talked to the people in Long Beach, they are far ahead of the anticipated ridership, on the line that has been opened up between Long Beach and Los Angeles. Security is a problem, which is the first time we have run into that because of some of the areas that it goes through.

We also asked them what they thought, which is the next item on the agenda of whether or not the State should build it, and they thought very strongly that it probably would not have been built if it had been turned over to Caltrans, who is the counter-part of Mn/DOT here.

8. Update on LRT Coordination Plan - Discussion

Commissioner Hunt distributed to the Board members a copy of a resolution which she drafted as a result of earlier actions on the part of this authority. Commissioner Ahrens and she felt that it should be formalized as a part of the Coordination Plan.

The resolution read as follows:

WHEREAS, The Ramsey County Regional Railroad Authority has adopted the position that Mn/DOT is the preferred organization to lead final design and construction of LRT; and

WHEREAS, The proposal from Mn/DOT provides for participation and decision-making by Regional Railroad Authorities and other appropriate agencies (see attached matrix); and

WHEREAS, The Ramsey County Regional Railroad Authority's position is different than that of the majority of members of the LRT Advisory Committee; Now, Therefore, Be It

RESOLVED, That the Ramsey County Regional Railroad Authority requests that its position become a formal part of the LRT Coordination Plan.

Chairman Finley stated, as you know, he feels very strongly the decision that was made by this body to have Mn/DOT construct LRT was wrong. There is not a system that he is aware of that has been built in the last ten years that has been built by a State agency. All of the LRT systems have been

have been built by regional or counties in conjunction with light rail. The question of whether or not we can, what it does as far as he is concerned, is that it is saying to the rest of the region and to the Legislature that we can't work with the other counties, and therefore, we think someone else should take it from here. He thinks that we can work with the other counties. The other six counties think that we can work with the other counties.

Chairman Finley feels very strongly that we did the wrong thing before, the fact that there are personalities that are involved in this, this is something that we have to live with. But, he does not think that Mn/DOT building this system will get it built, number one. Number two, he thinks it is a drastic step backwards in the planning process. Even under the matrix that is set up by Mn/DOT, we have all of the problems, and they have the construction, we are going to lose our commitment to the communities. He does not think that Mn/DOT is as tied into the community councils, into the municipalities. He feels very strongly that if we pass this resolution, like we passed the other one, he would seriously encourage this Board to rescind the previous one. We are the only, only unit of government that has taken a stand in the way we have taken it. The MTC has supported Joint County participation, because they are going to have to operate this system, and they feel more comfortable with the counties doing it.

Chairman Finley continued, we have all been on the tour, everyone said that the operating entity has to be involved in the planning, design, etc. He feels that the MTC feels that their chance of participating are much improved if the counties are involved. Mn/DOT will be revisiting every issue that we have painstakingly made over the last three years in the development of the LRT system within Ramsey County. It will be a giant step backward.

Chairman Finley reiterated, he totally opposes this resolution, and he thinks that if we do not rescind the other one, it is very difficult to continue with LRT from the County perspective, and it is a huge, giant step backwards, and very self-defeating. We are saying we cannot work with anybody else, please take it from us. This is the perception that we have given off to the other units of government, in his opinion.

Commissioner Hunt did not know if we wanted to redebate this all over again. One of the points that she thinks has to be made puts our area different than other parts of the country as far as she knows or can determine, no other part of the country had two major metropolitan areas in two different counties. Most of the other areas that she is familiar with had one major metropolitan area in one major county which put an entirely different perspective on the whole idea of coordination.

Chairman Finley feels that the other areas also had to deal with other units of government, with the local units of government, and the fact that one has to be a county, he does not think that makes much difference. As he looks at it, at the last meeting of the LRT Advisory Committee, they looked at the Joint Powers to include other representatives of some of the agencies.

Ms. DeSpiegelaere said this was the case, in fact the matrix was further refined, and she distributed to the Board members the latest revision, which includes an LRT Construction Commission to be formed by Joint Powers Agreement. This included Mn/DOT, RTB and other parties being parties to the Joint Powers Agreement. The concept of the Joint Powers were revised.

Chairman Finley believes that neither Commissioner Ahrens or Commissioner Hunt were able to be at the last meeting.

Ms. DeSpiegelaere said these changes were prepared by staff for presentation to the LRT Committee. However, when it comes to voting privileges, not all of these people would be voting members. There would be a corridor subcommittee that would be responsible for some of the decisions. The responsibility matrix has Mn/DOT being a participant in that it would be possible for the Joint Powers Board to contract with Mn/DOT for right-of-way/and for construction management. The funding would probably flow through the RTB. The staff was asked to further refine this concept by one of the members of the Advisory Committee. This was well received at the last meeting of the Advisory Committee.

Commissioner McCarty asked what the Advisory Committee's position was for this action. Chairman Finley said they voted 9 to 4 for the Joint Powers. Commissioners Hunt, Ahrens, Mn/DOT representative and Russ Larkin were the dissenting votes.

Commissioner Schaber in view of this would like to hold off on this new proposed resolution. Part of our problems are the players that are involved. He has talked to staff, and the concern he has is if we go to Mn/DOT, they are going to relook at everything we have done for three years which bothers him a little bit. In other words, they feel pretty strongly that they are just not going to accept what we have done. Another reason why he voted for Mn/DOT was that he feels very strongly that we need State funding, and he thought this might help encourage State funding. As a result, at this point in time, he would like to hold off on this resolution if possible.

Commissioner McCarty thinks this is where he was last time, he felt that the issue was without statewide funding commitment, he fails to see the gain in having a statewide agency taking over. He would support Commissioner Schaber's comments.

Commissioner McCarty would move to table the resolution of September 11, 1990 regarding Mn/DOT.

Commissioner Ahrens does not have any information that the Mn/DOT would go back and revisit, she does not know that they would do that.

Commissioner Schaber commented there is a good chance that is in effect what is going to happen.

Commissioner Ahrens feels that the information that was given at the meeting by Mn/DOT, as well as the matrix, indicates quite the opposite. That is why she is puzzled as to whether this information of revisiting, and how we came by that, this would be a concern. One of the reasons that we felt so strongly about Mn/DOT proceeding was what they said at the meeting, what we heard them say, what the presentation said, what was put on paper, what the matrix said, which was quite contrary to what your information is.

Commissioner Hunt said that whatever the final decision is going to be, it is going to be by the Legislature, and if the Legislature determines that it is going to be Mn/DOT, she is not going to encourage or authorize Mn/DOT to go out and reinvent the wheel. She does not think that is what is going to happen. She thinks what this resolution does is point out that there is a difference opinion on who should be the implementing agency.

Chairman Finley's feeling is exactly that the Legislature is going to make that decision, and what the Legislature asked us to do is to tell them what we think it should be. In his opinion, there is no question in his mind that the counties should continue the process and construct LRT. That is the way he voted. The fact that the personalities may have made it difficult to do that with other counties, he does not think is the issue. The issue is who should construct LRT, not who should be the Chairman, and who should call the shots. We are much better off with elected officials who are responsible to the constituency, than we are to a bureaucracy. He does not know of one LRT system built by a bureauacy of the State government.

Commissioner McCarty mentioned the 9 to 4 vote at the Advisory Committee.

Commissioner Ahrens said that they are not doing anything here that they have not already done. All we are asking is rather than have this buried in the minutes some place on a vote of 9 to 4 that we simply bring it up front, and say that this Board does have a different view from the majority opinion. That is all this does. It simply states what we have already done to make it a part of the official record. There is nothing new here, so if we want to lay the matter over, if you do not want to vote on this at this time, fine. But, she thinks it ought to be very clear with everyone that all this does is to reaffirm what we have already decided. If we want to revisit that and make another decision, that is a completely different matter, but this resolution does not do anything that we have not already done around this table.

Commissioner McCarty understands this, that is not what he is saying. He is concerned about it may in effect represent a minority report to the LRT Advisory Committee action. Commissioner Ahrens said that is exactly what it does.

Chairman Finley's feeling is that we should rescind what we have done.

Commissioner Ahrens appreciates that, but that is another issue.

Chairman Finley said it is not another issue, it is exactly this issue. What you are asking for is a reaffirmation of something that you already have a resolution through this Committee, you carried this to the LRT Advisory Committee, you have recorded your vote at that time. What you are asking for now is a reaffirmation. He restated he feels this should be rescinded as it was wrong then, and it is just as wrong today, more wrong today than it was then because the matrix, the refinement of the Joint Powers is an ongoing process. The recommendation is going to come to the RTB, and he thinks we will look like a bunch of cry babies, to be honest with you. He thinks it is clear that we can't work with the City, we can't work with the Counties, and we can't work with the RTB, and we want to give it to Mn/DOT. That is a perfect position to be in if you want to do damage to LRT in the regional system.

Commissioner Hunt does not believe it was probably necessary to bring this resolution to this meeting, and she is going to withdraw the resolution.

Chairman Finley said if you withdraw it, that is fine, but also thinks this should have been a part of the documentation, and not brought in separately.

Chairman Finley feels the problem is our position stands, and it is not a tenable position to be presenting to the public, because it is contrary to everyone else's position. It falls right in the face of what we have been charged with, that we are not able to make up our minds on things, so pass the buck.

Commissioner McCarty feels very strongly, he doubts very seriously if we will receive state wide funding in the next Legislative session, and as long as this remains a metro effort, a cooperative effort among the seven county area, that we ought to be supportive of what the Advisory Committee majority decides for the time being, in the interests of those good relationships that we will need in the future. It is a foregone conclusion if it isn't a metro wide sales tax, it isn't going to be.

Chairman Finley wished to say that this Board standing unified overcame, got into the RTB plan exactly what we wanted for the development, this Board standing unified got into the method of funding light rail for the entire region exactly what it decided as to its priorities. This Board standing divided and perpetuating that division is going to not be very successful in the continuation of those endeavors to the detriment of the metropolitan area. That is not a threat, that is just the way it happens.

Chairman Finley said since there is no resolution on board, we will move to No. 9.

9. Ratify Partial Payment No. 4 to SRF, Inc. in the amount of \$12,135.33.

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

WHEREAS, The Ramsey County Regional Railroad Authority has contracted for the professional services of Strgar-Roscoe-Fausch, Inc. for the purpose of conducting alignment studies for the Northeast Corridor; and

WHEREAS, Ramsey County Regional Railroad Authority Agreement Number RCRRA-90-001, govern the performance of services of and terms of payment to Strgar-Roscoe-Fausch, Inc.; and

R90-69
WHEREAS, Strgar-Roscoe-Fausch, Inc. has satisfactorily completed portions of the work identified in the referenced agreements, and provided detailed invoice documentation for services and costs accrued through August 31, 1990; and

WHEREAS, To ensure timely payment for services rendered in accordance with Agreement No. RCRRA 90-001, the Ramsey County Regional Railroad Authority authorized (Resolution R90-) the Director of Light Rail Transit Planning to process payments to Strgar-Roscoe-Fausch, Inc. for work completed and invoiced in accordance with the agreement; and

WHEREAS, Resolution R90- 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, Strgar-Roscoe-Fausch, Inc. Invoice No. 4, Partial Payment No. 4, and attachments thereto, provide the correct documentation of payments due Strgar-Roscoe-Fausch, Inc. through August 31, 1990; Now, Therefore, Be It

RESOLVED, Payment to Strgar-Roscoe-Fausch, Inc. in the amount of \$12,135.33 for Ramsey County Regional Railroad Authority's share of services rendered through August 31, 1990 is hereby ratified.

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

10. Ratify Partial Payment No. 11 to BRW, Inc. in the amount of \$142,385.49

Commissioner Schaber 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 July 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 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

R90-70
WHEREAS, BRW, Inc. Invoice No. 59179, Partial Payment No. 11, and attachments thereto, provide the correct documentation of payments due BRW, Inc. through July 31, 1990; Now, Therefore, Be It

RESOLVED, Payment to BRW, Inc. in the amount of \$142,385.49 for Ramsey County Regional Railroad Authority's share of services rendered through July 31, 1990 is hereby ratified.

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

<u>CHAIRMAN FINLEY</u> Originating Department <u>John T. Finley /s/</u> <u>10/15/90</u> 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:

<u>Committee / Meeting Date</u>	<u>Signature</u>	<u>Date</u>
<u>Committee / Meeting Date</u>	<u>Signature</u>	<u>Date</u>
<u>October 23, 1990</u>	<u><i>F. L. Glendinning</i></u>	<u>10/15/90</u>
<u>Board Date</u>	<u>Signature</u>	<u>Date</u>

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

3

Regional Railroad Authority
Originating Department

K. DeSpiegelaere
 Authorized Signature

10/13/90
 Date

Board Action Requested

Designate Cedar and Fourth Streets as the preferred location for LRT in Downtown St. Paul for purposes of Draft Environmental Impact Statement for Midway Corridor

ACTION IS REQUESTED

Request Justification

- See attached:
1. Proposed resolution
 2. Memorandum from K. DeSpiegelaere
 3. BRW recommendation
 4. Cost estimate
 5. Comparison of tunnel and surface alternatives
 6. Downtown Task Force membership list
 7. October 11 forum attendance list
 8. Summary of October 11 forum
 9. Map of Cedar and Fourth Streets

Budgeting and Accounting Ed Blawie
 County Attorney Jim M. With
 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
 October 23, 1990

Signature

Date

Board Date

Signature

Date

F. L. Glendinning

10/15/90



Resolution

Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: _____

No. _____

WHEREAS, Ramsey County Regional Railroad Authority recommended in its Comprehensive LRT Plan that six streets in Downtown St. Paul, St. Peter, Cedar, Minnesota, Fourth, Fifth and Sixth, be considered for LRT; and

WHEREAS, Ramsey County Regional Railroad Authority has adopted resolutions that:

1. The combination of Cedar and Fourth Streets is the preferred street-level location for LRT in Downtown St. Paul; and
2. The combination of St. Peter and Sixth Streets is the preferred location for a tunnel in downtown St. Paul; and
3. A comparison of tunnel and street-level alternatives would be conducted; and

WHEREAS, The results of the comparison were analyzed and the Downtown LRT Task Force recommended that LRT on Cedar and Fourth Streets, rather than in a tunnel, is preferred for Downtown St. Paul; and

WHEREAS, The recommendation was reviewed with affected property owners in individual meetings and at a Downtown LRT Forum on October 11; Now, Therefore, Be It

RESOLVED, That Ramsey County Regional Railroad Authority designates Cedar and Fourth Streets in Downtown St. Paul as the preferred location for LRT in the Draft Environmental Impact Statement for the Midway Corridor.

on the surface

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

MEMORANDUM

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

From: Kathryn DeSpiegelaere, Director of LRT Planning *KD*

Subject: Selection of Preferred Alignment for LRT in
Downtown St. Paul

Date: October 13, 1990

The purpose of this memorandum is to summarize the information generated to date that may provide Ramsey County Regional Railroad Authority with the information necessary to select a preferred alignment for LRT in Downtown St. Paul.

Ramsey County Regional Railroad Authority may indicate a preferred alignment for LRT in the Draft Environmental Impact Statement for the Midway Corridor. The preferred alignment will not become final until after a public comment period, including hearings, and after Ramsey County Regional Railroad Authority Commissioners have reviewed information that is received during the comment period. It will be possible for Ramsey County Regional Railroad Authority, based on information received during the public comment period, to make a final decision that differs from the recommended preferred alternative in the Draft Environmental Impact Statement. The Draft Environmental Impact Statement is scheduled to be released in December, 1990, and a Final Environmental Impact Statement in the spring of 1991.

BACKGROUND

The Comprehensive LRT Plan for Ramsey County, adopted in December, 1989, recommended six streets for consideration for LRT in Downtown St. Paul: St. Peter, Cedar, Minnesota, Fourth, Fifth and Sixth. A Downtown Task Force, chaired by Bob Bach and consisting of representatives of Downtown St. Paul residents, business organizations, City of St. Paul and Ramsey County Regional Railroad Authority, began meeting

March 1 to review information and make recommendations on the Downtown LRT alignment.

On June 12, 1990, at the request of the City of St. Paul, Ramsey County Regional Railroad Authority authorized BRW to conduct a study comparing the preferred surface option with a tunnel option for Downtown St. Paul. On June 26, 1990, Ramsey County Regional Railroad Authority adopted a resolution indicating that a transit mall on Cedar and Fourth Streets was the preferred option for LRT on the surface in Downtown St. Paul. On September 11, 1990, Ramsey County Regional Railroad Authority selected St. Peter and Sixth Streets as the preferred tunnel alternative for comparison to the street-level alternative of Cedar and Fourth Streets.

TUNNEL/SURFACE COMPARISON

A comparison of the tunnel and surface options for LRT in Downtown St. Paul is attached. BRW's recommendation (Attachment 1) was for the surface option. Attachment 2 is the cost estimate for the tunnel (\$150 million) and surface (\$34 million) options. Attachment 3 is the comparison of the options.

COMMUNITY PARTICIPATION

The Downtown LRT Task Force (list of members, Attachment 4) recommended on a vote of 9 in favor, one abstention, that the surface alternative of LRT on Cedar and Fourth Streets is preferred for Downtown St. Paul.

A Technical Staff Group, including representatives of the City of St. Paul Public Works and Planning and Economic Development Department, Metropolitan Transit Commission and Regional Transit Board, reviewed Downtown information.

The recommendation was reviewed at a public forum at the World Trade Center on October 11. A copy of the sign-in sheet (attendance was 68 people) is Attachment 5 and the summary of the public forum comments is Attachment 6. No comments at the forum were received in opposition to the surface alternative recommended by the Downtown Task Force.

In addition, individual meetings were arranged and attended by Bill Buth, Building Owners and Managers Association, for Ramsey County Regional Railroad Authority staff and consultants with representatives of Gillette, Minnesota Public Radio, Conservatory, St. Paul Athletic Club, Central Towers, Minnesota Chamber of Commerce, Town Square, Town Center, World Trade Center, Pioneer/Endicott, First Trust, Kellogg Square, Ecolab, Pioneer Press, Norwest, Union Depot, Mears Park Centre, All Right Parking, First National Bank and Midwest Federal. The purpose of these meetings was to discuss the Cedar/Fourth Street proposal, obtain their

comments and suggestions and determine if there were any unworkable problems. None were encountered. Don Sobania, St. Paul Traffic Engineer, participated in nearly every meeting with the property owners and managers.

RECOMMENDATION

Ramsey County Regional Railroad Authority is requested to consider designation of a transit mall on Cedar and Fourth Streets in Downtown St. Paul as the preferred location for LRT in the Draft Environmental Impact Statement for the Midway Corridor. A map of the recommended alternative is Attachment 7. The recommended alternative is compatible with both a tunnel or surface alignment in the Capitol area and with other regional LRT corridors.



BRW, INC.

THRESHER SQUARE

700 THIRD STREET SOUTH

MINNEAPOLIS, MINNESOTA 55415

PHONE: 612/370-0700 FAX: 612/370-1378

PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN

MEMORANDUM

DATE: September 20, 1990

TO: Kathryn DeSpiegelaere

FROM: Richard Wolsfeld
Mark Niles

RE: BRW's Recommendation on the Preferred LRT Option for Downtown St. Paul

This memorandum outlines BRW's recommendation regarding the surface or tunnel LRT options for Downtown St. Paul. The rationale for this recommendation is also outlined. The recommendation is based on the analyses and comparative evaluations of the preferred surface and tunnel LRT options.

RECOMMENDATION

The surface LRT option located along Cedar and Fourth Street is recommended by BRW for the Downtown St. Paul area. The three reasons for the recommendation are outlined below.

RATIONALE

1. The technical evaluation of the two downtown LRT alternatives against the prioritized evaluation criteria is the first reason for the finding:
 - o The surface alignment is technically feasible. With minor mitigation, the forecasted 2010 traffic can be accommodated on the existing street system with LRT. Capacity exists on other streets to serve the buses. The curbside impacts can be mitigated. The major factors that have led many cities to constructed tunnels (major negative surface street impacts) are not present in downtown St. Paul.

- o The capital cost of the surface system is \$34.4 million (1991 dollars) and the capital cost of the tunnel is \$149.8 million (1991 dollars). For the same level of capital expenditure, a major portion of another corridor could be constructed with the money required to build a tunnel.
 - o For high priority evaluation criteria, the tunnel has slight advantages over the surface alignment in vehicle travel time, person travel time, ridership, and operating/maintenance cost. The differences are not significant enough to offset the capital cost difference.
 - o For the second and third priority evaluation criteria, the surface alternative provides the most convenient access to the bus system, provides easier access for elderly and handicapped, and provides more flexibility for making regional LRT connections and modifying stations.
 - o For the second and third priority evaluation criteria, the tunnel alternative provides the greatest protection from the weather, has long-term viability (being independent of surface street changes), and has better ability to maintain schedules.
2. The second reason for recommending the surface alignment is the qualitative benefits presented by the surface alternatives:
- o The system is easily and frequently seen by the users and potential users; a strong presence exists.
 - o The stations will attract and generate large pedestrian volumes, which, in turn, will give the feeling of activity and liveliness at street level.
 - o The LRT route will bring visible change to downtown St. Paul; surface LRT lines are attractive, colorful and modern. A new and very visible mode of transportation will be introduced in downtown St. Paul.
3. The recommendation is also based on the opportunities that the surface LRT alternative provides the City of St. Paul to change the character of the downtown street system. To enliven downtown areas many cities have assigned different transportation functions to different streets. With the implementation of LRT, the following differentiating opportunities exist:
- o LRT/pedestrian: Cedar and Fourth Streets
 - o With-flow or contra-flow bus lanes: Fifth and Sixth Streets
 - o Traffic service: Kellogg, Minnesota/Robert, Sibley/Jackson, Fifth/Sixth, etc.
 - o On-street Parking/Access: Market, St. Peter, Waucouta, etc.

1-3

Kathryn DeSpiegelaere
September 20, 1990
Page 3

While it is not the purpose of this LRT planning process to develop a comprehensive downtown transportation plan, components of such a plan are present. The City of Portland is a good example of how LRT and a bus mall have positively changed the character of downtown.

While both LRT alternatives are viable, BRW favors the at-grade alternative for the above reasons.

RW/ch



BRW, INC.

THRESHER SQUARE

700 THIRD STREET SOUTH

MINNEAPOLIS, MINNESOTA 55415

PHONE: 612/370-0700 FAX: 612/370-1378

PLANNING
TRANSPORTATION
ENGINEERING
URBAN DESIGN*Attachment 2*

MEMORANDUM

DATE: September 20, 1990

TO: Kathy DeSpiegelaere, RCRRA

FROM: Bill Smith
Richard WolsfeldRE: Tunnel and At-Grade Downtown LRT Cost Estimates
41-9022

Current tunnel and at-grade cost estimates for the St. Paul downtown are presented in this memorandum. The current at-grade cost estimate is also compared to the at-grade cost estimate that was used in the Ramsey County Comprehensive LRT Plan document (S-R-F, Inc.). This earlier estimate was used in the RTB Regional LRT Development/Financial Plan (S-R-F, Inc. and BRW, Inc.).

As you will recall, the at-grade estimate for downtown St. Paul used in the RTB study was \$22 million (1988 \$) or \$25.5 million (1991 \$). In the RTB Plan refinements that followed approval of the Plan in January 1990, it was suggested adding \$3 million to the \$22 million for urban design/pedestrian amenity enhancements. This would have brought the total to \$25 million (1988 \$) or \$28.9 million (1991 \$).

The \$3 million estimate was a general estimate and was based on experience gained in downtown street design. Using specific quantities, a revised estimate for transit mall/pedestrian enhancements is \$3.5 million (1988 \$).

The most recent tunnel cost estimate is presented in Table 1. Table 2 shows the most recent at-grade estimate, and Table 3 compares the most recent at-grade estimate to the previous estimate.

BS/jkh
Enclosures

MINNEAPOLIS

DENVER

PHOENIX

TUCSON

ST. PETERSBURG

SAN DIEGO

TABLE 1
DOWNTOWN ST. PAUL TUNNEL COST ESTIMATE
 (I-94 to EAST PORTAL)

Item	Estimated Cost (Millions 1988 \$)	Estimated Cost (Millions 1991 \$)
Civil Works	\$ 26.3	\$ 30.4
Right-of-Way	0.5	0.6
Utility Relocation	2.2	2.6
Stations (3)	43.9	50.8
System Components	<u>6.4</u>	<u>7.4</u>
SUBTOTAL	\$ 79.3	\$ 91.8
Contingency @ 40 percent	31.8	36.8
Engineering/Construction Management @ 20 percent	<u>16.0</u>	<u>18.4</u>
SUBTOTAL	\$ 47.8	\$ 55.2
Special Items:		
o Replacement Parking*	\$ <u>2.4</u>	\$ <u>2.8</u>
TOTAL	\$129.5	\$149.8

NOTE: All of the above costs may not be the responsibility of the LRT implementation agency. This tunnel cost assumes that a tunnel is built in the Capitol Area; the northern terminus of the tunnel is under I-94.

* Assumes construction of parking structure with 278 spaces at \$10,000 per space (1991 \$) for replacement parking for Gillette.

TABLE 2
DOWNTOWN ST. PAUL AT-GRADE COST ESTIMATE
 (I-94 to UNION DEPOT)

Item	Estimated Cost (Millions 1988 \$)	Estimated Cost (Millions 1991 \$)
Civil Works	\$ 8.2	\$ 9.5
Right-of-Way	0.5	0.6
Utility Relocation	1.7	2.0
Stations (4)	4.5	5.2
System Components	<u>3.2</u>	<u>3.7</u>
SUBTOTAL	\$ 18.1	\$ 21.0
Contingency @ 20 percent	3.6	4.2
Engineering/Construction Management @ 20 percent	<u>3.6</u>	<u>4.2</u>
SUBTOTAL	\$ 7.2	\$ 8.4
Special Items:		
o Transit Mall/Pedestrian Enhancements*	3.5	4.0
o Replacement Parking**	<u>0.9</u>	<u>1.0</u>
SUBTOTAL	\$ 4.4	\$ 5.0
TOTAL	\$ 29.7	\$ 34.4

NOTE: All of the above costs may not be the responsibilities of the LRT implementation agency.

* 101,200 square feet at \$40 per square foot (1991 \$), the \$40.00/square foot cost would result in very high quality semi-transit mall environment.

** Assumes construction of parking structure with 102 spaces at \$10,000 per space (1991 \$)

NOTE: Utilities relocation estimate includes a 2-foot thick slab laid over existing utilities. If all utilities are relocated from under the LRT tracks, the relocation costs would be \$17 million (1991 \$) plus contingency and engineering/construction management. The LRT implementation agency may not be responsible for all utility relocations.

TABLE 3
COMPARISON OF RCRRA COMPREHENSIVE PLAN AND CURRENT AT-GRADE COST ESTIMATES

Item	RCRRA Comp. Estimated Cost (Millions 1988 \$)	Current Estimated Cost (Millions 1988 \$)
Civil Works	\$ 5.9	\$ 8.2
Right-of-Way	---	0.5
Utility Relocation	4.1	1.7
Stations	1.8	4.5
System Components	<u>2.9</u>	<u>3.2</u>
SUBTOTAL	\$ 14.7*	\$ 18.1**
Contingency	4.0	3.6
Engineering/Construction Management	<u>2.9</u>	<u>3.6</u>
SUBTOTAL	\$ 6.9***	\$ 7.2****
Special Items:		
o Transit Mall/Pedestrian Enhancements	---	3.5
o Replacement Parking	<u>---</u>	<u>0.9</u>
SUBTOTAL	\$ ---	\$ 4.4
TOTAL	\$ 21.6	\$ 29.7

* 1.5 single-track miles, forming a one-way loop on Cedar/Minnesota and 5th/6th with 4 single platform stations.

** .87 double track miles comprised of 2 two-way semi-transit malls, with 4 double platform stations.

*** Contingency at 25 percent and Engineering/Construction Management at 20 percent.

**** Contingency and Engineering/Construction Management, both at 20 percent.

**DOWNTOWN SAINT PAUL
POTENTIAL IMPACTS OF SURFACE AND TUNNEL LRT
(REVISED 9/11/90)**

Criteria	Surface	Tunnel
Traffic Impacts	- Diversion of traffic from Cedar and Fourth Streets to adjacent streets with available capacity - Conversion of Robert and Minnesota Streets to one-way pair - Additional turn lane at Robert Street and Kellogg Boulevard	- Impacts at tunnel portals on streets where portals are located
Curbside Impacts	- Elimination of 102 on-street metered parking spaces - Relocation of six truck loading zones - Rerouting of access to six parking lots or garages - Reconstruction of the building entrance for Saint Paul Pioneer Press Building - Relocation of bus stops from Cedar and Fourth Streets to adjacent streets - Restriction of access to five loading docks to off-peak hours for LRT (9 AM to 3 PM)	- Potential encroachment on Mears Park to accommodate tunnel station access

Criteria	Surface	Tunnel
Interface with Bus System	- Access on same level to bus stops on Fifth, Sixth, Minnesota and Robert Streets is provided for bus transfers	- Bus transfers required to change levels to access bus stops - Bus transfers to Cedar and Fourth Street bus routes required to walk one to two blocks to access bus stops
Pedestrian Impacts	- A pedestrian-oriented mall is created by removing vehicular traffic from Cedar and Fourth Streets - Potential for some sidewalk narrowing at station locations - Some sidewalk widening between stations - Potential pedestrian/vehicle conflict at Fifth/Sixth/Cedar	- Reduction in sidewalk/plaza areas at tunnel station access points - Access to skyways would require pedestrians to cross two levels
Visual Impacts	- LRT Station and catenary may interrupt Capitol views along Cedar Street (partially mitigated by station location under Norwest Center second-story parking garage) - Positive visual image of increased street level activity and station and streetscape amenities - Increased visibility of downtown area by LRT riders	- Downtown area is not visible to LRT riders - Potential negative visual impact of tunnel portals - No potential negative visual impacts of tunnel - Underground stations can be visually attractive
User Comfort/Convenience	- Surface stations are covered and heated but not totally enclosed - LRT station locations are visible and easy to find - Easier orientation to destinations	- Climate controlled environment - Some LRT patrons may be uncomfortable in tunnel beneath the ground surface - Signage may be required to direct LRT riders to tunnel stations

Criteria	Surface	Tunnel
Connection to LRT Corridors	- Connections to all six LRT corridors are possible - Connections to South-Southwest corridor may be difficult to provide	- Connections to all six LRT corridors are possible - Connections to South-Southwest Corridor may be difficult to provide - South Corridor required to enter downtown from the east
Handicapped/Elderly Access	- Ramps required to access the platforms	- Access via two elevators and escalators is required to access the tunnel station platform
Schedule Reliability		TO BE COMPLETED
Long-Term Viability		TO BE COMPLETED
Land Use Impacts		TO BE COMPLETED
Public Safety		TO BE COMPLETED
Travel Time		TO BE COMPLETED
Patronage		TO BE COMPLETED
Operating and Maintenance Cost		TO BE COMPLETED
Capital Cost		TO BE COMPLETED
Construction Impacts		TO BE COMPLETED

9/13/90

DOWNTOWN SAINT PAUL
POTENTIAL IMPACTS OF SURFACE AND TUNNEL LRT
PART 2

Criteria	Surface	Tunnel
Schedule Reliability	- Possibility of track blockage from street traffic/pedestrian.	- Very reliable.
Long-Term Viability	- Will accommodate the LRT trains from all six corridors for 2010 headways. - Growth in traffic beyond twenty-year time period could result in traffic congestion. - Provides the ability to add or change a station at a later time.	- Able to accommodate a greater number of trains than required for the six corridors for 2010 headways. - Ability to add a station would be very difficult
Land Use Impacts	- Development potential along the route based on increased visibility by LRT riders.	- Development potential at station locations.
Public Safety	- Some potential for automobile/LRT/pedestrian conflict. - Activity on surface can have positive impact on perception of safety.	- Negative perception of personal safety may require security personnel in tunnel stations.

Criteria	Surface	Tunnel
Travel Time	- Person travel time of 5.2 minutes from I-94 crossing to Sibley/Wacouta Station (4 stations). - Vehicle travel time of 5.2 minutes from I-94 crossing to Sibley Wacouta Station (4 stations).	- Person travel time of 4.3 minutes from I-94 crossing to Sibley/Wacouta Station (3 stations). (This includes time for LRT rider to access the surface.) - Vehicle travel time of 2.8 minutes from I-94 crossing to Sibley/Wacouta Station (3 stations).
Patronage	- Up to four percent less riders than the tunnel option based only on a higher travel time. - 30,020 current employees with 2 blocks of four stations.	- Up to four percent increase in ridership is possible based only on reduction in travel time when compared to surface LRT. - 24,200 current employees within 2 blocks of three stations.
Operating and Maintenance Cost	- Estimated annual operating and maintenance cost of \$970,000 for the downtown area due to labor cost of drivers.	- Estimated annual operating and maintenance cost of \$580,000 for the downtown area.
Capital Cost	- Estimated total capital cost of _____ million.*	- Estimated total capital cost of _____ million.*

* Capital cost will be distributed to committee at meeting.

Criteria	Surface	Tunnel
Construction Impacts	- The planned closing of Cedar and Fourth Streets to traffic would occur at the beginning of the construction phase. - Some lane restrictions on cross streets at Cedar and Fourth Streets would be required to accommodate construction of the LRT transit mall. - Sidewalks and access to buildings may need to be rerouted during the construction of the LRT transit mall.	- Lane closures on Sixth Street for cut-and-cover construction at station locations. - Utility relocations may require lane closures on Saint Peter and Sixth Streets. - Building underpinning at Sixth and Saint Peter Street corner and for buildings adjacent to stations may be required. - Soil and debris from tunnel boring needs to be removed and transported out of the area. - Staging area for tunneling equipment is needed. The location would most likely be near the portal location. - Subsurface dewatering would need to utilize the storm sewer system.

DOWNTOWN LRT TASK FORCE MEMBERSHIP LIST*Attachment 4-1*

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

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

Doug Hoskin
3640 Birchpond Road
Eagan, MN 55122

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

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

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

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

Elin M. Skinner
Midway Civic & Commerce Assn.
2383 University Avenue, Suite 200
St. Paul, MN 55114

Weiming Lu
Lowertown Redevelopment
175 East 5th Street
Suite 750
St. Paul, MN 55101

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

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

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

Bill Fallon
American National Bank
St. Paul, MN 55101

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

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

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

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

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

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

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

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

Andy Rossini
Department of Transportation
Rm. 417 Transportation Bldg.
John Ireland Blvd.
St. Paul, MN 55155

Commissioner John T. Finley
316 Courthouse
St. Paul, MN 55102

Commissioner Ruby Hunt
316 Courthouse
St. Paul, MN 55102

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

Councilmember Dave Thune
702 City Hall
St. Paul, MN 55102

Councilmember Tom Dimond
66 City Hall
St. Paul, MN 55102

DOWNTOWN LRT TASK FORCE

4-2

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

ATTENDANCE LIST

Please Print

Meeting: Anti Public ForumDate: 10-9-11

Name	Mailing Address	Zip Code	Phone
Bill Orna	Gillette 310 Fifth St Paul		292-4200
Buzz Harrigan	2204 Hillside St	55101	291-1620
MARYANN VONBEHREN	ECOLAB, 370 WABASHA		293-2246
John Thum	Minn. Mutual Life		358-3091
Kathryn Hespeler	RCRRA		
Francis J. O'Toole	R. T. B.		
Laura Sweney	1424 Sherburne Ave St. Paul	55101	
ARVIE LAPINSKY	66 E. 9th St.		224-7425
JIM ENGELMAUN	NSP Co., 825 Rice St		55117
Bob Bach	Falkner Law Firm		St. Paul
Bob Hadley	Saint Paul Area Chamber of Commerce		
Ben Kroiss	State of MN Admin 50 Sherburne Ave St Paul	55155	
Scott WEIDENHOF	MPCC		
John Jansen	1921 E. River Terr Mpls	55414	339-1170
Tony Strauss	1413 California Ave. W. Falcon Heights	55108	67-1421
KEN PEISCHEL	1604 American Nat Bank St. Paul		227-9201
Dick Beith	386 Wabasha St. Paul		291-8888

ATTENDANCE LIST

5-2

Please Print

Meeting: Dutch Public Forum
Date: 10-1-1

Name	Mailing Address	Zip Code	Phone
Peter Bruce	Downtown Council		297-6899
Pat Wolf	Rothschild Real Estate Co		290-8890
Nancy Freich	P&D		228-3363
Elin Shinner	MCCA		546-2636
Lawrence Lystig	St. Carmel Lutheran Church 1701 St Anthony Hwy, Mpls		781-2796
Lisa Lee	181 Sherburne Ave.	St. Paul 55103	222-6023
Rich Hanson	34 Front Ave		292-1616
Evelene Johnson	545 N. WABASHA		604
Norbert Thies	12466 Marysom Rd		Shokopee
Dave McDonnell	1988 Wellesley Ave		699-1137
Gene Shoup	RTB - St. Paul		229-2745
Ruby Hunt	City Bd.		
Paul Mohlscher	Science Museum 30 E. 10th St		221-9423
Dave Lick	District Energy		297-8955
Ruby Hunt	RCPPA Comm.		
Stephanie Eiler	RTB		
Connie Mowaka	26 W. 10th St #1904 St. Paul		291-0336

ATTENDANCE LIST

5-3

Please Print

Meeting: Public Forum
Date: 12-7-90

Name	Mailing Address	Zip Code	Phone
Chuck Wight	St Paul Chamber		273-5000
Mike Clemens	Office of the Mayor		298-4323
David Gray	9W 7 th place Apt 442 St. Paul	55102	298-1991
Sick Yoswa	11200 W 78 th ST. EDEN PRAIRIE MN	55433	
Dick Wedell	1003 Richmond Ct Shoreview MN		
Leon Pearson	City of St Paul Pub Wks		292-6277
WAYNE MIKOS	172 E. 4 th STREET ST. PAUL		229-1302
ALAN RUELSON, JR.	MN PARKS & TRAILS COUNCIL & FDN		
John Meller	Victory Parking Inc.		222-7371
Wendy Wolf	278 E. Wyoming St. St. Paul, MN	55107	
Bob Kren	MITC		223-4345
SCOTT R. JENSEN	GRADUATE ARCHITECT-TKDA		292-4531
DOUG HOSKIN	3640 Bushpond Rd Eagan	55122	687-0437
Claudia Elliott	10831 Roxcroft #14 Sun Valley CA	91352	818-762-5883
Don Brutho	Lilydale Condominiums		
JIM CZARNIECKI	123 FARRINGTON SAINT PAUL	55102-2101	
Ann E. Johnson	ECPPA		

ATTENDANCE LIST

5-4

Please Print

Meeting: Outr Public Forum
Date: 10-9-90

Name	Mailing Address + ZIP CODE	Phone
<u>RICHARD CHIN</u>	<u>ST. PAUL PIONEER PRESS</u>	
<u>Mike Brunkow</u>	<u>%RADISSON Hotel St. Paul</u>	<u>292-1900</u>
<u>Pat Kleinman</u>	<u>Enterprise Rent A Car</u>	<u>488-0213</u>
<u>Allen Loring</u>		<u>228-3229</u>
<u>Joe M. Mittle</u>	<u>Chm of St Thomas</u>	<u>647-5646</u>
<u>Ann Saifert</u>	<u>401 Sibley St. #304</u>	<u>227-6194</u>
<u>David Johnson</u>	<u>360 N. Robert St #700</u>	<u>222-3081</u>
<u>Catherine Dader</u>	<u>St. Paul PED</u>	<u>228-3392</u>
<u>Julia A. Hickey</u>	<u>218 E. 7th St #506</u>	<u>224-5707</u>
<u>Jody Hauer</u>	<u>708 S 3rd St</u>	<u>338 0791</u>
<u>Mark Filipi</u>	<u>St. Paul PED</u>	<u>228-3393</u>
<u>Julie Nelson</u>	<u>332 MN Street</u>	<u>225-3664</u>
<u>Spill K. Williams</u>	<u>405 No. Robert</u>	<u>291-4097</u>
<u>Andrew Rasmussen</u>	<u>124 No. Dale</u>	<u>227-3713</u>
<u>Kathryn Rose Larson</u>	<u>2500 American Nat'l Bank</u>	<u>292 4532 TADA</u>
<u>Karen Eid</u>	<u>" " "</u>	<u>TADA</u>
<u>GARY COOK</u>	<u>" " "</u>	<u>292 4436</u>

Ramsey County Regional Railroad Authority

DOWNTOWN SAINT PAUL PUBLIC FORUM ON LRT

TUESDAY, OCTOBER 9, 1990

SUMMARY MINUTES

The meeting was held at the World Trade Center and began at 3:30 P.M.

John T. Finley, Chair of the Ramsey County Regional Railroad Authority (RCRRA), opened the meeting by welcoming everyone to the Public Forum.

Commissioner Finley gave the background on Light Rail Transit (LRT) planning in Ramsey County which began in 1987 when the RCRRA was formed and described the proposed Ramsey County LRT corridors. He noted that the Midway Corridor project has had an active community participation process comprised of advisory committees to the RCRRA: Downtown Task Force, Midway Corridor Task Force, a Capitol Area group, a Technical Group, and the Intergovernmental Advisory Committee.

Chair of the Downtown Task Force, Bob Bach, said the Downtown Task Force began in February 1990. Their charge was to recommend a preferred alignment for LRT in Downtown Saint Paul, and they have recommended the Cedar/Fourth Street at-grade alignment. Various alignments, both at-grade and tunnel, were evaluated before the group made its recommendation.

Kathy DeSpiegelaere said the purpose of the Public Forum is to provide information and give the public an opportunity for questions to be answered and to make comments.

Jill Goski gave a slide presentation on LRT in general, LRT in Ramsey County and its relationship to the regional system, the RTB's role, the Midway Corridor with the three alignments being evaluated and the Downtown alignment recommendation.

Dick Wolsfeld reviewed the selection process used by the Downtown Task Force in evaluating the tunnel and at-grade alignment alternatives. He defined the Cedar/Fourth Street preferred alignment with station placement. He gave the comparative evaluation of the tunnel and at-grade alignments. The at-grade alignment was recommended because it is technically feasible, less costly by about \$115 million, it can change the character of the downtown street system and give synergistic benefits to Downtown Saint Paul. A slide show gave an idea of how the LRT system would look in Downtown. Mr. Wolsfeld described the tunnel portals.

John T. Finley said that high platform stations have been chosen for the region-wide LRT system so that access can be directly onto vehicles from station platforms.

QUESTIONS/COMMENTS FROM AUDIENCE

David Spittman, JEBCO Properties. . . Asked about snow removal from the tracks, stations and station ramps.

Maintenance vehicles will plow and snow may have to be removed. Ramps and stations will be maintained so that they are snow free.

Karen Eid, TKDA. . . At TKDA a group of downtown design professionals are interested in the aesthetic design image of LRT. The group presented a set of design issues to be addressed when developing LRT in downtown Saint Paul: accentuate Capitol City status, response to new highway and bridge design, treatment of street for LRT corridor, aesthetic design of LRT physical components, interaction of existing cityscape with LRT stops, accentuate identity of individual LRT stops, response to an active skyway system, capitalization of existing special places and views, sensitivity to historical character, investigation of identity as rivertown, and exploration of the future of existing railroad station. Ms. Eid presented the plans/suggestions to the RCRRA for its consideration.

Paul Mohrbacher, Science Museum. . . Asked if Cedar Street would be widened.

There is sixty feet of right-of-way on Cedar Street, 28 to 30 feet will be used for LRT, 12 to 14 feet will remain for one lane of traffic, and 10 to 12 feet for sidewalks. There are no plans to acquire right-of-way on Cedar. Where the LRT makes the turn from Cedar to Fourth, there is an impact to the vestibule of the Pioneer Press.

Downtown Senior Citizen . . . Asked about issues of safety and security on the LRT line, wondered if there would be transit police.

John T. Finley felt that we would not need transit police, but security issues will be addressed. Fare collections are done by proof of payment. The roving inspectors who randomly check for proof of payment also serve as security people.

Dave Urke, District Energy . . . It is his understanding that utilities are not allowed under the LRT tracks. He asked if the relocation costs of the utilities have been taken into consideration.

Location of utilities is a major design issue but they are allowed under tracks. Generally, the two approaches to deal with utilities are: to build a structural slab under the light rail tracks, access the utilities from the side without disturbing the LRT and take the utilities that are under pressure and relocate them from underneath the tracks. Another alternative is to move all utilities from underneath the line. The cost ranges from \$2 million to construct the slab to about \$17 million to move all the utilities in Downtown St. Paul.

Mike Brunkow, Radisson Hotel, St. Paul. . . Asked if any consideration has been given to moving short-term visitors around downtown St. Paul.

It has been considered and is one of the factors in locating the stations.

Bernie Moucha, citizen. . . He is an expert on LRT as an LRT rider for ten years in Europe. He came to the public meeting to say a tunnel would be the best alternative and after listening to the presentations is convinced the at-grade alternative is preferable. He feels issues more important than how long it takes to get from downtown to downtown are: easy access, making the system easy to use, frequent headways, and punctuality of trains. He suggested and encouraged that Cedar Street should be a walking street.

The reason one lane of traffic is being left open on Cedar is for local traffic of deliveries and exits/entrances to parking ramps. Headways during peak time will be 7.5 minutes and in off-peak every 15 minutes. LRT has a higher degree of reliability than the bus system; the train leaves on time and another one will come along soon.

Citizen. . . Commented on the history of streetcars on University Avenue and noted their fast acceleration. He said he has ridden the LRT and noise is not an issue; in fact, the LRT is so quiet it is a safety issue.

Wayne Mikos, Channel 2. . . Asked when we would be riding the LRT.

It is hoped that the Legislature will approve funding for construction in the 1991 session so LRT could be under construction by late 1992-1993 and open to service in 1995-1996. Mr. Mikos also asked if the biggest hang-up would be funding. Mr. Finley said, yes, and noted the regional financial plan for LRT proposed a regional sales tax to fund LRT. He described the ten-year and twenty-year LRT plans.

Scott Heiderich, Merriam Park citizen. . . Asked what types of tunneling construction were considered in the cost of the tunnel in Downtown St. Paul, and can there be a tunnel in the Capitol Area if there is not a tunnel in the downtown.

Yes, there can be a tunnel in the Capitol Area and an at-grade alignment in the downtown. The tunnel would be soft bore tunnel between the stations, with cut-and-cover construction at the stations.

Architect. . . Asked if it had been considered to split the tracks onto two streets for fewer impacts to the streets.

Yes, it was considered, but because of right-of-way constraints felt it was better to place both tracks on one street and limit the impacts to one street. The cost and impacts were greater, with few benefits.

FORUM 10/5/90
Page 4

Rich Hadley, St. Paul Area Chamber of Commerce. . . The Chamber got into the light rail study because it was concerned about the long-term ability of the community to get its workers from where they live to where they work, with a high concentration working in Downtown St. Paul. The Chamber has developed a maturity in its support for light rail and understands some of its challenges, not the least of which is the matter of funding. He said that it isn't a perfect system, but it is a step toward a vision for St. Paul. By optimizing a future transportation system we can bring new vitality to downtown. He commented on Atlanta's decision to build a rail system and how that had positively affected the City.

Bob Bach announced the last meeting of the Downtown Task Force and encouraged everyone to attend. It will be held on November 1, 1990, at 3:00 p.m., at 316 Courthouse. He invited Karen Eid of TKDA to attend the meeting.

After determining that no questions remained from the audience, Mr. Finley thanked everyone for attending and closed the meeting at 5:00 p.m.

Ramsey County Regional Railroad Authority Public Meeting
WRITTEN STATEMENT



6-5

NAME SUBIA A. HICKEY FRT.
ADDRESS 218 EAST 7TH ST. 506
ST. PAUL - 55101 PHONE 224-3707

Check One

- ☐ Elected Official
☐ Public Agency Representative
☒ Group Representative
☒ Private Citizen

STATEMENT ELDERLY HANDICAPPED
WOULD APPRECIATE CURB TO
ENTRANCE ENTRY (TO AVOID
FALLS BETWEEN A CURB &
DOORWAY TO CAR) SUBTERRAIN

Position, Agency or Group

MEMBER OF BUILDING
COUNCIL

HERITAGE HOUSE

GIVES A THOUGHT TO SECURITY. WASHINGTON D.C. HAS
A MODERN FAST SYSTEM - TICKETS BOUGHT FROM
A VENDING MACHINE. POLITE SECURITY PEOPLE
IN FULL VIEW (UNIFORMED) SHADY DARKNESS
IN SUBWAY MAKING A LITTLE NERVOUS. SAN FRANCISCO
HAS TROUBLE WITH SUBWAY FIRES (TOO MUCH SPEED?)
CONSTRUCTION OF SEATS (FLAMABLE MATERIALS?) CAUSES

Data Privacy Warning: "Written Statements" may be included in the record of the meeting

HEAVY SMOKE

Ramsey County Regional Railroad Authority Public Meeting
WRITTEN STATEMENT



NAME Lisa Lee
ADDRESS 181 Sherburne Avenue.
St. Paul MN 55103

Check One

- ☐ Elected Official
☐ Public Agency Representative
☐ Group Representative
☒ Private Citizen

STATEMENT

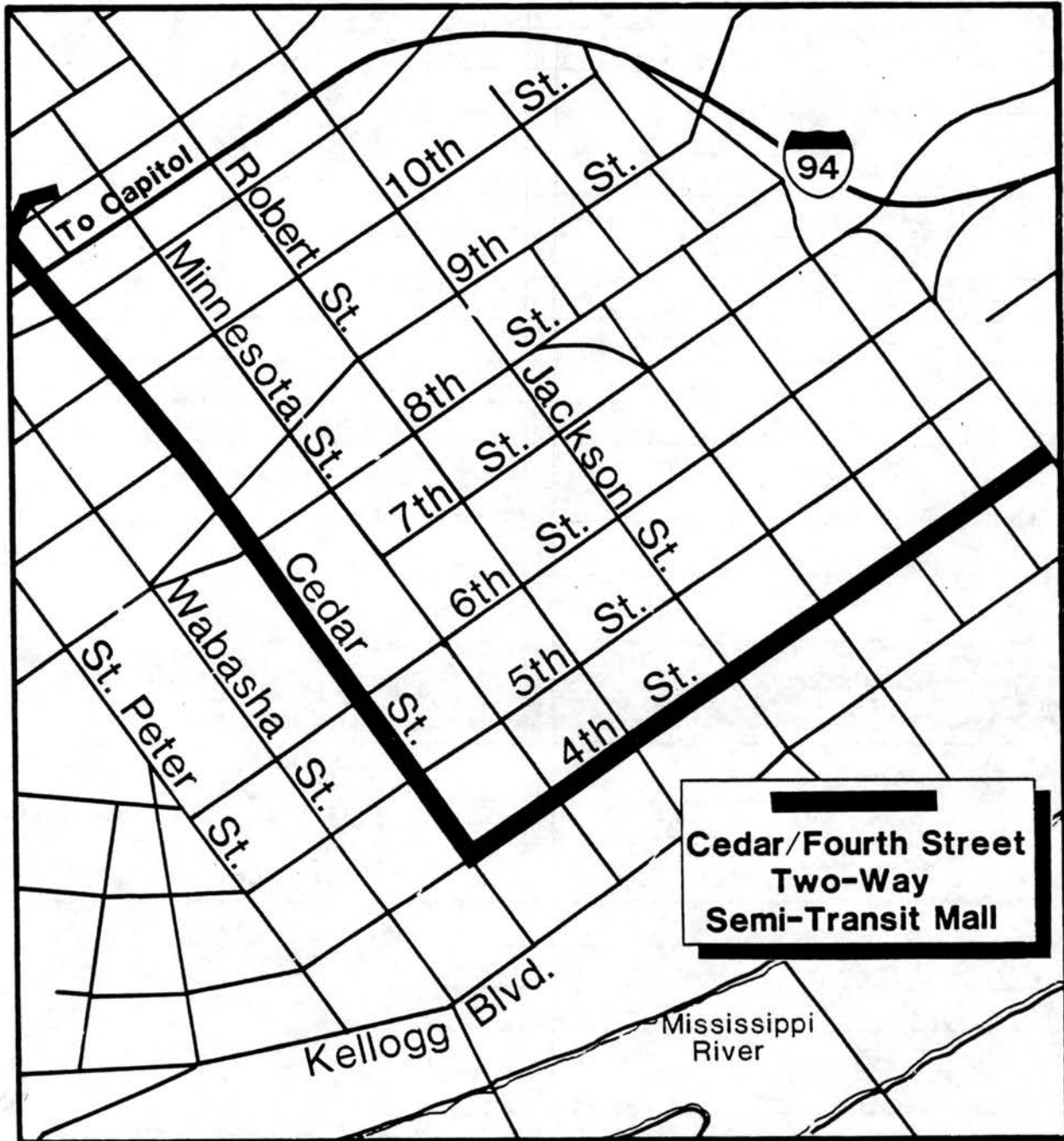
Position, Agency or Group

The \$34 million for light
rail transit surface route
in downtown St. Paul
(\$450 million for the whole)
could buy a lot of amenities for downtown
if spent directly on downtown, including
trees, special paving, cafe outdoor cafe
tables, etc. The service frequency times given
mean light rail will be less frequent than
the bus. ~~In addition~~ The downtown to
downtown ~~the~~ riding times of 39, 28, and 32
minutes ~~do not seem too~~ given are not impressive

Data Privacy Warning: "Written Statements" may be included in the record of the meeting

compared to the
cost.

(21)



Downtown Alignment Alternative

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

4

<u>Regional Railroad Authority</u> Originating Department <u>K. Walpielaw</u> <u>10/13/90</u> Authorized Signature Date	Board Action Requested Authorize acquisition of Burlington Northern right of way in St. Paul and Maplewood by eminent domain ACTION IS REQUESTED
---	---

Request Justification

1. See attached
1. Proposed resolution
2. Memorandum from David MacMillan
3. Map
4. RRA Resolution September 5, 1989 R89-54

Budgeting and Accounting Ed Blauhty
County Attorney David 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
October 23, 1990

Signature

Date

Board Date

Signature

10/15/90
Date



Resolution

Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: _____

No. _____

WHEREAS, The Burlington Northern Railroad Company has abandoned its railroad operations over the right-of-way extending from near downtown St. Paul to a point north of Beam Avenue in Maplewood; and

WHEREAS, The Minnesota Transportation Regulation Board has found that public necessity and convenience permitted discontinuance of rail service on the property; and

WHEREAS, The Ramsey County Regional Railroad Authority has identified this line as a potential corridor for future light rail development in Ramsey County; and

WHEREAS, Pursuant to Minnesota Statutes Section 398A.04, subdivisions 2 and 4, the Ramsey County Regional Railroad Authority has the power to acquire this rail line by purchase, gift, devise, condemnation, conditional sale, lease, lease purchase, or otherwise; and

WHEREAS, It is in the public interest that this corridor be preserved intact for possible future use as a corridor for light rail transit in Ramsey County; Now, Therefore, Be It

RESOLVED, That the public interest in light rail travel and transit requires the acquisition of the lands hereinafter described, and the Director of Light Rail Transit and the County Attorney are hereby authorized to acquire fee title to the property by negotiation or condemnation.

All of the right-of-way which the Burlington Northern Railroad abandoned pursuant to authorization of the Minnesota Transportation Regulation Board lying in the following sections and townships in Ramsey County:

- 1) The NE 1/4 of the SW 1/4 of the SW 1/4 of Section 32, Township 29, Range 22
- 2) The NE 1/4 of the SE 1/4 of the NW 1/4 of Section 32, Township 29, Range 22
- 3) The NW 1/4 of the NE 1/4 of the NE 1/4 of Section 32, Township 29, Range 22
- 4) SE 1/4, Section 29, Township 29, Range 22
- 5) SW 1/4, Section 28, Township 29, Range 22

John T. Finley, Chairman

By _____
Warren W. Schaber, Secretary



Resolution

Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: _____

No. _____

- 6) N 1/2 of SE 1/4, Section 28, Township 29, Range 22
- 7) E 1/2, NE 1/4, Section 28, Township 29, Range 22
- 8) E 1/2 of NW 1/4, Section 27, Township 29, Range 22
- 9) SW 1/4, Section 22, Township 29, Range 22
- 10) SE 1/4, Section 21, Township 29, Range 22
- 11) W 1/2 of NW 1/4, Section 22, Township 29, Range 22
- 12) W 1/2 of SW 1/4, Section 15, Township 29, Range 22
- 13) W 1/2 of NW 1/4, Section 15; Township 29, Range 22
- 14) SW 1/4, Section 10, Township 29, Range 22
- 15) NW 1/4, Section 10, Township 29, Range 22
- 16) NW 1/4, Section 3, Township 29, Range 22

In fee simple absolute, together with all leases, licenses, easements, and other interests in the property owned by any other parties.

RESOLVED, That the Ramsey County Regional Rail Authority and the Ramsey County Attorney are authorized to engage an independent private appraiser to determine the damages resulting to the owners of the land involved; and Be It Further

RESOLVED, That the Ramsey County Regional Rail Authority and the Ramsey County Attorney are authorized to engage a private title or abstract company to identify all ownership interests in the property; and Be It Further

RESOLVED, That the Ramsey County Regional Rail Authority and the Ramsey County Attorney are authorized to engage a private land surveyor to conduct a land survey and prepare an accurate certified survey of the property.

John T. Finley, Chairman

By _____
Warren W. Schaber, Secretary



OFFICE OF THE COUNTY ATTORNEY
RAMSEY COUNTY
SUITE 400
350 ST. PETER STREET
ST. PAUL, MINNESOTA 55102

TOM FOLEY
COUNTY ATTORNEY

TELEPHONE (612) 298-4421
FAX 298-5316

MEMORANDUM

TO: Ramsey County Regional Rail Authority

FROM: David MacMillan *DM*
Assistant County Attorney

DATE: October 15, 1990

RE: BURLINGTON NORTHERN
NORTHEAST CORRIDOR

BACKGROUND

On September 5, 1989, by Resolution No. 89-54, the Ramsey County Regional Rail Authority authorized staff to enter into negotiations with the Burlington Northern Railroad for a lease with option to purchase the Railroad's abandoned right-of-way between downtown St. Paul and Maplewood, just north of Beam Avenue. Since that time, our office has been attempting to negotiate this lease. It now appears that negotiations have come to a standstill, with local Burlington official unable to approve an agreement. As a result, our office is requesting authority to begin eminent domain proceedings to acquire the corridor and to retain independent specialists in surveying, appraisal, and title examinations to proceed with acquisition of the corridor.

DISCUSSION

Minnesota Statutes Section 398A.04, subd. 4, grants Regional Rail Authorities the power to condemn railroad rights-of-way provided that the Interstate Commerce Commission or another authority with power to make the finding has found that the public convenience and necessity permits discontinuance of rail service on the property. By Order D-5506 and Order R-4131 dated April 22, 1987, the Minnesota Transportation Regulation Board entered such findings and order and

authorized the railroad to remove the trackage from the line.

This line (see attached map) extends from near downtown St. Paul to just north of Beam Avenue in Maplewood. It is approximately 6.52 miles in length and has been classified as "industrial trackage" rather than mainline, and thus can be abandoned by authority of the State pursuant to Minn. Stat. § 219.471.

The attached resolution authorizes the county attorney to initiate eminent domain proceedings to acquire the abandoned roadbed for Light Rail Transit purposes.

The description of the property to be acquired in this resolution is somewhat vague and does not locate the property with precision; however, it is my opinion that the description is sufficiently detailed to put all parties on notice of the Regional Rail Authority's intent to acquire the property to be legally sufficient for petition purposes.

It will, however, be necessary to have a more formal survey completed before the Authority takes title to the property. In addition, it is necessary that all property interests, such as licenses, easements, or other interests the Railroad may have granted, and all liens or other encumbrances on the property are identified so that the owners of those may receive compensation so that the Authority can obtain clear title to the property. At a minimum, this will require the preparation of ownership and encumbrance reports and possibly may require that full abstracts of the property be prepared. Finally, it will be necessary to retain a real estate appraiser to establish a fair market value for the line.

It is requested that private individuals be retained to perform this surveying, title examination, and appraisal work. At the present time, we have identified over 200 separate parcels of land which are involved in this line.

The volume of survey and title work necessary to complete this in a timely manner exceeds the capacity of our office and the county surveyors office. We have already obtained a number of fee quotations from private appraisers and will also obtain quotations surveyors and title professionals. We will return to the Authority with recommendations and proposed contracts in the future. Due to the complexity of the acquisition, it is not possible at this time to pose a time line for completion of this work.

Ramsey County Regional Rail Authority
Page -3-
October 15, 1990

CONCLUSION

It is requested that the Ramsey County Regional Rail Authority authorize commencement of eminent domain proceedings and the engagement of private appraisal, survey, and title work relevant to the acquisition of the abandoned Burlington Northern Railroad line, pursuant to the attached resolution. Actual eminent domain proceedings will be filed in court when the appraisal, title, and survey work is completed, if negotiations for direct purchase continue to be unsuccessful.



Resolution

Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: September 5, 1989

No. R89 - 54

WHEREAS, The draft Comprehensive LRT Plan for Ramsey County was adopted on July 25 by Ramsey County Regional Railroad Authority; and,

WHEREAS, the Plan contained a recommendation that, "Ramsey County Regional Railroad Authority should take immediate steps to acquire the Burlington Northern right-of-way in the Northeast Corridor because of the feasibility for light rail transit and the availability of right-of-way in this area;" and,

WHEREAS, the Plan also contained a recommendation that "Preliminary engineering studies on the Northeast Corridor should be undertaken within the next five years, including, but not limited to, the issue of potential for joint use." Now Therefore, Be It Resolved

That Ramsey County Regional Railroad Authority directs staff to develop as quickly as possible:

1. A cost figure for an option for purchase of the Burlington Northern right-of-way in the Northeast Corridor from downtown St. Paul to the north border of Ramsey County for a one-year period with an option for an extension of time;
2. An estimated cost for survey, appraisals, environmental, and title work that would assist in negotiating the purchase price for the property.

John T. Finley, Chairman

By 
Warren W. Schaber, Secretary

DRAFT

LIGHT RAIL TRANSIT
COORDINATION PLAN



REGIONAL TRANSIT BOARD

DRAFT

LRT COORDINATION PLAN

**JOINT LRT ADVISORY COMMITTEE
OF THE
REGIONAL TRANSIT BOARD**

OCTOBER 1990

CHAPTER 1 EXECUTIVE SUMMARY

The "LRT Coordination Plan" was prepared in response to legislation passed by the 1989 Minnesota Legislature. It is a companion document to the "LRT Development and Financial Plan" published by the Regional Transit Board in February, 1990. The Coordination Plan is intended to provide guidelines for the implementation (design, construction and operation) of Light Rail Transit (LRT) in the Twin Cities. The Plan includes the following elements:

- o Organization plan
- o Implementation strategies
- o Schedule and budget for ten-year plan and two-year plan
- o Design guidelines
- o Operations and maintenance plan
- o Coordination of LRT with land use planning
- o Process for updating the Regional LRT Plan
- o Next steps in implementing LRT

The LRT Coordination Plan was prepared by the Joint LRT Advisory Committee for approval by the Regional Transit Board with review and comment by the Metropolitan Council and the Commissioner of Transportation. The Joint LRT Advisory Committee is made up of representatives of the seven county Regional Railroad Authorities, the Metropolitan Transit Commission and the Department of Transportation.

WHY LIGHT RAIL TRANSIT?

The Twin Cities, like many other growing metropolitan areas, will face severe transportation problems in the future. Population and employment are growing. Travel patterns are changing. Congestion is increasing while highways are deteriorating. Transportation problems in the metropolitan area can no longer be easily solved. Resources are limited; right-of-way for new highways is often unavailable; and people are demanding better alternatives. It is clear that transit will be relied upon more heavily in the future to meet peak hour transportation needs in congested corridors, in the downtowns, and in suburban employment centers.

Light Rail Transit is an important tool for responding to the transportation challenges being faced by the Twin Cities. It is certain that significant improvements in the level and quality of transit service will be needed in the future. The planning and implementation of an LRT system in the 1990s may avoid a transit crisis in the 21st century.

While LRT is not a panacea for all transportation needs, it offers distinct qualities which could bring significant benefits to the Twin Cities. Most importantly, LRT offers an opportunity to revitalize regular route transit service in the Twin Cities and to restructure transit services to better meet changing travel needs throughout the metropolitan area. Key potential benefits of LRT are:

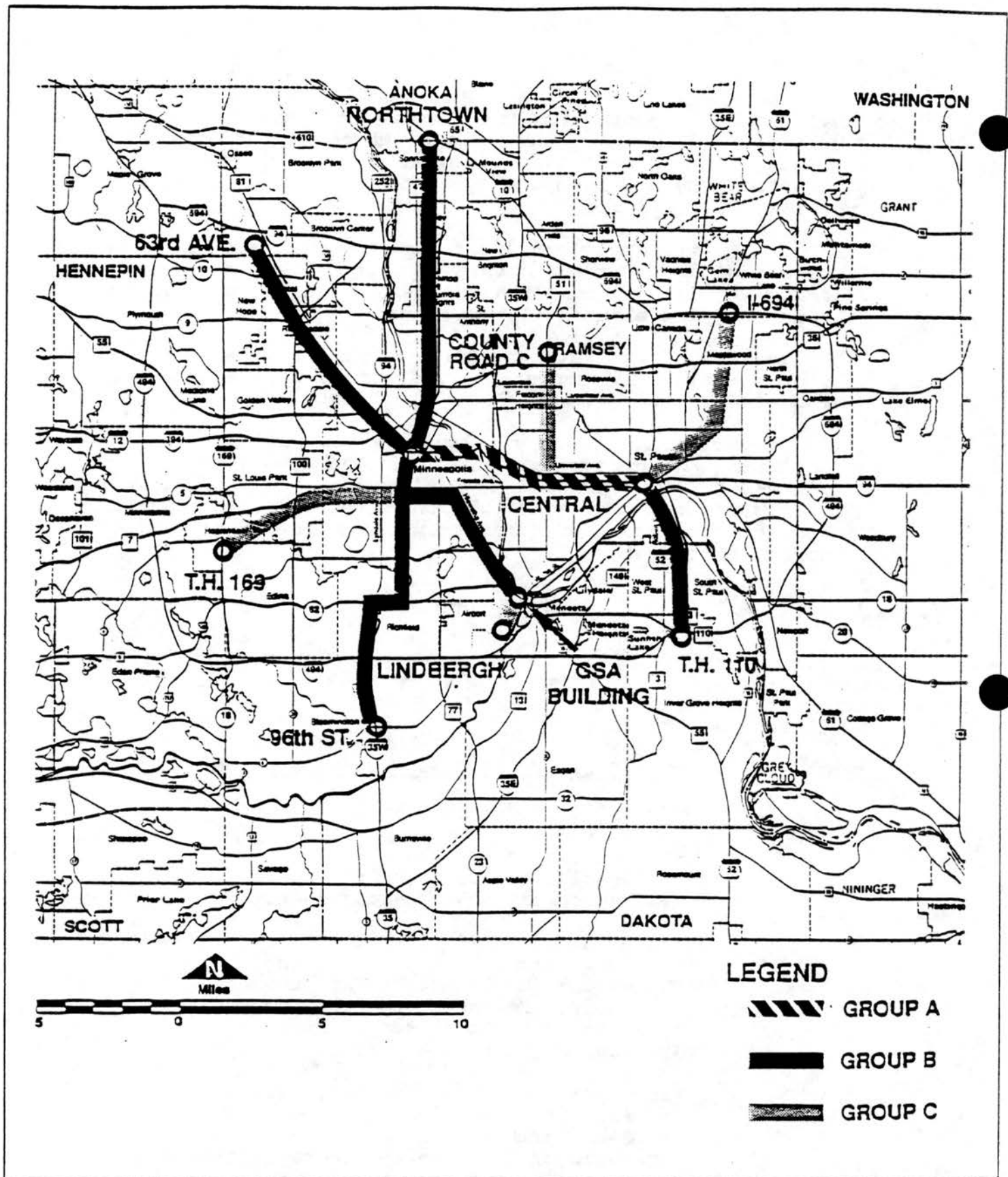
- o LRT can significantly increase transit ridership by providing better service coverage, better frequency, and shorter travel times for transit trips. The modern design, quality image, and high predictability of rail attracts many new riders who would not typically consider bus transportation. Once introduced to LRT service, new riders have a higher tendency to use the bus for connecting service to LRT.
- o LRT will enhance the existing bus system. Buses will continue to serve most transit needs, including the important function of a "feeder system" to LRT lines. Restructuring of existing bus routes will provide better suburb-to-suburb connections, improved neighborhood circulation, and better transit opportunities for the reverse-commuter. This restructuring around fixed LRT schedules will provide an opportunity to improve the timeliness of the entire bus system and coordinate a wide variety of transit service options and providers.
- o An LRT and bus system is more cost-effective than an all-bus system in moving large numbers of people. The primary reason for this operating cost advantage is that LRT is less labor intensive--one operator/driver can serve up to 450-500 passengers. Often the cost of constructing an LRT system can be recovered over several years through operating cost savings.
- o LRT can play an important part in relieving peak hour congestion in key commuter corridors. LRT has been successful in attracting people away from the automobile in highly congested corridors because it decreases transit travel times. The improved service coverage, trip frequency and reliability of LRT also adds to the perception that LRT is a high-speed mode of transportation which is competitive with the automobile.
- o LRT can also play an important role in relieving downtown congestion and improving air quality by reducing the number of buses and automobiles using downtown streets and reducing the need for additional parking.
- o LRT's physical characteristics provide a wide range of operating advantages over other modes of transit including improved ride quality, increased operating speed, variable capacity, increased cost efficiency and all-weather reliability.

- o LRT offers people with special transit needs a new versatility, increased freedom of movement, and much broader access to the metropolitan area. LRT can provide better accessibility for transit dependent people, as well as better mobility for all riders.
- o LRT can provide environmental benefits by reducing auto and bus emissions as riders choose the clean powered electric rail service over gasoline powered modes. LRT also runs quietly because of its electrical power source.
- o LRT can help focus retail, office and residential development. It can be used to complement existing or planned developments or to restructure new development activity.
- o A strong transit system will enhance the economic vitality of the metropolitan region, making it more attractive to new businesses, visitors and special events. By enhancing the quality of life and economic attractiveness of the Twin Cities metropolitan area, LRT indirectly benefits the economy of the entire State.

TEN-YEAR LRT PLAN

The recommended staging for the ten-year LRT plan is shown in Figure 2-1. The plan includes 83 miles of LRT service and is estimated to cost \$1.6 billion (1991 dollars). The three stages of the ten-year plan are:

<u>Group</u>	<u>Corridors, Facilities, Extensions</u>
A	Central Corridor (downtown Minneapolis to downtown St. Paul) St. Paul downtown loop Minneapolis downtown tunnel Central operations and maintenance facility
B	Minneapolis tunnel extension to 29th Street Hiawatha Corridor to GSA Building Minneapolis Northeast to Northtown Minneapolis Northwest to 63rd Avenue Minneapolis South to 96th Street St. Paul South to T.H. 110
C	Minneapolis Southwest to T.H. 169 St. Paul Northeast to I-694 St. Paul Northwest to County Road C Extension of Hiawatha to Lindbergh Terminal Extension of Minneapolis South to T.H. 13



LIGHT RAIL TRANSIT COORDINATION PLAN



STAGING FOR MAXIMUM
10-YEAR LRT PLAN

FIGURE 1-1

The LRT Coordination Plan focuses on the implementation of this ten-year plan with emphasis on the tasks and decisions required to implement Group A of the plan.

The LRT Coordination Plan also sets forth a strategy for the implementation of the remaining Group B and C corridors in the ten-year plan. These corridors would be implemented during the ten-year timeframe (1992 to 2001) based on the availability of funding and the priorities set forth in the Development and Financial Plan. The Coordination Plan provides a process for the periodic review and updating of the regional LRT Plan.

ORGANIZATION PLAN

The organizational structure recommended by the Joint LRT Advisory Committee is a Joint Powers Board which would act as the lead agency, for LRT final design and construction. Joint Powers Board would be established with representation from the Regional Railroad Authorities, Mn/DOT and the regional agencies. The Joint Powers Board, through its own staff or through delegation to an existing agency, would be responsible for the final design and construction of all LRT corridors. A state or regional agency would provide program management oversight. The RTB and Metropolitan Council would continue to set regional policies and priorities and would continue to review and approve LRT plans and designs. The MTC would be the operator of the LRT system. The Regional Railroad Authorities would continue to have lead responsibility for LRT corridor planning, environmental assessments, and preliminary engineering to completion of the 30 percent level of design.

IMPLEMENTATION STRATEGIES

Three alternative strategies for the implementation (design and construction) of LRT are considered suitable for use in the Twin Cities. These are:

- o **Current Industry Practice.** Under this alternative, the Joint Powers Board or its designee would complete 100 percent of the design of the facilities (civil works) and would award multiple contracts for construction. The Joint Powers Board would complete performance specifications for the systems elements and would award multiple contracts for design, furnishing and installation.
- o **Turnkey.** Under this alternative the County Rail Authorities would complete 30 percent of the design of the facilities (civil works) and complete performance specifications for the systems elements. A single contract would be awarded to a turnkey contractor by the Joint Powers Board who would be responsible for design, construction, furnishing and

installation of all facilities and equipment associated with the LRT project. The turnkey contractor would also be responsible for a test period of operation. A turnkey project may also involve private financing by the contractor to reduce the net cost of the system to the public.

- o Hybrid Approach. Under this alternative, the Joint Powers Board would complete 100 percent of the design of the facilities (civil works) and would award multiple contracts for construction. The Joint Powers Board would complete performance specifications for the systems elements and would award a single contract to a systems turnkey contractor for design, furnishing and installation of all vehicles and equipment needed for the LRT project. The systems turnkey contractor may also be required to operate the system for a test period. Private financing could also be a part of the systems turnkey contract.

The selection of the most appropriate implementation strategy will be dependent on conditions within existing corridors. Therefore, the Joint LRT Advisory Committee has recommended that the selection of a preferred implementation strategy be made by the responsible Joint Powers Board on a corridor-by-corridor basis. The implementation strategy selected for a specific corridor should be the alternative which best addresses the following recommended selection criteria:

- o Impact on project cost
- o Impact on project schedule
- o Owner risks
- o Owner control
- o Quality of end product
- o Requirements for funding commitment

SCHEDULE AND BUDGET

The Joint LRT Advisory Committee recommends a budget and schedule based on a funding assumption of a one cent regional sales tax for broad-based transportation purposes with 1/2 cent dedicated to LRT construction. Under this scenario, construction could begin on an LRT corridor every 12 months. The Central Corridor would be completed in 1997/1998. Construction could begin on all Group B corridors and two Group C corridors within the ten-year (1992 to 2001) timeframe. Four Group B corridors would be completed by 2001. It is assumed, as proposed in the Development and Financial Plan, that \$200 million (1991 dollars) of federal funding will be obtained for the ten-year plan and a 10 percent local share will be provided by the counties for Group B and C corridors not receiving federal funds.

DESIGN GUIDELINES

Light Rail Transit (LRT) is a mass transportation system which utilizes a steel-wheeled vehicle running on a steel track, powered by overhead electrical wires. Vehicles may operate singly or may be trained together. Consists of up to three vehicles are recommended for the Twin Cities based on block lengths in the two downtowns. LRT will serve as the backbone of the regional transit system, supported by a bus system which will be reconfigured to feed the LRT lines.

The LRT system proposed for the Twin Cities is conceptually a high speed, high capacity, moderate cost, commuter service radiating out from the two metro centers. Travel to and through the metro centers as well as within corridors is expected. To accomplish these objectives, the system will utilize high-platform level boarding, predominantly exclusive (but not necessarily grade-separated) rights-of-way, and stations spaced approximately one mile apart. The system will be fully accessible to mobility-impaired people.

One of the most important potential advantages of light rail is that it can improve the cost-effectiveness of the regional transit system. However, the implementation of light rail does require a major capital investment. The LRT system to be built in the Twin Cities should be reliable and moderate in cost. To accomplish this objective, the LRT system will utilize conventional "off-the-shelf" LRT technology. Designs and materials will be selected which are attractive but are moderate in cost, easy to install and inexpensive to maintain. Grade separations and tunnels will be provided only where it can be shown that they are needed to address topographic or operational concerns.

The LRT Coordination Plan provides design guidelines for:

- o Light rail vehicles
- o Stations
- o Park-and-ride lots and bus transfer facilities
- o Accessibility features for seniors and the disabled
- o Track system
- o Electrification system
- o Train signal system
- o Communication system
- o Fare collection system
- o Landscaping and architectural treatments
- o Operations and maintenance facilities

OPERATIONS AND MAINTENANCE PLAN

The Metropolitan Transit Commission will be the agency responsible for LRT operations and maintenance, and has prepared an organization and staffing plan for the provision of these services. The MTC operations and maintenance plan addresses overall operating policies as well as specific operational issues related to security, communications, signalization, dispatching and training. Key operating policies are:

- o The LRT hours of service will be comparable to those of the present day bus system (approximately 5:30 a.m. to 1:30 a.m.).
- o Scheduled train frequency will be adjusted to meet passenger demand. The maximum time between trains will be 10 minutes during peak hours and 30 minutes during off-peak hours.
- o Operating policies will be adopted to assure reliable service. This will include contingency plans for emergencies, training programs for personnel, and maintenance schedules which do not conflict with peak times of operation.
- o Fare collection will be barrier free and self-service. Passengers will purchase tickets from vending machines on station platforms. Fares will be in conformance with adopted RTB/MTC policies and will be consistent with other transit fares in the region.
- o Feeder bus service will take the form of timed transfers and will be designed to enhance overall transit service in the region. The feeder bus system will be planned using guidelines that include travel time, route spacing, rail/bus integration, and transfer standards.
- o A thorough and ongoing training program will be provided for all train operators. Operators will be subject to an annual review of their operating and safety records.
- o A system security plan will be prepared with assistance from municipal, county and state public safety agencies.

To assure reliability, minimize expense and promote a high level of passenger satisfaction, the MTC maintenance program will be based on a proactive, preventive approach. All inspections and component replacements will be completed in conformance with the guidelines and intervals recommended by suppliers. Emphasis will be given to those measures which increase vehicle availability and reduce system downtime and resulting service interruptions.

LRT AND LAND USE COORDINATION

The Metropolitan Council has prepared a planning framework for coordination between the development of an LRT system and land use-related activities. These guidelines are not mandatory but will serve as information and guidance to cities affected by the implementation of LRT. Cities will continue to be responsible for land use-related decisions. The recommended planning process includes five phases:

- o Phase I--Land Use Evaluation. This phase, which would be accomplished during preliminary design (10%) and environmental reviews, involves a review of local comprehensive land use and transportation policies, an assessment of the potential impacts of the LRT line, and an assessment of station locations.
- o Phase II--Station Area Land Use Planning. This phase, accomplished during preliminary engineering (30%), includes development of conceptual land use planning around LRT stations, amendments to comprehensive plans, and further refinement of the location and sizing of park-and-ride facilities.
- o Phase III--Detailed Station Area Land Use Planning. This phase of planning would be undertaken during final design of LRT and involves development of a final station area land use plan, preparation of an economic market analysis, and preparation of an implementation plan.
- o Phase IV--Station Area Preparation. Once LRT construction is initiated, cities would take the necessary steps to implement station area plans including land acquisition, negotiations with developers, and implementation of financial plans.
- o Phase V--Station Area Development would occur after the LRT system begins operation and would continue 10-20 years after the system is open.

PROCESS FOR UPDATING THE REGIONAL LRT PLAN

The regional LRT plan will be reviewed annually and formally updated every two years as part of RTB's update of the Five Year Transit Plan. Changes in corridor priorities will be based on the following conditions:

- o Selection of final corridor alignment and station locations
- o Completion of environmental reviews
- o Significant changes in implementation costs
- o Significant changes in patronage forecasts

- o Local and agency plan approvals
- o Readiness for construction
- o Any other significant changes in projected performance of the corridor

As part of this process, it is expected that the benefits and costs of LRT in each corridor can be better assessed as more detailed information becomes available. As a result, corridor priorities can be further refined based on cost-effectiveness, availability of funds, regional goals and other technical criteria.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

5

Regional Railroad Authority
Originating Department

K. DeSpiegelaere 10/16/90
Authorized Signature Date

Board Action Requested

Reconsider resolution on organization to design and construct LRT

ACTION IS REQUESTED

Request Justification

- See attached:
- 1) Memorandum from K. DeSpiegelaere
 - 2) Motion of Joint LRT Advisory Committee on organization
 - 3) Joint Powers organization matrix
 - 4) Previous RCRRA resolution on organization
 - 5) Mn/DOT organization matrix
 - 6) Executive Summary of Draft LRT Coordination Plan

Budgeting and Accounting Ed Glanville
County Attorney Don 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
October 23, 1990

Signature

Date

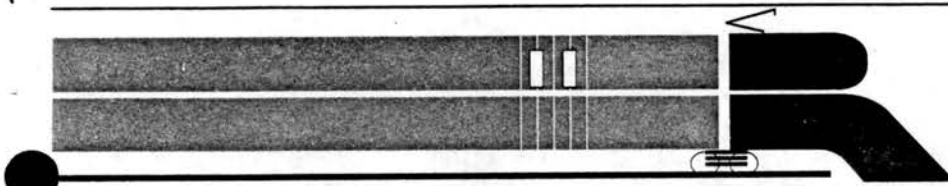
Board Date

Signature

Date

J. L. Glanville

10/17/90



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

SUBJECT: LRT Coordination Plan

DATE: October 16, 1990

Recent and forthcoming events on the preparation of the LRT Coordination Plan are:

1. The Draft Plan is proposed to be adopted by the Joint LRT Advisory Committee on October 17, 1990. A copy of the summary of the plan is attached, along with a copy of the motion of the Joint LRT Advisory Committee on organization to design and construct LRT, the Joint Powers organization matrix, Ramsey County Regional Railroad Authority's resolution on organization to design and construct LRT and the Mn/DOT organization matrix.
2. A peer review, consisting of experts speaking on LRT from other parts of the country, is scheduled to be held on November 14 from 8 till noon at Earle Brown Center at the University of Minnesota, St. Paul.
3. The Regional Transit Board will hold a hearing on the plan on November 15. The Minnesota Department of Transportation and Metropolitan Council will review and comment on the plan.

On a related subject, staff of Regional Railroad Authorities, metropolitan agencies and state agencies met on October 10 with staff of the Chicago regional office of the Urban Mass Transportation Administration (UMTA). It was clear that little progress has been made in obtaining clearances for entering the federal process in this region. The Urban Mass

Transportation Administration has now asked that the region select one corridor as the federal funding priority. The region had applied for three corridors, under the "overmatch" program and UMTA's response was that the region could enter the overmatch program with more than one corridor only if the local funding match for federal dollars requested was in hand. The three corridors for which UMTA funds were requested were I-35W, Hiawatha and Hennepin/Anoka Northeast.

Recommendation:

Reconsideration of the motion on organization has been requested.

APPENDIX D

MOTIONS OF THE JOINT LRT ADVISORY COMMITTEE REGARDING THE LRT COORDINATION PLAN

ORGANIZATIONAL ALTERNATIVES (CHAPTER 3)

August 8, 1990 - McCarron moved and Maher seconded that: The Joint LRT Advisory Committee receive and file the O'Brien-Kreitzberg & Associates' draft report on Task 1-Implementation Strategy and Task 2-Organizational Plan of the Regional Coordination Plan for LRT. Motion carried unanimously.

August 8, 1990 - Koniarski moved and Chapdelaine seconded that: The Joint LRT Advisory Committee direct the Joint LRT Staff Committee to analyze the O'Brien-Kreitzberg & Associates' draft report and state in the analysis what would be the pros and the cons of the different items in the report, and present this analysis at the September 5th meeting of the Joint LRT Advisory Committee. Motion carried unanimously.

August 29, 1990 - Sivanich moved and Chapdelaine seconded that: The Joint LRT Advisory Committee receive and file this report on the status of the evaluation of O'Brien-Kreitzberg's draft report on LRT implementation methods and organizational alternatives by the Staff Committee to the Joint LRT Advisory Committee. Motion carried unanimously.

September 5, 1990 - Koniarski moved and Hunt seconded that: The Joint LRT Advisory Committee receive and file the reports on organizational alternatives for regional LRT implementation for discussion and recommendation at the next meeting of the committee. Motion carried, four nays (Derus, Keefe, Stevens, Yantos).

September 19, 1990 - Sivanich moved and Derus seconded that: The Joint LRT Advisory Committee adopt alternative 4B), the County Regional Railroad Authorities Joint Powers Authority, with the considerations outlined by staff including participation by all regional bodies, Mn/DOT, and all seven metropolitan county RRA's if they desire, as the approved organizational alternative for regional LRT implementation. Motion carried; nine ayes (McCarron, Yantos, Chapdelaine, Maher, Stevens, Sivanich, Koniarski, Nawrocki and Derus) and four nays (Ahrens, Hunt, Larkin and Durgin), with one abstention (Faricy).

Legend

-  = Lead Role
-  = Approval Authority
-  = Advise
-  = No involvement

LRT Implementation Activities	Participants							
	LRTCC (JPB)	Mn/DOT	RTB	Metro Council	CRRA's	MTC	Local Jurisdictions	Advisory Groups
Funding Acquisition (Legislation)								
Regional System Planning								
General Program Management Oversight			To Be Determined					
Corridor Planning								
Preliminary Design (10%)/E.I.S. *								
System Standards/Design Criteria								
Preliminary Engineering (30%) *								
Final Design (100%) *								
R.O.W. Acquisition *								
Construction/Management *								
System Testing								
Operating/Maintenance								
Marketing								
Regional LRT Evaluation								

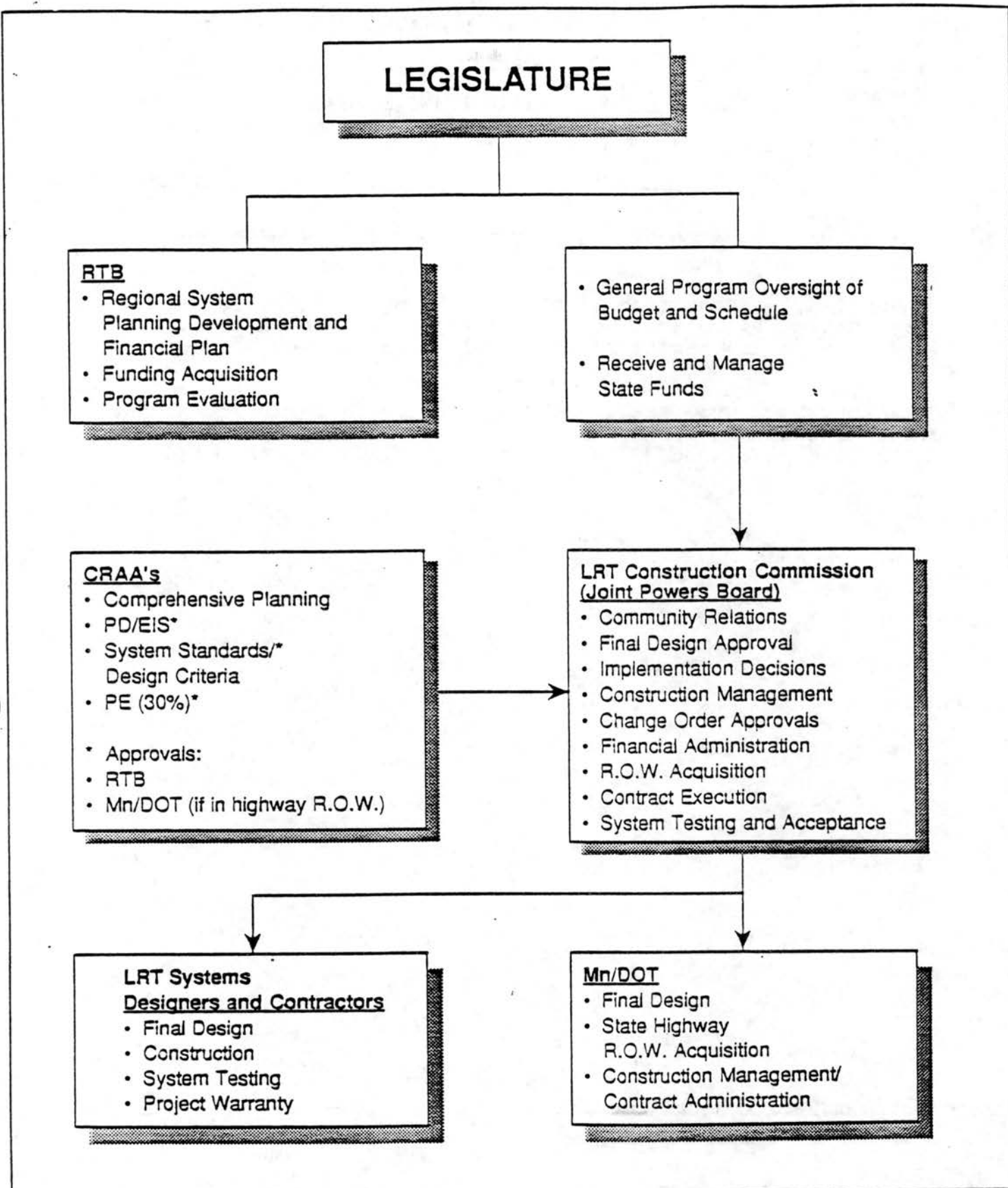
* Depending on Corridor

LIGHT RAIL TRANSIT COORDINATION PLAN



RESPONSIBILITY MATRIX LRT CONSTRUCTION COMMISSION (JOINT POWERS BOARD)

FIGURE 3-9



LIGHT RAIL TRANSIT COORDINATION PLAN



RECOMMENDED ORGANIZATION FOR IMPLEMENTATION OF LRT

FIGURE 3-8 4A



Resolution

Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: September 11, 1990

No. R90 - 63

WHEREAS, A Coordination Plan is being prepared for the Twin Cities Metropolitan Area that will recommend which organization should design and construct light rail transit; Now, Therefore, Be It

RESOLVED, The Ramsey County Regional Railroad Authority endorses the Minnesota Department of Transportation as the organization that should design and construct light rail transit.

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

	YEA	NAY	OTHER
Diane Ahrens	<u>X</u>		
John T. Finley		<u>X</u>	
Ruby Hunt	<u>X</u>		
Duane W. McCarty		<u>X</u>	
Hal Norgard	<u>X</u>		
Don Salverda	<u>X</u>		
Warren W. Schaber	<u>X</u>		

John T. Finley, Chairman

By Warren W. Schaber
Warren W. Schaber, Secretary 5

RESPONSIBILITY MATRIX

with Mn/DOT as Lead Design/Construction Agency

	= LEAD ROLE
	= APPROVAL AUTHORITY
	= PARTICIPANT

ACTIVITY	AGENCY							COMMENTS
	Mn/DOT	RTB	MET COUNCIL	CRRA'S	MTA	LOCAL JURISDICTIONS	ADVISORY GROUPS	
REGIONAL SYSTEM PLANNING								Develop System Plan & Updates
CORRIDOR PLANNING								EIS Process (10%)
PROJECT PLANNING/PRE-ENG.								Layouts, Design Study Reports (30%)
FINAL DESIGN								(100%)
R/W ACQUISITION								
CONST. MANAGEMENT								
SYSTEM TESTING								Safety, Pre-Revenue Testing
OPERATING/STAFF								Training & Gearing Up for Operation
MAINTENANCE								Vehicles, Lines, Park & Ride Lots, Sidewalks, etc.
FINANCIAL MANAGEMENT								Design & Construction
FUNDING ACQUISITION								Federal, State, Local Funds
MARKETING								Obtaining Support for the System
SYSTEM EVALUATION								

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

REQUEST FOR BOARD ACTION

6

Regional Railroad Authority

Originating Department

K. Despiéglase 10/13/90
Authorized Signature Date

Board Action Requested

Quarterly report of payments for RCRRA

July to September, 1990

***ACTION IS REQUESTED**

Request Justification

- See attached: 1) Proposed resolution
2) Memorandum from J. Van Houdt dated October 3, 1990

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

Signature

Date

October 23, 1990

Board Date

Signature

10/15/90

Date



Resolution

Board of

RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

Date: _____

No. _____

WHEREAS, Payments have been made from the Ramsey County Regional Railroad Authority budget for the period July through September, 1990, 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.

John T. Finley, Chairman

By _____
Warren W. Schaber, Secretary



Office of
BUDGETING AND ACCOUNTING

Room 36, Court House
St. Paul, Minnesota 55102
298-4196
Fax: 298-4565

TERRY SCHUTTEN
Executive Director

JAMES H. VAN HOUDT
Director - Budgeting & Accounting

MARLEN D. JOHNSON
Accounting Manager

VERNON H. WEHLAGE
Budget Manager

MEMORANDUM

DATE: October 3, 1990
TO: Terry Schutten, Executive Director
FROM: *JVH* James Van Houdt, Director - Budgeting & Accounting
SUBJECT: Ramsey County Regional Railroad Authority
Quarterly Report of Payments: July - September 1990

Ramsey County Regional Railroad Authority Resolution of October 5, 1987, authorized the Budget and Accounting Director to approve payment of bills for the Regional Railroad Authority and report these disbursements to the Regional Railroad Authority and the condition of the Regional Railroad Authority's budget on a quarterly basis.

A summary of the payments for the period are:

59101	Regional Railroad Authority Administration	\$ 31,193.57
59102	Comprehensive LRT Plan	157.57
59103	Phase I - Preliminary Engr & EIS - Midway	277,668.47
59106	Right-of-Way Acquisition	67.26
59107	Northeast Corridor Study	64,650.58
59108	South Corridor Study	300.00
	Total	<u>\$374,017.45</u>

I am attaching a report of Detail Disbursements made from the Regional Railroad Authority budget for the period July through September 1990 and a copy of the Budget Condition Report as of September 28, 1990.

JVH:EG:ja/gcl
Attachments

cc: K. DeSpiegelaere, Director,
R C Regional Railroad Authority Planning

REL

FUND 10. 591 RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

APPROPRIATION FUND	CURRENT APPROPRIATION	AMOUNT EXPENDED	UNPAID ENCUMBRANCES	BALANCE UNEXPENDED	BALANCE UNENCUMBERED	TRANSFER IN (TO)	TRANSFER OUT (FROM)	PCT EXPD YTD
59101	RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY							
020102	CONSULTING SERVICES	50,000.00	0.00	5,000.00	50,000.00	45,000.00	0.00	0.00
020122	STATE AUDITOR	1,800.00	1,637.25	0.00	162.75	162.75	0.00	90.96
020154	LEGISLATIVE REPRESENTATIVE	25,000.00	0.00	0.00	25,000.00	25,000.00	0.00	0.00
020174	COUNTY ATTORNEY SERVICES	52,576.00	1,730.08	0.00	50,845.92	50,845.92	0.00	3.29
020176	EXECUTIVE DIRECTOR-SERVICES	56,040.00	13,306.88	0.00	42,733.12	42,733.12	0.00	23.75
020177	BUDGETING AND ACCOUNTING SERVICES	31,550.00	6,473.32	0.00	25,076.68	25,076.68	0.00	20.52
020185	DATA PROCESSING SERVICES-MTCE	7,200.00	963.59	0.00	6,236.41	6,236.41	0.00	13.38
020193	COUNTY PROJECT MANAGEMENT SERVICES	301,740.00	39,159.79	0.00	262,580.21	262,580.21	0.00	12.98
020202	POSTAGE	5,800.00	791.80	0.00	5,008.20	5,008.20	0.00	13.65
020207	TELEPHONE LONG DISTANCE CHARGES	380.00	229.08	0.00	150.92	150.92	0.00	60.28
020208	TELEPHONE-LOCAL SERVICE	1,260.00	297.86	0.00	962.14	962.14	0.00	23.64
020301	TRANSPORTATION ALLOWANCE	600.00	0.00	0.00	600.00	600.00	0.00	0.00
020305	MESSENGER SERVICE	600.00	0.00	0.00	600.00	600.00	0.00	0.00
020401	PUBLISHING MINUTES & NOTICES	8,560.00	147.72	0.00	8,412.28	8,412.28	0.00	1.73

RFL
FUND NO. 591 RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

APPROPRIATION NO.	ADJ. CURRENT APPROPRIATION	AMOUNT EXPENDED	UNPAID ENCUMBRANCES	BALANCE UNEXPENDED	BALANCE UNENCUMBERED	TRANSFER IN (TO)	TRANSFER OUT (FROM)	PCT. EXPD YTD
59102	RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY			* CONTINUED *				
020501	PRINTING & STATIONERY 19,890.00	5,660.06	0.00	14,229.94	14,229.94	0.00	0.00	28.46
021909	PARKING SPACE 2,350.00	2,620.00	0.00	730.00	730.00	0.00	0.00	68.94
021101	BOOKS, PERIODICALS, SUBSCRIPTIONS 250.00	209.95	0.00	39.95CR	39.95CR	0.00	0.00	115.98
022192	INTEREST 0.00	0.00	0.00	0.00	0.00	0.00	0.00	
021226	COMMITTEE COMPENSATION 3,000.00	0.00	0.00	3,000.00	3,000.00	0.00	0.00	
021401	MEMBERSHIP & DUES 500.00	35.00	0.00	465.00	465.00	0.00	0.00	7.00
021403	CONFERENCE & SEMINAR EXPENSES 4,000.00	3,616.60	0.00	383.40	383.40	0.00	0.00	90.62
021407	OTHER TRAVEL 20,000.00	2,384.62	0.00	17,615.38	17,615.38	0.00	0.00	11.92
021408	VOLUNTEER/COMMITTEE MEETING EXPENSE 3,000.00	375.94	0.00	2,624.06	2,624.06	0.00	0.00	12.53
TOTL 02	399,096.00	78,719.54	5,000.00	517,376.46	512,376.46	0.00	0.00	13.21
030101	OFFICE SUPPLIES 1,300.00	53.99	0.00	1,246.01	1,246.01	0.00	0.00	4.15
040300	EQUIPMENT 4,100.00	2,533.76	0.00	1,566.24	1,566.24	0.00	0.00	61.80
061001	CONTINGENT APPROPRIATIONS 300,000.00	0.00	0.00	300,000.00	300,000.00	0.00	0.00	
061002	PHASE II PE - MIDWAY CORRIDOR 3,418,000.00	0.00	0.00	3,418,000.00	3,418,000.00	0.00	0.00	
061003	RIGHT-OF-WAY ACQUISITION 0.00	0.00	0.00	0.00	0.00	0.00	1,728,000.00	

RFC
 FUND 10, 591 RANSEY COUNTY REGIONAL RAILROAD AUTHORITY

APPROPRIATION NO.	ALJ. CURRENT APPROPRIATION	AMOUNT EXPENDED	UNPAID ENCUMBRANCES	BALANCE UNEXPENDED	BALANCE UNENCUMBERED	TRANSFER IN (TO)	TRANSFER OUT (FROM)	PCT EXPD YTD
59101 RANSEY COUNTY REGIONAL RAILROAD AUTHORITY * CONTINUED *								
NORTHEAST CORRIDOR STUDY								
061004	0.00	0.00	0.00	0.00	0.00	0.00	400,000.00	
SOUTH CORRIDOR STUDY								
061005	0.00	0.00	0.00	0.00	0.00	0.00	100,000.00	
CUR DEL-TOT	4,319,496.00	81,307.29	5,000.00	4,238,188.71	4,233,188.71	0.00	2,228,000.00	1.88

BUDGET CONTROL REPORT
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RAMSEY COUNTY
ACCOUNTING DEPT
09 28 90

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PCT OF YEAR ELAPSED = 74.25

RFC

FUND NO. 591 RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

APPROPRIATION NO.	ALJ. CURRENT APPROPRIATION	AMOUNT EXPENDED	UNPAID ENCUMBRANCES	BALANCE UNEXPENDED	BALANCE UNENCUMBERED	TRANSFER IN (TO)	TRANSFER OUT (FROM)	PCT EXPD YTD
R89 19102	RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY							
000000	52,635.00	52,278.99	0.00	356.01	356.01	0.00	0.00	99.32
016-TOT	4,272,131.00	133,586.28	5,000.00	4,238,544.72	4,233,544.72	0.00	2,228,000.00	3.06

RFL
FUND NO. 591 RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

APPROPRIATION NO.	ALJ. CURRENT APPROPRIATION	AMOUNT EXPENDED	UNPAID ENCUMBRANCES	BALANCE UNEXPENDED	BALANCE UNENCUMBERED	TRANSFER IN (TO)	TRANSFER OUT (FROM)	PCT EXPD YTD	
59102	ICMRA - COMPREHENSIVE LRT PLAN								
020102	CONSULTING SERVICES	94.56	7,508.84	0.00	7,414.28CR	7,414.28CR	0.00	0.00	7940.82
020174	COUNTY ATTORNEY SERVICES	10,680.00	942.90	0.00	9,737.10	9,737.10	0.00	0.00	8.83
020176	EXECUTIVE DIRECTOR-SERVICES	4,201.05	2,408.29	0.00	1,792.76	1,792.76	0.00	0.00	57.33
020179	BUDGETING AND ACCOUNTING SERVICES	3,650.36	0.00	0.00	3,650.36	3,650.36	0.00	0.00	
020185	DATA PROCESSING SERVICES-MTCE	0.00	178.11	0.00	178.11CR	178.11CR	0.00	0.00	1100.00
020193	COUNTY PROJECT MANAGEMENT SERVICES	6,320.11	9,564.36	0.00	2,744.27CR	2,744.27CR	0.00	0.00	140.24
020202	POSTAGE	75.13	101.47	0.00	26.29CR	26.29CR	0.00	0.00	134.97
020305	MESSENGER SERVICE	28.50	39.50	0.00	11.00CR	11.00CR	0.00	0.00	138.60
020401	PUBLISHING MINUTES & NOTICES	1,549.12	9.32	0.00	1,539.82	1,539.82	0.00	0.00	.60
020501	PRINTING & STATIONERY	2,014.69	2,835.73	0.00	21.04CR	21.04CR	0.00	0.00	100.75
021192	INTEREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
021226	COMMITTEE COMPENSATION	1,590.00	0.00	0.00	1,590.00	1,590.00	0.00	0.00	
021408	VOLUNTEER/COMMITTEE MEETING EXPENSE	1,385.66	444.29	0.00	941.37	941.37	0.00	0.00	32.06
TOT 02		32,889.23	24,032.81	0.00	8,856.42	8,856.42	0.00	0.00	73.07
BIG-TOT		32,889.23	24,032.81	0.00	8,856.42	8,856.42	0.00	0.00	73.07

REC

FULD RD. 591 RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

APPROPRIATION I.D.	ADJ. CURRENT APPROPRIATION	AMOUNT EXPENDED	UNPAID ENCUMBRANCES	BALANCE UNEXPENDED	BALANCE UNENCUMBERED	TRANSFER IN (TO)	TRANSFER OUT (FROM)	PCT EXPD YTD
59103	LEICA - PHASE 1 PRELIMINARY ENGINEERING							
020102	CONSULTING SERVICES	1,437,002.56	597,312.42	853,729.14	929,690.14	75,961.00	0.00	35.30
020174	COUNTY ATTORNEY SERVICES	33,813.00	6,257.69	0.00	27,560.31	27,560.31	0.00	18.50
020176	EXECUTIVE DIRECTOR-SERVICES	37,674.09	19,661.75	0.00	18,012.34	18,012.34	0.00	52.19
020179	BUDGETING AND ACCOUNTING SERVICES	13,681.20	151.70	0.00	13,529.50	13,529.50	0.00	1.11
020185	DATA PROCESSING SERVICES-MTCE	1,892.22	2,203.52	0.00	311.30CR	311.30CR	0.00	116.45
020193	COUNTY PROJECT MANAGEMENT SERVICES	86,046.34	132,255.23	0.00	53,208.89CR	53,208.89CR	0.00	161.84
020201	POSTAGE	2,949.25	365.99	0.00	2,583.26	2,583.26	0.00	12.41
020305	MESSENGER SERVICE	193.65	14.50	0.00	179.15	179.15	0.00	7.49
020401	PUBLISHING MINUTES & NOTICES	4,571.60	119.15	0.00	4,452.45	4,452.45	0.00	2.61
020501	PRINTING & STATIONERY	14,463.49	239.16	0.00	14,224.33	14,224.33	0.00	1.65
021192	INTEREST	0.00	0.00	0.00	0.00	0.00	0.00	
021226	COMMITTEE COMPENSATION	1,000.00	0.00	0.00	1,000.00	1,000.00	0.00	
021407	OTHER TRAVEL	2,553.47	0.00	0.00	2,553.47	2,553.47	0.00	
021408	VOLUNTEER/COMMITTEE MEETING EXPENSE	700.60	842.67	0.00	142.07CR	142.07CR	0.00	120.28
TOTL 02		1,636,546.47	676,423.78	853,729.14	960,122.69	106,393.55	0.00	41.33
ORG-TOT		1,636,546.47	676,423.78	853,729.14	960,122.69	106,393.55	0.00	41.33

RFL
FULL L.D. 591 RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

APPROPRIATION NO.	ADJ. CURRENT APPROPRIATION	AMOUNT EXPENDED	UNPAID ENCUMBRANCES	BALANCE UNEXPENDED	BALANCE UNENCUMBERED	TRANSFER IN (TO)	TRANSFER OUT (FROM)	PCT EXPD YTD
59100	LIGHT-OF-WAY ACQUISITION							
020102	CONSULTING SERVICES 166,000.00	0.00	0.00	166,000.00	166,000.00	166,000.00	0.00	
020174	COUNTY ATTORNEY SERVICES 36,000.00	552.16	0.00	35,447.84	35,447.84	36,000.00	0.00	1.53
020176	EXECUTIVE DIRECTOR-SERVICES 2,000.00	246.76	0.00	1,753.24	1,753.24	2,000.00	0.00	12.34
020179	BUDGETING AND ACCOUNTING SERVICES 2,000.00	0.00	0.00	2,000.00	2,000.00	2,000.00	0.00	
020185	DATA PROCESSING SERVICES-MTCE 500.00	20.69	0.00	479.31	479.31	500.00	0.00	4.14
020193	COUNTY PROJECT MANAGEMENT SERVICES 20,000.00	996.35	0.00	19,003.65	19,003.65	20,000.00	0.00	4.98
020202	POSTAGE 500.00	0.00	0.00	500.00	500.00	500.00	0.00	
020401	PUBLISHING MINUTES & NOTICES 500.00	0.00	0.00	500.00	500.00	500.00	0.00	
020501	PRINTING & STATIONERY 500.00	0.00	0.00	500.00	500.00	500.00	0.00	
040103	LAND ACQUISITION-RIGHT OF WAY 1,500,000.00	0.00	0.00	1,500,000.00	1,500,000.00	1,500,000.00	0.00	
ORG-TOT	1,728,000.00	1,815.96	0.00	1,726,184.04	1,726,184.04	1,728,000.00	0.00	.11

RFC

FUND NO. 591 RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

APPROPRIATION NO.	ADJ. CURRENT APPROPRIATION	AMOUNT EXPENDED	UNPAID ENCUMBRANCES	BALANCE UNEXPENDED	BALANCE UNENCUMBERED	TRANSFER IN (TO)	TRANSFER OUT (FROM)	PCT EXPD YTD
59107	NORTHEAST CORRIDOR STUDY							
020102	CONSULTING SERVICES 270,000.00	60,421.45	184,443.55	209,578.55	25,135.00	270,000.00	0.00	22.38
020174	COUNTY ATTORNEY SERVICES 17,000.00	2,908.00	0.00	14,092.00	14,092.00	17,000.00	0.00	17.11
020176	EXECUTIVE DIRECTOR-SERVICES 6,500.00	1,163.25	0.00	5,336.75	5,336.75	6,500.00	0.00	17.90
020179	BUDGETING AND ACCOUNTING SERVICES 3,000.00	75.83	0.00	2,924.15	2,924.15	3,000.00	0.00	2.53
020185	DATA PROCESSING SERVICES-MTCE 1,000.00	168.90	0.00	831.10	831.10	1,000.00	0.00	16.89
020193	COUNTY PROJECT MANAGEMENT SERVICES 100,000.00	9,305.18	0.00	90,694.32	90,694.32	100,000.00	0.00	9.31
020202	POSTAGE 500.00	33.84	0.00	466.16	466.16	500.00	0.00	6.77
020401	PUBLISHING MINUTES & NOTICES 500.00	0.00	0.00	500.00	500.00	500.00	0.00	
020501	PRINTING & STATIONERY 500.00	26.10	0.00	473.90	473.90	500.00	0.00	5.22
021226	COMMITTEE COMPENSATION 500.00	0.00	0.00	500.00	500.00	500.00	0.00	
021408	VOLUNTEER/COMMITTEE MEETING EXPENSE 500.00	34.60	0.00	465.40	465.40	500.00	0.00	6.92
DIG-TOT	400,000.00	74,137.67	184,443.55	325,862.33	141,418.78	400,000.00	0.00	18.53

RFL

FUND NO. 591 RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

APPROPRIATION NO.	ALL. CURRENT APPROPRIATION	AMOUNT EXPENDED	UNPAID ENCUMBRANCES	BALANCE UNEXPENDED	BALANCE UNENCUMBERED	TRANSFER IN (TO)	TRANSFER OUT (FROM)	PCT EXPD YTD
59108	SOUTH CORRIDOR STUDY							
020102	CONSULTING SERVICES 65,000.00	0.00	0.00	65,000.00	65,000.00	65,000.00	0.00	
020174	COUNTY ATTORNEY SERVICES 2,500.00	0.00	0.00	2,500.00	2,500.00	2,500.00	0.00	
020176	EXECUTIVE DIRECTOR-SERVICES 1,000.00	17.63	0.00	982.37	982.37	1,000.00	0.00	1.76
020179	BUDGETING AND ACCOUNTING SERVICES 500.00	0.00	0.00	500.00	500.00	500.00	0.00	
020185	DATA PROCESSING SERVICES-MTCE 200.00	2.52	0.00	197.48	197.48	200.00	0.00	1.26
020193	COUNTY PROJECT MANAGEMENT SERVICES 30,000.00	389.46	0.00	29,610.54	29,610.54	30,000.00	0.00	1.30
020202	POSTAGE 200.00	11.25	0.00	188.75	188.75	200.00	0.00	5.63
020401	PUBLISHING MINUTES & NOTICES 200.00	0.00	0.00	200.00	200.00	200.00	0.00	
020501	PRINTING & STATIONERY 200.00	0.00	0.00	200.00	200.00	200.00	0.00	
021226	COMMITTEE COMPENSATION 100.00	0.00	0.00	100.00	100.00	100.00	0.00	
021408	VOLUNTEER/COMMITTEE MEETING EXPENSE 100.00	0.00	0.00	100.00	100.00	100.00	0.00	
016-TOT	100,000.00	420.86	0.00	99,579.14	99,579.14	100,000.00	0.00	.42

REC
FUND NO. 591 RAMSEY COUNTY REGIONAL RAILROAD AUTHORITY

APPROPRIATION NO.	ADJ. CURRENT APPROPRIATION	AMOUNT EXPENDED	UNPAID ENCUMBRANCES	BALANCE UNEXPENDED	BALANCE UNENCUMBERED	TRANSFER IN (TO)	TRANSFER OUT (FROM)	PCT EXPD YTD
59177	FUNDS & RECOVERIES & PETTY CASH							
	PETTY CASH & CHANGE							
053000	100.00	100.00	0.00	0.00	0.00	100.00	0.00	100.00
ULG-TOT	100.00	100.00	0.00	0.00	0.00	100.00	0.00	100.00
ACT-TOT	8,269,666.70	910,517.36	1,043,172.69	7,359,149.34	6,315,976.65	2,228,100.00	2,228,000.00	11.01
5	ECT-TOT	3,269,666.70	910,517.36	1,043,172.69	7,359,149.34	2,228,100.00	2,228,000.00	11.01
FUND CUL. TOT	8,217,031.70	858,238.37	1,043,172.69	7,358,793.33	6,315,620.64	2,228,100.00	2,228,000.00	10.44
FUND R89 TOT	52,635.00	52,278.99	0.00	356.01	356.01	0.00	0.00	99.32
FUND TOTAL	8,269,666.70	910,517.36	1,043,172.69	7,359,149.34	6,315,976.65	2,228,100.00	2,228,000.00	11.01

RAMSEY COUNTY
BUDGET ACCOUNTING

PAGE
DATE 10/02/90

REGIONAL RAILROAD QTRLY REPORT
PERIOD JULY 1, 1990 THRU SEP 30, 1990

RAMSEY COUNTY REGIONAL RAILROAD AUTH

RFC	DEPT	OBJECT STATE AUDITOR	CLAIM ID	CLAIM NBR	WAR DATE	WAR NBR	WAR AMT	VENDOR NAME		
	59101	020122	CA	61785	081690	00590174	798.25	MINNESOTA STATE AUDITORS		
		020122					798.25			
		EXECUTIVE DIRECTOR SERVICES								
	59101	020176	IC	56200	070690	00579971	2,961.00	IC TRANSFER PMT 400 40301	300908	A00280
			IC	56201	070690	00579971	3,243.00	IC TRANSFER PMT 400 40301	300908	A00280
			IC	56202	070690	00579971	3,102.00	IC TRANSFER PMT 400 40301	300908	A00270
		020176					9,306.00			
		BUDGETING AND ACCOUNTING SERVICES								
	59101	020179	IC	56895	071390	00580927	682.65	IC TRANSFER PMT 400 40303	300908	A00270
			IC	58051	072090	00582552	379.25	IC TRANSFER PMT 400 40303	300908	A00290
			IC	61848	081790	00589414	743.72	IC TRANSFER PMT 400 40303	300908	A00290
			IC	66546	092190	00596416	761.42	IC TRANSFER PMT 400 40303	300908	A00310
		020179					2,567.04			
		DATA PROCESSING SERVICES-MTCE								
	59101	020185	IC	56203A	070690	00579971	187.69	IC TRANSFER PMT 574 57401	301385	C01460
			IC	56204A	070690	00579971	228.51	IC TRANSFER PMT 574 57401	301385	C01400
			IC	56205C	070690	00579971	191.58	IC TRANSFER PMT 574 57401	301385	C01340
		020185					607.78			
		COUNTY PROJECT MANAGEMENT SERVICES								
	59101	020193	IC	56201	070690	00579971	2,213.88	IC TRANSFER PMT 400 47109	300434	B00910
			IC	56211	070690	00579971	1,239.61	IC TRANSFER PMT 400 40801	300908	A02650
			IC	56212	070690	00579971	657.14	IC TRANSFER PMT 400 40801	300908	A02650
			IC	59167	080390	00586920	3,401.02	IC TRANSFER PMT 400 47109	300434	B00930
			IC	59168	080390	00586920	159.18	IC TRANSFER PMT 400 47103	300405	B00930
			IC	59669	080390	00586920	1,745.80	IC TRANSFER PMT 400 47102	300434	B00930
			IC	66547	092190	00596416	1,015.32	IC TRANSFER PMT 400 47109	300434	B00980
			IC	66547A	092190	00596416	236.00	IC TRANSFER PMT 400 47101	300166	B00980
			IC	66548	092190	00596416	260.56	IC TRANSFER PMT 400 47102	300434	B00990
		020193					10,928.51			
		POSTAGE								
	59101	020202	IC	60517	081090	00587844	59.25	IC TRANSFER PMT 521 52104	350323	W00660
			CA	65530	091890	00596263	45.00	DESPIEGELAERE PETTY CASH		KATHRYN
			IC	66549B	092190	00596416	90.25	IC TRANSFER PMT 521 52104	350323	W00700
		020202					194.50			
		TELEPHONE LONG DISTANCE CHARGES								
	59101	020207	CA	56883	071790	00581721	70.07	AT&T COMMUNICATIONS		
			CA	62877B	082490	00591204	19.73	AT&T COMMUNICATIONS		
			CA	55550	091890	00596255	79.58	AT&T COMMUNICATIONS		
		020207					169.38			

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PAMSEY COUNTY REGIONAL RAILROAD AUTH

RFC	DEPT	OBJECT TELEPHONE - LOCAL SERVICE	CLAIM ID HUR	CLAIM HUR	WAR DATE	WAR NDR	WAR AMT	VENDOR NAME	
	59101	020208	CA	56875	071390	00581008	88.75	U S WEST COMMUNICATIONS	
			CA	59599	073190	00585619	45.66	U S WEST COMMUNICATIONS	
			CA	65544	091890	00595757	51.67	U S WEST COMMUNICATIONS	
		020208					186.08		
		PUBLISHING MINUTES & NOTICES							
	59101	020401	IC	56896A	071390	00580927	5.30	IC TRANSFER PMT 400 41203	300431 H105
		020401					5.30		
		PRINTING & STATIONERY							
	59101	020501	IC	56207	070690	00579971	213.90	IC TRANSFER PMT 400 41202	300404 H012
			CA	57084	071390	00581552	56.96	DESPIEGELAERE-PETTY CASH	KATHRYN
			IC	58986	072790	00584729	422.60	IC TRANSFER PMT 400 40301	300130 A002
			CA	59602	073190	00585884	169.74	ST PAUL CITY OF	
			IC	59670	080390	00586920	122.37	IC TRANSFER PMT 400 41202	300404 H0131
			IC	65263	091490	00595219	337.68	IC TRANSFER PMT 400 41202	300404 H013
			CA	65538A	091890	00596263	1.58	DESPIEGELAERE PETTY CASH	KATHRYN
			CA	65552	091890	00595760	78.28	ST PAUL CITY OF	
			CA	66934	092590	00597898	34.48	DAY-TIMERS INC	
			CA	66935	092590	00597620	137.45	ST PAUL CITY OF	
		020501					1,575.04		
		PARKING SPACE							
	59101	020909	CA	59544	073190	00586272	180.00	VICTORY PARKING INC	
			CA	66013	092190	00596588	180.00	VICTORY PARKING INC	
			CA	66936	092590	00597618	180.00	VICTORY PARKING INC	
		020909					540.00		
		BOOKS-PERIODICALS-SUBSCRIPTIONS							
	59101	021101	CA	56423	070690	00580483	33.00	INTERNATIONAL RAILWAY JOURNAL	
			CA	57084B	071390	00581552	12.95	DESPIEGELAERE-PETTY CASH	KATHRYN
		021101					45.95		
		MEMBERSHIP & DUES							
	59101	021401	CA	66014	092190	00597200	35.00	CITIZENS LEAGUE	
		021401					35.00		
		CONFERENCE & SEMINAR EXPENSES							
	59101	021403	CA	62800	082490	00591648	410.00	NATL COUNCIL FOR URBAN ECON DE	
			CA	62801	082490	00591648	360.00	NATL COUNCIL FOR URBAN ECON DE	
			CA	64566	090790	00594403	682.00	DESPIEGELAERE	KATHRYN
			CA	65123	091490	00595685	30.00	MINN PUBLIC TRANSIT ASSN	
			CA	65124	091490	00595686	57.73	TOLAAS	JAMES E
		021403					1,539.73		
		OTHER TRAVEL							
	59101	021407	CA	59115	072790	00584969	1,161.12	TRAVEL ASSOC OF CARRIAGE HILL	

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RFC	DLPT	OBJECT OTHER TRAVEL	CLAIM ID	CLAIM NBR	WAR DATE	WAR NBR	WAR AMT	VENDOR NAME	
	59101	021407	CA	64015	083190	00593353	571.50	CARLSON TRAVEL NETWORK	
			CA	64567	090790	00594404	253.00	CARLSON TRAVEL AGENCY	
		021407					1,985.62		
		VOLUNTEER/COMMITTEE MEETING EXPENSE							
	59101	021408	CA	57084A	071390	00581552	10.00	DESPIEGELAERE-PETTY CASH	KATHRYN
			CA	59545	073190	00586273	113.75	ARA/CORY	
			CA	65538B	091890	00596263	22.09	DESPIEGELAERE PETTY CASH	KATHRYN
			CA	65539	091090	00590264	23.85	Q COFFEE SHOP	
			CA	66446	092190	00597312	150.00	MN WORLD TRADE CENTER CORP	
		021408					319.69		
		EQUIPMENT							
	59101	040300	PO	R01831	073190	00586274	389.70	S & T OFFICE PRODUCTS INC	
		040300					389.70		

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31,193.57

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RCRA COMPREHENSIVE LRT PLAN

RFC	DEPT	OBJECT	CLAIM ID	CLAIM NBR	WAR DATE	WAR NBR	WAR AMT	VENDOR NAME	
	59102	020185	IC	56205A	070690	00579971	19.95	IC TRANSFER PMT 574 57401	301385 C0134
		020185					19.95		
		COUNTY PROJECT MANAGEMENT SERVICES							
	59102	020193	IC	59671	080390	00580620	128.32	IC TRANSFER PMT 400 47109	300434 800931
		020193					128.32		
		PUBLISHING MINUTES & NOTICES							
	59102	020401	IC	56896B	071390	00580927	9.30	IC TRANSFER PMT 400 41203	300431 H1055
		020401					9.30		

RCRA COMPREHENSIVE LRT PLAN

157.57

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RCRRA PHASE 1 PRELIM ENGR * EIS

RFC	DLPT	OBJECT	CLAIM ID	CLAIM NBR	WAK DATE	WAR NBR	WAR AMT	VENDOR NAME		
		CONSULTING SERVICES								
	59103	020102	CA	PA800	072090	00583849	107,136.59	BRW INC		
			CA	PA800	082490	00591649	107,744.28	BRW INC		
		020102					214,880.87			
		EXECUTIVE DIRECTOR-SERVICES								
	59103	020176	IC	56200A	070690	00579971	2,961.00	IC TRANSFER PMT 400 40301	300908	A0028
			IC	56201A	070690	00579971	3,243.00	IC TRANSFER PMT 400 40301	300908	A0028
			IC	56202A	070690	00579971	3,102.00	IC TRANSFER PMT 400 40301	300908	A0027
		020176					9,306.00			
		DATA PROCESSING SERVICES-MTCE								
	59103	020185	IC	56203C	070690	00579971	374.30	IC TRANSFER PMT 574 57401	301385	C0146
			IC	56204B	070690	00579971	379.69	IC TRANSFER PMT 574 57401	301385	C0140
			IC	56205D	070690	00579971	338.79	IC TRANSFER PMT 574 57401	301385	C0134
		020185					1,092.78			
		COUNTY PROJECT MANAGEMENT SERVICES								
	59103	020193	IC	56208	070690	00579971	3,494.79	IC TRANSFER PMT 400 40801	300908	A0265
			IC	56209	070690	00579971	3,046.74	IC TRANSFER PMT 400 40801	300908	A0265
			IC	56210	070690	00579971	3,509.73	IC TRANSFER PMT 400 40801	300908	A0265
			IC	56213	070690	00579971	8,045.36	IC TRANSFER PMT 400 47110	300188	B0090
			IC	56214	070690	00579971	6,288.69	IC TRANSFER PMT 400 47109	300434	B0091
			IC	59672	080390	00586920	5,211.30	IC TRANSFER PMT 400 47102	300434	B0093
			IC	59673	080390	00586920	5,807.41	IC TRANSFER PMT 400 47109	300434	B0093
			IC	59674	080390	00586920	4,840.73	IC TRANSFER PMT 400 47110	300188	B0092
			IC	66550	092190	00596416	689.00	IC TRANSFER PMT 400 47101	300166	B0097
			IC	66550A	092190	00596416	2,968.71	IC TRANSFER PMT 400 47109	300434	B0097
			IC	66551	092190	00596416	5,315.52	IC TRANSFER PMT 400 47102	300434	B0098
			IC	66552	092190	00596416	1,760.86	IC TRANSFER PMT 400 47110	300188	B0098
			IC	66552A	092190	00596416	1,065.14	IC TRANSFER PMT 400 47101	300166	B0098
		020193					52,043.98			
		POSTAGE								
	59103	020201	IC	60517A	081090	00587844	39.46	IC TRANSFER PMT 521 52104	350323	H0066
			IC	66549A	092190	00596416	90.25	IC TRANSFER PMT 521 52104	350323	H0070
		020202					129.71			
		PUBLISHING MINUTES & NOTICES								
	59103	020401	IC	56896	072090	00582552	12.60	IC TRANSFER PMT 400 41203	300431	H1055
			CA	61786	081690	00590338	54.30	ST PAUL LEGAL LEDGER INC		
		020401					66.90			
		PRINTING & STATIONERY								
	59103	020501	IC	59670B	080390	00586920	4.15	IC TRANSFER PMT 400 41202	300404	H0131
		020501					4.15			

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RCRRA PHASE 1 PRELIM ENGR * EIS

KFC	DLPT	OBJECT	CLAIM ID	CLAIM NDR	WAR DATE	WAR NDR	WAR AMT	VENDOR NAME
		VOLUNTEER/COMMITTEE MEETING EXPENSE						
59103		021408	CA	59546	073190	00586275	66.25	MINNESOTA CLUB OF SAINT PAUL
			CA	60237	080790	00587779	50.00	CONCORDIA COLLEGE
			CA	60557	081090	00588405	27.83	Q COFFEE SHOP & QUALITY CATERI
		021408					144.08	

RCRRA PHASE 1 PRELIM ENGR * EIS 277,668.47

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RIGHT-OF-WAY ACQUISITION

	RFC	DLPT	OBJECT	CLAIM ID	CLAIM NDR	WAR DATE	WAR NDR	WAR AMT	VENDOR NAME	
7										
8			DATA PROCESSING SERVICES-MTCE							
9		59106	020185	IC	56203	070690	00579971	0.98	IC TRANSFER PMT 574 57401	301385 C01462
10				IC	56205	070690	00579971	2.12	IC TRANSFER PMT 574 57401	301385 C01342
11										
12			020185					3.10		
13			COUNTY PROJECT MANAGEMENT SERVICES							
14		59106	020193	IC	56215	070690	00579971	64.16	IC TRANSFER PMT 400 47109	300434 B00910
15										
16			020193					64.16		

RIGHT-OF-WAY ACQUISITION

67.26

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PERIOD JULY 1, 1990 THRU SEP 30, 1990

NORTHEAST CORRIDOR STUDY

RFC	DEPT	OBJECT	CLAIM ID	CLAIM NBR	WAR DATE	WAR NBR	WAR AMT	VENDOR NAME		
		CONSULTING SERVICES								
	59107	020102	CA	PA017	071390	00581553	1,571.89	STRGAR ROSCOE FAUSCH INC		
			CA	PA017	082490	00591650	18,865.32	STRGAR ROSCOE FAUSCH INC		
			CA	PA017	083190	00593354	27,848.91	STRGAR ROSCOE FAUSCH INC		
			CA	PA017	092890	00598691	12,135.33	STRGAR ROSCOE FAUSCH INC		
		020102					60,421.45			
		DATA PROCESSING SERVICES-MTCE								
	59107	020185	IC	56203B	070690	00579971	24.59	IC TRANSFER PMT 574 57401	301385	C01462
			IC	56204	070690	00579971	9.95	IC TRANSFER PMT 574 57401	301385	C01402
			IC	56205B	070690	00579971	29.56	IC TRANSFER PMT 574 57401	301385	C01342
		020185					64.10			
		COUNTY PROJECT MANAGEMENT SERVICES								
	59107	020193	IC	56216	070690	00579971	898.39	IC TRANSFER PMT 400 47109	300434	B00915
			IC	56217	070690	00579971	224.03	IC TRANSFER PMT 400 40801	300908	A02658
			IC	59675	080390	00586920	1,094.38	IC TRANSFER PMT 400 47102	300434	B00934
			IC	59676	080390	00586920	385.02	IC TRANSFER PMT 400 47109	300434	B00929
			IC	66553	092190	00596416	104.34	IC TRANSFER PMT 400 47109	300434	B00978
			IC	66553A	092190	00596416	24.00	IC TRANSFER PMT 400 47101	300166	B00978
			IC	66554	092190	00596416	1,354.93	IC TRANSFER PMT 400 47102	300434	B00982
		020193					4,085.09			
		POSTAGE								
	59107	020202	IC	66549C	092190	00596416	33.84	IC TRANSFER PMT 521 52104	350323	H00702
		020202					33.84			
		PRINTING & STATIONERY								
	59107	020501	IC	59678A	080390	00586920	26.10	IC TRANSFER PMT 400 41202	300404	H01310
		020501					26.10			
		NORTHEAST CORRIDOR STUDY					64,630.58			

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SOUTH CORRIDOR STUDY

DLPT	OBJECT	CLAIM ID	CLAIM NBR	WAR DATE	WAR NBR	WAR AMT	VENDOR NAME	
59108	020193	IC	59677	080390	00586920	224.59	IC TRANSFER PMT 400 47109	300434 B00928
		IC	66555	092190	00596416	12.00	IC TRANSFER PMT 400 47101	300166 B00976
		IC	66555A	092190	00596416	52.16	IC TRANSFER PMT 400 47109	300434 B00976
	020193 POSTAGE					288.75		
59108	020202	IC	66549	092190	00596416	11.25	IC TRANSFER PMT 521 52104	350323 W00702
	020202					11.25		

CORRIDOR STUDY 300.00

FUND TOTAL: JULY 1, 1990 - SEPTEMBER 30, 1990: 374,017.45