

June 1989

1989 Municipal Screening Board Data May 1989

612-296-1662

TO : Municipal Engineers

SUBJECT : Municipal State Aid Screening Board

Enclosed is a copy of the June 1989 Municipal Screening Board Data.

The data included in this report will be used by the Municipal Screening Board at its June 13 and 14, 1989, meeting near Brainerd to establish unit prices for the 1989 Needs Study and the resulting 1990 apportionment. The Board will also review other recommendations of the Needs Study Subcommittee outlined in the minutes.

Should you have any suggestions or recommendations reguarding the data in this publication, please refer them to your district representative along with a copy to this office, or call the above number prior to the Screening Board meeting.

Sincerely, Fay don M. Director, Office of State Aid

Enclosures: 1989 Municipal State Aid Screening Board Data.

## 1989 MUNICIPAL SCREENING BOARD DATA

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### 1989 MUNICIPAL SCREENING BOARD

#### OFFICERS

			- · ·	(					
Chairman Vice Chairman Secretary		Ronald Rudrud Bruce Bullert Jim Grube	Bloomington Northfield St.Louis Park	(612) (507) (612)	881-5811 645-8832 924-2551				
MEMBERS									
District	Served	Representative	<pre>Representative</pre>						
1	1	Nick Dragisich	Virginia	(218)	741-2388				
2	2	James Walker	Thief River Falls	(218)	751-3004				
3	2	Terry Maurer	Elk River	(612)	774-6021				
4	1	Alvin Moen	Alexandria	(612)	762-8149				
5	3	William Ottensmann	Coon Rapids	(612)	755-2880				
6	1	Tom Drake	Red Wing	(612)	227-6220				
7	3	Dwayne Haffield	Worthington	(507)	376-3161				
8	2	Joseph Bettendorf	Litchfield	(612)	252-4740				
9	3	Charles Siggerud	Burnsville	(612)	890-4100				
(Three C	ities	Dan Murphy	Duluth	(218)	723-3278				
of the		Marvin Hoshaw	Minneapolis	(612)	348-2456				
First C	lass)	Thomas Kuhfeld	St. Paul	(612)	292-6276				
District		Alternates							
1		Jim Pruzak	Cloquet	(218)	879-6758				
2		David Kildahl	Crookston	(218)	281-6522				
3		Roger Larson	Sauk Rapids	(612)	253-1000				
4		Herb Reimer	Moorhead	(612)	299-5390				
5		Michael Eastling	Richfield	(612)	869-7521				
6		Arnold Putnam	Owatonna	(612)	451-4541				
7		Brian Bachmeier	Fairmont	(507)	238-9461				
8		Dale Swanson	Willmar	(612)	235-4202				
9		Ken Haider	Maplewood	(612)	770-4552				

# 1989 SUBCOMMITTEES APPOINTED BY THE SCREENING BOARD

NEEDS STUDY SUBCOMMITTEE

Chairman - Gerald Butcher Maple Grove (612) 420-4000 Expires in 1989

> Dan Edwards Fergus Falls (218) 739-2251 Expires in 1990

> Clyde Busby Hibbing (218) 262-3486 Expires in 1991

### UNENCUMBERED CONSTRUCTION FUNDS SUBCOMMITTEE

.

Chairman - Larry Anderson Prior Lake (612) 447-4230 Expires in 1989

> Kenneth Saffert Mankato (507) 625-3161 Expires in 1990

Fred Moore Plymouth (612) 559-2800 Expires in 1991

### HIGHWAY DISTRICTS AND URBAN MUNICIPALITIES

### AS ESTABLISHED FOR STATE AID PURPOSES



#### MINUTES FALL MUNICIPAL SCREENING COMMITTEE OCTOBER 18-19, 1988

The fall meeting of the Screening Committee was called to order by Chairman Moore at 1:12 p.m., Tuesday, October 18, 1988. Roll call was taken by the Secretary. Present were: Officers and Screening Committee Members: Chairman Fred Moore, Plymouth Vice Chairman Ron Rudrud, Bloomington Secretary Bruce R. Bullert, Northfield District 1 - Clyde W. Busby Hibbing District 2 - James J. Walker Thief River Falls District 3 - Terry Maurer Elk River District 4 - Dan Edwards Fergus Falls District 5 - Bill Ottensmann Coon Rapids District 6 - Thomas Drake (Alternate) Red Wing District 7 - Dwayne Haffield Worthington District 8 - Joe Bettendorf Litchfield District 9 - Charles Siggerud Burnsville First Class City - John H. Carlson Duluth First Class City - Marvin Hoshaw First Class City - Joseph F. Koenig Minneapolis St. Paul Chairman Needs Study Subcommittee - Steve Gatlin **Roseville** Chairman Unencumbered Construction Funds Subcommittee - Bo Spurrier Brooklyn Center Others: Jon Ketokoski Minneapolis David Kreager Duluth Greg Peterson St. Paul Alvin Moen (Dist. 4 Alt.) Alexandria Gordon M. Fay Mn/DOT Director, Office of State Aid Roy L. Hanson Mn/DOT Assistant State Aid Engineer Kenneth Straus Mn/DOT Municipal State Aid Needs Unit Bill Croke Mn/DOT District 1, State Aid Jack Isaacson Mn/DOT District 2, State Aid Dave Reed Mn/DOT District 3, State Aid Vern Korzendorfer Mn/DOT District 4, State Aid Mn/DOT District 5, State Aid Chuck Weichselbaum Earl Welshons Mn/DOT District 6, State Aid Larry Hoben Mn/DOT District 7, State Aid John Hoeke Mn/DOT District 8, State Aid Elmer Morris Mn/DOT District 9, State Aid Ken Hoeschen Mn/DOT County State Aid Needs Unit

Chairman Moore made introductions of the Mn/DOT personnel, District State Aid Engineers, Subcommittee Chairmen, District Screening Committee Alternates and other persons in attendance at the meeting.

#### 1. MINUTES CONSIDERATION:

Chairman Moore called for consideration of approval of the minutes of the June 21 and 22, 1988, Screening Committee meeting. The minutes are printed on pages 6 through 22 of the 1988 Municipal State Aid Needs Report dated October, 1988. Ottensmann moved, seconded by Hoshaw, to approve the minutes. Motion carried.

#### **II. MEETING PROCEDURE:**

Chairman Moore mentioned that all agenda items regarding the needs apportionment, adjustments and other business matters would be discussed today. Additional informal discussions will occur this evening beginning at 8:00 p.m. Action on all items will occur at tomorrow's meeting, which will be held in this room beginning at 9:00 a.m.

#### **III. NEEDS REPORT:**

Ken Straus presented a summary of the 1988 Municipal State Aid Needs Report dated October, 1988. He stated that the apportionment amount in this summary is projected to be \$71,000,000 which is a 21.6% increase over the previous year's apportionment amount. The reasons for the increase are the 25% increase in the motor vehicle excise tax, a 3 cent increase in the gas tax and 5% from the General Funds which went into effect July, 1988. These items are highlighted on Page 23 of the report.

A history of the M.S.A.S. mileage, needs and apportionment is provided on page 24. He noted that the City of Buffalo is being added at this time but their mileage has not been included in this report.

The maximum mileage record is detailed on pages 26 through 28. The 1987 mileage increased 50.56 miles from 1986 due to annexations and additional designations. The total mileage of 2,296.31 miles is approaching the maximum limit of 2,500 miles which has been previously approved for the municipal state aid street system.

The 1988 improved mileage record for the municipal state aid system is outlined on pages 29 and 30.

On pages 31 and 32, the 1988 itemized tabulations of needs is summarized. The summary sheet shows Rochester, Duluth and Elk River near the top of the sheet due to a computer error and these amounts should be included in their respective totals further down in the summary sheet. The average cost per mile is \$254,286 with the lowest amount being \$111,058 per mile for Robbinsdale. Seven cities exceeded \$350,000 per mile with Farmington being the highest at \$550,230 per mile. It should be noted that Farmington was recently added to the municipal state aid system and therefore is receiving total needs on all segments. The 1988 money needs recommendations are listed on pages 34 and 35. The total needs is \$560,105,075 which will adjust slightly before the first of the year since Buffalo is estimated at this time. The final submittals have been delayed to some extent due to final agreements between the city and county on designations.

The 1988 needs study update for each municipality reflecting construction accomplishments, system revision, unit cost update and traffic update are shown on pages 36 through 40. A number of cities in district number 1 were not included in the traffic update; however, these adjustments are intended to be completed by January 1, 1989. Minneapolis and St. Paul were also not included in the traffic update. The unit price revisions are summarized on page 36. The net change of \$14,640,598 in needs reflects an increase of 2.7% from 1987 to 1988. Straus stated that this figure should increase even more next year with the reinstatement of needs after 20 years.

The adjusted 25 year construction needs for each municipality is summarized on pages 42 through 46. The table takes the basic needs and adjusts this amount in accordance with the different resolutions and associated actions by each city. The Screening Committee adjustments are for variances approved last year but the added requirement of hold harmless resolutions necessitated a delay in making these adjustments. The Hutchinson amount should be changed to Hopkins.

Straus next reviewed the storm sewer expenditures in 1987, pages 46 through 48, as well as the total storm sewer adjustment for each city as listed on pages 49 and 50. The storm sewer needs include both local and state aid expenditure projects. The total after the fact storm sewer needs is now \$22,732,031.00. The state aid office determines these amounts based upon report of state aid contract requests or on final payment if requested to do so.

The unencumbered construction fund balance was next reviewed. This amount is a negative adjustment based upon the balance as of September 1 less the current year allotment. The total adjustment for 1988 is \$43,859,241.00.

The off system expenditures was next reviewed by Mr. Straus as listed on pages 54 through 56. The 1987 projects are first listed with the entire summary following. These off system expenditures are a negative adjustment for a 10 year period. The total adjustment is \$25,652,404.00.

Straus reviewed the bond adjustment amounts as listed on pages 57 and 58. He reviewed the Cottage Grove accounts to show how the adjustment is determined. The adjustment can be either positive or negative depending upon the status of the bond in relation to expenditures applicable to that particular bond. Interest on the bonds is paid from the city's maintenance account, thereby requiring a letter from the city by December 15th requesting the interest amount be allocated to the maintenance account for the next year.

non-existing bridge adjustments is summarized on page 59. The The total adjustment is \$13,773,654 for 1988 which is a positive adjustment for the community. This adjustment is made for a period of 15 years. Straus also asked the Screening Committee to consider time limit for bridges to be reinstated for full needs similar to а actions taken at the summer meeting. Some bridges are now over 60 years old and do not receive needs. A time period of 30 to 35 years was suggested by Mr. Straus. Further, the counties have now changed bridge lengths from 20 feet to 10 feet which should also be discussed by the Screening Committee. Chairman Moore asked for any comments on these issues. Siggerud commented that 35 years would correspond to a bridge life expectancy of 70 years which seemed Straus also stated that some consideration regarding quite long. overlays would be necessary. The average life of county bridges has been approximately 58 years based upon recent figures.

Straus next summarized the right of way adjustments shown on pages 60 through 62. The total adjustment is \$25,047,359 which is a positive adjustment.

The needs adjustment for reconstruction projects is itemized on pages 63 and 64. The date of construction for the Duluth projects are in error with the first one being 1930 and the remainder being in the 1950's and 1960's. Carlson questioned when these adjustments will expire. Straus stated that the present construction projects will continue for the entire 15 year period; however, this program will expire on December 31, 1989 after which reconstruction projects will no longer be handled in this fashion. The total positive adjustment is \$5,945,977 at this time.

The tentative 1989 money needs apportionment is listed on pages 65 through 67. The money needs provide one half of the apportionment and each \$1,000 in adjusted money needs earns \$62.58 in apportionment, which is approximately a \$7.00 increase over last year.

Chairman Moore asked for any questions on the money needs or how they are determined. There were no questions and/or comments at this time.

Straus next reviewed the theoretical population apportionment on pages 69 through 72. The 1980 census is used with adjustments due to special census taken by a community or if areas are annexed or detached. Each person provides approximately \$14.03 in apportionment. Buffalo is the newest city added to the system.

The tentative total apportionment is provided on pages 73 through 76 with a comparison between 1988 and 1989 shown on pages 77 through 79. Each city has an increased apportionment in 1989 with some of the larger increases due to mileage designations such as Coon Rapids or other previous adjustments as in the case of West St. Paul, a large unencumbered construction fund balance. This item concluded Mr. Straus' initial presentation.

### IV. UNENCUMBERED CONSTRUCTION FUND SUBCOMMITTEE

Chairman Moore introduced Mr. Bo Spurrier who is the chairman of this subcommittee. The minutes of the subcommittee are printed on pages 80 through 89 of the report.

Spurrier noted that the subcommittee does not make the rules but rather applies the criteria that we had advised the Screening Committee would be used. The main purpose was to ensure that communities were programming projects to use their apportionments and their fund balances. To some extent, the subcommittee reduce more concerned with a long range plan then short term results. was The recommendations of the subcommittee are based upon the criteria listed He summarized the justification items listed page 80. on under number 3 which are as follows:

- 3. Justification that will be considered:
  - a. A 429 feasibility study held by City Council and project ordered.
  - b. Project submitted to the District State Aid Engineer.
  - c. Plan approval by the City Council and District State Aid Engineer.
  - d. Project letting date established or contract has been let.
  - e. State Aid construction funds have been encumbered.

These rules are really very lenient and therefore very few communities cannot comply with these rules. Out of all the communities listed, the subcommittee recommended an adjustment to only one city, Maplewood, because they did not have projects programmed to reduce their balance. Maplewood had not initiated any projects or studied any projects large enough to reduce their balance. Therefore, the subcommittee recommended an adjustment of two (2) times their unencumbered construction fund balance, page 81. The remaining communities could meet the requirements by completing paper work or other items. A deadline was given to these communities to accomplish this work. Straus stated that all of the cities did meet the deadline.

Spurrier stated that the subcommittee met at another time to discuss recommended language changes. The minutes detail the recommended language changes to be considered by the Screening Committee. He stated that in order for the state aid office to complete their report, a definite cut-off date is needed. Originally, the cut-off date was earlier in the year. The recommended change is September lst. In other words, if you are to reduce your account balance, the funds must be encumbered by September 1 by a Report of State Aid Contract or Final Contract. The only other criteria discussed by the subcommittee which would be acceptable to avoid an adjustment involves a delay caused by another agency or governmental unit. He referred to a project initiated by Richfield which ran into problems outside their control. Hoshaw asked when plans need to be submitted in order to meet the depended it on how that Hanson stated September 1 deadline. complete the plans are which affects review time as well as possible resubmittal requirements. Based on recent process time, approval of strictly MSA projects should not be a problem for the September 1 In the event other funding sources are also involved, timeline. Straus noted that the present time may be required. lead more deadline for unencumbered construction fund balance is June 30 and to September 1 with more strict back being moved now it is first notification is sent around February 1 to guidelines. The each city affected by this adjustment. A second notice is sent out after a review of their balance after June 30. Chairman Moore asked what is the recommendation of the subcommittee regarding notices. that the subcommittee had discussed showing the Spurrier stated unencumbered construction fund balance with associated items in all reports to further make communities aware of their position the along with the actual notices being sent by state aid office. The subcommittee did not finalize this procedure into a resolution form Straus commented on the proposed could if so directed. but resolution revision which states that an adjustment will be made if city does not meet the fund balance reduction by September 1. the Siggerud asked what the difference actually is between past practice proposed change. Straus stated that in the past there was the and flexibility that some communities came back year after year much 80 excuse which the subcommittee wanted to correct in with the same fair to all cities. Additional discussion took place be order to regarding the process and requirements outlined in the subcommittee minutes for the cities reviewed.

Ottensmann commented on the discussion in District No. 5 involving process and the resolution change. Generally, it was expressed this the criteria provides no flexibility as in such cases where a that building a fund balance to complete a larger project. community is Further, clarification of the affect by other governmental agencies the adjustment criteria needs to be added to the resolution. on Also, do other governmental agencies also include other governmental Chairman Moore commented that this item should be discussed units? more thoroughly at tonight's meeting. Spurrier restated the aspect legislature's concern and the use of state aid funds by the the of The previous direction by the communities on a timely basis. Screening Committee was to tighten the requirements and provide a definite financial incentive to complete projects and thereby reduce fund balances. Hoshaw noted that the procedure gives construction notice to the city on a timely basis while also allowing the city to present their case to the subcommittee for further consideration.

Siggerud asked for clarification from the subcommittee on their upon the underlined addition on page 88 and the intent based page 89 regarding other agency involvement. Straus paragraph on be incorporated into the paragraph IV should agreed that Spurrier stated that the part of the resolution, page resolution. giving the community the right to be heard has been left in the 109. Ottensmann again commented upon the lack of flexibility resolution. agreed that a language change is Spurrier the revisions. in Haffield offered some wording necessary to address this matter. changes which will be discussed at tonight's meeting.

Straus also handed out an example on how maintenance allotments would affect unencumbered construction fund balance figures. Hoshaw noted that the corrections would only occur during the first year if additional maintenance funds are requested. Carlson asked if the procedure should be changed to utilize total allocation rather than the construction portion.

#### V. VARIANCES:

Straus reviewed the variances acted upon from November, 1987 through June, 1988. The variances requiring no adjustment are listed on pages 91 and 92 while the ones requiring an adjustment are listed on pages 92 through 94. These cities have submitted hold harmless resolutions at this time. Straus also noted an error in the New Hope figures which should show an adjustment amount of \$686.00 rather than the \$17,832.00.

Straus explained the letters submitted by Eagan, pages 95 and 96, and Rochester, pages 97 and 98, regarding the documentation requested by the Screening Committee at last year's meeting. Eagan took over a CSAH road which had never received needs and they requested that a total adjustment be given. Rochester was drawing needs on 62 feet but only for a two year period which would then substantially reduce their adjustment.

VI. RESEARCH ACCOUNT:

The history of the research account is listed on page 99 of the report. Normally, 1/4 of 1 percent of the allocation is allocated to this account with any excess balances at the end of the year being transferred back to the state aid fund.

#### VII. ADMINISTRATIVE ACCOUNT:

On page 100 of the report, a history of the administrative account is provided.  $1 \ 1/2\%$  of the total funds available are set aside for the administration of state aid. The unexpended balances at the end of the year are transferred back to the state aid fund.

### VIII. CONSTRUCTION ACCOMPLISHMENTS RESOLUTION:

Straus reviewed the proposed revised resolution regarding construction accomplishments printed on page 101 of the report. The original resolution is provided on page 104. The revised resolution addresses the changes approved by the Screening Committee regarding reinstatement of needs after 20 years. The revised resolution also addresses the cost of bituminous resurfacing or concrete joint repair construction projects. This item needs to be addressed by the Screening Committee.

IX. OLD BUSINESS:

None

#### X. NEW BUSINESS:

Siggerud asked about the procedure needed to increase the maximum municipal state aid street mileage above its present limit of 2500 miles. Fay stated that a bill would need to be introduced into the legislature to change this figure. He noted that this has not been a problem in the past. Ottensmann requested clarification on the correct procedure to accomplish this change. Fay stated that the request should come from the City Engineer's Association and be initiated by the executive committee. Chairman Moore stated that the CEAM Executive Committee would address this matter.

XI. OTHER BUSINESS:

None.

XII. ADJOURNMENT:

Chairman Moore announced that informal discussion of the subjects discussed this afternoon will begin at 8:00 p.m. in the same room. Tomorrow's meeting will begin at 9:00 a.m. There being no further business, Chairman Moore adjourned the meeting at 2:59 p.m. Chairman Moore called the Municipal Screening Committee back into session at 9:10 a.m. on October 19, 1988. Roll call was taken and the list of attendees was the same as yesterday's meeting.

#### XII. NEED SUBCOMMITTEE RECOMMENDATIONS REVIEW:

Straus reviewed the Needs Subcommittee recommendations listed on page 12 of the report (Summer Screening Committee Minutes) and the actions taken at the summer Screening Committee meeting. Item No. 1, engineering and contingencies was passed by the Screening Committee and resulted in additional needs of approximately \$70 Carlson stated that this item is not reflected under million. apportionment needs. Straus confirmed this statement and further stated that it is included only as part of the regular needs. Hoshaw questioned why this is the case. Straus did not know the Carlson asked what procedure is needed to change this reason. procedure so that it would be included under apportionment needs. A motion is required, whereby Carlson moved, seconded by Drake, to include engineering costs in both the regular needs and apportionment needs. Chairman Moore asked clarification on the motion with regard to just engineering costs or both engineering and contingency costs. Carlson stated that the motion included only engineering costs which reflect actual needs rather than contingency costs which are not considered an actual need. Further, the 20% figure would apply to engineering costs. Straus questioned the change from the 15%/5% breakdown included in the recommendation. Ottensmann stated that we should remain consistent and use both engineering and contingency costs. Straus stated that this item would go into effect in 1989. Hoshaw requested that the motion be changed to 18% which would than be in agreement with the rules. Straus questioned whether the rule applied since this is for needs only. Fay stated the 18% figure is the rule and should be followed. The original motion was amended by Carlson, agreed to and seconded by Drake, to designate 18% as the engineering cost and further to include this 18 $\ddot{z}$  engineering cost in both the regular needs and apportionment needs. All were in favor of the motion. Motion carried.

Straus then stated that Item No. 2 involving the inclusion of needs for undesignated mileage was not approved.

The reinstatement of construction needs after 25 years less bituminous overlays, item No. 3, was passed by the Screening Committee with the change to 20 years instead. It is estimated that this item will increase construction needs by \$125 to \$150 million. This change goes into effect in 1989. Straus clarified that if a bituminous overlay is completed while you are drawing full needs, only the cost of the overlay would be deducted for 10 years.

Item No. 6, reinstatement of storm sewer adjustment needs was also passed by the Screening Committee with the change to 20 years.

Straus next reviewed item No. 4 regarding "after the fact construction accomplishments". The sunset pertaining to this item was approved as December 31, 1989. Therefore, projects undertaken before this date will continue to draw needs for 15 years, but after December 31, 1989, this procedure is discontinued.

The storm sewer construction needs at \$196,000 per mile was approved for inclusion in regular needs but not apportionment needs. The amount applicable to this item is approximately \$105,000,000.

Item No. 7 regarding non-existing bridges was not approved. This item was to be reviewed again at this meeting but will be discussed instead at a later meeting as will storm sewer needs.

The rubberized railroad crossing, item No. 8, was approved by the Screening Committee at \$700 per foot per track times the proposed roadway width. This item will go into effect in 1989.

Straus also noted that the maintenance needs doubled as per Screening Committee action. This item increases needs by \$2.6 million which is reflected in the apportionment column only.

Chairman Moore asked for any questions regarding these matters. There were no questions.

#### XIV. MONEY NEEDS APPROVAL:

Chairman Moore asked for consideration regarding approval of the money needs subject to modifications required by the Screening Committee resolutions. Straus noted that Buffalo is still not totally settled and they have till January 1, 1989 to complete their submittals. A motion to this effect was made by Siggerud, seconded by Ottensmann. All were in favor of the motion. Motion carried.

#### XV. UNENCUMBERED CONSTRUCTION FUND:

Straus explained pages 51 through 53 of the report in more detail and how they relate to the resolution printed on page 109. He highlighted the different paragraphs of the resolution on how it affects each city. He noted that cities should try and send their payment requests in early in order to reduce their balances by September 1.

Chairman Moore than moved onto the subcommittee's recommendations as noted on pages 80 through 89. A motion was made by Siggerud, seconded by Ottensmann, to approve the recommendations of the unencumbered construction fund subcommittee regarding the sixteen (16) communities reviewed for possible adjustment. Straus noted that four (4) cities; Hermantown, Vadnais Heights, New Hope and Golden Valley, did not meet the time period allowed by the subcommittee, September 1, 1988, but have now submitted everything required. Hoshaw asked clarification on the requirements. Straus stated that Hermantown, New Hope and Golden Valley needed to submit report of state aid contracts while Vadnais Heights needed to submit a schedule. Hoshaw questioned why we should treat these differently

than the first part of the resolution on deduction of unencumbered construction fund balance. None of these communities required a council resolution as part of their submittal. Hanson reviewed the Golden Valley case in which the city did not submit their report of state aid contract prior to September 1. He then asked about the Screening Committee's position on this matter. Siggerud asked clarification on the Hermantown situation. Straus stated that their project underran thereby reducing the associated costs. The FAU subcommittee wanted them to submit a revised report of state aid contract to gain construction engineering costs. Siggerud stated, however, that the subcommittee did not make specific requirements in this case. Ottensmann re-affirmed the lack of specific requirements and further stated that to require something now would be a Further discussion took place regarding these matters and penalty. the specific requirements of the subcommittee. Hoshaw commented that the date has been moved back to September 1. Siggerud stated that the rules should be made more specific first and then the cities required to follow them. Therefore, the present cities should remain as recommended. Spurrier than provided further clarification on these items. Hoshaw, based upon the comments of Siggerud, made a motion to amend the original motion, seconded by Ottensmann, that for this year only a time exception from September l to prior to the Screening Committee meeting be allowed for encumbering funds to avoid adjustments which would be handled under the administration of the state aid office. Some questions arose for the need for this amendment. Hoshaw noted that some communities had met the requirements and others had not submitted the necessary requests or made any commitments to reduce their unencumbered balance. Chairman Moore referred to the New Brighton case on page 81 in which the subcommittee recommended no action but under this amendment would receive an adjustment. Spurrier again stated that the subcommittee had used the criteria on page 80 under No. 3 which had existed prior to the process and approved by the Screening Committee. Based upon this material, Hoshaw withdrew his amendment, agreed to by Ottensmann. A further clarification of the motion was by Ottensmann with regard to the recommendation of the made subcommittee and that if the city did not meet these conditions, they would be adjusted. Fay agreed with Ottensmann's statement on the motion and reiterated that the committee should be sure if this is the action they desire to make. Chairman Moore noted that Golden Valley and New Hope did not meet the conditions imposed by the subcommittee. Siggerud thought the motion was consistent with past practice and would be against any change in this matter for this Siggerud then withdrew his motion, agreed to by Ottensmann vear. and in its place a motion was made by Siggerud, seconded by Edwards, that only Maplewood receive an adjustment as per the recommendation of the subcommittee. Motion carried on a vote of 11 to 1 with Carlson voting against the motion.

Chairman Moore next moved to the resolution revision language as noted on page 88 and 89 including the underlined portion as well as the exception language in Section IV. A motion was made by Hoshaw to revise the resolution which was last revised in October, 1986 to read as follows: "Whenever a municipality's construction fund balance available as of of the current year, not including the current year's September 1 allotment, exceeds \$300,000 or two times their annual construction allotment (whichever is greater), the Unencumbered Construction Fund Subcommittee will review and allow the city in question to explain the reason for the large balance. Each individual municipality will informed by the Subcommittee that an adjustment of the actual 25 be year needs will be made the following year by the Screening Such adjustments will be based upon twice the city's Committee. unencumbered construction fund balance, less the current year's construction allotment which will be deducted from the city's 25 needs prior to the succeeding year's apportionment. Unless the year balance is reduced in future years, this deduction will be increased 3, 4, 5, etc., times the amount until such time the annually to This adjustment would be in money needs are reduced to zero. addition to the unencumbered construction fund deduction previously defined."

Chairman Moore summarized motion was seconded by Ottensmann. This the balance must be reduced by September 1 or an adjustment that It was noted that either submittal of a report of be made. will state aid contract or report of final contract reduces the balance. Hoshaw clarified that the subcommittee would be there to inform the face to face of this matter. Some discussions took place city regarding the last sentence of the proposed revised resolution and confusion regarding this adjustment. Drake asked about the need for Hoshaw explained the need for the face to face subcommittee. the meeting on this matter. Bullert requested direction regarding the notification dates on which letters are sent to the cities in the resolution language. Hoshaw made an amendment to to relation motion incorporating March 1 and June 30 as notification dates the the resolution. Carlson asked Spurrier for his comments. He within that one side involves the legislature's view of the size of stated the construction fund balance and its effect on future funding while the other side is in the position that the state aid apportionment is an entitlement and therefore should not be adjusted so severely. The better argument is that the fund balance is a detriment for funding by the legislature and therefore the cities should be forced reduce their fund balance. This adjustment has caused cities to to Spurrier would like to see more information on their money. spend impact of these adjustments so cities would better the financial understand the affect of their action. He further supported the right of a face to face meeting or hearing for each city affected by Further discussion took place regarding the this resolution. subcommittee's role in this process. Haffield then questioned the wording of the resolution with regard to the change from June 30 to September 1 in the first sentence. Hoshaw stated that the intent of motion was for the subcommittee to meet with the cities after his Hanson further clarified this date issue. The date was June 30. changed back to June 30 as a friendly amendment. Chairman Moore noted the intent of the resolution is to set September 1 as the for fund compliance. Siggerud questioned the need for the deadline subcommittee to meet with the city prior to September 1 if detailed previously sent to the city outlining the been notice has requirements and subsequent actions if the requirements are not met.

Some additional concerns were expressed regarding the language of the revised resolution. Fay stated that the Committee may want to vote on the intent of the motion which if approved would be drafted and sent to each member for a final vote. Chairman Moore stated that the intent of the motion is to have an absolute cut-off date of September 1, either a report of state aid contract or report of final contract must be submitted to reduce the unencumbered construction fund balance prior to that date and the subcommittee would meet with the cities only for the purpose of providing a face to face meeting with the city to explain the adjustment, resolutions and other related matters. All were in favor of the intent of the motion. Motion carried.

Busby addressed the \$300,000 figure in the resolution and whether it should be changed. Hoshaw questioned if the subcommittee should review. Chairman Moore asked if there is a motion on this matter. None were forthcoming.

#### XVI. RESEARCH ACCOUNT:

A motion was made by Hoshaw, seconded by Carlson, to approve the motion on page 99, setting aside the amount of \$145,953 for the research account. All were in favor of the motion. Motion carried.

#### XVII. VARIANCE ADJUSTMENTS:

A motion was made by Siggerud, seconded by Hoshaw, to approve the variance adjustments listed on pages 92 through 94 subject to the revisions stated earlier by the state aid office. All were in favor of the motion. Motion carried.

#### XVIII. BRIDGES:

Chairman Moore asked the Screening Committee if there was any further discussion regarding bridge reinstatement of needs and/or length of bridges as discussed the previous day. Koenig asked the further clarification on this item. Straus stated that at the for present time bridges are not reinstated to draw needs because of no time limit being established for this item. Therefore, some bridges may be 60 years old and still not drawing needs. Siggerud if there was a listing of these bridges and what effect it asked would have on the needs. Hoshaw asked the approximate number of bridges which would be affected under a 30 to 35 year time period. Straus thought that probably 40 to 50 bridges would be involved; and, if this item is changed, these bridges would then start to draw needs again just as the street does as per the change approved by the Screening Committee last June. Hoshaw stated that a motion was necessary to first of all approve the reinstatement of bridge needs after a 30 to 35 year period and further to decide on the length of structure to be considered a bridge. Chairman Moore asked if the Screening Committee would first like to see a report outlining the effect of whatever changes are agreed upon before officially making the change. Hoshaw suggested that the Needs Subcommittee report back to the Screening Committee at the next

spring meeting. Straus disagreed with that procedure since it would delay the needs for another year; and, further, if the needs are there, the city deserves them and the effect of this change should have no effect on the decision. A motion was made by Busby, seconded by Koenig, that bridge needs be reinstated after 35 years. Straus stated that the counties use 35 years so therefore this motion would be consistent with the county program. All were in favor of the motion. Motion carried.

Chairman Moore next asked for a motion on the consideration of length of structure to be considered a bridge. He stated that the current situation is 20 feet in the MSAS system and that the state and county consider 10 feet or over as a bridge while the federal length is 20 feet. A motion was made by Carlson, seconded by Busby, to consider a bridge as any structure 10 feet or more in length. Busby asked for clarification on determination of span length for multiple barrel structures. Fay stated the span length is determined by the total clear opening of the multiple barrel structure with the stipulation that the structures must be no further apart than one-half the span of the smallest structure. Further discussion took place regarding this matter. All were in favor of the motion. Motion carried.

#### XIX. CONSTRUCTION ACCOMPLISHMENTS REVISED RESOLUTION:

Straus reviewed the proposed revised resolution on page 101 in relation to the current resolution on page 104. He stated that the next to the last paragraph in the current resolution

"Each city will be responsible for reporting their qualified reconstruction projects with the annual needs update, beginning December 31, 1983."

needs to be eliminated as well as the paragraph following that one. Straus noted some minor language changes in the proposed revised resolution as well as the need to include bridges in the wording which has not been completed at this time. A motion was made by Carlson, seconded by Drake, to replace the five paragraphs under Construction Accomplishments on page 104 with the five new paragraphs on page 101 including the minor language modifications and the insertion of the wording for the bridge reinstatement after 35 years. All were in favor of the motion. Motion carried.

#### XX. OTHER BUSINESS:

Chairman Moore asked about any further comments on non-existing bridges and storm sewer needs. Hoshaw stated that the Screening Committee had directed the Needs Subcommittee to further review these items and provide a report at the next Spring Screening Committee meeting.

Rudrud commented on the concern regarding the language for the unencumbered construction fund balance adjustment.

Ottensmann addressed the issue of apportionment needs for both old and proposed sidewalks. At the present time, a city can draw apportionment needs on only the replacement of existing sidewalks. If a new sidewalk is planned on a street, apportionment needs are drawn. not He questioned this difference if the sidewalk is needed. Fay provided some background in that if a sidewalk is already existing, it is very likely to be reconstructed; whereas, the construction of new sidewalks is very questionable. It was stated that some communities do not build a street without sidewalk while other cities never build sidewalks at all. Sidewalks are eligible for state aid funding. Drake asked if you can have a state aid sidewalk project only. Hanson affirmed the sidewalk project can be completely separate with the stipulation that the street on which the sidewalks is proposed must meet standards before the sidewalks can be funded through the MSA system. Further discussion took place regarding existing and non-existing sidewalks and the aspect of regular needs and/or apportionment needs for these sidewalks. Following the discussion, a motion was made by Ottensmann, seconded by Siggerud, to direct the Needs Subcommittee to review the present procedure regarding the inclusion of existing and proposed sidewalks within the regular/apportionment needs for a community and determine if all sidewalks should be included in the apportionment needs or some other change and provide a report/recommendation to the Spring 1989 Screening Committee meeting. All were in favor of the motion. Motion carried.

#### XXI. VARIANCES - EAGAN AND ROCHESTER:

Straus provided a general background regarding the particular adjustment for Eagan and Rochester as provided on pages 95 through 98. The information requested by the Screening Committee has been submitted by these two communities. A motion was made by Hoshaw, seconded by Siggerud, to approve the variance adjustments as outlined in the letters submitted by Eagan and Rochester on pages 95 through 98. All were in favor of the motion. Motion carried.

#### XXII. ADMINISTRATIVE ACCOUNT:

A motion was made by Drake, seconded by Hoshaw, that 1 / 2% of the total funds available be set aside for the administration of state aid. All were in favor of the motion. Motion carried.

Rudrud presented an item regarding the completion of a video package explaining the MSA system which could then be used to inform City Councils, etc. The payment of this item could come from the administrative account. Hoshaw expressed that this project may be something to be discussed by the City Engineer's Association. Fay stated that they will pursue this item and bring back some recommendations to the CEAM Executive Committee. He believed that this would be an administrative account expense. Carlson asked if a two or three page brochure could be developed for general distribution. Straus had included this project as one of his goals but has limited time available. Rudrud stated that he was looking for something more instructional for staff and other interested persons. Fay believed that the project should be done by the state aid office. Koenig stated that this information is definitely needed and would be beneficial.

#### XXIII. GORDON FAY, STATE AID DIRECTOR, REPORT:

Gordy Fay proceeded with the following comments:

A. City of St. Paul

A general review of a City of St. Paul MSA project with regard to MSA standards, the professional integrity of the engineer, and the demands of certain public interests were commented upon by Mr. Fay. The problem involves a certain request by the public which does not meet MSA standards and does not follow good engineering principles and the effect the request has on the professional engineer. The bottom line is that the professional engineer must stand by his principles and sometimes even refrain from signing plans which do not follow good engineering standards and which the engineer does not agree with. The aspect of tort liability cases must be considered in these matters.

B. Finals

The aspect that contracts sometimes are not finaled out on a timely basis was addressed. Certain projects due to federal funding, litigation and other reasons require more time to final but in many cases it is just a matter of completing the paperwork and submitting the required documentation.

#### C. Cooperative Agreements

Some problems have arisen on cooperative agreements between cities and the state in the past when the city has refused to deposit the money in a fund transfer account because of some other dispute with the trunk highway system. This refusal depletes the amount of money in federal aid projects which is available to pay the contractor and subsequently receive reimbursement from the Federal Highway Administration. A new cooperative agreement is now being processed which will hopefully clear up some of these problems.

D. Adjustments

The issue of a city meeting the goals of the subcommittee versus receiving an adjustment is interesting. Hermantown has for all practical purposes had a retired state aid engineer performing their engineering duties on a part-time basis. The city is now requesting the service of a professional engineer for 300 hours annually. The city has over \$300,000 per year to put under contract agreement and the question arises as to who is going to do this work on a time limit of 300 hours per year.

#### E. Bridges

Since 1976, fifty-five (55) bridges have been replaced within the 38 communities in Minnesota. A report to show the effect of reinstating needs on bridges after 35 years would have been interesting to review.

#### XXIV. FINAL COMMENTS:

Joe Koenig offered some comments regarding the St. Paul situation. Some discussion has taken place by Council Members that St. Paul, Minneapolis, and Duluth should go together to the legislature and be removed the MSAS system. The engineering staff are not in agreement with this proposal which is being promoted due to some variance disagreements on certain projects. He further clarified the difficult position an engineer is placed in when dealing with the public and the approval process/design of state aid projects.

Chairman Moore recognized and thanked Steve Gatlin and Bo Spurrier for their work on the subcommittees and the aspect that their term on these subcommittees expires at the end of the year. Chairman Moore also recognized and thanked Glyde Busby and Dan Edwards for their commitment to the Screening Committee as their terms expire at the end of the year. Hoshaw thanked Chairman Moore for his efforts as Chairman of the Screening Committee.

#### XXV. ADJOURNMENT:

A motion was made by Siggerud, seconded by Edwards, to adjourn the meeting. All were in favor of the motion. Motion carried.

The meeting adjourned at 11:16 a.m.

Respectfully submitted:

Bruce K. Buller

Bruce R. Bullert Secretary, CEAM

#### NEEDS STUDY SUBCOMMITTEE Minutes of April 25, 1989 Meeting Maple Grove City Hall

Meeting began at 8:30 A.M.

Present: Gerald Butcher, Chairman Dan Edwards Clyde Busby Ken Straus, MnDOT

Unit Price Recommendation:

Subcommittee discussed the need for a uniform application of the Needs Study data in recommending unit prices.

It was decided to use the five year average costs, where available, as the basis for the adjustments of the unit prices. The recommended unit price would be set at the next incremental value above the five year average.

Only exceptions to method will be noted hereafter.

\*The unit price recommendations are summarized on the attached sheet.

The Subcommittee used a three year average in evaluating the unit price for Tree Removal due to the dramatic difference in trends between the three and five year average costs.

The Class 5 Gravel Base unit price is based on the average of the combined three and five year average costs because of the differing directions of the price trends.

The Bituminous unit prices were left unchanged rather than being adjusted downward as would be indicated by the five year trends because all indications, including 1989 bids to date, indicate increasing oil prices for this year.

Subcommittee discussed difference between Storm Sewer Adjustment and Storm Sewer Items. There was no detailed information available for the calculation of unit prices for these items so we relied on MnDOT figures at this time and made no changes.

Also, discussed need to consider the Storm Sewer Adjustment needs being already available when MnDOT staff evaluates "after the fact" storm sewer needs requests.

Subcommittee discussed actual versus projected life of structures and the reinstatement of needs at the 1/2 life point of the structure.

The five year average again was used in evaluating unit prices for bridges but we threw out extremely variant project prices in calculating the 1988 price used as part of the five year average. This method was used for the 0' to 149' and 150' to 499' ranges in recommending adjustments. There was insufficient 1988 data (one project) to evaluate the 500' and over category so we recommended our adjustment based on similar adjustments made in the other categories.

There was no 1988 data for widening (Bridges) and the Subcommittee was concerned about the reliability of past data as a basis for evaluation because of the tremendous increase in cost reflected in 1986 and 1987.

There was also concern about the possibility of needs being greater for a proposed widening project than for a reconstruction project for the same size bridge.

Subcommittee used twice the rate of the 150' to 499' range for use as the 1989 widening unit price.

Also, discussed the need for data from all MnDOT projects, especially in categories where there are insufficient MSAS projects to supply a reasonable amount of data upon which to base unit price adjustments.

No change for Railroad Bridge price because of lack of data.

Subcommittee recommends accepting MnDOT Railroad Administration prices except the maximum adjustment for Signals and Gates would be \$99,000 due to the present limitation of the computer program to accept a higher rate. The program should be upgraded to eliminate this problem next year.

Traffic Signal costs remain unchanged until data would substantiate the need for an adjustment.

#### Excess Unencumbered Construction Fund Balance:

Subcommittee discussed apparent difference between the Resolution wording on this item and the manner in which the adjustments have been calculated by staff in the past.

It appears that the intent of the Resolution is in line with staff procedures but the wording of the Resolution should be clarified.

\*Subcommittee recommends that the Screening Board review and clarify this Resolution.

#### <u>One Way Street Mileage - St. Paul Request</u>

Subcommittee reviewed the request by the City of St. Paul that designated one-way streets be treated as 1/2 mileage as per Resolution.

Evaluation of each designated one-way street pair was made using the appropriate Resolution criteria.

\*Subcommittee recommends that Screening Board approve the request of the City of St. Paul. The mileage on MSAS Route No. 196 should be at 1/2 its designated mileage as it is paired with a CSAH route. Other pair street mileages should be calculated as 1/2 of the total mileage of the pair.

\*Subcommittee recommends that future "Needs Reports" include data on all established one-way street pairs previously approved by the Screening Board for designation as 1/2 mileage in the needs study.

<u>Maintenance Cost Study:</u> The Subcommittee reviewed the maintenance cost data compiled by MnDOT and discussed possible adjustments.

It was decided to adjust upward the parking lane maintenance cost based on its representing approximately 60% of the traffic lane area in a typical street section and its incurring of similar maintenance requirements.

Once this new ratio was established, the Subcommittee agreed that all the maintenance costs should be doubled to bring them in line with the results of the maintenance cost study by Mn/DOT participating cites.

\*Subcommittee recommendations for Maintenance Costs are shown on sheet included in booklet.

Discussion then continued regarding Turnback Maintenance Adjustment Costs.

\*Subcommittee recommends that the Trunk Highway Turnback Resolution be changed to require \$8,000 per year per mile in apportionment be earned rather than the \$1,500 currently allowed.

There was no change recommended for the minimum maintenance cost automatically received from MSAS, but the Screening Board may want to discuss this issue regarding legislative changes, etc.

#### Reconstruction Needs:

The subcommittee reviewed and discussed the Reconstructed Needs data and examples provided by MnDOT. After the fact needs for reconstruction should be removed after the 1989 apportionment and the needs reinstated in the year 2010 apportionment for the effected projects.

\*Subcommittee recommends that every project receiving "after the fact" needs should be removed from the Needs list for 20 years following the December 31, 1989 deadline for "after the fact" projects.

An exception would be the Duluth Aerial Bridge (MSAP 118-149-19) because of the special action taken previously by the Screening Board. This bridge would be removed from the Needs list for 35 years following the receipt of the last of the existing 15 year after the fact needs.

#### Sidewalk Needs:

The Subcommittee discussed the issue of sidewalk needs as referred from the Screening Board. Discussion centered on parity between treatment of proposed versus existing sidewalks.

\*Subcommittee recommends that all cities receive regular and apportionment needs for sidewalks on MSAS streets regardless of whether or not the sidewalks are existing. The proposed sidewalk must be approved by District State Aid Engineer and shown on the individual needs sheets in order to qualify.

#### Storm Sewer Needs:

Subcommittee discussed projected life cycle for storm sewer and at what point Needs should be reinstated if "after the fact" needs are eliminated. Example, is a 70 year life and 35 year time period before reinstatement of needs as currently used for bridges or perhaps longer life cycle?

Discussion continued in the area of merits of continuing with "after the fact" needs or returning to the original storm sewer needs concept.

It was brought up that from the documentation aspect of the current program, the cure may have been worse than the original problem it was meant to correct.

The Subcommittee discussed the simplicity of the original concept of the Municipal State Aid System as a whole. It was felt to be worthwhile to attempt to restore this simplicity by relying once again on the fair and factual reporting of the member cities under the uniform interpretation of rules and requirements by MnDOT State Aid Staff. This idea applies to more than just the storm sewer areas.

\*The Subcommittee recommends that the "after the facts" need system be eliminated and the original concept of storm sewer needs be restored with special emphasis on the fair and factual reporting and on the uniform interpretation issues. Further, it is recommended that all storm sewer needs be limited to 15 years to encourage the realization of a practical storm sewer system.

#### Bridges:

Discussion centered upon merits of changing needs for non-existent bridges, limits on the length of time needs could be drawn, and potential for abuse if needs are allowed. Based on current needs formula, it requires approximately 15 years to receive full needs for this type of project.

Any non-existent bridge needs program should be comparable to the existing bridge program.

\*The Subcommittee recommends that non-existent bridges be allowed to draw needs in the same manner as existing bridges with a 15 year limit. Careful review of any non-existent bridge proposal will be required to assure the feasibility of eventual construction.

#### Traffic Signals:

No change is proposed in needs at this time. Further data is required from MnDOT in the area of possible impacts on funding for all size cities if some variable needs rate is established to compensate for the wide variety in traffic signal system costs per mile. A variable rate per mile based on traffic volume on the individual street segments was discussed as a possibility. The difference in needs based on population factors must also be considered in any new concept for realigning traffic signal costs among the cities.

Subcommittee adjourned at 3:30 P.M.

Dan Edwards Needs Subcommittee Member

### 25 YEAR CONSTRUCTION NEEDS FOR EACH INDIVIDUAL CONSTRUCTION ITEM

ITEM	1987 APPORTIONMENT COST	1988 APPORTIONMENT COST	DIFFERENCE	1988 % OF THE TOTAL
Grading	\$53,997,679	\$58,252,881	\$ <i>A</i> 255 202	0 0.28
Special Drainage	1,993,655	2 034 617	40 062	7.936
Storm Sever Adjustment	9 487 240	2,034,017	40,962	0.358
Curb & Cutter Removal	5,307,240	9,386,180	(101,060)	1.60%
Sidowalk Removal	6,152,644	6,770,249	617,605	1.15%
Datemark Removal	4,269,636	4,317,120	47,484	0.74%
	12,357,103	13,733,468	1,376,365	2.34%
Tree removal	2,580,200	3,303,855	723,655	0.56%
SUBTOTAL GRADING	90,838,157	97,798,370	6,960,213	16.67%
Gravel Subbase #2211	48 315 898	11 219 004		<b>7</b> 040
Gravel Base $#2211$	33 690 720	41,310,004	(0,997,894)	7.04%
Bituminous Base #2221	53,690,720	53,618,686	(72,034)	5.73%
bicaminous base #2551	52,698,936	51,849,780	(849,156)	8.84%
SUBTOTAL BASE	134,705,554	126,786,470	(7,919,084)	21.61%
Bituminous Surface #2331	2 805 880	2 583 043		0 4 4 9
Bituminous Surface #2341	117 104 804	2,303,042	(222,838)	0.44%
Bituminous Surface #2341	42 411 022	112,700,142	(4,404,752)	19.21%
Surface Widening	42,411,032	43,680,850	1,269,818	7.448
Buildee widening	3,608,000	3,182,736	(425,264)	0.54%
SUBTOTAL SURFACE	165,929,806	162,146,770	(3,783,036)	27.64%
			I	
Gravel Shoulders #2221	664,928	478,519	(186,409)	0.08%
SUBTOTAL SHOULDERS	664,928	478,519	(186,409)	0.08%
Curb and Cutter				
Curb and Gutter	50,858,280	51,370,494	512,214	8.76%
	14,895,857	15,130,192	234,335	2.58%
Traffic Signals	25,721,348	32,757,240	7,035,892	5.58%
Street Lighting	4,318,200	35,196,800	30,878,600	6.00%
Retaining Walls	1,867,784	2,019,333	151,549	0.34%
SUBTOTAL MISCELLANEOUS	97,661,469	136,474,059	38,812,590	23.26%
TOTAL ROADWAY	489,799,914	523,684,188	33,884,274	89.26%
Bridge	35,701,797	39,581,826	3,880,029	6 752
Railroad Crossings	14,755,900	13,813,800	(942 100)	2 3 5 8
Maintenance	2,569,683	4,965,401	2 395 718	0 95%
Right-of-Way	1,853,560	4,670,954	2,817,394	0.80%
SUBTOTAL OTHERS	54,880,940	63,031,981	8,151,041	10.74%
Farmington	776,510			
TOTAL	\$545,457,364	\$586,716,169	\$41,258,805	100.00%
	Page	26		



#### Cost Per 5-Year Needs Study No. of Average Unit Price Lin. Ft. Quantity Cost Cities Year 1.75 93,360 1.12 1.21 83,672 1980 26 1.75 58,030 1.39 1.31 41,852 1981 24 1.50 45 77,339 86,596 1.12 1.35 1982 42,589 66,635 1.56 1.37 1.50 33 1983 1.37 1.50 176,974 1.66 106,678 1984 43 1.50 50 145,294 208,971 1.44 1.43 1985 216,648 1.81 1.52 1.50 119,913 46 1986 1.63 1.75 139,029 1.67 83,232 1987 35

Subcommittees recommended price for 1989 Needs Study \$ 1.75 Based upon 1988 construction costs.

1.37

290,721

1988

64

211,446

1.75

1.59

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Year	No. of Cities	Quantity	Cost	Cost Per Sq. Yd.	5-Year Average	Needs Study Unit Price
1980	17	30,387	95,782	3.15	2.79	4.00
1981	19	20,627	68,003	3.30	3.17	4.00
1982	33	61,909	98,144	1.59	2.98	3.50
1983	21	27,288	98,276	3.60	3.07	2.50
1984	30	59,315	222,584	3.75	3.08	3.50
1985	38	56,873	254,161	4.47	3.34	3.50
1986	38	44,695	159,347	3.57	3.39	4.00
1987	25	35,889	141,549	3.94	3.87	4.00
1988	46	77,633	270,831	3.51	3.85	4.00

Subcommittees recomended price for 1989 Needs Study  $_{-4.00}$  Based upon 1988 construction costs.



	No. of			Cost Per	5-Year	Needs Study
Year	Cities	Quantity	Cost	Sq. Yd.	Average	Unit Price
1980	8	42,322	139,785	3.30	3.21	4.50
1981	16	83,263	345,180	4.15	3.63	4.00
1982	23	229,468	533,404	2.32	3.47	4.00
1983	18	119,864	541,569	4.52	3.76	3.50
1984	16	81,645	301,726	3.70	3.60	4.50
1985	28	134,698	494,572	3.67	3.67	3.75
1986	15	132,405	440,715	3.33	3.51	3.75
1987	25	106,550	493,029	4.63	3.97	3.75
1988	44	276,630	886,757	3.24	3.71	4.00

Subcommittee recommended price for 1989 Needs Study \$\_3.75 Based upon 1988 construction costs.



Year	No. of Cities	Quantity	Cost	Cost Per Tree	5-Year Average	Needs Study Unit Price
1980	23	2,338	133,306	57.02	86.11	90.00
1981	20	1,362	100,003	73.42	84.32	80.00
1982	31	3,122	123,015	39.40	74.67	80.00
1983	17	841	78,574	93.43	68.31	50.00
1984	34	3,743	221,765	59.25	64.50	90.00
1985	30	1,442	82,586	57.27	64.56	90.00
1986	18	311	42,365	136.22	77.11	90.00
1,987	19	535	71,490	133.63	95.96	100.00
1988	40	884	122,030	138.04	104.88	135.00

Subcommittee recommended price for 1989 Needs Study \$ 140.00 Based upon 1988 construction costs.



Year	No. of Cities	Quantity	Cost	Cost Per Ton	5-Year Average	Needs Study Unit Price
1980	 Ą	15,662	69,469	4.44	3.40	4.50
1981	5	68,562	264,587	3.86	3.70	4.50
1982	7	29,887	114,531	3.83	4.02	4.00
1983	6	30,625	125,717	4.11	4.17	4.00
1984	13	146,141	691,052	4.73	4.19	4.25
1985	Ą	21,968	123,871	5.64	4.43	4.50
1986	6	52,643	248,938	4.73	4.61	5.00
1987	8	60,793	239,623	3.94	4.63	5.00
1988	10	68,406	286,398	4.19	4.65	4.75

Subcommittee recommended price for 1989 Needs Study \$ 4.75 Based upon 1988 construction costs.

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Year	No. of Cities	Quantity	Cost	Cost Per Ton	5-Year Average	Needs Study Unit Price
1980	42	397,897	1,753,637	4.41	3.57	4.85
1981	43	307,088	1,360,272	4.43	3.92	4.85
1982	48	431,148	1,984,392	4.60	4.25	4.85
1983	46	335,849	1,694,167	5.04	4.60	4.85
1984	50	444,073	2,210,475	4.98	4.69	5.25
1985	63	584,097	2,651,362	4.54	4.72	5.25
1986	61	455,259	2,768,438	6.08	5.05	5.25
1987	51	381,898	2,185,112	5.72	5.27	6.00
1988	70	648,98 <b>8</b>	3,385,938	5.56	5.38	6.00

Subcommittee recommended price for 1989 Needs Study \$ 5.75 Based upon 1988 construction costs.



	No. of			Cost Per	5-Year	Needs Study
Year	Cities	Quantity	Cost	Ton	Average	Unit Price
1980	39	220,016	3,513,820	15.97	12.83	17.00
1981	44	211,045	4,164,825	19.73	14.83	17.00
1982	55	211,326	4,062,409	19.22	16.52	19.00
1983	44	159,242	3,363,455	21.12	18.46	20.00
1984	54	376,525	7,922,674	21.04	19.42	23.50
1985	62	294,318	6,000,326	20.39	20.30	23.50
1986	63	261,043	5,130,552	19.65	20.29	22.00
1987	50	176,177	3,515,861	19.96	20.43	22.00
1988	71	316,333	5,793,245	18.31	19.87	21.00

Subcommittee recommended price for 1989 Needs Study \$ 21.00 Based upon 1988 construction costs.


Year	No. of Cities	Quantity	Cost	Cost Per Ton	5-Year Average	Needs Study Unit Price
1980	39	164,346	2,928,915	17.82	14.12	20.00
1981	38	123,479	2,595,032	21.02	15.98	20.00
1982	43	139,280	2,846,138	20.43	17.65	20.50
1983	42	113,894	2,551,729	22.40	19.47	21.50
1984	47	144,567	3,295,718	22.80	20.89	25.00
1985	50	154,773	3,876,447	25.05	22.34	25.00
1986	55	122,701	2,851,035	23.24	22.78	25.00
1987	47	101,894	2,352,539	23.09	23.31	25.00
1988	58	144,986	3,119,592	21.52	23.14	24.00

Subcommittee recommended price for 1989 Needs Study \$ 24.00 Based upon 1988 construction costs.



	No. of			Cost Per	5-Year	Needs Study
Year	Cities	Quantity	Cost	Ton	Average	Unit Price
1980	16	17,695	469,842	26.55	22.63	27.00
1981	17	24,336	780,247	32.06	25.09	27.00
1982	18	26,628	725,878	27.26	26.55	30.00
1983	17	21,339	707,320	33.15	29.24	30.00
1984	16	38,723	1,212,779	31.32	30.07	35.50
1985	18	36,507	1,213,006	33.23	31.40	35.50
1986	14	25,213	855,500	33.93	31.78	35.50
1987	11	23,776	713,311	30.00	32.33	35.50
1988	17	25,201	770,369	30.57	31.81	34.00

Subcommittee recommended price for 1989 Needs Study \$ 34.00 Based upon 1988 construction costs.



	No. of			Cost Per	5-Year	Needs Study
Year	Cities	Quantity	Cost	Lin. Ft.	Average	Unit Price
1980	41	433,513	2,085,243	4.81	4.33	6.50
1981	48	332,455	1,651,673	4.97	4.65	6.50
1982	58	450,590	2,124,634	4.72	4.83	5.50
1983	. 47	354,529	1,826,990	5.15	4.98	5.50
1984	58	554,327	2,907,985	5.25	4.98	5.50
1985	61	469,258	2,498,655	5.32	5.08	6.50
1986	67	434,124	2,243,498	5.17	5.12	6.00
1987	51	359,952	1,868,721	5.19	5.22	6 <b>.0</b> 0
1988	73	606,413	3,002,995	4.95	5.18	6.00

Subcommittee recommended price for 1989 Needs Study \$ 5.50 Based upon 1988 construction costs.



	No. oî			Cost Per	5-Year	Needs Study
Year	Cities	Quantity	Cost	Sq. Yd.	Average	Unit Price
1980	32	71,946	937,803	13.03	10.76	14.00
1981	31	46,222	577,293	12.49	11.45	14.00
1982	44	91 <b>,</b> 266	1,112,414	12.19	12.40	13.50
1983	35	69,630	940,122	13.50	13.01	13.50
1984	44	96,059	1,277,135	13.30	12.90	14.00
1985	48	103,377	1,446,980	14.00	13.09	14.00
1986	51	79,756	1,126,616	14.13	13.42	14.00
1987	40	94,423	1,376,749	14.58	13.90	14.50
1988	62	1,432,848	2,150,360	13.50	13.90	14.50

Subcommittee recommended price for 1989 Needs Study \$ 14.00 Based upon 1988 construction costs. STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION OFFICE MEMORANDUM OFFICE OF BRIDGES AND STRUCTURES HYDRAULICS - Room 718

TO : K. G. Straus DAT State Aid Needs Unit PHO

DATE : March 2, 1989 PHONE: 612/296-0824 FAX : 612/297-2070

FROM : D. V. Halvorson AVA Hydraulics Engineer

**SUBJECT:** State Aid Storm Sewer Construction Costs (1989)

We have analyzed the State Aid storm sewer construction costs for 1989 and find that, for planning purposes, a figure of \$196,000 per mile can be used. For storm sewer adjustments we suggest \$62,000 per mile. These figures are unchanged from 1988.

If we can be of further assistance, please advise.

- cc: G. M. Fay
  - D. V. Halvorson
  - E. H. Aswegan

B	r	i	d	g	e	S		0	6220	1	Ą	9		F	e	e	t
603Q			-	40200P	4,023	-	-	888		8763	-365 <b>2</b>		-	-	425529	-	94 <b>0</b>

Bridges 150-499 Feet

BRIDGE	PROJECT	DECK	BRIDGE	COST	LENGTH
NUMBER	NUMBER	AREA	COST	Sq. Ft.	
58528	58-598-09 $118-142-08$ $71-606-05$ $22-599-46$ $83-599-33$ $85-619-03$ $22-599-30$ $18-599-08$ $80-598-08$ $22-599-32$ $11-650-02$	3,238	\$129,757.15	40.07	95.12
69575		8,447	715,034.65	84.65	105.11
71516		2,211	93,846.01	42.45	62.58
22573		2,679	116,084.27	43.33	89.31
83529		3,840	158,519.40	41.28	128.00
85534		3,638	169,887.90	46.70	107.00
22559		2,880	121,892.00	42.32	96.00
18516		1,438	84,831.50	58.99	47.92
80522		2,374	88,690.00	37.36	79.12
22563		2,880	105,710.54	36.71	96.00
11514		2,108	181,823.80	86.25	62.00
Total		35,733	\$1,966,077	\$55.02	Average

BRIDGE	PROJECT	DECK	BRIDGE	COST					
NUMBED	NIIMBED	AREA	COST	Sa. Ft.	LENGTH				
NOMBER			$ \cdots \cdots$						
84517	84-618-01	11,400	\$495,846.80	43.50	322.67				
27667	141-080-10	13,375	844,990.61	63.18	327.22				
77521	77-607-05	8,237	289,903.64	35.20	209.42				
54537	54-598-09	5,567	255,067.72	45.82	157.54				
33527	33-611-11	8,042	263,207.80	32.73	185.58				
55545	55-598-19	4,800	207,873.95	43.31	150.00				
16508	16-598-02	8,089	479,294.32	59.25	228.93				
27569	27-640-01	12,789	1,563,192.17	122.23	181.82				
62546	164-020-58	24,173	1,340,177.76	55.44	403.85				
08533	08-629-08	10,611	634,692.70	59.81	244.87				
86508	86-604-05	9,295	422,318.35	45.44	214.50				
Total		116,378	\$6,796,565.82	\$58.40	Average				
Bridges	Bridges 500 Feet and Over								
BRIDGE	PROJECT	DECK	BRIDGE	COST					
NTIMOED	NIMDED	ADFA	COST	Sa Ft	LENGTH				
NOLIDEK	NOMDER	ALLA	CODI	Jan Le					

السنان الجال كبينة ستند با بالد المالة					
NUMBER	NUMBER	AREA	COST	Sq. Ft.	LENGTH
			22 929 929 930 233 235 239 239 239 239 239 239 239 239 239 239		
27636	27-652-12	91,612	\$23,904,451.47	\$260.93	1036.67

Railroad	l Bridge				
	ar and any any and and and and				
BRIDGE NUMBER	PROJECT NUMBER	NUMBER OF TRACKS	BRIDGE COST	COST Lin. Ft.	LENGTH
145 <b>21</b>	144-123-03	2	\$787 <b>,</b> 609.50	5,182	152.00

## MN/DOT COSTS FOR 1988 BRIDGE CONSTRUCTION

Bridges	500 Feet and	Over		
BRIDGE	DECK	BRIDGE	COST	LENGTH
NUMBER	AREA	COST	Sq. Ft.	
27801	75,070	\$5,878,928	\$78.31	776.08
69841	34,225	1,936,486	56.58	863.18
27047	29,650	2,147,333	72.42	950.24
27045	27,897	2,005,566	71.89	926.00
27048	24,205	1,921,347	79.38	525.60
27046	22,990	1,766,577	76.84	504.83
23015	30,181	1,054,938	34.95	715.76
TOTAL	244,218	\$16,711,175	\$68.43	AVERAGE

BRIDGE	WIDING			
BRIDGE NUMBER	DECK AREA	BRIDGE COST	COST Sq. Ft.	LENGTH
5401	165	\$112,030	\$678.97	40.18
69031	226	152,039	672.74	75.17
69030	1,965	455,062	231.58	295.00
6859	2,193	340,321	155.19	129.00
5441	2,440	389,881	159.79	195.19
5545	3,881	412,271	106.23	167.50
9341	975	178,286	182.86	131.50
9339	1,512	241,334	159.61	183.17
9070	4,200	584,650	139.20	175.00
5993	5,966	3,636,006	609.45	1869.86
9776	1,843	262,982	142.69	203.75
9775	1,640	261,963	159.73	203.75
27891	2,647	319,898	120.85	170.67
27734	3,550	233,224	65.70	335.46
9862	9,562	888,981	92.97	169.63
6887	929	264,560	284.78	159.00
TOTAL	43,694	\$8,733,488	\$199.88	AVERAGE

#### RAILROAD BRIDGES

BRIDGE	NUMBER	BRIDGE	COST LIN FT	ΓΕΝΓΟΠΙ
62002	1	\$1,372,714	\$8,499	161.51
27746	1	1,720,110	5,423	317.19

## BRIDGE COSTS

# Price per sq. ft.

Lando effect motor mans source mans solender of 20 20 20 20 20 20 20 20 20 20 20 20 20	Bridge price	e & Struc averages	tures	محمد معدد معدد معدد محمد محمد محمد معمد مع	: Screening Committee : Recomendations					
: Const. : Year	0' to 149'	150' to 499'	500' and over	: Widen-: ing	0' to 149'	150' to 499'	500' and over	Widen- ing	Needs : year	
: : 1980	39.00	43.00	62.00	75.00	39.00	43.00	62.00	75.00	81	
: : 1981	36.00	43.00	62.00	75.00	36.00	43.00	62.00	75.00	82	
: 1982	36.00	41.00	62.00	70.00	36.00	43.00	62.00	75.00	83	
: 1983	38.00	44.00	50.00	65.00	38.00	44.00	50.00	65.00	84	
: 1984	45.00	51.00	48.00	57.00	45.00	51.00	50.00	65.00	85	
: 1985	45.00	46.00	61.00	49.00	49.00	51.00	55.00	65.00	86	
: 1986	36.40	39.66	54.12	116.67	37.00	40.00	54.00	100.00	87	
: 1987	41.50	47.30	56.04	147.46	41.50	47.00	56.00	120.00	88	
: : 1988	55.02	58.40	260.93	none					89	
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DEPARTME Railroad Room 810	NT OF TRANSPORTATION s and Waterways	0	T F	A F	T I	E C	E E	F' <u>M</u>	M E	M	N 0	N R	E A	S N	D	А <u>М</u>
TO:	Kenneth Straus Highway Needs Unit					Ľ	Date	e: N	laı	ch	n 2	20,	1	.98	9	
FROM:	Robert G. Swanson, Director Railroad Administration					F	ЮНО	NE:	29	6-	-24	72	•			
SUBJECT:	Projected Railroad Grade Crossing	J														

We have projected 1989 costs for railroad-highway work at grade crossing improvements. They are expected to be as follows:

Railroad Grade Crossings:

Improvements - Cost for 1989

Signals (Single Track - Low Speed)\* Unit \$70,000.00 (Average Price)

Signals and Gates: (Multiple Track - High & Low Speed) \*\* Unit \$105,000.00 (Average Price)

Signs Only

Unit \$300.00

Crossing Surfaces: (Rubber Crossing Surface) per Track Ft \$700.00 Complete reconstruction of the crossing. Labor and Materials

\* Modern signals with motion sensors - signals are activated when train enters electrical circuit - deactivated if train stops before reaching crossing.

\* \* Modern signals with grade crossing predictors - has capabilities in (\*) above, plus ability to gauge speed and distance of train from crossing to give constant 20-25 second warning of approaching trains traveling from 5 to 80 MPH.

Lotus-2.01-3 (Unitcomp)

### 1989 COUNTY SCREENING BOARD DATA

#### JUNE, 1989

C.S.A.H. Roadway Unit Price Report

Construction Item	1988 CSAH Needs Study Average	1984-1988 CSAH 5-Year Average	1988 CSAH Average	1989 CSAH Unit Price Recommended by CSAH Subcommittee
Rural & Urban Design				
Grav. Base Cl 5 & 6/Ton	\$3.88	\$3.88	\$3.56	*
Rural Design				
Subbase Cl 3 & 4/Ton Bit.Base & Surf. 2331/Ton Bit.Surf. 2341/Ton Con.Surf. 2301/Sq.Yd.	\$3.75 15.51 17.64 11.80	\$3.61 17.39 18.77 	\$3.41 15.53 16.15 11.80 (1987-Mn/DOT)	
Gravel Surf. 2118/Ton Gravel Shldr. 2221/Ton	3.80 4.02	3.69 4.18	3.55 4.11	
Urban Design				
Subbase Cl 3 & 4/Ton Bit.Base & Surf. 2331/Ton Bit.Surf. 2341/Ton Con.Surf. 2301/Sq.Yd.	\$3.88 17.68 24.90 14.89	\$5.35 19.81 24.39 	4.75 18.34 19.26 14.89 (1987-Mn/DOT)	

\* The Recommended Gravel Base Unit Price for each individual county is shown on the state map foldout (Fig. A).

G.B. - The gravel base price as shown on the state map.

## 1989 MUNICIPAL SCREENING BOARD DATA UNIT PRICE RECOMMENDATION TO THE 1989 SCREENING BOARD

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	Pay Item	1988 Prices	Sub- committee Suggested Prices For 1989	Screening Board Recommended Prices For 1989
Right of Way	Acre	\$10,000.00	\$10,000.00	
Grading	Cu. Yd.	3.00	3.00	
Removal Items				
Curb and Gutter Sidewalk Concrete Pavement Tree Removal	Lin.Ft. Sq. Yd. Sq. Yd. Unit	$1.75 \\ 4.00 \\ 4.00 \\ 135.00$	1.75 4.00 3.75 140.00	
Base				
Class 4 Spec. #2211 Class 5 Spec. #2211 Bituminous Spec. #2331	Ton Ton Ton	4.75 6.00 21.00	4.75 5.75 21.00	
Surface				
Bituminous Spec. #2331 Bituminous Spec. #2341 Bituminous Spec. #2361 Grvl.Shldrs Spec. #2221	Ton Ton Ton Ton	21.00 24.00 34.00 4.25	21.00 24.00 34.00 4.25	
Miscellaneous				
Traffic Signals Street Lighting Curb and Gutter Sidewalk Storm Sewer Adjustment Storm Sewer	Mile Mile Lin.Ft. Sq. Yd. Mile Mile	15,000.00 16,000.00 6.00 14.50 62,000.00 196,000.00	15,000.00 16,000.00 5.50 14.00 62,000.00 196,000.00	
Structures				
Bridges 0 to 149 Ft. Bridges 150 to 499 Ft. Bridges 500 and over Bridge Widening	Sq. Ft. Sq. Ft. Sq. Ft. Sq. Ft.	41.50 47.00 56.00 120.00	45.00 50.00 60.00 100.00	
Railroad over Highway				
Number of Tracks - 1 Additional Track (each)	Lin.Ft. Lin.Ft.	2,250.00 1,750.00	2,250.00 1,750.00	
Railroad Grade Crossing				
Signals (Single Track- Low Speed) Signals & Gate (Multiple	Unit	65,000.00	70,000.00	
Track - High & Low Speed) Signs Only Rubberized Material	Unit Unit Lin.Ft.	95,000.00 300.00 700.00	99,000.00 300.00 700.00	



Minnesota Department of Transportation

Transportation Building,

St. Paul, MN 55155

February 14, 1989

612-296-1662

Phone\_\_\_\_\_

In reply refer to: Unencumbered Construction Fund Balance

Dear

The present Screening Board Directive states that whenever a municipality's construction fund balance available as of September 1 of the current year, not including the current year's allotment, exceeds \$300,000 or two times their annual construction allotment (whichever is greater), shall receive an adjustment to their money needs.

Our records show that as of February 1, 1989 you have a balance of \$\_\_\_\_\_\_ available for construction, not including the 1989 allotment.

According to the guidelines set forth by the Screening Board Resolution, you have an excess balance of \$\_\_\_\_\_\_. This excess amount must be reduced by September 1,1989 to avoid an adjustment to the money needs.

Any excess above the specified limits will result in \$\_\_\_\_\_\_ loss of money needs. The effect of this loss for the 1990 apportionment, based on the 1989 apportionment, will be approximately \$\_\_\_\_\_\_\_\$

If there are questions regarding your fund balance, please feel free to call me at the above number.

Sincerely,

Genneth Straws

Kenneth Straus Municipal State Aid Needs Manager

# TENTATIVE UNENCUMBERED BALANCE ADJUSTMENT

The Screening Board changed the Unencumbered Construction resolution to deal with the Unencumbered Balances. The guidelines setforth in the resolution will affect the city's apportionment the following year by approximately the amount of (F) if the balance is not reduced to the allowable balance (C) by September 1,1989. See attached resolution.

	\$29,284,602	\$7,558,720 \$	21,725,882	:	\$15,234,114	:	\$6,491,768	\$46,481,768	\$3,020,385	2.87
Vadnais Heights	516,080	109,367	406,713		300,000		106,713	813,426	52,856	3.72
Shoreview	1,125,082	344,691	780,391		689,382		91,009	1,560,782	101,420	2.26
St. Peter	729,117	187,109	542,008		374,218		167,790	1,084,016	70,439	2.90
Rochester	4,943,736	1,491,338	3,452,398		2,982,676		469,722	6,904,796	448,674	2.31
Richfield	2,288,343	604,012	1,684,331		1,208,024		476,308	3,368,662	218,896	2.79
Prior Lake	1,149,168	294,461	854,707		588,922		265,785	1,709,414	111,078	2.90
Orono	626,961	189,887	437,074		379,773		57,301	874,148	56,802	2.30
Northfield	955,472	317,967	637,505		635,934		1,571	1,275,010	82,850	2.00
New Brighton	1,452,213	318,500	1,133,713		636,999		496,714	2,267,426	147,337	3.56
Maplewood ***	3,419,039	389,035	3,030,004		778,070		2,251,934	9,090,012	590,669	7.79
Little Falls	744,082	230,599	513,483		461,198		52,285	1,026,966	66,732	2.23
Lino Lakes	994,771	322,091	672,680		644,182		28,498	1,345,360	87,421	2.09
Lake Elmo	643,630	132,296	511,334		300,000		211,334	1,022,668	66,453	3.87
Hermantown	1,006,296	301,437	704,859		602,874		101,985	1,409,718	91,603	2.34
Golden Valley	2,547,495	710,381	1,837,114		1,420,762		416,352	3,674,228	238,751	2.59
Fridley	2,373,633	523,337	1,850,296		1,046,675		803,622	3,700,592	240,464	3.54
Edina	2,739,304	857,670	1,881,634		1,715,340		166,294	3,763,268	244,537	2.19
Chaska	\$1,030,181	\$234,543	\$795,638		\$469,086		\$326,552	\$1,591,276	\$103,401	3.39
Municipality	2-1-89	Allotment	2-1-89	(-)	Balance	(=)	Balance	Needs	Apportionment	Column A
	Balance As Of ()	(-)	Amount	(-)	Allowable	(-)	(B-C) Evene	(Negative)	Estimated	Column B
	D. 1	1000			<b>_</b>		()	(2×B)	**	
		(A)	(B)		(C)		(D)	(E)	(F)	(G)

\* Two times the construction allotment or \$300,000 (whichever is greater.)

\*\* \$1000 of money needs = \$64.98 in apportionment (based on 1989 apportionment.)

\*\*\* Adjustment of needs = 3 times construction allotment.



## CITY OF SAINT PAUL DEPARTMENT OF PUBLIC WORKS

DONALD E. NYGAARD, DIRECTOR

600 City Hall Annex, Saint Paul, Minnesota 55102 612-298-4241

GEORGE LATIMER MAYOR

February 6, 1989

Mr. Kenneth Straus Office of State Aid Minnesota Department of Transportation 420 Transportation Building Saint Paul, Minnesota 55155

Dear Ken:

The City of Saint Paul currently has four one-way street pair designations in the downtown area and the Office of State Aid is requested to treat these routes as one-half mileage in the needs study.

The pairs are:

#### MSA Route No.

134	Eastbound Fifth Street	Fort Rd. (W. 7th St.) to Broadway St.	0.85 Miles
198	Westbound Sixth Street		0.86 Miles
235	Northbound Wabasha St.	Kellogg Blvd. to Twelfth Street	0.61 Miles
236	Southbound St. Peter St.		0.62 Miles
165	Northbound Minnesota St.	Kellogg Blvd. to Tenth Street	0.47 Miles
117	Southbound Cedar Street		0.46 Miles
196	Northbound Sibley Street Southbound Jackson St.	Shepard Road to Seventh Street	0.34 Miles <u>CSAH</u>
			4 21 Miles

In accordance with the 1983 one-way mileage resolution, I am asking you to bring this request before the Needs Study Subcommittee for review. The street widths for these segments will be brought into compliance with the resolution upon approval of this request by the full Screening Board.

Thank you.

Very truly yours,

Thomas Kuhfeld

Thomas E. Kuhfeld Assistant City Engineer

GKP:smh

Enclosures

#### ST. PAUL'S REQUEST

That any one-way streets added to the Municipal State Aid Street system must be reviewed by the Needs Study Subcommittee, and approved by the Screening Board before any one-way street can be treated as one-half mileage in the Needs Study.

A one-way street will be treated as one-half of a full four-lane width divided street of either 56 feet or 72 feet (72 feet when the projected ADT is over 8,000) for needs, and that the roadway system must be operating as one-way streets prior to the time of designation.

# M.S.A.S. 134

SEG.	LENGTH	INPLACE WIDTH	PROPOSED WIDTH	PROJECTED TRAFFIC	YEAR BUIL <b>T</b>
010	0.13	40	44	6.000	10/1
015	0.05	40	40	8,625	1941
020	0.25	40	44	12,275	1954
021	0.08	40	40	15.300	1972
022	0.08	55	55	10.050	1976
030	0.26	40	48	8,475	1956
TOTAL	0.85				

M	•	S	•	A	•	S			1	9	8
	-		-	-	-	-	-	_	-	-	-207

045	0.10	40	40	10,650	1900
050	0.10	40	44	9,150	1932
060	0.16	40	44	13,090	1947
070	0.07	44	44	12,495	1980
080	0.14	41	41	12,750	1939
090	0.29	41	44	11.775	1939

TOTAL 0.86

M.S.A.S. 235									
030	0.27	40	52	14,138	1900				
040	0.15	40	40	13,763	1900				
050	0.14	55	55	13,500	1900				
060	0.05	55	55	13,500	1900				

TOTAL	0
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.61

M.S.A.S. 236									
010	0.25	40	40	13,725	1907				
020	0.37	40	40	12,200	1900				

TOTAL 0.62

M.S.A.S. 165

SEG.	LENGTH	INPLACE WIDTH	PROPOSED WIDTH	PROJECTED TRAFFIC	YEAR BUILT
010 011 013 017 020	0.07 0.07 0.06 0.13 0.14	40 40 48 42 40	44 40 48 42 44	12,750 12,750 12,750 11,410 8,580	1917 1972 1976 1980 1903
TOTAL	0				
		M	.S.A.S. 117		
010 020 030 040 050 060	0.07 0.06 0.07 0.07 0.05 0.14	50 50 40 50 50 42	48 48 44 48 48 48 44	9,900 7,260 8,580 9,900 9,900 8,400	1961 1933 1933 1963 1933 1932
TOTAL	0.46				
	18 fr	M	.s.A.s. 196		
010 020 030	0.03 0.05 0.26	44 56 40	52 52 48	14,550 14,550 10,050	1920 1934 1900
TOLAT					



#### ANNUAL MAINTENANCE COST FOR MUNICIPAL STATE AID STREET NEEDS

These are the current maintenance prices used in the M.S.A.S. maintenance needs study. The total needs maintenance cost for 1988 is \$4,965,401. The average cost per mile is \$2,446.

Existing Facilities Only Screening UnderOverSubcommitteeBoard10001000SuggestedRecommendedVPDVPDPricesPrices Traffic Lanes \_\_\_\_\_miles x \_\_\_\_no. x \$600 \$1,000 \$1200 or \$2,000 \$\_\_\_ Median \_\_\_\_\_miles x \$200 \$400 \$400 or \$800 \$\_\_\_\_ Strip \_ Parking -----\_\_\_\_\_ Storm \$400 \$\_\_\_\_ Sewer \_\_\_\_miles x \$200 \$200 Traffic \_\_\_no.x \$400 \$400 \$400 \$\_\_\_\_ Signals TOTAL Estimated Maintenamce Cost for Segment \$ \$ OR Unlimited Segments: Normal M.S.A.S. Streets. Minimum Allowance for Maintenance \$4000 \$ \$2000 per mile x length. Limited Segments: Combination Routes. Minimum Allowance for Maintenance \$2000 \$ \$1000 per mile x length.

Maintenance Cost Computation

<u> Item 13 - Traffic Lanes</u>

Segment length-times-number of existing traffic lanes-times-(\$600 if the existing traffic is under 1,000 ADT) or (\$1,000 if the existing traffic is 1,000 or more) to compute the maintenance cost for the traffic lanes of the segment.

<u>No Item - Median Strips</u>

Item 4 - Segment length-times-(\$200 if the ADT is less than 1,000) or (\$400 if the ADT is 1,000 or more). This computation takes place only if the existing roadway is divided.

Item 14 - Parking Lanes

If 2-lane in Item 13 and Item 8 is: less than 32' - 0 parking lanes 32' and less than 40' - 1 parking lane 40' and over - 2 parking lanes

If	4-lane	e in	Item	13 a	and	Ite	m 8	is:	
	less	s tha	an 56	1			0	parking	lanes
	56'	and	less	thar	n 62	2 -	1	parking	lane
	62'	and	over			-	2	parking	lanes

The number of parking lanes shall be determined by subtracting the product of the number of traffic lanes times 12 from the existing street width, divide the difference by 8 and the whole number of the quotient shall be considered the number of Parking Lanes. This number is limited to 0-1 or 2-lanes. Segment length-times-number of existing parking lanes-times-\$200 per mile equals maintenance cost.

Item 16 - Storm Sewer

Existing storm sewer length-times-\$200 results in the cost of storm sewer maintenance.

<u>Item 17 - Traffic Signals</u>

Number of intersections having traffic signals-times-\$200 results in the traffic signal maintenance cost. When a control section or segment break results at an intersection with traffic signals, divide the intersection and report as .5 intersection.

The sum of all maintenance costs shall be determined and if less than the minimum maintenance cost of \$2,000 per mile on the normal Municipal State-Aid Street System, the cost shall be increased to \$2,000 per mile. On combination routes the minimum for the municipality's portion shall be \$1,000 per mile.

#### 1. <u>Traffic Lanes</u>

Segment length (Col. 11-14, card 1) x Existing Traffic Lanes (Col. 28, card 1) x \$600 (if traffic is under 1,000 Existing ADT) or \$1,000 (if traffic is over Existing 1,000 ADT) = Traffic Lanes Maintenance.

#### 2. <u>Median Strips</u>

Segment length (Col. 11-14, card 1) X \$200 (if traffic is under Existing 1,000 ADT) or \$400 (if traffic is over Existing 1,000 ADT) = Median Strips Maintenance Cost.

#### 3. <u>Parking Lanes</u>

Segment length (Col. 11-14, card 1) x number of parking lanes (Col. 29, card 1) x \$200 = Parking Lanes Maintenance Cost.

4. <u>Storm Sewer</u>

Existing storm sewer length (Col 31-34, card 1) x 200 = Storm Sewer Maintenance.

#### 5. Traffic Signals

Number of intersections (Col. 35-37, card 1) x \$200 = Traffic Signals Maintenance Cost.

The sum of all maintenance costs shall be determined and if less than the minimum maintenance cost of \$2,000 per mile on the normal Municipal State Aid Street System, the cost shall be increased to \$2,000 per mile. On combination routes the minimum for the municipality's portion shall be \$1,000 per mile.

Maintenance Cost Study							
(Cost Per Mile)							
Municipality	1985	1986	1987	Total	3 Year Average		
Albert Lea Alexandria	\$7,018	\$7,110	\$6,653	\$20,781	\$6,927		
Andover	2,162	1,760	2,473	6,395	2,132		
Anoka Apple Valley				0	0		
Arden Hills				0	0		
Austin	9,251	13,621	8,494	31,366	10,455		
Blaine	8,669	9,968	8,594	27,231 0 0	9,077 0		
Bloomington Brainerd		7,629	7,560	15,189	7,595		
Brooklyn Center				0	0		
Brooklyn Park Buffalo	7,599	7,417	7,886	22,902	7,634		
Burnsville				0	0		
Champlin Chanhassen				0	0		
Chaska				0	0		
Chisholm Cloquet	12,843 11,300	13,709 10,700	13,997 10,200	40,549	13,516		
Columbia Heights	•	,		0	0		
Coon Rapids Cottage Grove				0	0		
Crookston				0	0		
Crystal Detroit Lakes	9,125 6,525	5,353 6 525	5,872 5,410	20,350	6,783		
Duluth	8,894	7,604	7,324	23,822	7,941		
Eagan East Bethel	2,619	3,284	3,223	9,126	3,042		
East Grand Forks				0	0		
Eden Prairie Edina	6,176	6,906	6,607	19,689	6,563		
Elk River			5,508	5,308	5,308		
Eveleth Fairmont	11,395	12,910	13,545	37,850	0 12,617		
Falcon Heights				. O	0 0		
				0	0		

Municipality					
Faribault Farmington Fergus Falls			\$9,967	\$9,967 0 0	\$9,967 0 0
Fridley Golden Valley Grand Rapids	3,482	5,903 3,675	4,920 3,139	10,823 10,296 0 0	5,412 3,432 0 0
Ham Lake Hastings Hermantown	7,410 3,580	7,549 3,075	7,096 4,310	0 22,055 10,965	0 7,352 3,655
Hibbing Hopkins Hutchinson	5,729	5,753	5,634	0 17,116 0 0 0	5,705 0 0
International Falls Inver Grove Heights Lake Elmo				0 0 0 0	0 0 0 0
Lakeville Lino Lakes Litchfield				0 0 0 0	0 0 0 0
Little Canada Little Falls Mankato				0 0 0	0 0 0
Maple Grove Maplewood Marshall	4,709 10,140	4,990 8,978	6,957	0 16,656 0 19,118	0 5,552 0 9,559
Mendota Heights Minneapolis Minnetonka	1,884 25,547	1,936 23,960	2,073 17,713	0 5,893 67,220 0	0 1,964 22,407 0
Montevideo Moorhead Morris				0 0 0 0	0 0 0
Mound Mounds View New Brighton	5,034	5,370 6,938 4,899	6,307	16,711 6,938 4,899 0	5,570 6,938 4,899 0
New Hope New Ulm	7,512	7 004	7 220	7,512 0	7,512
North Mankato	1,392	7,004	6,887	21,724 0 6,887	6,887
North St. Paul Oakdale	10,063	11,893 8,097	11,798	33,/54 8,097 0	11,251 8,097

Municipality	1985	1986	1987	Total	3 Year Average
Orono Owatonna Plymouth	\$5,258			\$5,258 0 0	\$5,258 0 0
Prior Lake Ramsey				0 0 0	0 0 0
Red Wing	7,274	7,641		14,915	7,458
Redwood Falls Richfield Robbinsdale	6,165	8,031	7,905	0 22,101 0	0 7,367 0
Rochester Rosemount Roseville	9,877	8,473	8,476	0 26,826 0 0	0 8,942 0 0
St. Anthony				0	0
St. Cloud St. Louis Park	4,871	4,989 9,232	5,192 13,664	15,052 22,896	5,017 11,448
St. Paul St. Peter Sauk Rapids	23,826	25,073	26,739	0 75,638 0 0	0 25,213 0 0
Savage Shakopee Shoreview	14,062	16,654	20,485 6,756	0 51,201 6,756 0	0 17,067 6,756 0
South St. Paul Spring Lake Park Stillwater	4,725	8,378	8,207	0 16,585 4,725 0	0 8,293 4,725 0
Thief River Falls Vadnais Heights Virginia				0 0 0 0	0 0 0 0
Waseca	7,839	8,840	8,490	0 25,169	0 8,390
West St. Paul White Bear Lake	7,844	7,594	6,567	0 22,005	0 7,335
Willmar Winona Woodbury Worthington	12,959	9,714	9,595	0 0 32,268 0 0	0 0 10,756 0 0
Total	\$300,758	\$339,135	\$329,351	\$969 <b>,</b> 244	\$383,900

OVERALL AVERAGE \$8,428

ATTORNEY GENERAL

## STATE OF MINNESOTA Office Memorandum

DATE : April 14, 1989

DEPARTMENT :

TO : Gordon M. Fay, Director Office of State Aid 420 DOT

FROM : Donald J. Mueting Amartin Assistant Attorney General

PHONE : 296-3369

SUBJECT : Municipal State Aid Maintenance Payments for Municipal Bond Interest

I believe that you should make the statutorily-required adjustment to the maintenance accounts for those municipalities which have bond interest obligations. I suppose you could reason that the amortization schedule consitutes a variance request upon which the annual allocation can be calculated.

I apologize for any deviation from the technical language of your rules and statutes. However, I believe that I grasp the question and I hope the answer is understandable.

DJM/rlb Attachment To: Mr. Don Mueting, SAAG Room 515 Transportation Building

From: Gordon M.Fav buil

Re: Municipal State Aid Maintenance Payments For Municipal Bond Interest

Minnesota Statutes 162.18 Subd. 1 state "In the resolution providing for the issuance of the obligations, the governing body of the municipality shall irrevocably pledge and appropriate to the sinking fund from which the obligations are obligated, an amount of the monies allotted or to be allotted to the municipality from its account in the municipal state-aid street fund sufficient to pay the principal of and the interest on the obligations as they respectfully come due... All interest on the bond obligations shall be paid out of the municipality's normal maintenance account in the municipal state-aid street fund."

Minnesota Rules 8820.1400 Subp. 3 state " Those municipalities desiring to receive an amount greater than the established minimum shall file a request not later than December 15 preceding the annual allocation and shall agree to file a detailed annual maintenance expenditure report at the end of the year."

We have the situation where a municipality has issued obligations for which interest payments combined with maintenance expenditures are greater than the municipality's normal maintenance allocation. In this situation the municipality must then request an increase in their annual maintenance allocation to provide the adequate maintenance money necessary to cover their obligations.

It appears to me that we make mountains out of mole hills. Our present practice requires the municipality to submit an amortization schedule so we know their obligations and yet when we figure their annual maintenance allotment we do not consider the interest obligation. The municipality must then file a request by December 15 of the year preceding the allotment. If the municipality forgets to file the request they either don't get the necessary funds or they have to request a variance. Finance keeps a tab on the interest payments and if there was not enough maintenance money available to pay the current interest obligation they make it up in subsequent years.

It seems to me that once they file the amortization schedule we should consider the annual interest payment and add it to the normal maintenance allotment. We would then advance the interest payments when due and we would eliminate the need for a municipality to file for a variance.

figured the annual maintenance allotment as I suggest?  $\mathcal{M}$ 

we would approach the Municipal Screening Committee for Whe mut their approval before implementing any change if your repty with is favorable. Your consideration of this request is appreciated. Cc: Ken Straus - Room 420 Allan Weiszel - Annex

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EXCERPT FROM 1988 FALL MINUTES ADDRESSING SIDEWALKS

Ottensmann addressed the issue of apportionment needs for both old and proposed sidewalks. At the present time, a city can draw apportionment needs on only the replacement of existing sidewalks. If a new sidewalk is planned on a street, apportionment needs are He questioned this difference if the sidewalk is not drawn. Fay provided some background in that if a sidewalk is needed. already existing, it is very likely to be reconstructed; whereas, the construction of new sidewalks is very questionable. It was stated that some communities do not build a street without sidewalk while other cities never build sidewalks at all. Sidewalks are eligible for state aid funding. Drake asked if you can have a state aid sidewalk project only. Hanson affirmed the sidewalk project can be completely separate with the stipulation that the street on which the sidewalks is proposed must meet standards before the sidewalks can be funded through the MSA system. Further discussion took place regarding existing and non-existing sidewalks and the aspect of regular needs and/or apportionment needs for these sidewalks. Following the discussion, a motion was made by Ottensmann, seconded by Siggerud, to direct the Needs Subcommittee to review the present procedure regarding the inclusion of existing and proposed sidewalks within the regular/apportionment needs for a community and determine if all sidewalks should be included in the apportionment needs or 80**8**6 other change and provide a report/recommendation to the Spring 1989 Screening Committee meeting. All were in favor of the motion. Motion carried.

1988	NEEDS STUDY		MILE	AGE SUMMA	RY FOR	STATE O	F MINNESOT	Ą
MILEAGE SURFACE	BY EXISTING TYPE	SURFACE	TYPE AND P	ROJECTED	TRAFFIC	C VOLUME	GROUP 1000-4999 0 67	

MILEAGE BY EXISTING SURFACSURFACE TYPEADT-B - UNIMPROVED-C - GRADED & DRAINED-D - SOIL SURFACED-E - GRAVEL-F - BITUMINOUS TREATED-G - BITUMINOUS-I - ASPHALTIC CONCRETE-J - CONCRETE-K - BRICK-L - BLOCK-O - NON-EXISTENT-	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \textbf{L} \textbf{C} \textbf{E} \textbf{I} \textbf{Y} \textbf{P} \textbf{E} \textbf{AND} \textbf{P} \textbf{R} \textbf{U} \textbf{J} \textbf{E} \textbf{C} \textbf{I} \textbf{E} \textbf{J} \textbf{I} \textbf{I} \textbf{I} \textbf{I} \textbf{I} \textbf{I} \textbf{I} I$	$\begin{array}{c ccccc} & & & & & & & & & & & & & & & & &$	5000 = 99999 0.10 0.73 0.54 8.70 3.46 168.31 200.00 52.72 2.34 0.69 29.99	10000&OVER 0.12 0.08 0.14 0.50 1.47 132.13 240.58 64.46 2.85 0.24 16.83	TOTAL 3.43 18.51 24.29 85.44 32.87 792.40 869.14 193.67 7.25 2.61 175.44
TOTAL-	14.25 203.40	90.08 970.34	467.58	459.40	2,205.05
MILEAGE BY CERTIFICATION (	GROUPING S	TOTAL			
NON-EXISTING 175. UNIMPROVED 3. IMPROVED 1,990.	44 0.00 43 0.00 99 35.19	175.44 3.43 2,026.18			
TOTAL 2,169.4	86 35.19	2,205.05			
GRADING ITEMS	NEEDS ITEM SUMMAR Needs cost	Y FOR STATE OF MINNESO Apportion	MENT COST	QUA	YTITY
GRADING SPECIAL DRAINAGE STORM SEWER CONSTRUCTION STORM SEWER ADJUSTMENT CURB & GUTTER REMOVAL SIDEWALK REMOVAL CONCRETE PAVEMENT REMOVAL CLEARING & GRUBBING (TREE CLEARING & GRUBBING (ACRE ALL GRADING I	<pre>\$ 58,569,327 \$ 2,034,617 \$105,022,680 \$ 9,386,180 \$ 6,770,249 \$ 4,317,120 \$ 13,787,320 \$ 3,303,855 ) \$ 00 TEMS \$ 203,191,34</pre>	\$ 58,2 \$ 2,0 \$ 9,3 \$ 6,7 \$ 4,3 \$ 13,7 \$ 3,3 \$ \$	52,881 34,617 00 86,180 70,249 17,120 33,468 03,855 00 7,798,370	537.20 154.00 3,868,58 1,079,280 3,446,830 24,47 683.0	D MI. 6 MI. 7 L.F. 0 S.Y. 0 S.Y. 3 NO. 6 ACRE
BASE ITEMS					
SUBBASE CL 4 #2211 GRAVEL BASE CL 5 #2211 BITUMINOUS BASE #2321 CONCRETE BASE #2301 ALL BASE I	\$ 41,460,956 \$ 33,879,870 \$ 52,345,104 \$ 00 TEMS \$ 127,685,93	\$ 41,3 \$ 33,6 \$ 51,8 \$ \$	18,004 18,686 49,780 00 6,786,470		

# SURFACE ITEMS

GRAVEL #2118 BITUMINOUS #2321 BITUMINOUS #2331 BITUMINOUS #2341 BITUMINOUS #2361 CONCRETE #2301	\$ 00 \$ 00 \$ 2,583,042 \$113,318,520 \$ 44,678,278 \$ 00	\$00 \$00 \$2,583,042 \$112,700,142 \$43,680,850 \$00	0.00 MI. 0.00 MI. 105.33 MI. 1,450.90 MI. 646.56 MI. 0.08 MI.
BASIC SURFACE ITEMS SURFACE WIDENING	\$   160,579,840 \$    3,182,736	\$ 158,964,034 \$ 3,182,736	2,202.87 MI. 104.54 MI.
SHOULDER ITEMS			
GRAVEL #2221	\$ 478,519	\$ 478,519	195.51 MI.
MISCELLANEOUS CONSTRUCTION ITE	4S		
CURB & GUTTER SIDEWALK TRAFFIC SIGNALS STREET LIGHTING RETAINING WALLS MISCELLANEOUS	\$ 51,760,770 \$ 30,301,693 \$ 32,807,940 \$ 35,250,880 \$ 2,019,333 936,059	<pre>\$ 51,370,494 \$ 15,130,192 \$ 32,757,240 \$ 35,196,800 \$ 2,019,333</pre>	8,626,795 L.F. 2,089,748 S.Y. 2,203.18 MI. 2,203.18 MI.
ALL MISCELLANEOUS ITEMS ALL ROADWAY COST ALL STRUCTURES ALL RAILROAD GRADE CROSSINGS ALL MAINTENANCE ENGINEERING & CONTINGENCIES ALL ROADSIDE DEVELOPMENT ALL RIGHT OF WAY	<pre>\$ 153,076,675 \$ 648,195,048 \$ 48,114,338 \$ 13,846,300 \$ 127,828,088 \$ 1,063,688 \$ 20,556,954</pre>	<pre>\$ 136,474,059 \$ 523,684,188 \$ 39,581,826 \$ 13,813,800 \$ 4,965,401 \$ 00 \$ 4,670,954</pre>	NO. OF BRDGS 379 NO. OF XINGS 432
TOTAL NEEDS COST \$	859,604,416		
TOTAL APPORTIONMENT COST \$	586,716,169		

TOTAL MILES 2,205.05

1988 NEEDS STUDY SUMMARY FOR STATE OF MINNESOTA

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#### RECONSTRUCTION NEEDS

Resolution that was passed by the Screening Committee in June, 1983:

"The money needs for all streets and bridges constructed with State Aid funds with the exception of additional surfacing, shall be removed from the Needs Study until such time as a reconstruction project is awarded. At that time, a money needs adjustment shall be made by annually adding the total amount of the street and bridge cost that is eligible for State Aid reimbursement for a 15 year period (except for preliminary engineering). This cost to include any federal or State Aid grants and to be effective on all reconstruction projects awarded after January 1, 1983."

In October 1988, the Screening Board revised the resolution to read: "When a Municipal State Aid Street is constructed to State Aid Standards, said street shall be considered adequate for a period of twenty years from the date of project letting or encumbrance of force account funds."

A hypothetical situation has been developed to compare two identical streets. Both streets were initially constructed with State Aid funds in 1966. Street no. 1 was reconstructed in 1986 and street no. 2 will be reconstructed in 1990.

1. Street number 1 :

After the initial construction in 1966, needs were removed for a twenty year period; from 1967 to 1986. In 1987 needs were reinstated because the street was reconstructed with State Aid funds in 1986 and the resolution at that time permitted "after the fact needs". The city shall receive needs for 15 years according to the old resolution, to the year 2002. Then the needs shall be removed until the year 2007 when the street will be eligible for reinstatement of needs according to the current resolution.

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Net result: 1967 to 1986 - no needs 1987 to 2002 - reconstruction needs (15 years) 2003 to 2007 - no needs 2008 to 2011 - complete needs (4 years) 2012 to ? - complete needs

2. Street number 2 :

After the initial construction in 1966, needs were removed for a twenty year period; 1967 to 1986. In 1987, because the "After the fact" needs resolution was in effect, no needs were permitted. In 1989 needs may be reinstated according to the current resolution. In 1990 the street will be reconstructed thereby removing the needs for a twenty year period.

Net result: 1967 to 1988 - no needs 1989 to 1990 - complete needs (2 Years) 1991 to 2011 - no needs 2012 to ? - complete needs

The date 2011 was used for comparison purposes. The street with "After the Fact" needs receives 15 years of "After the fact" needs plus 4 years of complete needs for a total of 19 years to the year 2011. The street without "After the fact" needs receives 2 years of complete needs to the year 2011.

It's questioned if "After the fact" reconstruction needs should be eliminated or revised in view of the current resolution.



EXAMPLE - NEEDS COMPARISON OF A STREET INITIALLY CONSTRUCTED IN 1966.

# Needs Adjustment for Reconstruction Projects (For reference, See Construction Accomplishments Resolution)

The following summary shows the reconstruction projects reported:

Municipality	Project No.	Type of Project	Date of Const.	Date of Reconst.	Years of Apport. Adj.	Amount	Total Adjustment
Austin	104-120-01	G,B,C Sur&Misc	: 1961	1984	1986-2000	\$67,543	
	104-121-04	G,B,C Sur&Misc	: 1960	1986	1988-2002	243,426	\$310,969
Brainerd	108-103-07	GR,B,S	1959	1984	1986-2000	25,526	
	108-114-03	GR, B, S	1967	1984	1986-2000	65,748	
	108-114-04	GR, B, S	1967	1984	1986-2000	15,064	
	108-117-03	GR, B, S	1967	1984	1986-2000	8,110	
	108-118-02	GR, B, S	1973	1984	1986-2000	11,679	
	108-124-05	GR, B, S	1959	1985	1987-2001	58,908	185,035
Burnsville	179-102-17	G,B,C Sur&Misc	1966	1987	1989-2003	1,053,559	1,053,559
Duluth	118-140-19	Bridge Repair	1930	1984	1987-2001	1,054,200	
	118-107-02	G,B,Conc Pave	1978	1983	1988-2002	11,858	
	118-109-09	BrkSurf,St Sew	1975	1983	1988-2002	112,424	
	118-129-14	BrkSurf,St Sew	1978	1983	1988-2002	86,859	
	118-171-03	BrkSurf,St Sew	1979	1984	1988-2002	209,012	
	118-129-17	BrkSurf,St Sew	1978	1984	1988-2002	14,487	
	118-135-07	BrkSurf,St Sew	1966	1984	1988-2002	14,559	
	118-136-07	BrkSurf, St Sew	1975	1984	1988-2002	26,430	
	118-138-10	BrkSurf, St Sew	1975	1984	1988-2002	4,394	
	118-139-06	BrkSurf,St Sew	1975	1984	1988-2002	24,066	
	118-140-18	BrkSurf, St Sew	1975	1984	1988-2002	17,698	
	118-141-10	BrkSurf,St Sew	1975	1984	1988-2002	23,882	
	118-143-06	BrkSurf,St Sew	1975	1984	1988-2002	24,685	1,624,554
Mendota Heights	140-103-06	G,B,Bit	1966	1985	1987-2001	81,436	81,436
Minneapolis	141-165-13	G,B,Bit,SW	1962	1984	1988-2002	237,982	
	141-199-06	B,Bit Surf	1968	1985	1988-2002	598,913	
	141-370-02	G,B,Bit,SW	1975	1986	1988-2002	350,622	1,187,517

Municipality	Project No.	Type of Project	Date of Const.	Date of Reconst.	Years of Apport. Adj.	Amount	Total Adjustment
Moorhead	144-122-03	Bit Resurf	1959	1984	1988-2002	186,397	186,397
Northfield	149-108-06	Bridge Rehab	1963	1986	1988-2002	31,743	31,743
St. Paul	164-113-17 164-156-10 164-108-14 164-141-08 164-159-23 164-159-22	G,B,Conc Pave G,B,Conc Pave G,B,Conc Pave Bridge Repair Bridge Rehab. Bit. Misc.	1969 1970 1962 1965 1964 1964	1983 1983 1983 1984 1984 1984	1985-1999 1985-1999 1985-1999 1986-2000 1986-2000 1986-2000	307,298 103,674 138,932 151,484 449,427 133,952	1,284,767

STATE TOTAL

\$5,945,977

#### 1989 MUNICIPAL SCREEMING BOARD DATA

Status of Municipal Traffic Counting

1. Seven County Metropolitan Traffic Area

Cities in the seven county metropolitan area count cooperatively with Mn/DOT. All cities, except Minneapolis and St. Paul, are scheduled to count on the odd numbered years. Minneapolis and St. Paul will count their individual municipalities over the 1989-1990 cycle.

2. Out-State Municipalities

The out-state cities will be counted on a four-year cycle.

A. Municipalities that have a count annually Duluth counts 1/4 of the city each year.

B. Traffic to be counted in 1989 by state forces

Albert Lea Brainerd Crookston East Grand Forks Fairmont	Faribault Grand Rapids Little Falls Mankato Marshall	Moorhead Morris New Ulm Northfield

C. Traffic to be counted in 1990 by state forces Alexandria Rochester Worthington Cloquet Willmar

D. Traffic to be counted in 1991 by state forces Bemidji Hermantown Owatonna Sauk Rapids Chisholm Hibbing Red Wing Thief River Falls Elk River Hutchinson Redwood Falls Virginia Eleveth Litchfield St. Cloud Waseca Fergus Falls North Mankato St. Peter Winona

- E. Traffic to be counted in 1992 by state forces Detroit Lakes International Falls Montevideo
- F. Traffic to be counted in 1992 by individual municipalities Austin

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TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET DULUTH EVELETH GRAND RAPIDS HIBBING INTERNATIONAL FALLS HERMANTOWN DISTRICT 1	TOT TOT TOT TOT TOT TOT TOT TOT	35,739 93,795 1,872 3,891 9,454 23,146 128,902 296,799	94,050 44,243 5,673 11,117 27,011 46,292 37,581 39,785	11,530 26,750 312 635 3,438 7,122 71,612 121,399	30,342 12,618 945 1,814 9,823 14,244 20,878 16,273	3.10 3.51 6.00 6.13 2.75 3.25 1.80 2.44	.38 2.12 .33 .35 .50 3.43 7.46
BEMIDJI CROOKSTON EAST GRAND FORKS THIEF RIVER FALLS DISTRICT 2	T O T T O T T O T T O T T O T T O T	23,201 20,860 6,860 20,725 71,646	45,492 56,378 27,440 98,690 53,467	8,593 5,960 1,960 8,290 24,803	16,849 16,108 7,840 39,476 18,510	2.70 3.50 3.50 2.50 2.89	.51 .37 .25 .21 1.34
BRAINERD ST CLOUD SAUK RAPIDS ELK RIVER DISTRICT 3	TOT TOT TOT TOT TOT TOT	34,264 19,019 19,930 33,600 106,813	25,194 38,814 58,618 13,827 23,120	13,194 6,447 7,118 21,500 48,259	9,701 13,157 20,935 8,848 10,446	2.60 2.95 2.80 1.56 2.21	1.36 .49 .34 2.43 4.62
ALEXANDRIA FERGUS FALLS MOORHEAD MORRIS DISTRICT 4	TOT TOT TOT TOT TOT TOT	7,686 24,800 275,526 56,813 364,825	16,709 25,051 182,468 74,754 98,071	7,686 7,515 83,604 17,754 116,559	16,709 7,591 55,367 23,361 31,333	1.00 3.30 3.30 3.20 3.13	.46 .99 1.51 .76 3.72
BLAINE BLOOMINGTON BROOKLYN CENTER BROOKLYN PARK COLUMBIA HEIGHTS COON RAPIDS EDINA HOPKINS MINNEAPOLIS MINNETONKA ROBBINSDALE SHAKOPEE EDEN PRAIRIE NEW HOPE MAPLE GROVE CHAMPLIN CHANHASSEN RAMSEY PRIOR LAKE EAST BETHEL DISTRICT 5	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	14,640 55,512 30,556 17,974 23,189 51,527 14,080 21,227 210,853 12,409 12,800 69,846 191,777 24,240 293,924 66,763 16,726 15,185 5,625 22,680 1,171,533	29,280 51,400 55,556 35,243 34,101 40,255 1,408,000 117,928 59,563 31,023 37,647 58,694 136,984 38,476 279,928 58,055 12,671 13,438 93,750 19,220 64,441	4,800 17,612 7,639 16,161 5,822 36,955 3,518 4,333 35,054 6,687 3,200 82,179 173,890 10,070 94,052 27,561 7,233 17,450 1,500 28,000 583,716	9,600 16,307 13,889 31,688 8,562 28,871 351,800 24,072 9,902 16,718 9,412 69,058 124,207 15,984 89,573 23,966 5,480 15,442 25,000 23,729 32,108	3.05 3.15 4.00 1.11 3.98 1.39 4.90 4.90 6.02 1.86 4.00 2.41 3.13 2.41 3.13 2.42 2.31 .87 3.75 .81 2.01	.50 1.08 .55 .51 .68 1.28 .01 .18 3.54 .40 .34 1.19 1.40 .63 1.05 1.15 1.32 1.13 .06 1.18 1.8 1.19 1.128
ALBERT LEA AUSTIN FARIBAULT	TOT TOT TOT	11,424 7,863 19,037	21,156 15,726 33,995	4,050 3,145 5,439	7,500 6,290 9,713	2.82 2.50 3.50	. 54 . 50 . 56
## EXCAVATION CU. YD.

	тот	TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
		9,170	23,513	2,658	6,815	3.45	. 39
ωτνονά		1/,584	11,/23	6,971	4,647	2.52	1.50
DISTRICT 6	TOT	11,097 76 775	43,322	3,342	12,378	3.50	. 27
	101	70,775	20,419	25,605	6,810	3.00	3.76
FAIRMONT	тот	16,429	41,073	3,533	8 8 7 7	6 4 5	6.0
ΜΑΝΚΑΤΟ	тот	118,585	57,012	42,041	20.212	2 82	2 0 2
NEW ULM	тот	12,874	22,989	4,699	8,391	2 76	2.00
NORTH MANKATO	тот	132,278	124,791	52,391	49,425	2 52	1 04
WASECA	тот	8,406	12,546	2,802	4,182	3 00	1.00
WORTHINGTON	тот	10,055	29,574	2,793	8.215	3.60	.07
DISTRICT 7	тот	298,627	58,440	108,259	21,186	2.76	5.11
HUTCHINSON	тот	<b>रर १र</b> १	55 672	17 575	00 100		
REDWOOD FALLS	ŤŇŤ	5 830	10 228	13,535	22,189	2.50	.61
DISTRICT 8	ŤŇŤ	39,668	33 617	4,100	/,281	1.40	. 57
		37,000	55,017	17,005	14,987	2.24	1.18
HASTINGS	тот	6,529	5,265	1,978	1.595	3 30	1 26
NORTH ST PAUL	тот	35,532	35,891	20,250	20.455	1 75	1.24
ROSEVILLE	тот	29,625	40,034	11,351	15,339	2 61	
ST PAUL	тот	101,787	33,483	28,225	9,285	3 61	./4 3 06
SOUTH ST PAUL	тот	11,058	25,132	2,022	4,595	5 47	5.04
WEST ST PAUL	тот	51,421	48,510	14,045	13,250	3 66	1 04
WHILE BEAR LAKE	тот	6,200	23,846	3,100	11,923	2 00	26
INVER GROVE HEIGHTS	тот	6,255	52,125	695	5,792	9.00	.20
BURNSVILLE	тот	59,669	63,478	29,577	31,465	2 02	.12
CUTTAGE GROVE	TOT	57,865	62,220	68,945	74,134	.84	93
UAKDALE	TOT	29,399	57,645	17,466	34,247	1.68	51
APPLE VALLEY	TOT	3,750	3,676	1,500	1,471	2.50	1 02
	TOT	110,449	89,072	98,900	79,758	1.12	1 24
		3,241	10,128	740	2,313	4.38	32
	TOT	13,379	27,304	5,802	11,841	2.31	.52
RUSEMUUNI	TOT	57,147	31,926	44,033	24,599	1.30	1 79
	TOT	14,241	83,771	11,194	65,847	1.27	.17
DISIKICI A	101	597,547	39,055	359,823	23,518	1.66	15.30
STATE TOTAL		7 00/ 07-					
STATE IUTAL		3,024,233	49,847	1,406,108	23,176	2.15	60.67

EXCAVALIUN CU. T	D.
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TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT	296,799 71,646 106,813 364,825 1,171,533 76,775 298,627 39,668 597,547	39,785 53,467 23,120 98,071 64,441 20,419 58,440 33,617 39,055	121,399 24,803 48,259 116,559 583,716 25,605 108,259 17,685 359,823	16,273 18,510 10,446 31,333 32,108 6,810 21,186 14,987 23,518	2.44 2.89 2.21 3.13 2.01 3.00 2.76 2.24 1.66	7.46 1.34 4.62 3.72 18.18 3.76 5.11 1.18 15.30
STATE TOTAL		3,024,233	49,847	1,406,108	23,176	2.15	60.67

# CURB & GUTTER REM. LIN. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CHISHOLM CLOQUET DULUTH EVELETH GRAND RAPIDS HIBBING INTERNATIONAL FALLS HERMANTOWN DISTRICT 1	TOT TOT TOT TOT TOT TOT TOT TOT	2,724 2,756 1,680 4,546 3,350 30 4,562 45 19,693	8,513 4,176 832 13,776 9,571 86 9,124 13 2,474	1,362 2,344 420 2,273 805 20 4,562 45 11,831	4,256 3,552 208 6,888 2,300 57 9,124 13 1,486	2.00 1.18 4.00 2.00 4.16 1.50 1.00 1.00 1.66	.32 .66 2.02 .33 .35 .50 3.43 7.96
BEMIDJI	TOT	384	753	192	376	2.00	.51
CROOKSTON	TOT	817	2,208	1,634	4,416	.50	.37
EAST GRAND FORKS	TOT	2,626	14,589	1,876	10,422	1.40	.18
THIEF RIVER FALLS	TOT	490	742	140	212	3.50	.66
DISTRICT 2	TOT	4,317	2,510	3,842	2,234	1.12	1.72
BRAINERD	TOT	486	586	243	293	2.00	.83
SAUK RAPIDS	TOT	880	2,588	489	1,438	1.80	.34
ELK RIVER	TOT	11,817	4,746	16,820	6,755	.70	2.49
DISTRICT 3	TOT	13,183	3,602	17,552	4,796	.75	3.66
ALEXANDRIA	TOT	3,293	5,777	2,268	3,979	1.45	.57
FERGUS FALLS	TOT	9,770	9,869	3,937	3,977	2.48	.99
MOORHEAD	TOT	8,191	7,876	6,203	5,964	1.32	1.04
MORRIS	TOT	5,970	7,855	5,970	7,855	1.00	.76
DISTRICT 4	TOT	27,224	8,102	18,378	5,470	1.48	3.36
BLOOMINGTON BROOKLYN CENTER COLUMBIA HEIGHTS COON RAPIDS EDINA FRIDLEY HOPKINS MINNEAPOLIS MINNEAPOLIS MINNETONKA ROBBINSDALE ST ANTHONY SHAKOPEE EDEN PRAIRIE NEW HOPE MAPLE GROVE CHAMPLIN PRIOR LAKE DISTRICT 5	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	12,175 1,470 3,291 3,600 2,742 517 4,123 47,463 2,107 2,135 6,006 1,915 1,184 1,600 750 293 525 91,896	15,411 2,100 10,616 2,813 274,200 22,906 13,332 5,268 6,279 11,550 878 846 11,429 781 2,664 8,750 7,102	6,083 1,470 3,291 2,820 1,274 470 2,616 29,988 1,406 1,423 5,460 766 296 800 300 450 150 59,063	7,700 2,100 10,616 2,203 127,400 14,533 8,424 3,515 4,185 10,500 351 211 5,714 313 4,091 2,500 4,564	2.00 1.00 1.28 2.15 1.10 1.58 1.50 1.50 1.50 1.50 1.50 1.650 1.650 1.	.79 .70 .31 1.28 .01 .18 3.56 .40 .34 .52 2.18 1.40 .14 .96 .11 .06 12.94
ALBERT LEA	TOT	3,210	7,465	2,590	6,023	1.24	.43
AUSTIN	TOT	27,350	23,178	9,740	8,254	2.81	1.18
FARIBAULT	TOT	3,437	6,138	2,291	4,091	1.50	.56
NORTHFIELD	TOT	4,081	10,464	4,081	10,464	1.00	.39
DWATONNA	TOT	2,129	2,087	4,258	4,175	.50	1.02
NINONA	TOT	4,140	15,333	2,760	10,222	1.50	.27

CURB & GUTTER REM. LIN. FT.

TOTALS		TOTAL	COST PFR MILE	TOTAL QUANTITY	QUANTITY PFR MILE	UNIT PRICE	LENGTH
DISTRICT 6	TOT	44,347	11,519	25,720	6,681	1.72	3.85
FAIRMONT MANKATO NEW ULM NORTH MANKATO WASECA WORTHINGTON DISTRICT 7	TOT TOT TOT TOT TOT TOT TOT	4,145 13,448 10,227 1,373 6,051 134 35,378	10,363 6,465 4,333 1,295 9,031 394 5,120	1,842 12,961 16,446 915 3,973 103 36,240	4,605 6,231 6,969 863 5,930 303 5,245	2.25 1.04 .62 1.50 1.52 1.30 .98	.40 2.08 2.36 1.06 .67 .34 6.91
HUTCHINSON WILLMAR REDWOOD FALLS DISTRICT 8	TOT TOT TOT TOT	260 565 2,964 3,789	274 1,027 5,200 1,830	110 377 1,482 1,969	116 685 2,600 951	2.36 1.50 2.00 1.92	.95 .55 .57 2.07
HASTINGS ROSEVILLE ST PAUL SHOREVIEW SOUTH ST PAUL WEST ST PAUL INVER GROVE HEIGHTS BURNSVILLE OAKDALE APPLE VALLEY LAKEVILLE LITTLE CANADA ROSEMOUNT DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	240 2,475 27,843 600 2,647 6,250 234 1,404 714 5,863 82 400 2,142 50,894	194 5,051 9,159 6,667 1,918 5,896 532 1,692 1,400 5,748 161 1,250 1,197 4,001	$120 \\ 1,650 \\ 21,131 \\ 150 \\ 2,257 \\ 4,100 \\ 117 \\ 468 \\ 238 \\ 5,330 \\ 40 \\ 200 \\ 1,050 \\ 36,851 \\ \end{array}$	97 3,367 6,951 1,667 1,636 3,868 266 564 467 5,225 78 625 587 2,897	2.00 1.50 1.32 4.00 1.17 1.52 2.00 3.00 1.10 2.05 2.00 2.04 1.38	1.24 .49 3.04 .09 1.38 1.06 .44 .83 .51 1.02 .51 .32 1.79 12.72
STATE TOTAL		290,721	5,268	211,446	3,831	1.37	55.19

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## CURB & GUTTER REM. LIN. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT TOT	19,693 4,317 13,183 27,224 91,896 44,347 35,378 3,789 50,894	2,474 2,510 3,602 8,102 7,102 11,519 5,120 1,830 4,001	11,831 3,842 17,552 18,378 59,063 25,720 36,240 1,969 36,851	1,486 2,234 4,796 5,470 4,564 6,681 5,245 951 2,897	1.66 1.12 .75 1.48 1.56 1.72 .98 1.92 1.38	7.96 1.72 3.66 3.36 12.94 3.85 6.91 2.07 12.72
STATE TOTAL		290,721	5,268	211,446	3,831	1.37	55.19

SIDEWALK REMOVAL SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CHISHOLM	TOT	2,077	6,491	4,153	12,978	.50	.32
CLOQUET	TOT	2,818	4,270	9,843	14,914	.29	.66
DULUTH	TOT	6,566	1,814	35,864	9,907	.18	3.62
EVELETH	TOT	2,320	7,030	6,354	19,255	.37	.33
GRAND RAPIDS	TOT	2,710	45,167	4,878	81,300	.56	.06
HIBBING	TOT	3,240	9,257	10,800	30,857	.30	.35
INTERNATIONAL FALLS	TOT	4,908	9,816	19,634	39,268	.25	.50
DISTRICT 1	TOT	24,639	4,219	91,526	15,672	.27	5.84
BEMIDJI	TOT	76	149	76	149	1.00	.51
CROOKSTON	TOT	2,139	5,781	10,696	28,908	.20	.37
EAST GRAND FORKS	TOT	2,456	13,644	6,140	34,111	.40	.18
THIEF RIVER FALLS	TOT	468	709	312	473	1.50	.66
DISTRICT 2	TOT	5,139	2,988	17,224	10,014	.30	1.72
ELK RIVER	TOT	17,488	7,023	69,950	28,092	.25	2.49
DISTRICT 3	TOT	17,488	7,023	69,950	28,092	.25	2.49
ALEXANDRIA FERGUS FALLS MOORHEAD MORRIS DISTRICT 4	TOT TOT TOT TOT TOT TOT	7,029 6,540 6,395 1,818 21,782	12,780 6,606 8,305 2,392 7,095	21,966 13,079 25,146 3,636 63,827	39,938 13,211 32,657 4,784 20,791	.32 .50 .25 .50 .34	.55 .99 .77 .76 3.07
BLOOMINGTON BROOKLYN CENTER COLUMBIA HEIGHTS COON RAPIDS MINNEAPOLIS MINNETONKA ROBBINSDALE SHAKOPEE PRIOR LAKE DISTRICT 5	TOT TOT TOT TOT TOT TOT TOT TOT TOT	3,037 3,792 112 560 112,304 85 570 263 800 121,523	3,844 5,417 361 1,556 31,546 1,063 1,676 121 13,333 14,502	$10,818 \\ 10,071 \\ 562 \\ 700 \\ 229,013 \\ 153 \\ 951 \\ 350 \\ 400 \\ 253,018 \\ \end{array}$	13,694 14,387 1,813 1,944 64,329 1,913 2,797 161 6,667 30,193	.28 .38 .20 .80 .49 .56 .60 .75 2.00 .48	.79 .70 .31 .36 3.56 .08 .34 2.18 .06 8.38
ALBERT LEA	T O T	3,226	8,719	11,610	31,378	.28	.37
AUSTIN	T O T	761	1,522	2,174	4,348	.35	.50
NORTHFIELD	T O T	7,536	19,323	18,839	48,305	.40	.39
OWATONNA	T O T	11,838	11,606	42,615	41,779	.28	1.02
ROCHESTER	T O T	1,185	1,118	3,555	3,354	.33	1.06
WINONA	T O T	3,769	13,959	10,769	39,885	.35	.27
DISTRICT 6	T O T	28,315	7,843	89,562	24,809	.32	3.61
FAIRMONT	TOT	4,348	10,870	7,904	19,760	.55	.40
MANKATO	TOT	19,768	9,504	49,419	23,759	.40	2.08
NEW ULM	TOT	3,382	6,039	4,509	8,052	.75	.56
NORTH MANKATO	TOT	554	523	1,385	1,307	.40	1.06
WASECA	TOT	2,197	3,433	4,993	7,802	.44	.64
WORTHINGTON	TOT	212	624	353	1,038	.60	.34
DISTRICT 7	TOT	30,461	5,996	68,563	13,497	.44	5.08
HUTCHINSON	тот	21	34	60	98	. 35	

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#### SIDEWALK REMOVAL SQ. FT. TOTALS TOTAL COST COST TOTAL QUANTITY UNIT LENGTH PER MILE PER MILE QUANTITY WILLMAR PRICE TOT 1,087 1,976 4,896 8,902 .22 DISTRICT 8 .55 TOT 1,108 955 4,956 4,272 .22 1.16 NORTH ST PAUL TOT 20 32 ROSEVILLE ST PAUL SOUTH ST PAUL WEST ST PAUL 20 32 1.00 .63 TOT 802 1,084 924 1,249 .87 .74 TOT 13,847 4,396 25,447 8,078 .54 .50 3.15 TOT 3,632 2,883 7,196 5,711 1.26 TOT 1,760 3,321 5,850 11,038 .30 .50 .50 WHITE BEAR LAKE .53 TOT 50 192 100 385 BURNSVILLE DISTRICT 9 .26 TOT 265 319 530 639 .83 TOT 20,376 2,754 40,067 5,414 .51 7.40 STATE TOTAL 270,831 6,989 698,693 18,031 .39 38.75

 $270,831 / 698,693 = .3876 \times 9 = $ 3.49 \text{ Sq. Yd.}$ 

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SIDEWALK REMOVAL SQ. FT.

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TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT	24,639 5,139 17,488 21,782 121,523 28,315 30,461 1,108 20,376	4,219 2,988 7,023 7,095 14,502 7,843 5,996 955 2,754	91,526 17,224 69,950 63,827 253,018 89,562 68,563 4,956 40,067	15,672 10,014 28,092 20,791 30,193 24,809 13,497 4,272 5,414	.27 .30 .25 .34 .48 .32 .44 .22 .51	5.84 1.72 2.49 3.07 8.38 3.61 5.08 1.16 7.40
STATE TOTAL		270,831	6,989	698,693	18,031	. 39	38.75

270,831 / 698,693 = .3876 X 9 = \$ 3.49 Sq. Yd.

CONC. PAVEM. REM. SQ. FT.

TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CHISHOLM	TOT	5,067	15,834	11,448	35,775	.44	.32
CLOQUET	TOT	8,424	12,764	22,246	33,706	.38	.66
DULUTH	TOT	28,614	18,110	116,928	74,005	.24	1.58
EVELETH	TOT	574	1,739	1,476	4,473	.39	.33
GRAND RAPIDS	TOT	15,158	252,633	25,263	421,050	.60	.06
INTERNATIONAL FALLS	TOT	1,743	3,486	5,229	10,458	.33	.50
DISTRICT 1	TOT	59,580	17,270	182,590	52,925	.33	3.45
CROOKSTON EAST GRAND FORKS THIEF RIVER FALLS DISTRICT 2	TOT TOT TOT TOT TOT	345 18,809 12 19,166	932 104,494 29 19,965	1,035 37,548 54 38,637	2,797 208,600 132 40,247	.33 .50 .22 .50	.37 .18 .41 .96
ELK RIVER	TOT	55,700	22,369	250,650	100,663	.22	2.49
DISTRICT 3	TOT	55,700	22,369	250,650	100,663	.22	2.49
MOORHEAD	TOT	35,044	45,512	90,378	117,374	.39	.77
MORRIS	TOT	2,060	2,711	3,708	4,879	.56	.76
DISTRICT 4	TOT	37,104	24,251	94,086	61,494	.39	1.53
BLAINE BROOKLYN CENTER COLUMBIA HEIGHTS EDINA FRIDLEY MINNEAPOLIS ROBBINSDALE ST ANTHONY SHAKOPEE NEW HOPE PRIOR LAKE DISTRICT 5	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	583 3,728 1,414 305 89 294,780 1,152 14,065 72 700 350 317,238	1,166 4,492 4,561 30,500 116,514 3,388 27,048 33 5,000 5,833 42,754	1,240 8,622 3,378 486 405 526,077 1,602 87,300 72 1,400 100 630,682	2,480 10,388 10,897 48,600 207,936 4,712 167,885 33 10,000 1,667 84,998	.47 .43 .42 .63 .22 .56 .72 .16 1.00 .50 3.50 .50	.50 .83 .31 .01 2.53 .34 .52 2.18 .14 .06 7.42
ALBERT LEA	TOT	13,938	37,670	49,590	134,027	.28	.37
AUSTIN	TOT	25,560	51,120	115,020	230,040	.22	.50
FARIBAULT	TOT	162	1,013	324	2,025	.50	.16
NORTHFIELD	TOT	10,347	26,531	93,123	238,777	.11	.39
OWATONNA	TOT	31,325	30,711	92,903	91,081	.34	1.02
ROCHESTER	TOT	500	472	900	849	.56	1.06
DISTRICT 6	TOT	81,832	23,381	351,860	100,531	.23	3.50
FAIRMONT	TOT	1,681	4,203	3,025	7,563	.56	.40
MANKATO	TOT	119,311	57,361	272,673	131,093	.44	2.08
NEW ULM	TOT	304	298	1,044	1,024	.29	1.02
NORTH MANKATO	TOT	50,530	47,670	109,584	103,381	.46	1.06
WASECA	TOT	2,337	3,652	4,725	7,383	.49	.64
WORTHINGTON	TOT	24,684	72,600	61,126	179,782	.40	.34
DISTRICT 7	TOT	198,847	35,893	452,177	81,620	.40	5.54
WILLMAR	TOT	4,134	7,516	12,481	22,693	.33	.55
DISTRICT 8	TOT	4,134	7,516	12,481	22,693	.33	.55
HASTINGS	TOT	1,976	1,594	8,892	7,171	.22	

TOTALS		TOTAL		TOTAL	QUANTITY	UNIT	LENGTH
NORTH ST PAUL	TOT	856	865	1,453	1,468	. 59	.99
RUSEVILLE ST PAUL	TOT	3,131 83,531	4,231 27,477	4,077 375,291	5,509 123,451	.22	3.04
SOUTH ST PAUL	TOT	793	748	1,485	1,401	.53 40	1.06
BURNSVILLE	TOT	5,200	6,265	46,800	56,386	.11	.83
OAKDALE DISTRICT 9	ТОТ ТОТ	2,830 113,156	5,549 12,657	1,415 476,511	2,775 53,301	2.00	.51 8.94
STATE TOTAL		886,757	25,793	2,489,674	72,416	. 36	34.38

886,757 / 2,489,674 = .3562 X 9 = \$3.21 Sq. Yd.

CONC. PAVEM. REM. SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT	59,580 19,166 55,700 37,104 317,238 81,832 198,847 4,134 113,156	17,270 19,965 22,369 24,251 42,754 23,381 35,893 7,516 12,657	182,590 38,637 250,650 94,086 630,682 351,860 452,177 12,481 476,511	52,925 40,247 100,663 61,494 84,998 100,531 81,620 22,693 53,301	.33 .50 .22 .39 .50 .23 .44 .33 .24	3.45 .96 2.49 1.53 7.42 3.50 5.54 .55 8.94
STATE TOTAL		886,757	25,793	2,489,674	72,416	. 36	34.38

886,757 / 2,489,674 = .3562 X 9 = \$ 3.21 Sq. Yd.

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CLEARING 2101 NUMBER

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET EVELETH INTERNATIONAL FALLS DISTRICT 1	TOT TOT TOT TOT	180 100 250 530	643 303 1,250 654	2 1 5 8	7 3 25 10	90.00 100.00 50.00 66.25	.28 .33 .20 .81
BEMIDJI CROOKSTON DISTRICT 2	TOT TOT TOT	900 900 1,800	1,765 2,432 2,045	18 6 24	35 16 27	50.00 150.00 75.00	.51 .37 .88
BRAINERD ST CLOUD DISTRICT 3	T 0 T T 0 T T 0 T T 0 T	475 1,475 1,950	896 1,916 1,500	10 18 28	19 23 22	47.50 81.94 69.64	.53 .77 1.30
ALEXANDRIA FERGUS FALLS MOORHEAD DISTRICT 4	T O T T O T T O T T O T T O T	2,290 935 2,105 5,330	2,267 944 2,845 1,945	39 11 17 67	39 11 23 24	58.72 85.00 123.82 79.55	1.01 .99 .74 2.74
BROOKLYN CENTER COLUMBIA HEIGHTS COON RAPIDS FRIDLEY MINNEAPOLIS MINNETONKA ROBBINSDALE SHAKOPEE RAMSEY DISTRICT 5	TOT TOT TOT TOT TOT TOT TOT TOT TOT	1,255 1,108 2,500 2,860 14,131 186 2,400 330 220 24,990	1,512 3,574 2,717 10,625 2,325 7,059 541 1,833 5,504	11 22 100 52 72 6 8 11 22 304	13 71 109 54 75 24 18 183 67	114.0950.3625.0055.00196.2631.00300.0030.0010.0082.20	.83 .31 .92 1.33 .08 .34 .61 .12 4.54
ALBERT LEA AUSTIN FARIBAULT NORTHFIELD OWATONNA WINONA DISTRICT 6	TOT TOT TOT TOT TOT TOT TOT	2,200 200 600 150 2,800 760 6,710	5,946 909 2,727 385 2,745 2,815 2,695	11 2 3 1 28 19 64	30 9 14 3 27 70 26	200.00 100.00 200.00 150.00 100.00 40.00 104.84	.37 .22 .22 .39 1.02 .27 2.49
FAIRMONT NEW ULM DISTRICT 7	T 0 T T 0 T T 0 T T 0 T	800 975 1,775	2,000 1,413 1,628	4 13 17	10 19 16	200.00 75.00 104.41	.40 .69 1.09
HUTCHINSON REDWOOD FALLS DISTRICT 8	T 0 T T 0 T T 0 T T 0 T	1,500 300 1,800	2,459 526 1,525	6 6 12	10 11 10	250.00 50.00 150.00	.61 .57 1.18
HASTINGS NORTH ST PAUL ROSEVILLE ST PAUL WHITE BEAR LAKE BURNSVILLE LAKEVILLE	TOT TOT TOT TOT TOT TOT TOT	200 5,423 394 13,900 300 1,200 2,572	161 5,478 804 4,572 1,154 1,446 2,074	2 100 15 94 3 24 80	2 101 31 12 29 65	100.00 54.23 26.27 147.87 100.00 50.00 32.15	1.24 .99 .49 3.04 .26 .83 1.24

		CLE	ARING 2101	NUMBER			
TOTALS		TOTAL	COST	TOTAL	QUANTITY	UNTT	LENGTH
LAKE ELMO ROSEMOUNT FARMINGTON DISTRICT 9	ТОТ ТОТ ТОТ ТОТ	COST 1,000 1,228 60 26,277	PER MILE 2,041 686 353 2,493	QUANTITY 20 20 3 361	PER MILE 41 11 18 34	PRICE 50.00 61.40 20.00 72.79	.49 1.79 .17 10.54
STATE TOTAL		71,162	2,783	885	35	80.41	25.57

TREE REMOVAL

Cost	No.			
\$ 71,162 50 868	885 Clearing			
\$122,030	882 Grubbing 1767			

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 $122,030 / \frac{1767}{2} = \$ 138.12$ 

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CLEARING 2101 NUMBER

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT TOT	530 1,800 1,950 5,330 24,990 6,710 1,775 1,800 26,277	654 2,045 1,500 1,945 5,504 2,695 1,628 1,525 2,493	8 24 28 67 304 64 17 12 361	10 27 22 24 67 26 16 10 34	66.25 75.00 69.64 79.55 82.20 104.84 104.41 150.00 72.79	.81 .88 1.30 2.74 4.54 2.49 1.09 1.18 10.54
STATE TOTAL		71,162	2,783	885	35	80.41	25.57

## TREE REMOVAL

Cost	No.	
\$ 71,162	885 (	Clearing
50,868	882 0	Grubbing
\$122,030	1767	

 $122,030 / \frac{1767}{2} = $ 138.12$ 

GRUBBING 2101

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TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	121	432	2	7	60.50	.28
EVELETH	TOT	100	303	1	3	100.00	.33
INTERNATIONAL FALL	S TOT	250	1,250	5	25	50.00	.20
DISTRICT 1	TOT	471	581	8	10	58.88	.81
BEMIDJI	ТОТ	1,350	2,647	18	35	75.00	.51
CROOKSTON	ТОТ	900	2,432	6	16	150.00	.37
DISTRICT 2	ТОТ	2,250	2,557	24	27	93.75	.88
BRAINERD ST CLOUD DISTRICT 3	ТОТ ТОТ ТОТ	475 1,238 1,713	896 1,608 1,318	10 20 30	19 26 23	47.50 61.90 57.10	.53 .77
ALEXANDRIA	TOT	1,610	1,594	39	39	41.28	1.01
FERGUS FALLS	TOT	100	101	4	4	25.00	.99
MOORHEAD	TOT	1,835	2,480	17	23	107.94	.74
DISTRICT 4	TOT	3,545	1,294	60	22	59.08	2.74
BROOKLYN CENTER COLUMBIA HEIGHTS COON RAPIDS FRIDLEY MINNEAPOLIS MINNETONKA ROBBINSDALE SHAKOPEE RAMSEY DISTRICT 5	TOT TOT TOT TOT TOT TOT TOT TOT TOT	220 399 2,000 2,145 13,610 186 440 330 220 19,550	265 1,287 2,174 10,233 2,325 1,294 541 1,833 4,306	11 17 100 39 72 6 8 11 22 286	13 55 109 54 75 24 18 183 63	20.00 23.47 20.00 55.00 189.03 31.00 55.00 30.00 10.00 68.36	.83 .31 .92 1.33 .08 .34 .61 .12 4.54
ALBERT LEA AUSTIN FARIBAULT NORTHFIELD OWATONNA WINONA DISTRICT 6	TOT TOT TOT TOT TOT TOT TOT	1,100 200 800 50 1,042 945 4,137	2,973 909 3,636 128 1,022 3,500 1,661	11 4 8 1 52 21 97	30 18 36 51 78 39	100.0050.00100.0050.0020.0445.0042.65	.37 .22 .22 .39 1.02 .27 2.49
FAIRMONT	ТОТ	200	500	4	10	50.00	.40
NEW ULM	ТОТ	450	652	9	13	50.00	.69
DISTRICT 7	ТОТ	650	596	13	12	50.00	1.09
HUTCHINSON	ТОТ	1,500	2,459	6	10	250.00	.61
REDWOOD FALLS	ТОТ	300	526	6	11	50.00	.57
DISTRICT 8	ТОТ	1,800	1,525	12	10	150.00	1.18
HASTINGS NORTH ST PAUL ROSEVILLE ST PAUL WHITE BEAR LAKE BURNSVILLE LAKEVILLE	TOT TOT TOT TOT TOT TOT TOT	200 4,155 394 5,765 90 700 3,190	161 4,197 804 1,896 346 843 2,573	2 100 15 95 3 14 80	2 101 31 12 17 65	100.00 41.55 26.27 60.68 30.00 50.00 39.88	1.24 .99 .49 3.04 .26 .83 1.24

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## GRUBBING 2101

TOTALS		TOTAL	COST PFR MILF	TOTAL QUANTITY	QUANTITY PFR MILE	UNIT PRICE	LENGTH
LAKE ELMO ROSEMOUNT FARMINGTON	TOT TOT TOT	1,000 1,228 30	2,041 686 176	20 20 3	41 11 18 77	50.00 61.40 10.00	.49 1.79 .17
DISTRICT 9	101	16,752	1,589	352	33	47.39	10.94
STATE TOTAL		50,868	1,989	882	34	57.67	25.57

TREE REMOVAL

Cost	No.	
\$ 71,162	885	Clearing
50,868	882	Grubbing
\$122.030	1767	
·		

 $122.030 / \frac{1767}{2} = \$ 138.12$ 

## GRUBBING 2101

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT	471 2,250 1,713 3,545 19,550 4,137 650 1,800 16,752	581 2,557 1,318 1,294 4,306 1,661 596 1,525 1,589	8 24 30 60 286 97 13 12 352	10 27 23 22 63 39 12 10 33	58.88 93.75 57.10 59.08 68.36 42.65 50.00 150.00 47.59	.81 .88 1.30 2.74 4.54 2.49 1.09 1.18 10.54
STATE TOTAL		50,868	1,989	882	34	57.67	25.57

TREE REMOVAL

Cost	No.
\$ 71,162	885 Clearing
50,686	<u>882</u> Grubbing
\$122,030	1 <b>767</b>

 $122,030 / \frac{1767}{2} = \$ 138.12$ 

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GRAVEL SUBBASE 2211 TONS

		URAVI	L JUDDAJL LEII	10113			
TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	ТОТ	1,145	4,089	304	1,086	3.77	.28
DISTRICT 1	ТОТ	1,145	4,089	304	1,086	3.77	.28
THIEF RIVER FALLS	TOT	36,000	171,429	9,000	42,857	4.00	.21
DISTRICT 2	TOT	36,000	171,429	9,000	42,857	4.00	.21
FERGUS FALLS	TOT	43,765	44,207	9,704	9,802	4.51	.99
DISTRICT 4	TOT	43,765	44,207	9,704	9,802	4.51	.99
ST ANTHONY NEW HOPE DISTRICT 5	T 0 T T 0 T T 0 T T 0 T	36,765 20,855 57,620	70,702 42,561 57,050	8,550 4,300 12,850	16,442 8,776 12,723	4.30 4.85 4.48	.52 .49 1.01
AUSTIN	TOT	20,723	41,446	3,604	7,208	5.75	.50
DISTRICT 6	TOT	20,723	41,446	3,604	7,208	5.75	.50
NEW ULM	TOT	76,043	60,834	22,013	17,610	3.45	1.25
DISTRICT 7	TOT	76,043	60,834	22,013	17,610	3.45	1.25
REDWOOD FALLS	TOT	5,400	9,474	900	1,579	6.00	. 57
DISTRICT 8	Tot	5,400	9,474	900	1,579	6.00	. 57
ST PAUL	TOT	21,102	70,340	4,031	13,437	5.23	.30
LAKEVILLE	TOT	24,600	24,848	6,000	6,061	4.10	.99
DISTRICT 9	TOT	45,702	35,428	10,031	7,776	4.56	1.29
STATE TOTAL		286,398	46,950	68,406	11,214	4.19	6.10

TOTALS		GRAVEL Total Cost	SUBBASE 2211 COST PER MILE	TONS TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT	1,145 36,000 43,765 57,620 20,723 76,043 5,400 45,702	4,089 171,429 44,207 57,050 41,446 60,834 9,474 35,428	304 9,000 9,704 12,850 3,604 22,013 900 10,031	1,086 42,857 9,802 12,723 7,208 17,610 1,579 7,776	3.77 4.00 4.51 4.48 5.75 3.45 6.00 4.56	.28 .21 .99 1.01 .50 1.25 .57 1.29
STATE TOTAL		286,398	46,950	68,406	11,214	4.19	6.10

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GRAVEL BASE 2211 TONS

TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CHISHOLM CLOQUET DULUTH EVELETH GRAND RAPIDS HIBBING INTERNATIONAL FALLS HERMANTOWN DISTRICT 1	TOT TOT TOT TOT TOT TOT TOT TOT TOT	3,006 28,176 36,038 4,700 13,977 23,758 61,092 128,351 299,098	9,394 42,691 15,270 14,242 39,934 67,880 122,184 37,420 36,036	631 6,977 5,848 444 1,771 3,655 9,622 26,471 55,419	1,972 10,571 2,478 1,345 5,060 10,443 19,244 7,717 6,677	4.76 4.04 6.16 10.59 7.89 6.50 6.35 4.85 5.40	.32 .66 2.36 .33 .35 .50 3.43 8.30
BEMIDJI	TOT	45,364	88,949	10,352	20,298	4.38	.51
CROOKSTON	TOT	48,162	130,168	7,915	21,392	6.08	.37
EAST GRAND FORKS	TOT	1,620	9,000	189	1,050	8.57	.18
THIEF RIVER FALLS	TOT	5,920	15,179	1,512	3,877	3.92	.39
DISTRICT 2	TOT	101,066	69,701	19,968	13,771	5.06	1.45
BRAINERD	TOT	46,843	34,443	9,687	7,123	4.84	1.36
ST CLOUD	TOT	49,080	35,309	9,276	6,673	5.29	1.39
SAUK RAPIDS	TOT	20,335	59,809	4,281	12,591	4.75	.34
ELK RIVER	TOT	90,740	36,442	34,900	14,016	2.60	2.49
DISTRICT 3	TOT	206,998	37,096	58,144	10,420	3.56	5.58
ALEXANDRIA	TOT	5,968	12,974	2,051	4,459	2.91	.46
FERGUS FALLS	TOT	21,878	22,099	4,851	4,900	4.51	.99
MOORHEAD	TOT	45,216	96,204	12,762	27,153	3.54	.47
MORRIS	TOT	55,648	73,221	12,173	16,017	4.57	.76
DISTRICT 4	TOT	128,710	48,026	31,837	11,879	4.04	2.68
BLAINE BLOOMINGTON BROOKLYN CENTER BROOKLYN PARK COLUMBIA HEIGHTS COON RAPIDS HOPKINS MINNETONKA ROBBINSDALE ST ANTHONY SHAKOPEE EDEN PRAIRIE NEW HOPE MAPLE GROVE CHAMPLIN CHANHASSEN RAMSEY PRIOR LAKE EAST BETHEL DISTRICT 5	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	15,000 42,260 43,109 9,712 1,128 80,464 9,874 12,445 10,647 37,853 96,736 130,929 21,330 115,005 39,732 75,547 46,172 12,013 44,625 844,581	30,000 78,259 51,939 19,043 3,639 62,863 54,856 38,891 31,315 72,794 28,705 93,521 33,857 109,529 34,550 57,233 40,860 200,217 37,818 50,817	2,500 6,278 7,698 1,637 166 13,600 1,348 1,900 1,521 7,350 19,100 22,194 4,110 23,247 5,760 16,415 9,455 1,550 8,500 154,329	5,000 11,626 9,275 3,210 535 10,625 7,489 5,938 4,474 14,135 5,668 15,524 22,140 5,009 12,436 8,367 25,833 7,203 9,286	6.00 6.730 5.930 5.892 7.5505 5.990 5.999 5.990 4.885 5.990 4.885 5.990 4.885 5.990 4.885 5.990 4.27 5.47	.50 .54 .83 .51 .31 1.28 .18 .32 .34 .52 3.37 1.40 .63 1.05 1.15 1.32 1.13 .06 1.18 16.62
ALBERT LEA	ТОТ	26,597	71,884	3,570	9,649	7.45	. 37
FARIBAULT	ТОТ	34,390	61,411	5,340	9,536	6.44	. 56
NORTHFIELD	ТОТ	26,542	68,056	4,670	11,974	5.68	. 39

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## GRAVEL BASE 2211 TONS

TUTALS		TOTAL	COST	TOTAL	QUANTITY	UNIT	LENGTH
OWATONNA	тот	54.724	76 483	QUANTITY	PER MILE	PRICE	
ROCHESTER	ŤŎŤ	14.800	13 040	14,020	9,347	3.90	1.50
WINONA	ŤŌŤ	24,065	89 130	2,590	2,443	5.71	1.06
DISTRICT 6	TOT	181,118	43.643	3,945	14,611	6.10	.27
MANKATO		,	10,010	34,133	0,225	5.31	4.15
	TOT	255,643	122,905	41,176	19.796	6 21	2 00
NEN ULPI North Mankato	TOT	59,363	47,490	15,245	12,196	3 80	2.00
MASECA	101	182,872	86,260	34, 591	16.317	5 20	1.25
HORTHINCTON	101	9,408	14,042	1,819	2.715	5 17	2.12
DISTRICT 7	101	11,539	33,938	1,856	5,459	6 22	.0/
DISTRICT /	101	518,825	80,313	94,687	14,657	5.48	. 34 6 46
HUTCHINSON	тот	57 601	04 575				0.10
REDWOOD FALLS	TOT	7 260	94,5/5	12,374	20,285	4.66	.61
DISTRICT 8	ŤŇŤ	66 031	12,702	1,180	2,070	6.14	. 57
		04,751	55,026	13,554	11,486	4.79	1.18
HASTINGS	тот	9,250	7,460	1 860	1 696	F 07	
MENDUIA HEIGHTS	тот	70,680	78,533	11,600	17 464	5.03	1.24
NURTH ST PAUL	TOT	38,205	38,591	4,999	12,007	6.20	.90
RUSEVILLE	TOT	89,569	121,039	13.272	17 075	/.64	. 99
ST PAUL	ТОТ	109,590	36,049	22.329	7 365	6.75	. / 4
	TOT	65,490	111,000	8.732	16 800	4.91	3.04
SUUTH ST PAUL	TOT	4,301	21,505	555	2,775	7.50	. 59
WEST ST PAUL	TOT	82,616	77,940	14,480	13,660	7.75	.20
TNVER GROVE HETOUTO		13,325	51,250	2,050	7.885	6 50	1.06
BUDNSVILLE		10,377	32,428	2,306	7.206	6 50	. 20
		107,360	114,213	27,934	29.717	3 86	. 32
OAKDALE		51,310	55,172	10,230	11.000	5 02	.94
		32,055	62,853	4,449	8,724	7 20	.95
		15,530	15,225	3,300	3,235	4 71	1 02
		219,211	73,808	35,683	12,014	6 14	1.02
ROSEMONINT		25,361	51,757	5,350	10,918	6 76	2.97
FARMINGTON		86,806	48,495	16,056	8,970	5 61	.49
DISTRICT	101	9,575	56,324	1,950	11,471	4 91	1.79
biotkict y	101	1,040,611	57,302	186,915	10,293	5.57	18.16
STATE TOTAL		3,385,938	52,430	648,988	10,049	5.22	64 58
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GRAVEL BASE 2211 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT	299,098 101,066 206,998 128,710 844,581 181,118 518,825 64,931 1,040,611	36,036 69,701 37,096 48,026 50,817 43,643 80,313 55,026 57,302	55,419 19,968 58,144 31,837 154,329 34,135 94,687 13,554 186,915	6,677 13,771 10,420 11,879 9,286 8,225 14,657 11,486 10,293	5.40 5.06 3.56 4.04 5.47 5.31 5.48 4.79 5.57	8.30 1.45 5.58 2.68 16.62 4.15 6.46 1.18 18.16
STATE TOTAL		3,385,938	52,430	648,988	10,049	5.22	64.58

# BIT. SURF. 2331 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CHISHOLM CLOQUET DULUTH EVELETH GRAND RAPIDS HIBBING INTERNATIONAL FALLS HERMANTOWN DISTRICT 1	TOT TOT TOT TOT TOT TOT TOT TOT	5,596 23,329 65,843 5,415 15,213 116,795 66,849 312,514 611,554	17,488 35,347 19,596 16,409 43,466 44,749 133,698 91,112 52,903	200 1,080 3,083 200 516 5,754 2,126 21,091 34,050	625 1,636 918 606 1,474 2,205 4,252 6,149 2,946	27.98 21.60 21.36 27.08 29.48 20.30 31.44 14.82 17.96	.32 .66 3.36 .33 .35 2.61 .50 3.43 11.56
BEMIDJI CROOKSTON EAST GRAND FORKS THIEF RIVER FALLS DISTRICT 2	TOT TOT TOT TOT TOT TOT	14,347 47,562 22,670 80,008 164,587	28,131 128,546 125,944 53,339 64,292	963 2,008 703 4,197 7,871	1,888 5,427 3,906 2,798 3,075	14.90 23.69 32.25 19.06 20.91	.51 .37 .18 1.50 2.56
BRAINERD ST CLOUD SAUK RAPIDS ELK RIVER DISTRICT 3	TOT TOT TOT TOT TOT TOT	74,962 31,312 32,448 124,730 263,452	55,119 34,791 95,435 50,092 51,759	4,141 2,060 1,790 7,550 15,541	3,045 2,289 5,265 3,032 3,053	18.10 15.20 18.13 16.52 16.95	1.36 .90 .34 2.49 5.09
ALEXANDRIA FERGUS FALLS MOORHEAD MORRIS DISTRICT 4	TOT TOT TOT TOT TOT	7,302 48,504 246,627 70,445 372,878	12,811 48,994 125,830 92,691 87,121	349 2,503 12,736 2,950 18,538	612 2,528 6,498 3,882 4,331	20.92 19.38 19.36 23.88 20.11	.57 .99 1.96 .76 4.28
BLAINE BLOOMINGTON BROOKLYN CENTER BROOKLYN PARK COLUMBIA HEIGHTS COON RAPIDS EDINA HOPKINS MINNEAPOLIS MINNETONKA ROBBINSDALE ST ANTHONY SHAKOPEE EDEN PRAIRIE NEW HOPE MAPLE GROVE CHAMPLIN CHANHASSEN RAMSEY PRIOR LAKE EAST BETHEL DISTRICT 5 ALBERT LEA	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	10,385 125,588 63,923 12,773 97,308 105,162 15,598 34,456 920,139 51,893 24,358 28,388 95,392 142,812 69,170 100,005 47,815 41,400 85,195 9,563 52,026 2,133,349	20,770 116,285 77,016 25,045 313,897 82,158 1,559,800 191,422 258,466 129,733 71,641 54,592 28,306 102,009 141,163 104,172 41,578 31,364 75,394 159,383 44,090 103,661	915 7,291 3,215 630 4,270 5,430 1,339 1,950 47,367 2,907 1,240 1,815 5,080 6,411 3,731 4,793 3,648 3,000 3,360 410 2,900 111,702	1,830 6,751 3,873 1,235 13,774 4,242 133,900 10,833 13,305 7,268 3,647 3,490 1,507 4,579 7,614 4,993 3,172 2,273 2,973 6,833 2,458 5,428	11.35 17.23 19.88 20.27 22.79 19.37 11.65 17.67 19.43 17.85 19.64 15.11 10.80 25.36 17.94 10.94 10.80 25.36 17.94 19.10 10.040	.50 1.08 .83 .51 .31 1.28 .01 .18 3.56 .40 .34 .52 3.37 1.40 .49 .96 1.15 1.32 1.13 .06 1.18 20.58
ALDERI LEA	IOT	37,824	126,080	1,591	5,303	23.77	.30

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BIT. SURF. 2331 TONS

TOTALS		TOTAL	COST	TOTAL	QUANTITY	UNIT	LENGTH
FARİBAULT NORTHFIELD OWATONNA ROCHESTER WINONA DISTRICT 6	TOT TOT TOT TOT TOT TOT	C051 68,188 27,540 15,388 118,909 53,738 321,587	PER MILE 121,764 70,615 10,259 112,178 199,030 78,820	QUANTITY 3,546 1,350 843 5,500 1,778 14,608	PER MILE 6,332 3,462 562 5,189 6,585 3,580	19.23 20.40 18.25 21.62 30.22 22.01	.56 .39 1.50 1.06 .27 4.08
FAIRMONT MANKATO NEW ULM NORTH MANKATO WASECA DISTRICT 7	TOT TOT TOT TOT TOT TOT	1,494 174,150 128,673 199,031 102,968 606,316	4,394 83,726 102,938 93,883 153,684 93,857	33 10,967 6,196 11,334 5,081 33,611	97 5,273 4,957 5,346 7,584 5,203	45.27 15.88 20.77 17.56 20.27 18.04	.34 2.08 1.25 2.12 .67 6.46
HUTCHINSON REDWOOD FALLS DISTRICT 8	TOT TOT TOT	106,841 16,160 123,001	112,464 28,351 80,922	5,459 650 6,109	5,746 1,140 4,019	19.57 24.86 20.13	.95 .57 1.52
HASTINGS MENDOTA HEIGHTS NORTH ST PAUL ROSEVILLE ST PAUL SHOREVIEW SOUTH ST PAUL WHITE BEAR LAKE INVER GROVE HEIGHTS BURNSVILLE COTTAGE GROVE OAKDALE APPLE VALLEY LAKEVILLE ROSEMOUNT FARMINGTON DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	31,917 60,942 41,311 58,625 289,318 30,962 36,823 102,864 11,880 47,733 195,344 56,719 17,202 25,500 110,205 71,194 7,982 1,196,521	25,740 67,713 41,728 79,223 95,170 52,478 83,689 97,042 45,692 108,484 207,813 60,988 33,729 25,000 49,419 39,773 46,953 69,203	1,785 3,340 2,258 3,286 19,761 1,621 2,272 6,450 625 2,976 12,166 2,680 1,027 1,500 6,800 5,317 439 74,303	1,440 3,711 2,281 4,441 6,500 2,747 5,164 6,764 12,943 2,882 2,014 1,471 3,049 2,970 2,582 4,297	17.88 18.25 18.30 17.84 14.64 19.10 16.21 15.95 19.01 16.04 16.06 21.16 16.75 17.00 16.21 13.39 18.18 16.10	$\begin{array}{c} 1.24\\.90\\.99\\.74\\3.04\\.59\\.44\\1.06\\.26\\.44\\.93\\.51\\1.02\\2.23\\1.79\\.17\\17.29\end{array}$
STATE TOTAL		5,793,245	78,906	316,333	4,309	18.31	73.42

## BIT. SURF. 2331 TONS

TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT	611,554 164,587 263,452 372,878 2,133,349 321,587 606,316 123,001 1,196,521	52,903 64,292 51,759 87,121 103,661 78,820 93,857 80,922 69,203	34,050 7,871 15,541 18,538 111,702 14,608 33,611 6,109 74,303	2,946 3,075 3,053 4,331 5,428 3,580 5,203 4,019 4,297	17.96 20.91 16.95 20.11 19.10 22.01 18.04 20.13 16.10	11.562.565.094.2820.584.086.461.5217.29
STATE TOTAL		5,793,245	78,906	316,333	4,309	18.31	73.42

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BIT. SURF. 2341 TONS

TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	ТОТ	17,625	46,382	728	1,916	24.21	.38
DULUTH	ТОТ	64,879	19,309	3,013	897	21.53	3.36
GRAND RAPIDS	ТОТ	24,029	82,859	784	2,703	30.65	.29
DISTRICT 1	ТОТ	106,533	26,435	4,525	1,123	23.54	4.03
BEMIDJI	ТОТ	16,597	32,543	991	1,943	16.75	. 51
DISTRICT 2	Тот	16,597	32,543	991	1,943	16.75	. 51
BRAINERD	TOT	91,480	67,265	4,542	3,340	20.14	1.36
ST CLOUD	TOT	28,210	31,344	1,438	1,598	19.62	.90
SAUK RAPIDS	TOT	17,600	51,765	751	2,209	23.44	.34
ELK RIVER	TOT	166,170	66,735	9,005	3,616	18.45	2.49
DISTRICT 3	TOT	303,460	59,619	15,736	3,092	19.28	5.09
ALEXANDRIA	ТОТ	5,013	9,115	228	415	21.99	.55
FERGUS FALLS	ТОТ	62,640	63,273	2,768	2,796	22.63	.99
MOORHEAD	ТОТ	35,025	31,554	1,703	1,534	20.57	1.11
DISTRICT 4	ТОТ	102,678	38,746	4,699	1,773	21.85	2.65
BLAINE BLOOMINGTON BROOKLYN CENTER BROOKLYN PARK COLUMBIA HEIGHTS COON RAPIDS EDINA HOPKINS MINNEAPOLIS MINNETONKA ROBBINSDALE ST ANTHONY SHAKOPEE EDEN PRAIRIE NEW HOPE MAPLE GROVE CHAMPLIN CHANHASSEN RAMSEY PRIOR LAKE DISTRICT 5	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	36,070 55,156 46,639 13,490 28,705 68,563 8,936 19,666 253,237 66,746 20,505 220,806 98,101 33,727 118,022 43,780 31,370 35,829 6,028 1,227,868	72,140 51,070 56,192 26,451 77,581 53,565 893,600 109,256 71,942 52,973 66,153 39,433 65,521 70,072 53,535 112,402 38,070 23,765 31,707 100,467 59,867	906 2,457 1,989 562 1,140 3,190 361 979 10,259 3,048 1,024 780 11,366 3,739 1,368 4,626 2,696 1,742 2,470 205 54,907	1,812 2,275 2,396 1,102 3,081 2,492 36,100 5,439 2,419 3,012 1,500 3,373 2,677 2,171 4,406 2,344 1,320 2,186 3,417 2,677	39.81 22.45 23.45 24.00 25.18 21.49 24.75 20.09 24.68 21.90 21.96 21.96 21.96 24.51 16.24 18.01 14.51 29.40 22.36	$\begin{array}{r} .50\\ 1.08\\ .83\\ .51\\ .37\\ 1.28\\ .01\\ .18\\ 3.52\\ 1.26\\ .34\\ .52\\ 3.37\\ 1.40\\ .63\\ 1.05\\ 1.15\\ 1.32\\ 1.13\\ .06\\ 20.51\end{array}$
ALBERT LEA	TOT	6,200	36,471	310	1,824	20.00	.17
FARIBAULT	TOT	22,047	55,118	926	2,315	23.81	.40
NORTHFIELD	TOT	29,690	76,128	1,100	2,821	26.99	.39
OWATONNA	TOT	1,963	1,925	47	46	41.77	1.02
DISTRICT 6	TOT	59,900	30,253	2,383	1,204	25.14	1.98
MANKATO NEW ULM NORTH MANKATO WORTHINGTON DISTRICT 7	TOT TOT TOT TOT TOT TOT	231,777 82,375 68,932 1,122 384,206	111,431 65,900 32,515 3,300 66,357	9,656 3,736 3,528 16 16,936	4,642 2,989 1,664 47 2,925	24.00 22.05 19.54 70.13 22.69	2.08 1.25 2.12 .34 5.79

## BIT. SURF. 2341 TONS

TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
REDWOOD FALLS DISTRICT 8	ТОТ ТОТ	10,460 10,460	18,351 18,351	325 325	570 570	32.18 32.18	. 57
HASTINGS MENDOTA HEIGHTS NORTH ST PAUL ROSEVILLE ST PAUL SHOREVIEW SOUTH ST PAUL WEST ST PAUL WHITE BEAR LAKE INVER GROVE HEIGHTS BURNSVILLE COTTAGE GROVE OAKDALE APPLE VALLEY LAKEVILLE LAKE ELMO ROSEMOUNT FARMINGTON DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	58,673 67,744 14,589 55,142 62,734 26,381 20,676 57,769 12,676 24,154 97,906 43,592 28,698 136,471 73,371 14,490 102,394 102,394 10,430 907,890	47,317 75,271 40,525 74,516 23,321 44,714 14,983 54,499 48,754 54,895 104,155 46,271 62,890 32,902 29,571 57,203 61,353 48,062	2,945 3,150 606 2,383 2,221 1,219 970 3,000 550 1,189 5,144 2,010 1,267 7,395 3,971 660 5,317 487 44,484	2,375 3,500 1,683 3,220 2,066 2,066 2,115 2,702 5,472 2,161 2,484 3,408 1,781 1,347 2,970 2,865 2,355	19.92 21.51 24.07 23.14 28.25 21.64 21.32 19.26 23.05 20.31 19.03 21.69 22.65 18.45 18.45 18.48 21.95 19.26 21.42 20.41	$     \begin{array}{r}       1.24 \\       .90 \\       .36 \\       .74 \\       2.69 \\       .59 \\       1.38 \\       1.06 \\       .26 \\       .44 \\       .94 \\       .93 \\       .51 \\       2.17 \\       2.23 \\       .49 \\       1.79 \\       .17 \\       18.89 \\    \end{array} $
STATE TOTAL		3,119,592	51,976	144,986	2,416	21.52	60.02

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## BIT. SURF. 2341 TONS

TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT	106,533 16,597 303,460 102,678 1,227,868 59,900 384,206 10,460 907,890	26,435 32,543 59,619 38,746 59,867 30,253 66,357 18,351 48,062	4,525 991 15,736 4,699 54,907 2,383 16,936 325 44,484	1,123 1,943 3,092 1,773 2,677 1,204 2,925 570 2,355	23.54 16.75 19.28 21.85 22.36 25.14 22.69 32.18 20.41	4.03 .51 5.09 2.65 20.51 1.98 5.79 .57 18.89
STATE TOTAL		3,119,592	51,976	144,986	2,416	21.52	60.02

## BIT. SURF. 2361 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CHISHOLM CLOQUET DULUTH EVELETH GRAND RAPIDS HIBBING HERMANTOWN DISTRICT 1	TOT TOT TOT TOT TOT TOT TOT	23,200 5,612 62,856 14,500 7,964 53,810 73,677 241,619	72,500 20,043 20,813 43,939 132,733 20,617 21,480 24,042	800 173 2,017 500 132 2,215 2,937 8,774	2,500 618 668 1,515 2,200 849 856 873	29.00 32.44 31.16 29.00 60.33 24.29 25.09 27.54	.32 .28 3.02 .33 .06 2.61 3.43 10.05
ST CLOUD	ТОТ	19,448	21,609	772	858	25.19	.90
DISTRICT 3	ТОТ	19,448	21,609	772	858	25.19	.90
MOORHEAD	TOT	43,942	51,696	1,188	1,398	36.99	.85
DISTRICT 4	TOT	43,942	51,696	1,188	1,398	36.99	.85
MINNEAPOLIS	ТОТ	304,195	121,678	9,239	3,696	32.93	2.50
MINNETONKA	ТОТ	11,279	140,988	373	4,663	30.24	.08
NEW HOPE	ТОТ	11,940	85,286	480	3,429	24.88	.14
DISTRICT 5	ТОТ	327,414	120,373	10,092	3,710	32.44	2.72
OWATONNA	TOT	5,609	5,499	142	139	39.50	1.02
DISTRICT 6	TOT	5,609	5,499	142	139	39.50	1.02
MANKATO	TOT	25,799	18,297	800	567	32.25	1.41
DISTRICT 7	TOT	25,799	18,297	800	567	32.25	1.41
HUTCHINSON	ТОТ	39,834	41,931	1,228	1,293	32.44	.95
DISTRICT 8	ТОТ	39,834	41,931	1,228	1,293	32.44	
NORTH ST PAUL	ТОТ	7,138	11,330	206	327	34.65	.63
ST PAUL	ТОТ	59,566	32,373	1,999	1,086	29.80	1.84
DISTRICT 9	ТОТ	66,704	27,006	2,205	893	30.25	2.47
STATE TOTAL		770,369	37,819	25,201	1,237	30.57	20.37

BIT. SURF. 2361 TONS

TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT	241,619 19,448 43,942 327,414 5,609 25,799 39,834 66,704	24,042 21,609 51,696 120,373 5,499 18,297 41,931 27,006	8,774 772 1,188 10,092 142 800 1,228 2,205	873 858 1,398 3,710 139 567 1,293 893	27.54 25.19 36.99 32.44 39.50 32.25 32.44 30.25	10.05.902.721.021.41.952.47
STATE TOTAL		770,369	37,819	25,201	1,237	30.57	20.37

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7.14

AGG. SHLD. 2221 TONS TOTALS TOTAL COST TOTAL QUANTITY UNIT LENGTH COST PER MILE QUANTITY PER MILE PRICE HIBBING TOT 8,100 3,584 1,620 717 2.26 2.26 5.00 DISTRICT 1 тот 8,100 3,584 1,620 717 5.00 CHANHASSEN TOT 325 50 50 246 38 6.50 1.32 DISTRICT 5 TOT 325 246 38 6.50 1.32 FARIBAULT TOT 200 1,111 19 106 10.53 .18 **DISTRICT 6** TOT 200 1,111 19 106 10.53 .18 COTTAGE GROVE TOT 7,630 8,204 1,090 1,172 7.00 .93 LAKE ELMO тот 3,080 6,286 440 .49 1.79 898 7.00 ROSEMOUNT TOT 1,013 566 57 32 17.77 FARMINGTON TOT 1,206 7,094 209 1,229 5.77 .17 DISTRICT 9 TOT 12,929 3,825 1,796 531 7.20 3.38 STATE TOTAL

3,485

488

6.18

3,019

21,554

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202 201

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#### AGG. SHLD. 2221 TONS

			JO. JHED. LEET	10110			
TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 5 DISTRICT 6 DISTRICT 9	ТОТ ТОТ ТОТ ТОТ	8,100 325 200 12,929	3,584 246 1,111 3,825	1,620 50 19 1,796	717 38 106 531	5.00 6.50 10.53 7.20	2.26 1.32 .18 3.38
STATE TOTAL		21,554	3,019	3,485	488	6.18	7.14

		CURB &	GUTTER 2531	LIN. FT.			
TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CHISHOLM	TOT	9,194	28,731	1,362	4,256	6.75	.32
CLOQUET	TOT	28,147	42,647	4,488	6,800	6.27	.66
DULUTH	TOT	60,338	25,567	10,194	4,319	5.92	2.36
EVELETH	TOT	15,887	48,142	2,389	7,239	6.65	.33
GRAND RAPIDS	TOT	13,311	38,031	1,566	4,474	8.50	.35
HIBBING	TOT	22,670	64,771	3,570	10,200	6.35	.35
INTERNATIONAL FALLS	TOT	28,659	57,318	4,409	8,818	6.50	.50
HERMANTOWN	TOT	187,508	54,667	34,988	10,201	5.36	3.43
DISTRICT 1	TOT	365,714	44,062	62,966	7,586	5.81	8.30
BEMIDJI	TOT	28,936	56,737	5,261	10,316	5.50	.51
CROOKSTON	TOT	18,736	50,638	3,535	9,554	5.30	.37
EAST GRAND FORKS	TOT	30,999	72,091	4,470	10,395	6.93	.43
THIEF RIVER FALLS	TOT	21,677	20,645	4,090	3,895	5.30	1.05
DISTRICT 2	TOT	100,348	42,520	17,356	7,354	5.78	2.36
BRAINERD	TOT	29,750	21,875	5,999	4,411	4.96	1.36
ST CLOUD	TOT	51,530	37,072	12,040	8,662	4.28	1.39
SAUK RAPIDS	TOT	20,874	61,394	4,570	13,441	4.57	.34
ELK RIVER	TOT	90,048	36,164	21,000	8,434	4.29	2.49
DISTRICT 3	TOT	192,202	34,445	43,609	7,815	4.41	5.58
ALEXANDRIA	TOT	10,141	17,791	2,383	4,181	4.26	.57
FERGUS FALLS	TOT	19,346	19,541	3,825	3,864	5.06	.99
MOORHEAD	TOT	94,047	59,149	15,189	9,553	6.19	1.59
MORRIS	TOT	36,545	48,086	7,792	10,253	4.69	.76
DISTRICT 4	TOT	160,079	40,941	29,189	7,465	5.48	3.91
BLAINE BLOOMINGTON BROOKLYN CENTER COLUMBIA HEIGHTS COON RAPIDS EDINA HOPKINS MINNEAPOLIS MINNETONKA MOUND ROBBINSDALE ST ANTHONY SHAKOPEE EDEN PRAIRIE NEW HOPE MAPLE GROVE CHAMPLIN CHANHASSEN RAMSEY PRIOR LAKE DISTRICT 5	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	22,950 61,419 40,667 15,276 61,304 9,968 22,633 311,186 32,198 32,480 14,513 21,641 66,001 68,375 21,255 54,259 53,126 55,365 48,210 5,115 1,017,941	45,900 56,869 48,996 49,277 47,894 996,800 125,739 70,245 80,495 11,048 42,685 41,617 19,585 48,839 33,738 51,617 19,585 48,839 33,738 51,617 19,585 48,839 33,738 51,683 41,943 42,664 85,250 44,607	5,400 12,531 9,176 3,278 15,020 1,808 4,376 43,519 6,324 10,230 3,225 5,280 13,206 15,795 3,560 11,360 12,337 13,341 11,745 660 202,171	10,800 11,603 11,055 10,574 11,734 180,800 24,311 9,824 15,810 3,485 10,154 3,919 11,282 5,651 10,819 11,863 10,107 10,394 11,000 8,859	4.25 4.90 4.43 4.66 4.68 5.51 5.17 7.15 5.09 3.17 4.10 5.97 4.31 5.97 4.31 5.97 4.15 5.97 4.15 5.04	.50 1.03 .83 1.28 .01 .18 4.43 .40 2.94 .34 .52 3.37 1.40 .63 1.05 1.04 1.32 1.13 .06 2.82

16,350 5,409

30,278 10,818 5,580 5,193

10,333 10,386 2.93 1.04 .54 .50

TOT Tot PAGE 66

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ALBERT LEA AUSTIN CURB & GUTTER 2531 LIN. FT.

TOTALS		TOTAL	COST	TOTAL	QUANTITY	UNIT	LENGTH
FARIBAULT NORTHFIELD OWATONNA ROCHESTER WINONA DISTRICT 6	TOT TOT TOT TOT TOT TOT	COST 28,587 19,623 53,777 59,790 15,161 198,697	PER MILE 51,048 50,315 35,851 56,406 56,152 41,223	QUANTITY 5,916 4,175 9,482 10,715 2,614 43,675	PER MILE 10,564 10,705 6,321 10,108 9,681 9,061	PRICE 4.83 4.70 5.67 5.58 5.80 4.55	.56 .39 1.50 1.06 .27 4.82
FAIRMONT MANKATO NEW ULM NORTH MANKATO WASECA DISTRICT 7	TOT TOT TOT TOT TOT TOT	20,795 114,035 16,886 53,035 17,749 222,500	51,988 54,825 73,417 50,033 26,491 50,113	3,573 21,565 2,791 10,935 4,034 42,898	8,933 10,368 12,135 10,316 6,021 9,662	5.82 5.29 6.05 4.85 4.40 5.19	.40 2.08 .23 1.06 .67 4.44
HUTCHINSON WILLMAR REDWOOD FALLS DISTRICT 8	TOT TOT TOT TOT TOT	28,460 2,210 13,500 44,170	29,958 4,018 23,684 21,338	6,084 354 2,250 8,688	6,404 644 3,947 4,197	4.68 6.24 6.00 5.08	.95 .55 .57 2.07
HASTINGS MENDOTA HEIGHTS NORTH ST PAUL ROSEVILLE ST PAUL SHOREVIEW SOUTH ST PAUL WHITE BEAR LAKE INVER GROVE HEIGHTS BURNSVILLE COTTAGE GROVE OAKDALE APPLE VALLEY LAKEVILLE LITTLE CANADA LAKE ELMO ROSEMOUNT DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT TOT TOT	39,615 47,368 41,761 35,248 162,908 27,638 13,373 16,837 70,366 24,800 24,138 8,075 51,049 1,800 3,000 81,524 701,344	31,948 52,631 42,183 47,632 51,717 40,644 9,691 37,482 46,588 38,266 74,857 26,667 47,329 7,917 41,169 5,625 6,122 45,544 38,791	10,425 9,350 8,926 7,680 31,743 6,095 2,212 9,570 2,850 3,631 17,814 6,200 5,765 1,700 11,950 200 19,550	8,407 10,389 9,016 10,378 10,077 8,963 1,603 9,028 10,962 8,252 18,951 6,667 11,304 1,667 9,637 625 408 10,922 8,621	3.80 5.07 4.59 5.13 4.53 4.53 4.253 4.254 3.900 4.19 4.757 9.000 15.000 4.17 4.50	1.24 .90 .99 .74 3.15 .68 1.38 1.06 .26 .44 .94 .93 .51 1.02 1.24 .49 1.79 18.08
STATE TOTAL		3,002,995	41,489	606,413	8,378	4.95	72.38

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		CURB	& GUTTER 2531	LIN. FT.			
TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT	365,714 100,348 192,202 160,079 1,017,941 198,697 222,500 44,170 701,344	44,062 42,520 34,445 40,941 44,607 41,223 50,113 21,338 38,791	62,966 17,356 43,609 29,189 202,171 43,675 42,898 8,688 155,861	7,586 7,354 7,815 7,465 8,859 9,061 9,662 4,197 8,621	5.81 5.78 4.41 5.48 5.04 4.55 5.19 5.08 4.50	8.30 2.36 5.58 3.91 22.82 4.82 4.44 2.07 18.08
STATE TOTAL		3,002,995	41,489	606,413	8,378	4.95	72.38

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SIDEWALK CONSTR. SQ. FT.

TOTALS		TOTAL Cost	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CHISHOLM CLOQUET DULUTH EVELETH GRAND RAPIDS HIBBING INTERNATIONAL FALLS HERMANTOWN DISTRICT 1	TOT TOT TOT TOT TOT TOT TOT TOT	7,517 33,364 158,854 11,905 6,874 25,840 47,958 71,548 363,860	23,491 50,552 43,882 36,076 114,567 73,829 95,916 20,859 39,251	4,063 18,927 95,563 6,435 3,819 15,290 19,183 65,044 228,324	12,697 28,677 26,399 19,500 63,650 43,686 38,366 18,963 24,630	1.85 1.76 1.66 1.85 1.80 1.69 2.50 1.10 1.59	.32 .66 3.62 .33 .06 .35 .50 3.43 9.27
BEMIDJI CROOKSTON EAST GRAND FORKS THIEF RIVER FALLS DISTRICT 2	TOT TOT TOT TOT TOT TOT	140 24,226 13,539 192 38,097	275 65,476 75,217 768 29,082	70 16,044 8,735 96 24,945	137 43,362 48,528 384 19,042	2.00 1.51 1.55 2.00 1.53	.51 .37 .18 .25 1.31
BRAINERD ST CLOUD SAUK RAPIDS ELK RIVER DISTRICT 3	T O T T O T T O T T O T T O T T O T	1,710 31,984 162 175,169 209,025	3,226 23,010 476 70,349 44,005	900 28,522 108 103,650 133,180	1,698 20,519 318 41,627 28,038	1.90 1.12 1.50 1.69 1.57	.53 1.39 .34 2.49 4.75
ALEXANDRIA FERGUS FALLS MOORHEAD MORRIS DISTRICT 4	TOT TOT TOT TOT TOT	26,060 44,603 80,123 5,369 156,155	47,382 45,054 104,056 7,064 50,865	23,691 28,114 46,617 3,420 101,842	43,075 28,398 60,542 4,500 33,173	1.10 1.59 1.72 1.57 1.53	.55 .99 .77 .76 3.07
BLAINE BLOOMINGTON BROOKLYN CENTER BROOKLYN PARK COLUMBIA HEIGHTS COON RAPIDS EDINA FRIDLEY	TOT TOT TOT TOT TOT TOT TOT	3,156 31,971 10,988 5,364 550 35,142 3,377 3,184	6,312 29,603 39,243 10,518 1,774 27,455 337,700	6,640 22,689 8,790 4,470 289 33,050 2,862 1,975	13,280 21,008 31,393 8,765 932 25,820 286,200	.48 1.41 1.25 1.20 1.90 1.06 1.18 1.61	.50 1.08 .28 .51 .31 1.28 .01
MUNKINS MINNEAPOLIS MINNETONKA MOUND ROBBINSDALE SHAKOPEE EDEN PRAIRIE NEW HOPE CHAMPLIN PRIOR LAKE DISTRICT 5	TOT TOT TOT TOT TOT TOT TOT TOT TOT	13,800 428,366 17,771 45,865 13,971 42,006 8,440 24,803 18,592 2,960 710,306	70,007 105,509 222,138 15,600 41,091 12,465 6,029 39,370 34,430 49,333 40,427	9,324 243,905 11,847 44,966 9,635 32,405 4,894 17,750 15,216 1,850 472,557	60,075 148,088 15,295 28,338 9,616 3,496 28,175 28,178 30,833 26,896	1.48 1.76 1.50 1.02 1.45 1.30 1.72 1.40 1.22 1.60 1.50	4.06 .08 2.94 .34 3.37 1.40 .63 .54 .06 17.57
ALBERT LEA AUSTIN FARIBAULT NORTHFIELD	TOT TOT TOT TOT	18,775 36,133 3,459 26,000	34,769 13,687 8,648 66,667	12,435 21,287 2,217 20,800	23,028 8,063 5,543 53,333	1.51 1.70 1.56 1.25	.54 2.64 .40 .39
## M.S.A.S. UNIT PRICE STUDY

## SIDEWALK CONSTR. SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
	TOT	93,866	62,577	67,909	45,273	1.38	1.50
		10,546	9,949	6,470	6,104	1.63	1.06
DISTRICT 4		21,452	79,452	12,950	47,963	1.66	. 27
DISTRICT	101	210,231	30,916	144,068	21,186	1.46	6.80
FAIRMONT	тот	23,812	59,530	17.255	63 138	1 7 9	6.0
ΜΑΝΚΑΤΟ	тот	102,942	49,491	74,316	35 720	1,30	.40
NEW ULM	тот	21,684	9,188	11.712	6,963	1.37	2.00
NORTH MANKATO	тот	64,815	61,146	44,700	42,170	1.05	2.30
WASECA	тот	9,659	15,092	6,263	9.786	1 56	1.00
WORTHINGTON	тот	791	2,326	344	1,012	2 30	.04
DISTRICT 7	тот	223,703	32,515	154,590	22,469	1.45	6.88
HUTCHINSON	тот	560	0 0 E	07.0			
WILLMAR	TOT	15 377	00J 27 059	2/0	443	2.00	.61
DISTRICT 8	ŤŇŤ	15 017	17 700	9,342	16,985	1.65	. 55
	101	10,717	13,722	9,612	8,286	1.66	1.16
HASTINGS	тот	26,364	21,261	21,970	17,718	1 20	1 26
NURTH ST PAUL	TOT	16,107	25,567	10,890	17,286	1.48	63
RUSEVILLE	TOT	12,105	16,358	9,960	13,459	1.22	.00
	TOT	57,317	18,196	29,514	9,370	1.94	315
	101	17,857	30,266	14,285	24,212	1.25	. 59
NEST ST DAW		9,269	7,356	5,896	4,679	1.57	1.26
NUED CROVE HETCHTC		18,063	17,041	16,460	15,528	1.10	1.06
BUDNEVILLE		10,463	32,697	8,340	26,063	1.25	.32
DISTRICT O		55,521	59,065	46,415	49,378	1.20	.94
DISIKICI 3	101	223,066	22,464	163,730	16,488	1.36	9.93
STATE TOTAL		2 150 7/0	75 (07	• • • • • • •			
STATE TOTAL		2,130,360	35,403	1,432,848	23,590	1.50	60.74

\$1.50 X 9 = \$13.50 Sq. Yd.

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## SIDEWALK CONSTR. SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1 DISTRICT 2 DISTRICT 3 DISTRICT 4 DISTRICT 5 DISTRICT 5 DISTRICT 6 DISTRICT 7 DISTRICT 8 DISTRICT 9	TOT TOT TOT TOT TOT TOT TOT TOT	363,860 38,097 209,025 156,155 710,306 210,231 223,703 15,917 223,066	39,251 29,082 44,005 50,865 40,427 30,916 32,515 13,722 22,464	228,324 24,945 133,180 101,842 472,557 144,068 154,590 9,612 163,730	24,630 19,042 28,038 33,173 26,896 21,186 22,469 8,286 16,488	1.59 1.53 1.57 1.53 1.50 1.46 1.45 1.66 1.36	9.27 1.31 4.75 3.07 17.57 6.80 6.88 1.16 9.93
STATE TOTAL		2,150,360	35,403	1,432,848	23,590	1.50	60.74

\$ 1.50 X 9 = \$ 13.50 Sq. Yd.

## CURRENT RESOLUTIONS OF THE MUNICIPAL SCREENING BOARD

## OCTOBER 1988

## BE IT RESOLVED:

### ADMINISTRATION

## Appointments to Screening Board - Oct. 1961 (Revised June 1981)

That annually the Commissioner of Mn/DOT will be requested to appoint three (3) new members, upon recommendation of the City Engineers Association of Minnesota, to serve three (3) year terms as voting members of the Municipal Screening Board. These appointees are selected from the Nine Construction Districts together with one representative from each of the three (3) major cities of the first class.

# Screening Board Chairman and Vice Chairman - June 1987

That the Chairman and Vice Chairman, nominated annually at the annual meeting of the City Engineers association of Minnesota and subsequently appointed by the Commissioner of the Minnesota Department of Transportation shall not have a vote in matters before the Screening Board unless they are also the duly appointed Screening Board Representative of a construction District or of a City of the first class.

## Screening Board Secretary - Oct. 1961

That annually, the Commissioner of the Minnesota Department of Transportation (Mn/DOT) may be requested to appoint a secretary, upon recommendation of the City Engineers' Association of Minnesota, as a non-voting member of the Municipal Screening Board for the purpose of recording all Screening Board actions.

## Appointment to the Needs Study Subcommittee - June 1987

The Screening Board Chairman shall annually appoint one city engineer, who has served on the Screening Board, to serve a three year term on the Needs Study Subcommittee. The appointment shall be made after the annual Spring meeting of the Municipal Screening Board. The appointed subcommittee person shall serve as chairman of the subcommittee in the third year of the appointment.

## Appointment to Unemcumbered Construction Funds Subcommittee - Revised June 1979

The Screening Board past Chairman be appointed to serve a three-year term on the Unencumbered Construction Fund Subcommittee. This will continue to maintain an experienced group to follow a program of accomplishments.

## Screening Board Alternate Attendance - June 1979

The alternate to a third year member be invited to attend the final meeting. A formal request to the alternates governing body would request that he attend the meetings and the municipality pay for its expenses.

### Appearance Screening Board - Oct. 1962 (Revised Oct. 1982)

That any individual or delegation having items of concern regarding the study of State Aid Needs or State Aid Apportionment amounts, and wishing to have consideration given to these items, shall, in a written report, communicate with the State Aid Engineer. The State Aid Engineer with concurrence of the Chairman of the Screening Board shall determine which requests are to be referred to the Screening Board for their consideration. This resolution does not abrogate the right of the Screening Board to call any person or persons before the Board for discussion purposes.

#### Research Account - Oct. 1961

That an annual resolution be considered for setting aside a reasonable amount of money for the Research Account to continue municipal street research activity.

### Soil Type - Oct. 1961

That the soil type classification as approved by the 1961 Municipal Screening Board, for all municipalities under Municipal State Aid be adopted for the 1962 Needs Study and 1963 apportionment on all streets in the respective municipalities. Said classifications are to be continued in use until subsequently amended or revised by Municipal Screening Board action.

### Improper Needs Report - Oct. 1961

That the Office of State Aid and the District State Aid Engineer is requested to recommend an adjustment of the Needs Reporting whenever there is a reason to believe that said reports have deviated from accepted standards and to submit their recommendations to the Screening Board, with a copy to the municipality involved, or its engineer.

### New Cities Needs - Oct. 1983

Any new city which has determined their eligible mileage, but does not have an approved State Aid System, their money needs will be determined at the cost per mile of the lowest other city.

### Construction Cut Off Date - Oct. 1962 (Revised 1967)

That for the purpose of measuring the Needs of the Municipal State Aid Highway System, the annual cut off date for recording construction accomplishments based upon the project award date shall be December 31st of the preceding year.

### Construction Accomplishments - (Oct. 1988)

When a Municipal State Aid Street is constructed to State Aid Standards, said street shall be considered adequate for a period of 20 years from the date of project letting or encumbrance of force account funds.

If, during the period that complete needs are being received the street is improved with a bituminous overlay or concrete joint repair the municipality will continue to receive complete needs but shall have the non-local cost of the bituminous resurfacing or concrete joint repair construction project deducted from its total needs for a period of ten (10) years.

If the construction of the Municipal State Aid Street is accomplished with local funds, only the construction needs necessary to bring the roadway up to State Aid Standards will be permitted in subsequent needs for 20 years from the date of the letting or encumbrance of force account funds. At the end of the 20 year period, reinstatement for complete construction needs shall be initiated by the Municipality.

Needs for resurfacing, lighting, and traffic signals shall be allowed on all Municipal State Aid Streets at all times.

That any bridge construction project shall cause the needs of the affected bridge to be removed for a period of 35 years from the project letting date or date of force account agreement. At the end of the 35 year period, needs for complete reconstruction of the bridge will be reinstated in the needs study at the initiative of the Municipal Engineer. If, during the period that complete bridge needs are being received the bridge is improved with a bituminous overlay, the municipality will continue to receive complete needs but shall have the non-local cost of the overlay deducted from its total needs for a period of ten (10) years.

The adjustments above will apply regardless of the source of funding for the road or bridge project. Needs may be granted as an exception to this resolution upon request by the Municipal Engineer and justification to the satisfaction of the State Aid Engineer (e.g., a deficiency due to changing standards, projected traffic, or other verifiable causes). In the event that a M.S.A.S route earning "After the Fact" needs is removed from the M.S.A. system, then, the "After the Fact" needs shall be removed from the needs study, except if transferred to another state system. No adjustment will be required on needs earned prior to the revocation.

#### DESIGN

## Design Limitation on Non-Existing Streets - Oct. 1965

That non-existing streets shall not have their needs computed on the basis of urban design unless justified to the satisfaction of the Commissioner.

## Less Than Minimum Width - Oct. 1961 (Revised 1986)

That in the event that a Municipal State Aid Street is constructed with State Aid Funds to a width less than the standard design width as reported in the Needs Study, the total needs shall be taken off such constructed street other than the surface replacement need. Surface replacement and other future needs shall be limited to the constructed width unless exception is justified to the satisfaction of the Commissioner.

## Greater Than Minimum Width

If a Municipal State Aid Street is constructed to a width wider than required, only the width required by rules will be allowed for future resurfacing needs.

#### Miscellaneous Limitations - Oct. 1961

That miscellaneous items such as fence removal, bituminous surface removal, manhole adjustment, and relocation of street lights are not permitted in the Municipal State Aid Street Needs Study. The item of retaining walls, however, shall be included in the Needs Study.

#### MILEAGE

### (Feb. 1959)

The maximum mileage for Municipal State Aid Street designation shall be 20 percent of the municipality's basic mileage - which is comprised of the total improved streets less Trunk Highway and County State Aid Highways.

#### (Nov. 1965 - Revised 1972)

The maximum mileage for Municipal State Aid Street designation shall be based on the Annual Certification of Mileage current as of December 31st of the preceding year. Submittal of a supplementary certification during the year shall not be permitted.

## (Nov. 1965 - Revised 1969)

However, the maximum mileage for State Aid designation may be exceeded to the extent necessary to designate trunk highway turnbacks, only if sufficient mileage is not available as determined by the Annual Certification of Mileage.

### (Jan. 1969)

Any mileage for designation prior to the trunk highway turnback shall be used for the turnback before exceeding the maximum mileage.

In the event the maximum mileage is exceeded by a trunk highway turnback, no additional designation other than trunk highway turnbacks can be considered until allowed by the computations of the Annual Certification of Mileage within which the maximum mileage for State Aid designation is determined.

# Oct. 1961 (Revised May 1980, Oct. 1982 and Oct. 1983)

All requests for additional mileage or revisions to the Municipal State Aid System must be received by the District State Aid Engineer by March first. The District State Aid Engineer will forward the request to the State Aid Engineer for review. A City Council resolution of approved mileage and the Needs Study reporting data must be received by the State Aid Engineer by May first, to be included in the current year's Needs Study. Any requests for additional mileage or revisions to the Municipal State Aid Systems received by the District State Aid Engineer after March first will be included in the following year's Needs Study.

## One Way Street Mileage - June 1983 (Revised Oct. 1984)

That any one-way streets added to the Municipal State Aid Street system must be reviewed by the Needs Study Sub-Committee, and approved by the Screening Board before any one-way street can be treated as one-half mileage in the Needs Study.

A one-way street will be treated as one-half of a full four-lane width divided street of either 56 feet or 72 feet (72 feet when the projected ADT is over 8,000) for needs, and that the roadway system must be operating as one-way streets prior to the time of designation. Construction Item Unit Prices - (Revised Annually)

Right of Way:			\$	10,000.00	Mile	
Grading:	:		\$	3.00	Cu. Yd.	
Base:						
	Class 4	Spec. #2211	\$	4.75	Ton	
	Class 5	Spec. #2211	\$	6.00	Ton	
	Bituminous	Spec. #2331	\$	21.00	Ton	
Surface:	:					
	Bituminous	Spec. #2331	\$	21.00	Ton	
	Bituminous	Spec. #2341		24.00	Ton	
	Bituminous	Spec. #2361		34.00	Ton	
Shoulder	s:					
	Gravel	Spec. #2221	\$	4.25	Ton	
Miscella	aneous:					
Storm Sewer Construction			\$	196,000.00	Mile	
	Storm Sewer A	Adjustment	\$	62,000.00	Mile	
	Traffic Signals			15,000.00	Mile	
	Street Light:	ing		16,000.00	Mile	
Curb & Gutter				6.00	Lin. Ft.	
	Sidewalk			14.50	Sq. Yd.	
Removal	Items:					
	Curb & Gutter	c	\$	1.75	Lin. Ft.	
	Sidewalk			4.00	Sq. Yd.	
	Concrete Pave	ement		4.00	Sq. Yd.	
	Tree Removal			135.00	Unit	

## STRUCTURES

Bridge Costs - Oct. 1961 (Revised Annually)

That for the study of needs on the Municipal State Aid Street System, bridge costs shall be computed as follows:

Bridges 0 to 149 Ft.	\$ 41.50 Sq. Ft.
Bridges 150 to 499 Ft.	\$ 47.00 Sq. Ft.
Bridges 500 & Over	\$ 56.00 Sq. Ft.
Bridge Widening	\$120.00 Sq. Ft.

"The money needs for all "non-existing" bridges and grade separations be removed from the Needs Study until such time that a construction project is awarded. At that time a money needs adjustment shall be made by annually adding the total amount of the structure cost that is eligible for State Aid reimbursement for a 15-year period." This directive to exclude all Federal or State grants.

COST

### Bridge Width & Costs - (Revised Annually)

That after conferring with the Bridge Section of Mn/DOT and using the criteria as set forth by this Department as to the standard design for railroad structures, that the following costs based on number of tracks be used for the Needs Study:

## Railroad Over Highway

Number of Tracks - 1	\$2,250	Lin.	Ft.
Each Additional Track	\$1,750	Lin.	Ft.

### RAILROAD CROSSINGS

Railroad Crossing Costs - (Revised Annually)

That for the study of needs on the Municipal State Aid Street System, the following costs shall be used in computing the needs of the proposed Railroad Protection Devices:

#### Railroad Grade Crossings

Signals - (Single track - low speed)	\$65	,000	Unit	
Signals and Gates(Multiple Track - high	\$95	,000	Unit	
Signs Only & low speed)	\$	300	Unit	
Rubberized Railroad Crossings	\$	700	Lin.	Ft.

#### NEEDS ADJUSTMENTS

Expenditures Off State Aid System - Oct. 1961

That any authorized Municipal State Aid expenditure on County State Aid or State Trunk Highway projects shall be compensated for by annually deducting the full amount thereof from the Money Needs for a period of ten years.

## Bond Adjustment - Oct. 1961 (Revised 1976, 1979)

That a separate annual adjustment shall be made in total money Needs of a municipality that has sold and issued bonds pursuant to Minnesota Statutes, Section 162.18, for use on State Aid projects.

That this adjustment, which covers the amortization period, and which annually reflects the net unamortized bonded debt shall be accomplished by adding said net unamortized amount to the computed money needs of the municipality.

For the purpose of this adjustment, the net unamortized bonded debt shall be the total unamortized bonded indebtedness less the unexpended bond amount as of December 31st of the preceding year. That for the purpose of this separate annual adjustment, the unamortized balance of the St. Paul Bond Account, as authorized in 1953, 2nd United Improvement Program, and as authorized in 1946, Capital Approach Improvement Bonds, shall be considered in the same manner as those bonds sold and issued pursuant to Minnesota Statutes, Section 162.18.

"Bond account money spent off State Aid System would not be eligible for Bond Account Adjustment. This action would not be retroactive, but would be in effect for the remaining term of the Bond issue."

### Unencumbered Construction Fund Balance Adjustment - Oct. 1961

#### (Revised June 1986)

That for the determination of Apportionment Needs, the amount of the unencumbered construction fund balance as of September 1st of the current year, not including the current year construction apportionment, shall be deducted from the 25-year total Needs of each individual municipality.

Projects that have been received before September 1st by the District State Aid Engineer for payment shall be considered as being encumbered and the construction balances shall be so adjusted.

#### Excess Unencumbered Construction Fund Balance (Revised Oct. 1988)

Whenever a municipality's construction fund balance available as of February 1, of the current year, not including the current years allotment, exceeds \$300,000 or two times their annual construction allotment (whichever is greater), the State Aid Office shall notify the City in writing by March 1st of this excess balance and outline the financial impact to the City if this unencumbered construction fund balance is not reduced to the stated amount by September 1, of that year. The State Aid Office shall review the balance as of June 30, and send a second notice to those cities still exceeding the allowable unencumbered construction fund balance based upon the criteria stated above and include further explanation of the financial impact to their city if the balance is not reduced within the guidelines by September 1, of that same year. The Unencumbered Construction Fund Subcommittee shall meet with those cities still having an excess unencumbered construction fund balance after September 1, of that year and inform them of the adjustment which will be made to their 25 year construction needs for the following year. It is understood that either the submittal of a report of State Aid Contract or report of final contract approved by the District State Aid Engineer by September 1, which reduces the fund balance within required limits shall be considered acceptable to meeting the intent of this particular resolution. In the event the city does not meet the requirements of this resolution to reduce their unencumbered construction fund balance as per the criteria stated above, an adjustment of twice the city's unencumbered construction fund balance less the current years construction allotment will be deducted from the city's twenty-five year needs prior to the succeeding year apportionment. Unless the balance is reduced in future years, this deduction will be increased annually to 3,

4, 5, etc. times the amount until such time the money needs are reduced to zero. This adjustment would be in addition to the unencumbered construction fund balance adjustment previously defined.

### (Revised Oct. 1981)

By January 1, 1983, each municipality shall submit a revised 5-year construction program which has been approved by their city council. This program shall include sufficient projects to utilize all existing and anticipated funds accruing during the life of the program. The program will be updated at 3-year intervals and a review made at that time to ascertain program implementation.

### Storm Sewer - June 1986

The money needs for all complete storm sewers shall be removed from the Needs Study until such time that adjustment shall be made by annually adding the amount of the Storm Sewer Construction project cost that is eligible for State Aid participation for a 15-year period. Adjust storm sewer will continue to be included as a needs item.

On all complete Storm Sewer Construction projects let in 1984 and subsequent years where State Aid Funds have participated in the cost, the complete Storm Sewer Needs will be determined by the Office of State Aid using the participating plan quantities, the participating percentage and the contract or force account prices.

In order to receive needs for qualifying Storm Sewer Construction projects funded with local funds let in 1984 and subsequent years, a plan and an Abstract of Bids or Construction Proceed Order must be submitted to the Office of State Aid by the City Engineers. The Hydraulics Section of the Office of Design Services will determine the eligible percentage of participating storm sewer and the Office of State Aid will determine the complete Storm Sewer Needs.

Adjustments to the complete Storm Sewer Needs will be acceptable but the responsibility of reporting final costs will rest with the City Engineer.

### Right of Way - Oct. 1965 (Revised June 1986)

The Right of Way needs shall be included in the apportionment needs based on the unit price per mile, until such time that the right of way is acquired and the actual cost established. At that time a money needs adjustment shall be made by annually adding the local cost (which is the total cost less county or trunk highway participation) for a 15-year period. Only right of way acquisition costs that are eligible for State-Aid reimbursement shall be included in the right-of-way money needs adjustment. This Directive to exclude all Federal or State grants. Right-of-way projects that are funded with State Aid Funds will be compiled by the State Aid Office. When "After the Fact" needs are requested for right-of-way projects that have been funded with local funds, but qualify for State Aid reimbursement, documentation (copies of warrants and description of acquisition) must be submitted to the State Aid Office.

Variance Granted - Reduction of Money Needs - Oct, 1982 (Revised Oct. 1984) (Revised Oct. 1987)

That the State Aid Office give future money needs based on the date of variance approval.

The adjustment for width variances will be based on the needs cost of the base and surface, times the proportional difference between the minimum standards and the granted variance, times fifteen or the proportional difference between average past 15 years of base and surface needs received and the granted variance times fifteen (Documentation furnished by the City). This would be a one-year adjustment to the 25-year needs.

### Trunk Highway Turnback - Oct. 1967

That any trunk highway turnback which reverts directly to the municipality and becomes part of the State Aid Street system shall not have its construction needs considered in the money needs apportionment determination as long as the former trunk highway is fully eligible for 100 percent construction payment from the Municipal Turnback Account. During this time of eligibility, financial aid for the additional maintenance obligation, of the municipality imposed by the turnback shall be computed on the basis of the current year's apportionment data and shall be accomplished in the following manner.

Initial Turnback Maintenance Adjustment - Fractional Year Reimbursement:

The initial turnback adjustment when for less than 12 full months shall provide partial maintenance cost reimbursement by adding said initial adjustment to the money needs which will produce approximately 1/12 of \$1,500 per mile in apportionment funds for each month or part of a month that the municipality had maintenance responsibility during the initial year.

To provide an advance payment for the coming year's additional maintenance obligation, a needs adjustment per mile shall be added to the annual money needs. This needs adjustment per mile shall produce sufficient apportionment funds so that at least \$1,500 in apportionment shall be earned for each mile of trunk highway turnback on Municipal State Aid Street System.

Turnback adjustments shall terminate at the end of the calendar year during which a construction contract has been awarded that fulfills the Municipal Turnback Account Payment provisions; and the resurfacing needs for the awarded project shall be included in the Needs Study for the next apportionment.

## Traffic Limitation on Non-Existing Streets - Oct. 1965

That non-existing street shall not have their needs computed on a traffic count of more than 4,999 vehicles per day unless justified to the satisfaction of the Commissioner.

#### Traffic Manual - Oct. 1962

That for the 1965 and all future Municipal State Aid Street Needs Studies, the Needs Study procedure shall utilize traffic data developed according to the Traffic Estimating Manual - M.S.A.S. #5-892.700. This manual shall be prepared and kept current under the direction of the Screening Board regarding methods of counting traffic and computing average daily traffic. The manner and scope of reporting is detailed in the above mentioned manual.

Traffic Counting - Sept. 1973 (Revised June 1987)

That future traffic data for State Aid Needs Studies be developed as follows:

- 1. The municipalities in the metropolitan area cooperate with the State by agreeing to participate in counting traffic every two years.
- 2. The cities in the outstate area may have their traffic counted for a nominal fee and maps prepared by State forces every four years, or may elect to continue the present procedure of taking their own counts and preparing their own traffic maps at four year intervals.
- 3. Some deviations from the present four-year counting cycle shall be permitted during the interim period of conversion to counting by State forces in the outstate area.