

MN DEPT OF TRANSPORTATION
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1987 Municipal Screening Board Data



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June 1987



Minnesota Department of Transportation

Transportation Building, St. Paul, MN 55155

Phone 612-296-1662

May 1987

TO : Municipal Engineers

SUBJECT : Municipal State Screening Board Data

Enclosed is a copy of the June 1987 Municipal Screening Board Data.

The data included in this report will be used by the Municipal Screening Board at its June 16 and 17, 1987, meeting in Brainerd to establish unit prices for the 1987 Needs Study and the resulting 1988 apportionment. The Board will also review other activities of the Needs Study Subcommittee such as set amounts for Grading Costs, Maintenance Allocations, the status of Municipal Traffic Counting, Unencumbered Construction Fund, the transfer of F.A.U. funds to Mn/DOT and other related data.

Should you have any suggestions or recommendations regarding 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,

Gordon M. Fay
Director, Office of State Aid

Enclosures:
1987 Municipal State Aid Screening Board Data

EVENT -----	REPORTING DUE DATE -----	NOTATION -----	REQUIRED DOCUMENTS -----	REFERENCE -----
Certification of mileage	Mileage to be reported before January 15.	Sent to Cities by State Aid office in November. Note revisions on the back of the form.	Certification of mileage form TP. 29172-01	State Aid Manual 5-892.685 Screening Committee resolution: mileages: in the rear portion of needs booklet.
Construction accomplishment (road data sheets)	Road data sheets submitted by January 15. New designation or revocation by May 1 to receive needs for the present year.	Construction accomplishments based upon projects awarded thru December 31 of the preceding year.	Road data form TP 29101-02	State Aid Manual 5-892.800
System revision-- (designation and revocation)	Throughout the year. In order to receive needs for upcoming apportionment, requests must be in district office by March 1 and resolution in by May 1. Requests after March 1 or resolutions after May 1 will be included in the following years needs.	Resolution is passed after preliminary approval.	Preliminary approval A. Written explanation of proposed revisions. B. Sketch of Street-- preferably from State Aid Map. C. Show lengths.	State Aid Manual 5-892.101 Memo Nov. 27, 1985 Minnesota rules for State Aid Operations 8820.0400 thru 8820.0800.
Request for more than minimum maintenance	November through December 15 before apportionment.	Sale of Bonds does not automatically transfer interest payments into the maintenance account. An amount must be requested each year and must agree to file a detailed annual maintenance expenditure report.	Letter requesting amount or % form Fig. A5-892.505.	State Aid Manual 5-892.500 Minnesota rules for State Aid Operations 8820.1400
Variance	Throughout the year	Check with Roy Hanson for scheduled dates @ (612) 296-9877	Resolution and supplemental data--see manual for requirements.	State Aid Manual 5-892.219 Minnesota rules for State Aid Operations 8820.3300
Traffic Update	Not required	Done by State Aid Office as traffic maps are received.	None	State Aid Manual 5-892.700 Screening committee resolution-Traffic: in rear portion of needs booklet.
Storm Sewer on MSA Streets	None--for projects with State Aid funding unless storm sewer is to be based on final. Any --Projects with local time funding after contract is awarded.	Construction projects have a one year lag on needs.	State Aid funding - none Local funded projects - plan and abstract of bids or a final voucher.	Screening committee resolution-Storm sewers: in rear portion of needs booklet.
Right of Way on MSA Streets	None--Projects funded with State Aid funds. Any --Projects funded with time local funds.	Projects have a one year lag on needs. Items eligible: acquisition, easements, moving expense and court commissioners.	State Aid funding - none Local funded projects on MSA streets - a listing showing project number, warrant numbers, parcel numbers, type of R/W, amounts and to whom paid.	Screening committee resolution-Right of Way: in rear portion of needs booklet.
Non-existing Bridge Needs	Throughout year until December 15 before apportionment.	Only bridge portion of contract is eligible for needs.	Letter - projects funded with State Aid funds. Note project number, letter, plan and abstract of bids for projects funded with local funds.	Screening committee resolution - Structures: in rear portion of needs booklet.
Reconstruction Projects	By January 15 with the annual needs update.	Construction projects have a one year lag on needs. Local funding on MSAS is eligible providing State Aid Standards are met.	State Aid projects - letter-note project number. Plan and abstract of bids for projects on MSA streets funded with local funds.	Screening committee resolution - Construction accomplishments: in rear portion of needs booklet.
Unencumbered Construction Fund Balances	None	To avoid an added adjustment per resolution reduce excess balance by June 30. Balance as of September 1 is used for reduction in needs.	Submit report of State Aid contract and abstract of bids to district State Aid Engineer before June 30 or September 1.	Screening committee resolution - Construction Fund balance: in rear portion of needs booklet.

1987 MUNICIPAL SCREENING BOARD DATA

TABLE OF CONTENTS

I.	1987 Municipal Screening Committee.....	1
II.	Subcommittees Appointed by the Screening Committee.....	2
III.	Map of Highway Districts and Urban Municipalities.....	3
IV.	Minutes of the October 28 & 29, 1986 Screening Committee Meeting...	4-11
V.	Activities of the 1987 Municipal Needs Study Subcommittee	
	A. Minutes of the April 16, 1987 Subcommittee Meeting.....	12-13
	B. Relationship of the total 25-year needs to each Individual Construction Item.....	14
	Municipal State Aid Street Unit Price and Graphs.	
	C. Curb & Gutter Removal # 2104.....	15-16
	D. Sidewalk Removal # 2105.....	17-18
	E. Concrete Pavement Removal # 2106.....	19-20
	F. Tree Removal # 2101.....	21-22
	G. Class 4 - Subbase # 2211.....	23-24
	H. Class 5 - Gravel Base # 2211.....	25-26
	I. Bituminous Base or Surface # 2331.....	27-28
	J. Bituminous Surface # 2341.....	29-30
	K. Bituminous Surface # 2351 & 2361.....	31-32
	L. Curb & Gutter Construction # 2531.....	33-34
	M. Sidewalk Construction # 2521.....	35-36
	N. 1987 Storm Sewer Costs Mn/DOT Hydraulics Section.....	37
	O. 1986 Bridge Structural Costs Mn/DOT Bridge Section.....	38
	P. Bridge Cost per Sq. Ft.....	39
	Q. Costs for 1986 Bridge Construction.....	40
	R. 1986 Railroad Crossing Costs Mn/DOT Railroad Operations.....	41
	S. Preliminary County State Aid Unit Price Study.....	42
VI.	Unit Price Recommendation to the 1987 Screening Committee.....	43
VII.	M.S.A.S. Unit Price Study Computer Run.....	44-77
VIII.	Status of Municipal Traffic Counting.....	78
IX.	Status of Unencumbered Construction Fund.....	79-80
X.	Cities with Remaining balances in Maintenance account as of 3/3/87.	81
XI.	Federal Aid F.A.U. Funds Transferred To Mn/DOT.....	82-83
XII.	Grading Costs & Variations.....	84-97
XIII.	Current Resolutions of the Municipal Screening Board.....	98-108

1987 MUNICIPAL SCREENING BOARD

OFFICERS

Chairman	Kenneth Saffert	Mankato	(507) 625-3161
Vice Chairman	Fred Moore	Plymouth	(612) 559-2800
Secretary	Ronald Rudrud	Bloomington	(612) 881-5811

MEMBERS

District	Served	Representative		
1	2	Clyde Busby	Hibbing	(218) 262-3486
2	3	Gary Sanders	East Grand Forks	(218) 773-1185
3	3	Ronald Schweninger	Brainerd	(218) 828-2309
4	2	Dan Edwards	Fergus Falls	(218) 739-2251
5	1	William Ottensmann	Coon Rapids	(612) 755-2880
6	2	Richard Murphy	Austin	(507) 437-7671
7	1	Dwayne Haffield	Worthington	(507) 376-3161
8	3	Thomas Rodeberg	Montevideo	(612) 269-6575
9	1	Charles Siggerud	Burnsville	(612) 890-4100
(Three Cities		John Carlson	Duluth	(218) 723-3278
of the		Marvin Hoshaw	Minneapolis	(612) 348-2456
First Class)		Robert Peterson	St. Paul	(612) 298-5070
District		Alternates		
1		Norman Schmidt	Hermantown	(218) 729-6331
2		David Kildahl	Thief River Falls	(218) 681-2944
3		Terry Maurer	Elk River	(612) 774-6021
4		Alvin Moen	Alexandria	(612) 762-8149
5		Michael Eastling	Richfield	(612) 869-7521
6		Robert Bollant	Winona	(507) 452-8550
7		Brian Backmeier	Fairmont	(507) 238-9461
8		Marlow Priebe	Hutchinson	(612) 587-5151
9		Ken Haider	Maplewood	(612) 770-4552

District

1987 SUBCOMMITTEES APPOINTED BY THE SCREENING BOARD

NEEDS STUDY SUBCOMMITTEE

Chairman - Roger Plumb
Rochester
(507-281-6008)
Expires in 1987

Steve Gatlin
White Bear Lake
(612-429-8531)
Expires in 1988

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

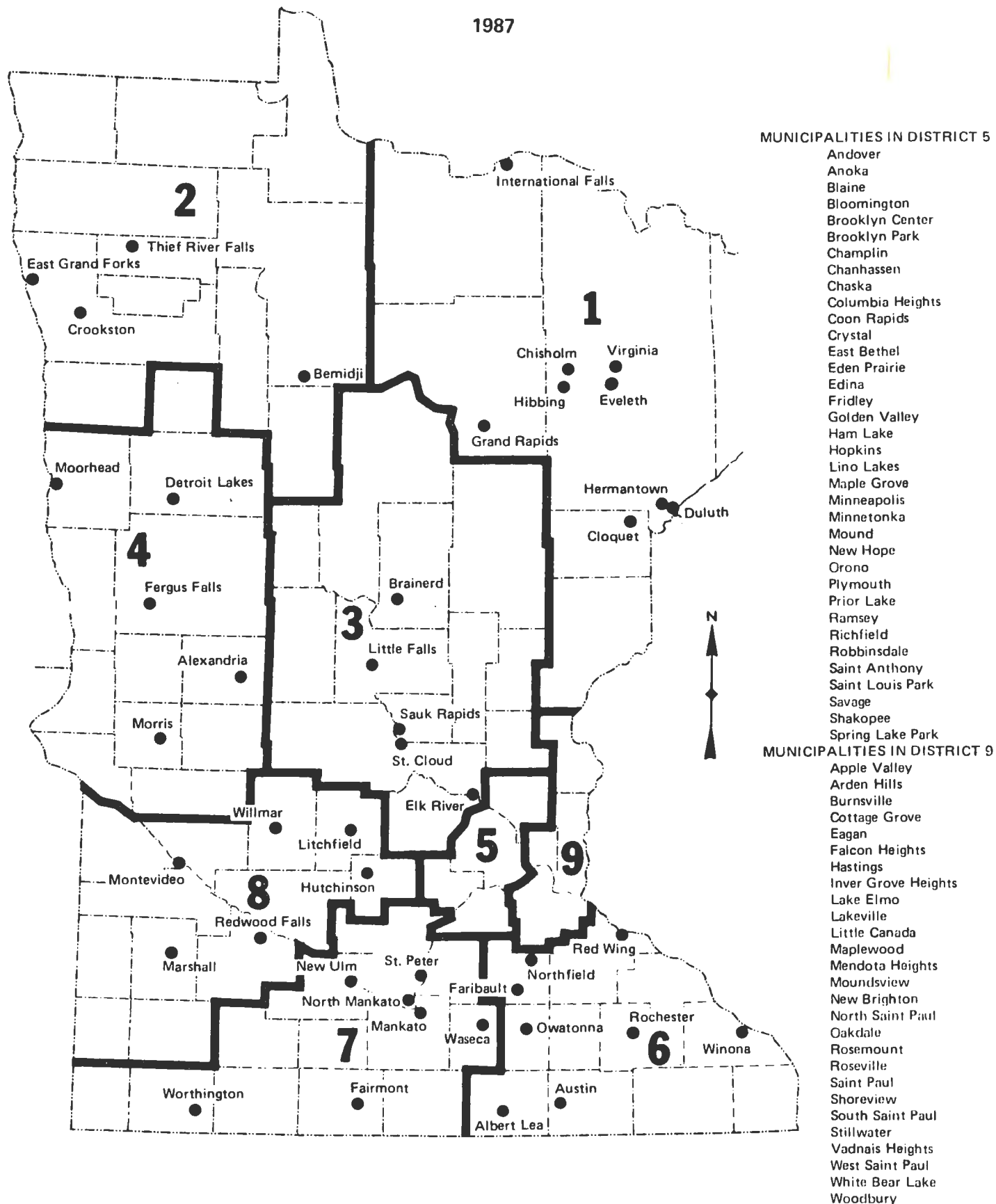
UNENCUMBERED CONSTRUCTION FUNDS SUBCOMMITTEE

Chairman - Herbert Reimer
Moorhead
(218-299-5390)
Expires in 1987

H. R. Spurrier
Brooklyn Center
(612-561-5440)
Expires in 1988

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

STATE OF MINNESOTA
HIGHWAY DISTRICTS AND URBAN MUNICIPALITIES
AS ESTABLISHED FOR STATE AID PURPOSES



MINUTES
FALL
MUNICIPAL SCREENING COMMITTEE
OCTOBER 28 and 29, 1986

The fall meeting of the Screening Board was called to order by Chairman Anderson at 1:05 p.m., Tuesday, October 28, 1986.

PRESENT WERE:

OFFICERS:

Chairman, Larry Anderson	Prior Lake
Vice Chairman, Ken Saffert	Mankato
Secretary, Fred Moore	Plymouth

MEMBERS:

ALTERNATE

District 1 - Clyde Busby	Hibbing	
* District 2 - Gary Sanders	East Grand Forks	
District 3 - Ron Schweninger	Brainerd	
District 4 - Dan Edwards	Fergus Falls	
District 5 - Ron Rudrud	Bloomington	Bill Ottensman, Coon Rapids
District 6 - Richard Murphy	Austin	
District 7 - Martin Menk	North Mankato	
* District 8 - Tom Rodenberg	Montevideo	
District 9 - Steven Gatlin	White Bear Lake	Charles Siggerud, Burnsville
First Class City - John Carlson	Duluth	
First Class City - Marvin Hoshaw	Minneapolis	
First Class City - Robert Peterson	St. Paul	
Chairman Needs Study		
Subcommittee - Don Asmus	Minnetonka	

OTHERS:

Tom Kuchfeld	St. Paul
Mike Eastling	Richfield
Ed Leone	Duluth
Jon Ketckoski	Minneapolis
Gordon Fay	Mn/DOT Director, Office of State Aid
Roy Hanson	Mn/DOT Assistant State Aid Engineer
Ken 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
* Chuck Weichselbaum	Mn/DOT District 5, State Aid
Earl Welshons	Mn/DOT District 6, State Aid
Harv Suedbeck	Mn/DOT District 7, State Aid
John Hoeke	Mn/DOT District 8, State Aid
Elmer Morris	Mn/DOT District 9, State Aid
Ken Hoescher	Mn/DOT State Aid

*Wednesday Only

MINUTES CONSIDERATION:

Chairman Anderson called for the consideration of the minutes of the June 24 and 25, 1986, Screening Committee. They are printed as page 6 to 14 of the Needs Report. Ken Straus noted that the reference to eight percent in Item 3 F on page 14 should be deleted since it was incorrect. Marv Hoshaw moved, seconded by Ron Rudrud, to approve the minutes with the correction as noted. Motion carried.

NEEDS REPORT:

Ken Straus handed out a revised "Municipal State Aid Needs Report". An error had been discovered in the computer program and the report includes revisions to any tabulation indicating "Money Needs".

Chairman Anderson stated that the entire report would be reviewed and discussed today, and we will hold any action until the Wednesday morning session. This will give all members a chance to informally discuss various items on Tuesday evening.

Ken Straus reviewed the booklet. Pages 1 through 5 contain general information, Pages 6 through 14 the minutes of the past meeting, Pages 15 through 20 the approved mileage and Pages 21 through 49 the Needs Determination. He stated that the Needs were based upon the new unit prices approved at the spring meeting.

A discussion was held on the September 1st date for determining the amount of the Unencumbered Construction Fund balance for the current year. This date was revised and established at the spring meeting. Ken Straus stated that it provided a short time for the State Aid Office to prepare the booklet. It was the consensus that no change should be made.

Ken Straus requested comments from members whether anyone uses the tabulation of the Unencumbered Construction Fund balance which compares it to the percent of Basic Needs as indicated on Page 30 and 31 of the Report. If it is not used, it should be dropped from the Report. This will be discussed informally this evening.

Ken Straus stated that on Page 42 is indicated the Needs adjustment for reconstruction projects. Included in this amount is two inches of asphalt for resurfacing. When an asphalt overlay is a part of a reconstruction project, Needs are also drawn on this overlay. A determination should be made by the Screening Committee on whether this should be revised.

Ken Straus reviewed the tentative Apportionment Data indicated on Pages 50 through 65 of the Report. This section is devoted to the establishment of the tentative Apportionment. If the board accepts the Mileage and Needs Data, as shown in the Report, the original of the letter as shown on Page 47, would be approved for signatures by the board. With regard to the Apportionment, the following applies.

- A. In comparing 1986 to 1987 only seven Cities increased and the remaining decreased.
- B. One half of the Apportionment is based upon population.
- C. The Apportionment is based upon an estimated revenue of \$52,000,000.

UNEMCUMBERED CONSTRUCTION FUND SUBCOMMITTEE:

The minutes of the Subcommittee are printed on Pages 66 through 69 of the Report. The Subcommittee is recommending an adjustment to the Needs for Little Falls and West St. Paul. Sixteen communities were reviewed and it is only recommended that adjustments be made for two communities.

RESEARCH ACCOUNT:

Page 71 of the Report indicates the history of the research account. In the past a certain amount of money is set aside for research projects each year. It is recommended that one quarter of one percent be allocated to this account.

VARIANCES:

A resolution of the Municipal Screening Board requires a Needs adjustment for those Cities that receive a variance approval to construct a street to a lesser width than was requested in the Needs Study. In accordance with this resolution an adjustment will be required for Winona and St. Paul. The recommended adjustment is indicated on Page 73 of the Report.

NEEDS STUDY SUBCOMMITTEE:

Don Asmus, Chairman of the Needs Study Subcommittee handed out a recommendation with regard to the request for "After the Fact Needs" for the lift bridge for the City of Duluth. The Subcommittee met on October 10, 1986 and made the following recommendation:

\$1,054,200 be added to Duluth's Need each year for the next fifteen years.

Don Asmus stated that the reasons for this recommendation are as follows:

1. The City of Duluth did draw Needs on the bridge from 1958 through 1966 and should have continued to receive them through 1984.
2. The bridge was deficient in that the sufficiency ratings were very low and the speed and the load carrying capacity of the bridge were actually lowered to reduce the impact on the physical structure of the bridge itself.

John Carlson, City of Duluth, stated that because of the special nature of the bridge, consideration should be given for additional needs. The determination of the Subcommittee was based upon the existing length of the bridge. This is an aerial bridge, and therefore, it is of a shorter length to obtain the same clearance that would be required of a typical bridge. He further stated they spent approximately \$3,600,000 on the reconstruction of the bridge and they are requesting Needs for this full amount.

Ken Straus stated that if the bridge had been drawing Needs for the past nineteen years at the established rate per square foot, it would have drawn approximately 13.5 million dollars.

OTHER BUSINESS:

1. Bob Peterson made the following comments on the State Legislation on the road system through Como Park and the petition to eliminate the width requirements.

- a. St. Paul sent a petition to the Commissioner of MnDOT for a variance to the proceedings. The petition was denied.
 - b. In 1977 the Legislature adopted an act which stated that Park Land could not be used for the widening of Lexington Avenue.
 - c. The approved plan for Lexington Avenue requires its relocation.
 - d. The plan went to the Legislature to rescind the 1977 law, allow relocation and eliminate the need for a variance for the 32 foot width roadway. This was approved by the Legislature.
2. Ken Straus handed out a comparison of the traffic projection factor using 1.5 versus 2. This comparison does not change any traffic projection factor that was more than 2. The comparison indicates that by changing the traffic projection factor from 2 to 1.5 it has very little affect on the total Apportionment.
 3. Mike Eastling, City of Richfield, requested a review of the rules for Reconstruction Needs. He stated that during reconstruction some streets are rebuilt on a slightly different alignment, but serve the same purpose. Their request is to consider these streets as reconstruction of the State Aid System.
 4. Ken Straus suggested a change in the current resolution for "Construction Fund Balance". He suggested that in the last paragraph of the resolution, as indicated on Page 81 of the Report, the word "accumulation" be inserted after the word Municipality in the first sentence. This will clarify any misunderstandings.
 5. A motion was made by Steve Gatlin, seconded by Dick Murphy, to adjourn the meeting until 9:00 a.m., October 29th for further discussion on the items herein discussed. Motion carried. Adjournment at 2:50 p.m.

SECOND SESSION:

Chairman Anderson called the Municipal Screening Board meeting back into session at 9:04 a.m. on October 29th. He stated that action was required on several items discussed the previous day.

TRAFFIC PROJECTIONS:

Ken Straus stated that the State Aid Office will look in more detail at the affect of revising the factor from 2 to 1.5 and will report at the next spring meeting.

UNENCUMBERED CONSTRUCTION FUND BALANCE:

It was determined that the report printed on Page 30 and 31 of the booklet should be continued since it is good for comparison and informational purposes.

UNENCUMBERED CONSTRUCTION FUND BALANCES:

The action would be to approve the recommendation of the Unencumbered Construction Fund Subcommittee.

1. A motion was made by Martin Menk, seconded by Dan Edwards, to approve the Committee recommendation with regard to Little Falls. Motion carried.
2. A motion was made by Ron Rudrud, seconded by Steve Gatlin, to approve the Committee recommendation with regard to West St. Paul. Motion carried.

CONSTRUCTION FUND BALANCE RESOLUTION: (Page 81 of Report)

Martin Menk stated that when the \$300,000 was established, it was an arbitrary number. It is not logical to increase this number by ten percent to adjust for increase in construction cost. There was a consensus of the board that the \$300,000 amount should not be changed.

A motion was made by Marv Hoshaw, seconded by John Carlson, to delete the first sentence of the last paragraph of the current resolution on Construction Fund Balance and replace it with the following sentence.

Whenever a Municipality's Construction Fund Balance available as of June 30th, not including the current year's 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.

Motion carried.

RESEARCH ACCOUNT:

A motion was made by Dick Murphy, seconded by Tom Rodenberg, that an amount of \$147,745, not to exceed one quarter of one percent of the 1986, M.S.A.S. Apportionment sum of \$59,097,819 shall be set aside from the 1987 Apportionment Fund and be credited to the Research Account. Motion carried.

VARIANCES:

The Needs adjustment as a result of variances should be based upon the minimum standards for width and the granted variance. If this was done incorrectly, the State Aid Office should revise the calculations and make the necessary adjustments.

Marv Hoshaw moved, seconded by Martin Menk, that an adjustment of \$816,363 be made to the Needs for St. Paul. Motion carried.

Marv Hoshaw moved, seconded by Martin Menk, that an adjustment of \$661,826 be made to the Needs for Winona. Motion carried.

Motion by Dick Murphy, seconded by Dan Edwards, that no other adjustments are necessary due to variances. Motion carried.

OTHER NEEDS ADJUSTMENT:

Duluth Aerial Bridge

A motion was made by Marv Hoshaw, seconded by Dick Murphy, to approve the recommendation of the Needs Subcommittee that \$1,054,200 be added to Duluth's Needs each year for the next fifteen years.

Ron Schweninger stated that a Needs adjustment is justified and \$1,000,000 is too low, and \$3,600,000 is too high. He stated that the bridge should be considered as a non-existing bridge and constructed to the required standards, probably 60 feet wide.

Marv Hoshaw stated that if the bridge had been considered in the Needs since 1965, it would have drawn less than the recommendation of the Subcommittee.

The reasons for the recommendation of the Subcommittee are as follows:

1. The City of Duluth did draw Needs on the bridge from 1958 through 1966 and should have continued to receive them through 1984.
2. The bridge was deficient in that the sufficiency ratings were very low and the speed in the load carrying capacity of the bridge were actually lowered to reduce the impact on the physical structure of the bridge itself.

Motion carried with a hand vote of seven to five.

A motion was made by Ron Rudrud, seconded by Dan Edwards, to reconsider. Motion carried.

Dan Edwards stated that if 60 foot had been used as a width in 1965, Duluth would not have settled for the amount.

On a revote the motion carried on a hand vote of seven to five.

OTHER NEEDS ADJUSTMENT - RICHFIELD

Mike Eastling stated that Richfield is requesting that the board consider the following:

1. Should there be a negative adjustment.
2. Should Reconstruction Needs be allowed on a revised alignment.
3. Should the standards be flexible with regard to redevelopment or rigid as they are with past practices.

Ron Schweninger stated that this would not be reconstruction since it is on a new alignment and adjustments are only made if it is taken off the system.

Marv Hoshaw stated that developed communities can use M.S.A. Funds by removing streets from the existing system. At some time in the future they will receive Reconstruction Needs.

Ken Straus stated that the Screening Committee has encouraged long range planning and not short term decisions. The system rewards long range plans and makes negative adjustments for short term decisions. This was done to discourage a lot of political influence.

Mike Eastling requested that the board continue to reconsider reconstruction areas and take no action at this time.

NEEDS ON RECONSTRUCTION PROJECTS:

It was the consensus that no changes be made with regard to the two inch asphalt surface at this time.

DESIGN WIDTH RESOLUTION:

The consideration is whether adjustment for width variances be from "Minimum Width" as presently stated, or from "Needs Width".

Motion by Dan Edwards, seconded by Ron Rudrud, to confirm the existing resolution. Motion carried.

MONEY NEEDS:

A motion was made by Marv Hoshaw, seconded by Steve Gatlin to approve the Money Needs as indicated on Page 48 and 49 of the Report and authorizing signing of the letter to Commissioner Braun printed on Page 47. Motion carried.

OTHER BUSINESS:

Ron Rudrud stated that the A.M.A. has requested a determination of whether Opticom is eligible for State Aid participation. Chuch Weichselbaum, District 5 State Aid Engineer, stated that it is now eligible by State law.

Ron Rudrud asked if turn lanes were eligible for State Aid. Ken Straus stated that plans should be submitted, and if they were in accordance with the standards, they would receive State Aid.

Chairman Anderson thanked Don Asmus and Bob Simon for their excellent work as Chairmans of the Subcommitties.

Chairman Anderson thanked Ron Rudrud, Martin Menk and Steve Gatlin for their participation in the Screening Committee. This will be their last meeting of their current term.

Gordon Fay, State Aid Director, made the following Report:

1. Items need to be brought to the Screening Committee since it is an educational process. This has been an excellent meeting with good discussions.
2. The several changes which the Legislature has made in the last four years with regard to the contribution of the excise tax to the Road User Fund points out the advantage of "Dedicated Funds" to provide stability to the State Aid Fund.


3. The balance in the State Aid Fund is at an all time high. This conflicts with requests to provide additional funding to the State Aid System. This also applies to Federal Funds and is being looked at by the Legislature.
4. The County Engineer's feel there is a need for computer interconduct with MnDOT for road reports and design.

ADJOURNMENT:

A motion was made by Martin Menk, seconded by Steve Gatlin, to adjourn the meeting. Motion carried.

The meeting was adjourned at 11:05 a.m.

Respectfully submitted,


Fred G. Moore, Secretary
C.E.A.M.

4/24/87

MINUTES OF THE MUNICIPAL STATE AID NEEDS SUBCOMMITTEE

The Needs Subcommittee met April 16, 1987, at the Minnesota Department of Transportation Building, St. Paul, Minnesota.

Members Present: Chairman Roger Plumb, Steve Gatlin, Gerald Butcher
Others Present: Roy Hanson, Kenneth Straus, Municipal State Aid

UNIT PRICES FOR MSA CONSTRUCTION

The Subcommittee reviewed unit prices for Municipal State Aid Construction and recommended that unit prices remain the same as in 1986 except as follows:

Curb and Gutter Removal -	Increase from \$1.50 to \$1.75 per Lin. Ft.
Concrete Pavement Removal -	Increase from \$3.75 to \$4.00 per Sq. Yd.
Tree Removal -	Increase from \$90.00 to \$100.00 per unit
Class 5 Base -	Increase from \$5.25 to \$6.00
Traffic Signals -	Increase from \$10,000 to \$12,000 per mile
Sidewalks -	Increase from \$14.00 to \$14.50 per Sq. Yd
Bridge Structures -	0 to 149 Ft. reduce from \$49.00 to \$37.00 per Sq. Ft.
	150 to 499 Ft. reduce from \$51.00 to \$40.00 per Sq. Ft.
	500 and Over reduce from \$55.00 to \$54.00 per Sq. Ft.
Bridge Widening -	Increase from \$65.00 to \$100.00 per Sq. Ft.

FILING ANNUAL REPORTS

The Subcommittee recommended that cities which are delinquent in filing annual reports appear before the Unencumbered Construction Fund Committee to explain why the reports have not been filed. When maintenance expenditures above \$1,500/mile are claimed, it is required that annual reports of actual maintenance expenditures be filed.

CITIES RECEIVING MORE THAN MINIMUM MAINTENANCE

The Subcommittee recommended that a letter be sent to each city advising that any municipality desiring to receive an amount greater than the established minimum shall file a request not later than December 15th preceding the annual allocation and shall agree to file a detailed annual maintenance expenditure report by the end of the year. The Subcommittee also recommended that a study be conducted to see if the rule should be changed, based on lane miles.

GRADING COST BASIS

The Subcommittee recommended utilizing cost per cubic yard for grading rather than cost per mile. There are wide discrepancies in the present use of grading costs per mile. The costs vary widely from \$2,000.00 to \$549,000.00.

TRANSFER OF FEDERAL AID URBAN FUNDS

The Subcommittee reviewed the transfer of Federal Aid (F.A.U.) funds to Mn/DOT by various cities and recommended that there not be any needs adjustment for such transfers.

AFTER THE FACT NEEDS WHEN STREETS ARE REVOKED

The Subcommittee discussed whether remaining after the fact needs should be terminated when a street is revoked from the system. However, no recommendation was recorded on this item.

Respectfully Submitted,



Roger E. Plumb
Chairman

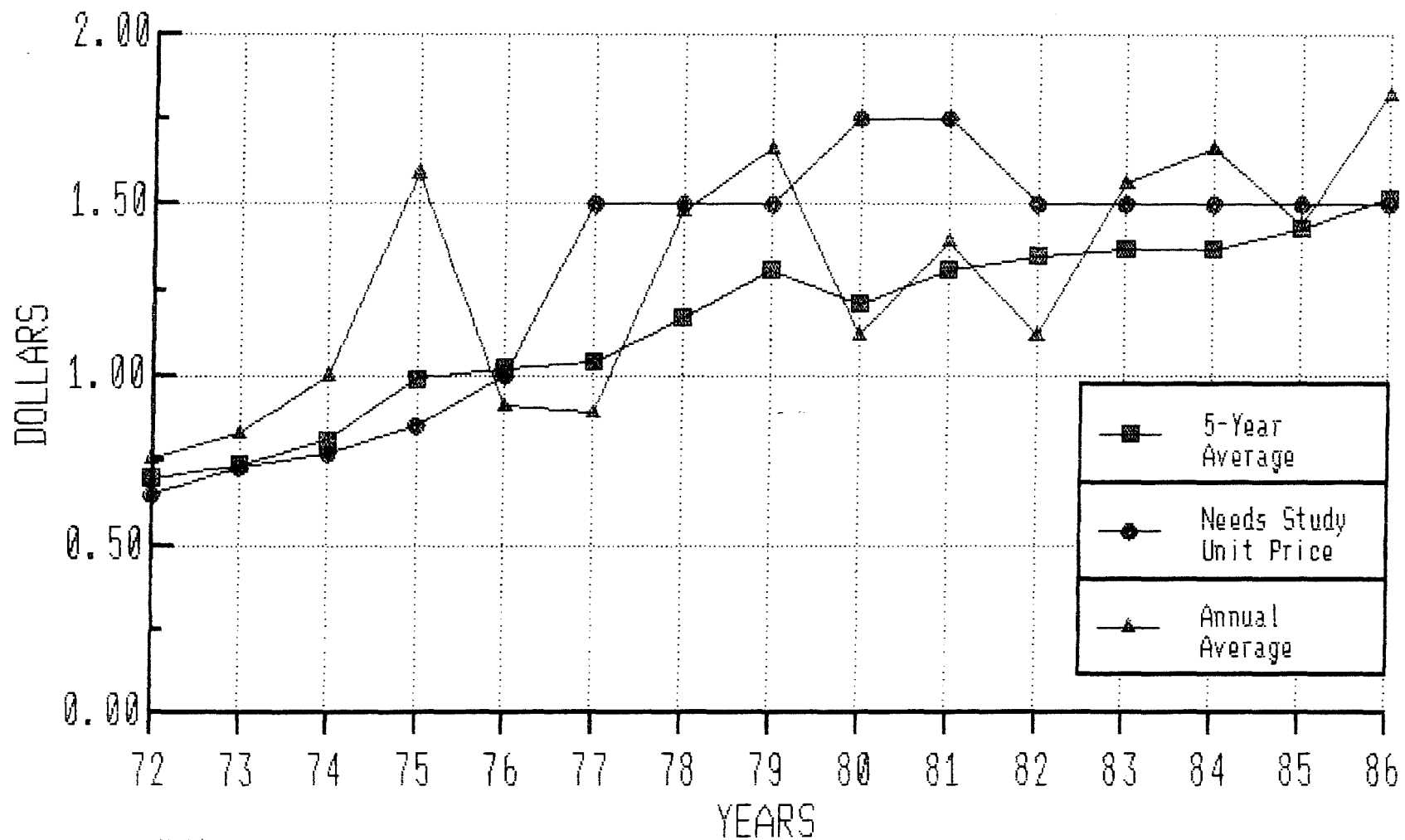
cc: Kenneth Straus
Steve Gatlin
Gerald Butcher

1986 RELATIONSHIP OF THE TOTAL 25-YEAR NEEDS
TO EACH INDIVIDUAL CONSTRUCTION ITEM

ITEM -----	APPORTIONMENT COST -----	% OF THE TOTAL -----
Grading	59,608,933	10.80%
Special Drainage	1,704,503	0.31%
Storm Sewer Adjustment	9,370,060	1.70%
Curb & Gutter Removal	5,372,956	0.97%
Sidewalk Removal	4,411,164	0.80%
Pavement Removal	12,922,132	2.34%
Tree removal	2,225,430	0.40%
 TOTAL GRADING	 \$95,615,178	 17.32%
 Gravel Subbase #2211	 45,334,030	 8.22%
Gravel Base #2211	30,651,025	5.55%
Bituminous Base #2331	55,918,552	10.13%
 TOTAL BASE	 \$131,903,607	 23.90%
 Bituminous Surface #2331	 2,418,922	 0.44%
Bituminous Surface #2341	111,850,141	20.27%
Bituminous Surface #2361	49,524,592	8.97%
Surface Widening	3,507,975	0.64%
 TOTAL SURFACE	 \$167,301,630	 30.32%
 Gravel Shoulders #2221	 689,303	 0.12%
 TOTAL SHOULDERS	 \$689,303	 0.12%
 Curb and Gutter	 51,910,887	 9.41%
Sidewalk	14,840,980	2.69%
Traffic Signals	21,405,458	3.88%
Street Lighting	4,281,300	0.78%
Retaining Walls	2,106,038	0.38%
 TOTAL MISCELLANEOUS	 \$94,544,663	 17.14%
 TOTAL ROADWAY	 \$490,054,381	 88.80%
 Bridge	 42,353,809	 7.68%
Railroad Crossings	15,295,900	2.77%
Maintenance	2,547,959	0.46%
Right-of-Way	1,598,100	0.29%
 TOTAL OTHERS	 \$61,795,768	 11.20%
 TOTAL	 \$551,850,149	

M.S.A.S. UNIT PRICE STUDY CURB & GUTTER REMOVAL #2104

Page 15

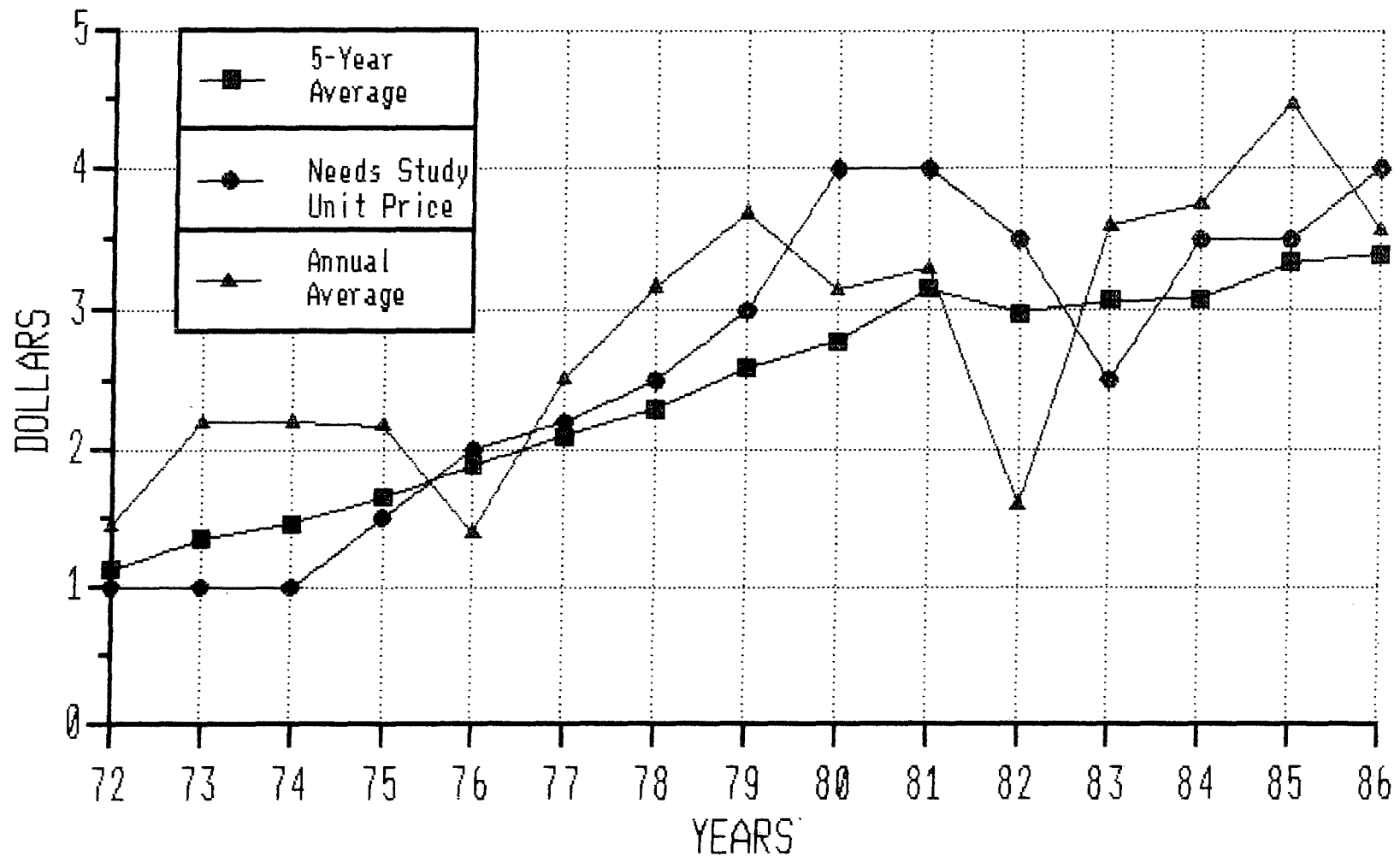


M.S.A.S. UNIT PRICE STUDY
CURB & GUTTER REMOVAL #2104

Year	No. of Cities	Quantity	Cost	Cost Per Lin. Ft.	5-Year Average	Needs Study Unit Price
----	-----	-----	----	-----	-----	-----
1966	24	59,532	\$32,332	\$0.54	--	\$ --
1967	21	73,031	36,592	0.50	--	--
1968	28	76,302	49,669	0.65	--	--
1969	19	47,268	29,607	0.63	--	--
1970	32	159,504	113,005	0.71	0.61	--
1971	20	44,767	33,630	0.75	0.65	--
1972	23	88,188	67,387	0.76	0.70	0.65
1973	30	123,954	102,972	0.83	0.74	0.73
1974	27	39,256	39,140	1.00	0.81	0.77
1975	26	49,508	78,796	1.59	0.99	0.85
1976	17	41,176	37,554	0.91	1.02	1.00
1977	18	28,011	24,847	0.89	1.04	1.50
1978	24	28,277	41,774	1.48	1.17	1.50
1979	25	45,053	74,853	1.66	1.31	1.50
1980	26	83,672	93,360	1.12	1.21	1.75
1981	24	41,852	58,030	1.39	1.31	1.75
1982	45	77,339	86,596	1.12	1.35	1.50
1983	33	42,589	66,635	1.56	1.37	1.50
1984	43	106,678	176,974	1.66	1.37	1.50
1985	50	145,294	208,971	1.44	1.43	1.50
1986	46	119,913	216,648	1.81	1.52	1.50

Subcommittees recommended price for 1987 Needs Study \$ _____
Based upon 1986 construction costs.

M.S.A.S. UNIT PRICE STUDY SIDEWALK REMOVAL #2105



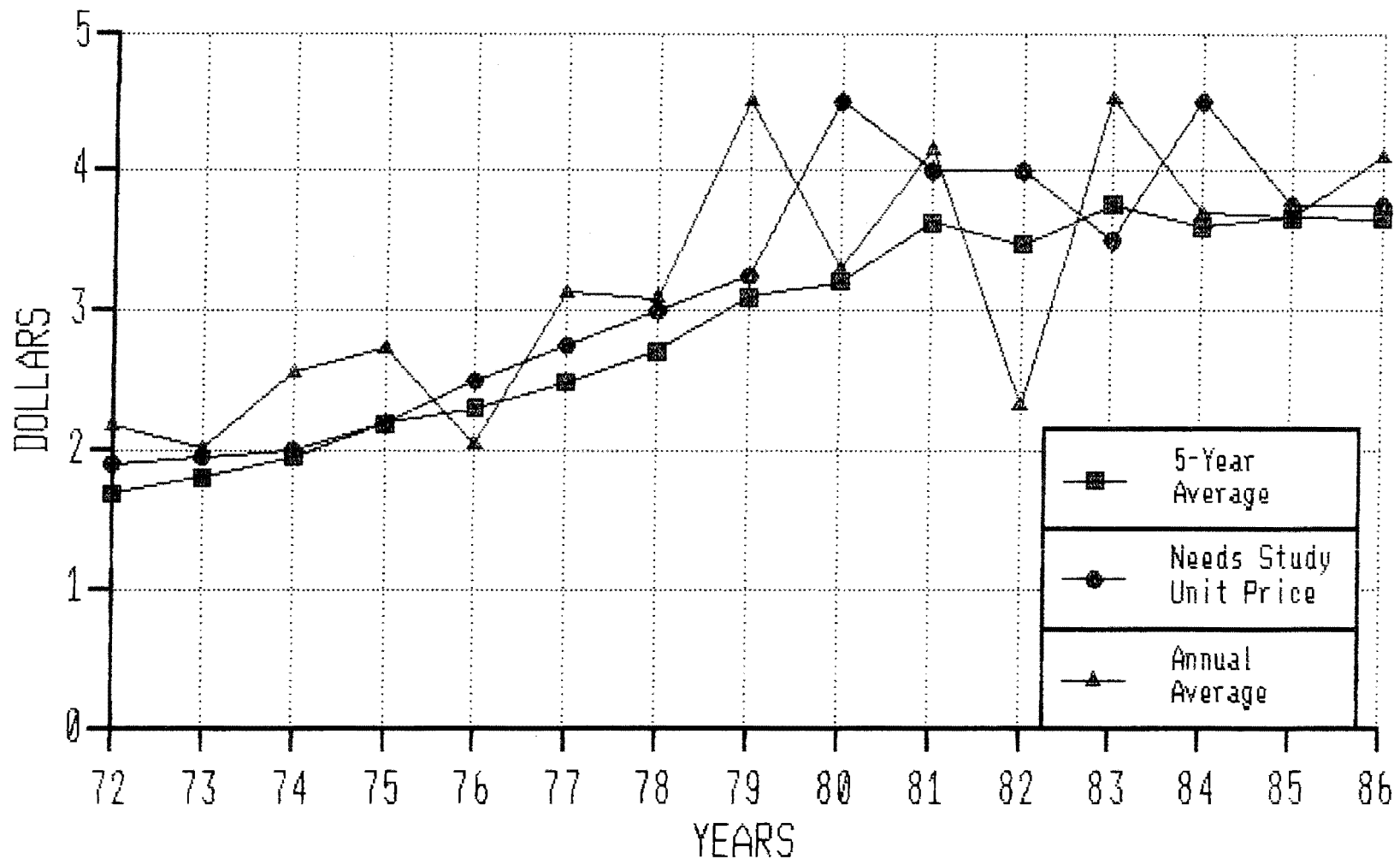
M. S. A. S. UNIT PRICE STUDY

SIDEWALK REMOVAL #2105

Year	No. of Cities	Quantity	Cost	Cost Per Sq. Yd.	5-Year Average	Needs Study Unit Price
----	-----	-----	----	-----	-----	-----
1966	18	19,887	\$15,742	\$0.79	--	\$ --
1967	21	21,607	14,570	0.67	--	--
1968	24	36,820	41,060	1.12	--	--
1969	18	9,105	14,879	1.63	--	--
1970	28	44,882	55,188	1.23	1.09	--
1971	18	97,565	23,084	0.24	0.98	--
1972	19	69,223	99,576	1.44	1.13	1.00
1973	20	46,628	101,998	2.19	1.35	1.00
1974	21	17,422	38,380	2.20	1.46	1.00
1975	19	18,465	40,094	2.17	1.65	1.50
1976	14	32,917	45,829	1.39	1.88	2.00
1977	14	13,237	33,250	2.51	2.09	2.20
1978	15	13,268	42,115	3.17	2.29	2.50
1979	16	23,223	85,805	3.69	2.59	3.00
1980	17	30,387	95,782	3.15	2.78	4.00
1981	19	20,627	68,003	3.30	3.16	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	3.40	4.00

Subcommittees recomended price for 1987 Needs Study \$ _____
Based upon 1986 construction costs.

M.S.A.S. UNIT PRICE STUDY CONCRETE PAVEMENT REMOVAL #2106



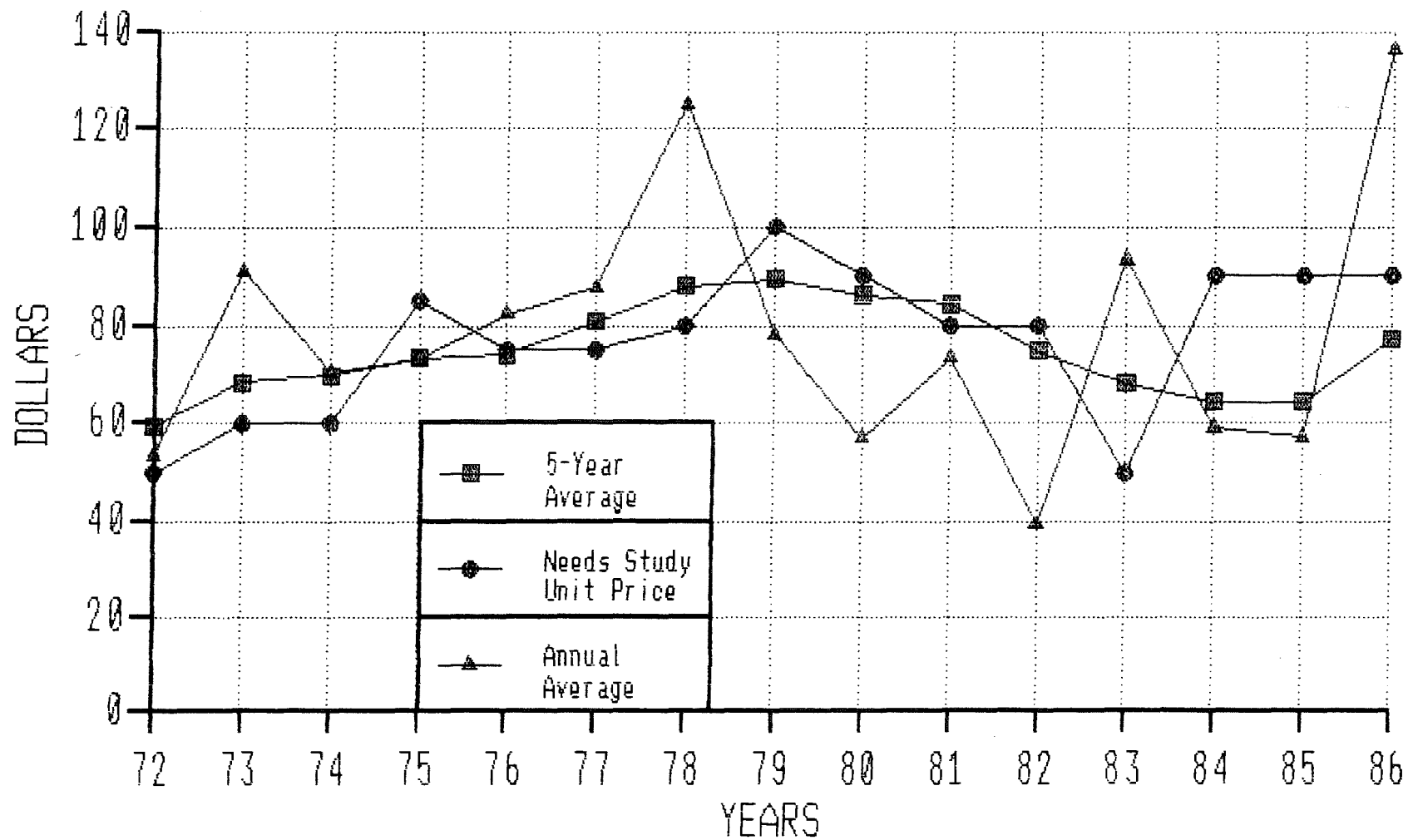
M.S.A.S. UNIT PRICE STUDY

CONCRETE PAVEMENT REMOVAL #2106

Year	No. of Cities	Quantity	Cost	Cost Per Sq. Yd.	5-Year Average	Needs Study Unit Price
1966	7	30,405	\$51,572	\$1.70	--	\$ --
1967	13	21,386	30,668	1.43	--	--
1968	20	59,026	83,708	1.42	--	--
1969	8	9,196	16,821	1.83	--	--
1970	25	110,940	173,446	1.56	1.59	--
1971	14	56,559	81,979	1.45	1.54	--
1972	11	187,366	408,919	2.18	1.69	1.90
1973	12	188,588	379,940	2.01	1.81	1.95
1974	11	40,506	103,569	2.56	1.95	2.00
1975	12	21,211	57,984	2.73	2.19	2.20
1976	9	62,379	127,199	2.04	2.30	2.50
1977	9	15,279	47,801	3.13	2.49	2.75
1978	11	35,176	108,531	3.09	2.71	3.00
1979	9	65,081	292,769	4.50	3.10	3.25
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	107,529	440,715	4.10	3.66	3.75

Subcommittee recommended price for 1987 Needs Study \$ _____
Based upon 1986 construction costs.

M. S. A. S. UNIT PRICE STUDY TREE REMOVAL #2101



M.S.A.S. UNIT PRICE STUDY

TREE REMOVAL #2101

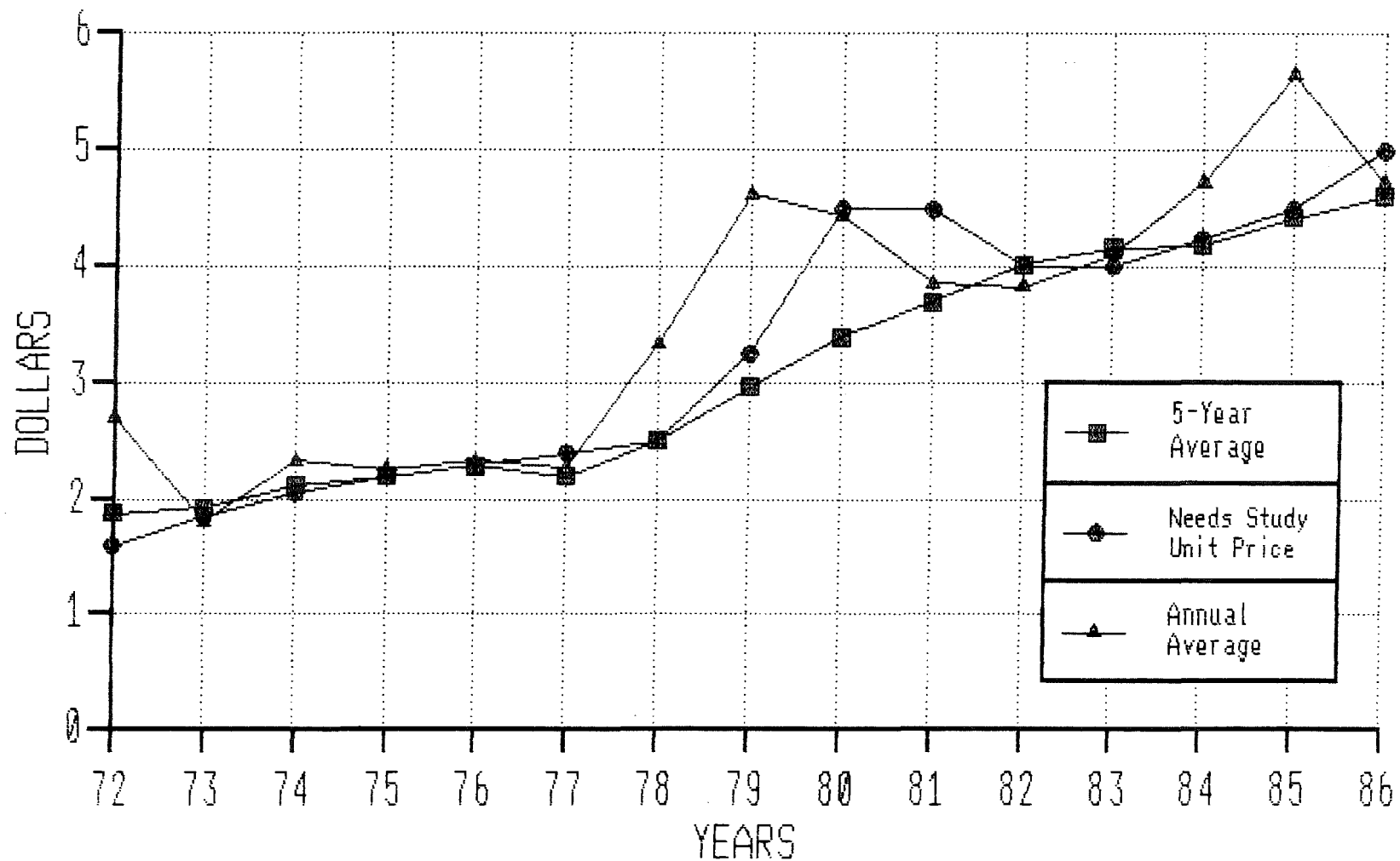
Year	No. of Cities	Quantity	Cost	Cost Per Tree	5-Year Average	Needs Study Unit Price
1966	23	811	\$51,020	\$62.91	--	\$ --
1967	16	600	34,743	57.91	--	--
1968	31	1,398	64,848	46.39	--	--
1969	13	308	19,502	63.32	--	--
1970	36	2,172	122,015	56.18	57.34	--
1971	10	245	19,184	78.30	60.42	--
1972	13	324	17,380	53.64	59.57	50.00
1973	29	925	84,043	90.86	68.46	60.00
1974	27	1,150	81,001	70.44	69.88	60.00
1975	24	802	58,836	73.36	73.32	85.00
1976	18	819	67,463	82.37	74.13	75.00
1977	16	492	43,110	87.62	80.93	75.00
1978	19	485	60,745	125.25	87.81	80.00
1979	20	1,171	91,659	78.27	89.37	100.00
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	64.55	90.00
1986	18	311	42,365	136.22	77.11	90.00

Subcommittee recommended price for 1987 Needs Study \$_____

Based upon 1986 construction costs.

M.S.A.S. UNIT PRICE STUDY

CLASS 4 - SUBBASE #2211



M. S. A. S. UNIT PRICE STUDY

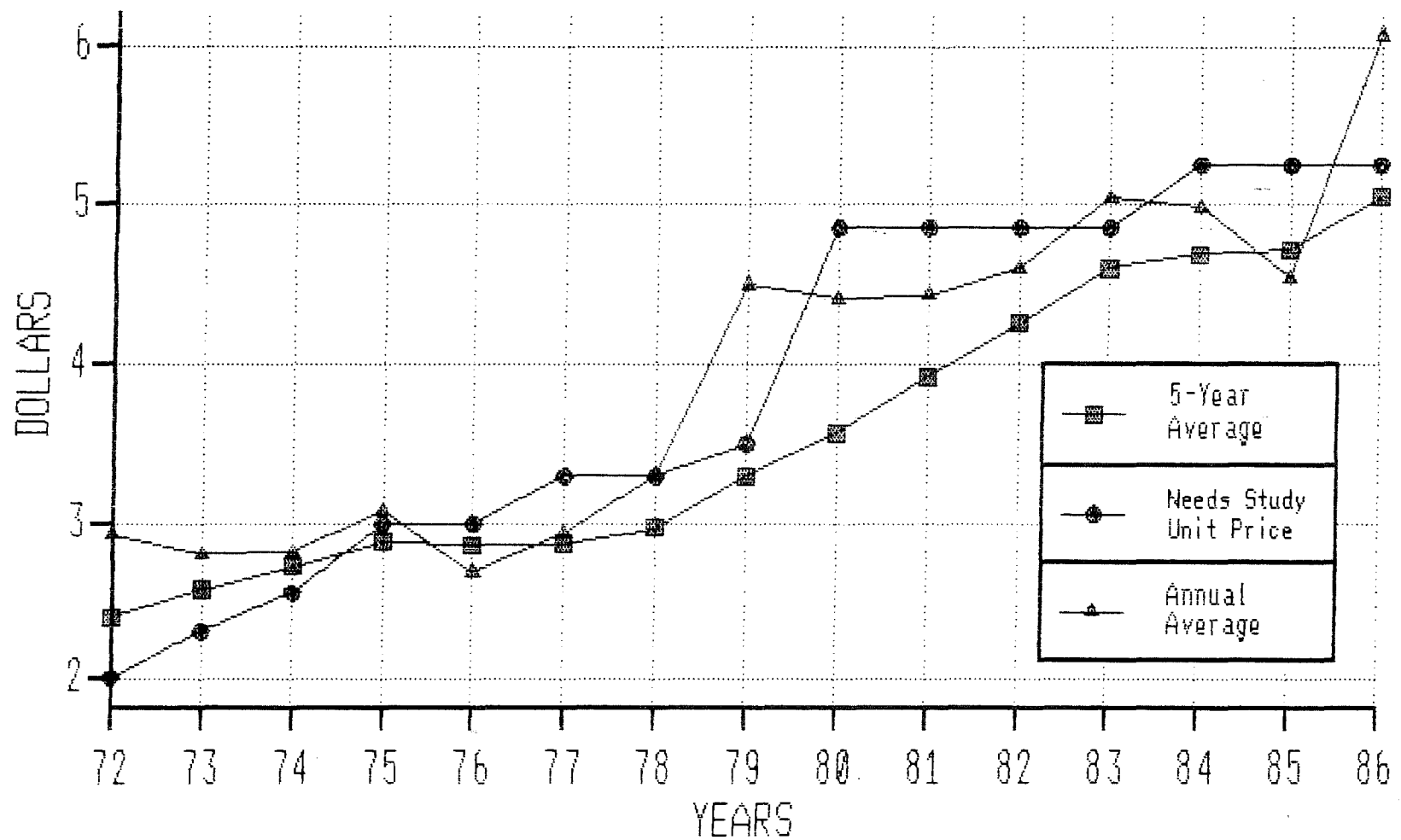
CLASS 4 -SUBBASE #2211

Year	No. of Cities	Quantity	Cost	Cost Per Ton	5-Year Average	Needs Study Unit Price
----	-----	-----	----	-----	-----	-----
1966	19	162,227	\$244,388	\$1.51	--	\$ --
1967	20	146,505	217,241	1.48	--	--
1968	18	168,867	264,211	1.56	--	--
1969	6	118,431	160,615	1.36	--	--
1970	22	306,697	568,987	1.86	1.55	--
1971	13	64,690	123,445	1.91	1.63	--
1972	21	127,852	345,571	2.70	1.88	1.60
1973	12	170,461	308,583	1.81	1.93	1.85
1974	14	65,447	152,247	2.33	2.12	2.05
1975	8	34,597	78,175	2.26	2.20	2.20
1976	6	56,428	131,657	2.33	2.29	2.30
1977	6	48,481	109,817	2.27	2.20	2.40
1978	14	101,757	338,832	3.33	2.50	2.50
1979	5	44,710	206,741	4.62	2.96	3.25
1980	4	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	4	21,968	123,871	5.64	4.43	4.50
1986	6	52,643	248,938	4.73	4.61	5.00

Subcommittee recommended price for 1987 Needs Study \$_____

Based upon 1986 construction costs.

M.S.A.S. UNIT PRICE STUDY CLASS 5 - GRAVEL BASE #2211



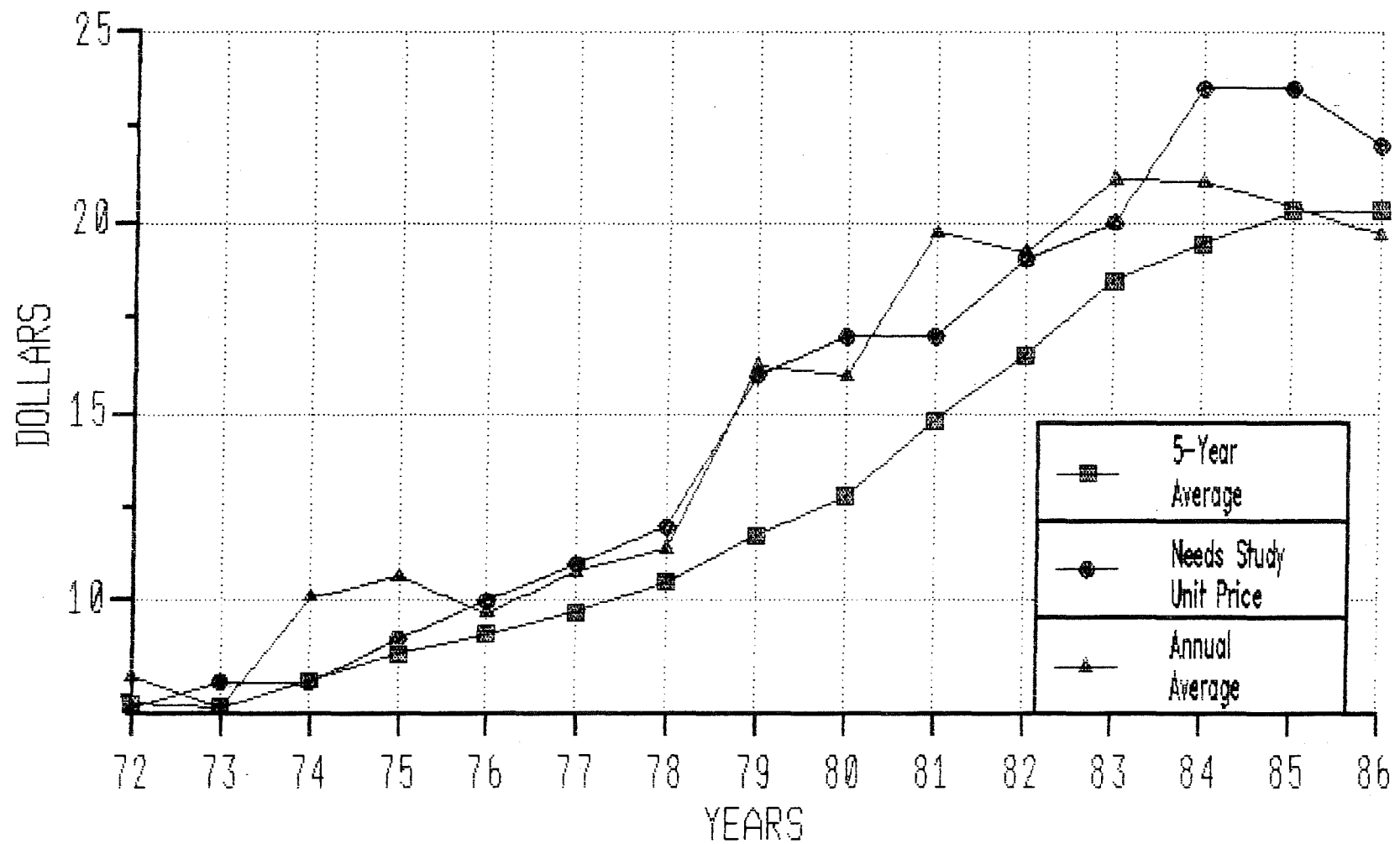
M. S. A. S. UNIT PRICE STUDY
CLASS 5 - GRAVEL BASE #2211

Year	No. of Cities	Quantity	Cost	Cost Per Ton	5-Year Average	Needs Study Unit Price
----	-----	-----	----	-----	-----	-----
1966	28	141,595	\$272,406	\$1.92	--	\$ --
1967	34	177,601	325,300	1.83	--	--
1968	36	220,664	419,319	1.90	--	--
1969	19	81,525	170,982	2.10	--	--
1970	47	335,261	749,335	2.24	2.00	--
1971	21	86,534	241,303	2.79	2.17	--
1972	31	155,513	457,010	2.94	2.39	2.00
1973	38	258,756	724,450	2.80	2.57	2.30
1974	38	163,212	459,956	2.82	2.72	2.55
1975	34	166,600	513,641	3.08	2.89	3.00
1976	32	237,857	641,603	2.70	2.87	3.00
1977	30	157,357	462,151	2.94	2.87	3.30
1978	37	294,730	975,587	3.31	2.97	3.30
1979	38	288,809	1,300,553	4.50	3.31	3.50
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

Subcommittee recommended price for 1987 Needs Study \$_____

Based upon 1986 construction costs.

M.S.A.S. UNIT PRICE STUDY BITUMINUS BASE OR SURFACE #2331



M.S.A.S. UNIT PRICE STUDY

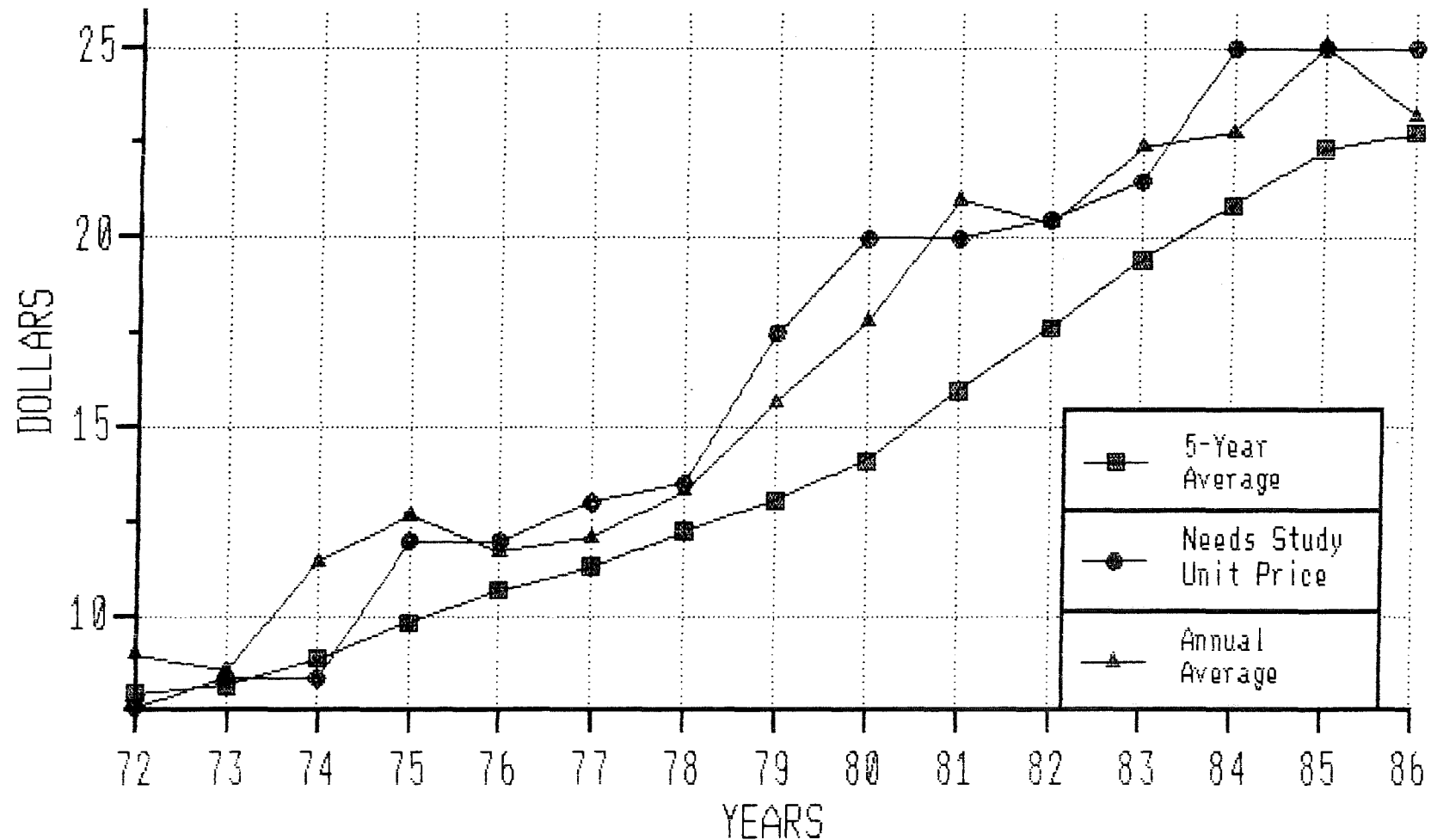
BITUMINOUS BASE OR SURFACE #2331

Year	No. of Cities	Quantity	Cost	Cost Per Ton	5-Year Average	Needs Study Unit Price
-----	-----	-----	-----	-----	-----	-----
1966	14	25,029	\$171,625	\$6.86	\$ --	\$--
1967	12	18,472	135,910	7.36	--	--
1968	21	63,156	479,784	7.60	--	--
1969	11	34,627	228,695	6.60	--	--
1970	29	138,590	991,585	7.15	7.11	--
1971	21	84,866	603,153	7.11	7.16	--
1972	33	246,781	1,979,516	8.02	7.30	7.20
1973	38	401,085	2,886,763	7.20	7.22	7.87
1974	40	257,613	2,606,149	10.12	7.92	7.87
1975	31	138,117	1,473,830	10.67	8.62	9.00
1976	28	158,260	1,533,606	9.69	9.14	10.00
1977	32	135,287	1,461,919	10.81	9.70	11.00
1978	38	164,748	1,881,493	11.42	10.54	12.00
1979	42	229,249	3,723,054	16.24	11.77	16.00
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	20.28	22.00

Subcommittee recommended price for 1987 Needs Study \$_____

Based upon 1986 construction costs.

M.S.A.S. UNIT PRICE STUDY BITUMINUS SURFACE #2341



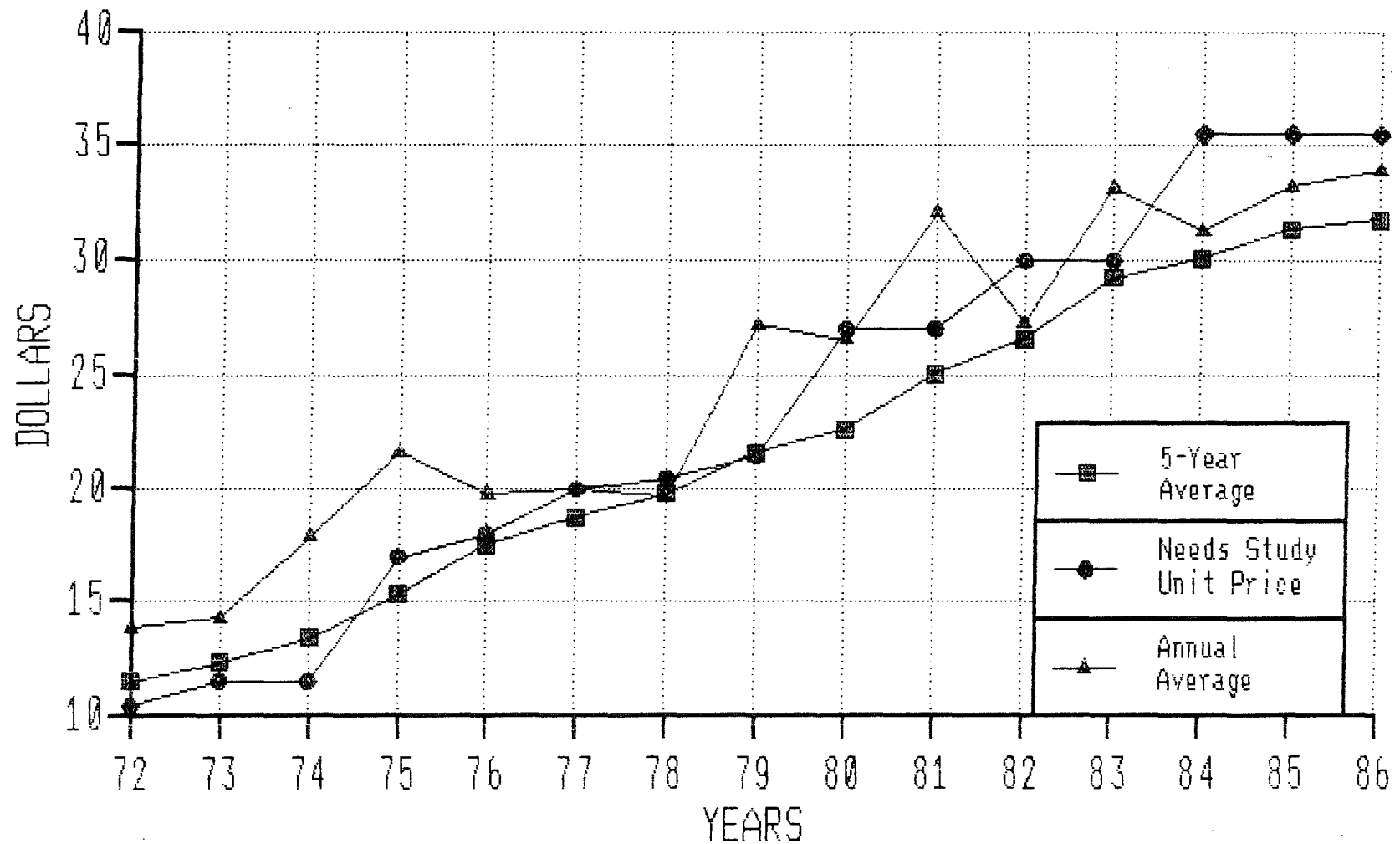
M.S.A.S. UNIT PRICE STUDY

BITUMINOUS SURFACE #2341

Year	No. of Cities	Quantity	Cost	Cost Per Ton	5-Year Average	Needs Study Unit Price
----	-----	-----	-----	-----	-----	-----
1966	20	58,504	\$442,817	\$7.57	\$ --	\$ --
1967	21	66,918	474,309	7.09	--	--
1968	21	62,920	480,045	7.63	--	--
1969	12	31,532	248,437	7.88	--	--
1970	36	162,736	1,274,195	7.83	7.60	--
1971	24	74,558	563,358	7.56	7.60	--
1972	38	143,523	1,294,668	9.02	7.98	7.60
1973	39	241,907	2,078,158	8.59	8.18	8.40
1974	37	148,666	1,705,930	11.47	8.89	8.36
1975	31	147,041	1,863,333	12.67	9.86	12.00
1976	31	72,803	854,492	11.74	10.70	12.00
1977	26	63,007	760,571	12.07	11.31	13.00
1978	32	102,935	1,368,723	13.30	12.25	13.50
1979	37	126,977	1,989,710	15.67	13.09	17.50
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

Subcommittee recommended price for 1987 Needs Study \$ _____
Based upon 1986 construction costs.

M.S.A.S. UNIT PRICE STUDY BITUMINUS SURFACE #2351 & 2361



M. S. A. S. UNIT PRICE STUDY

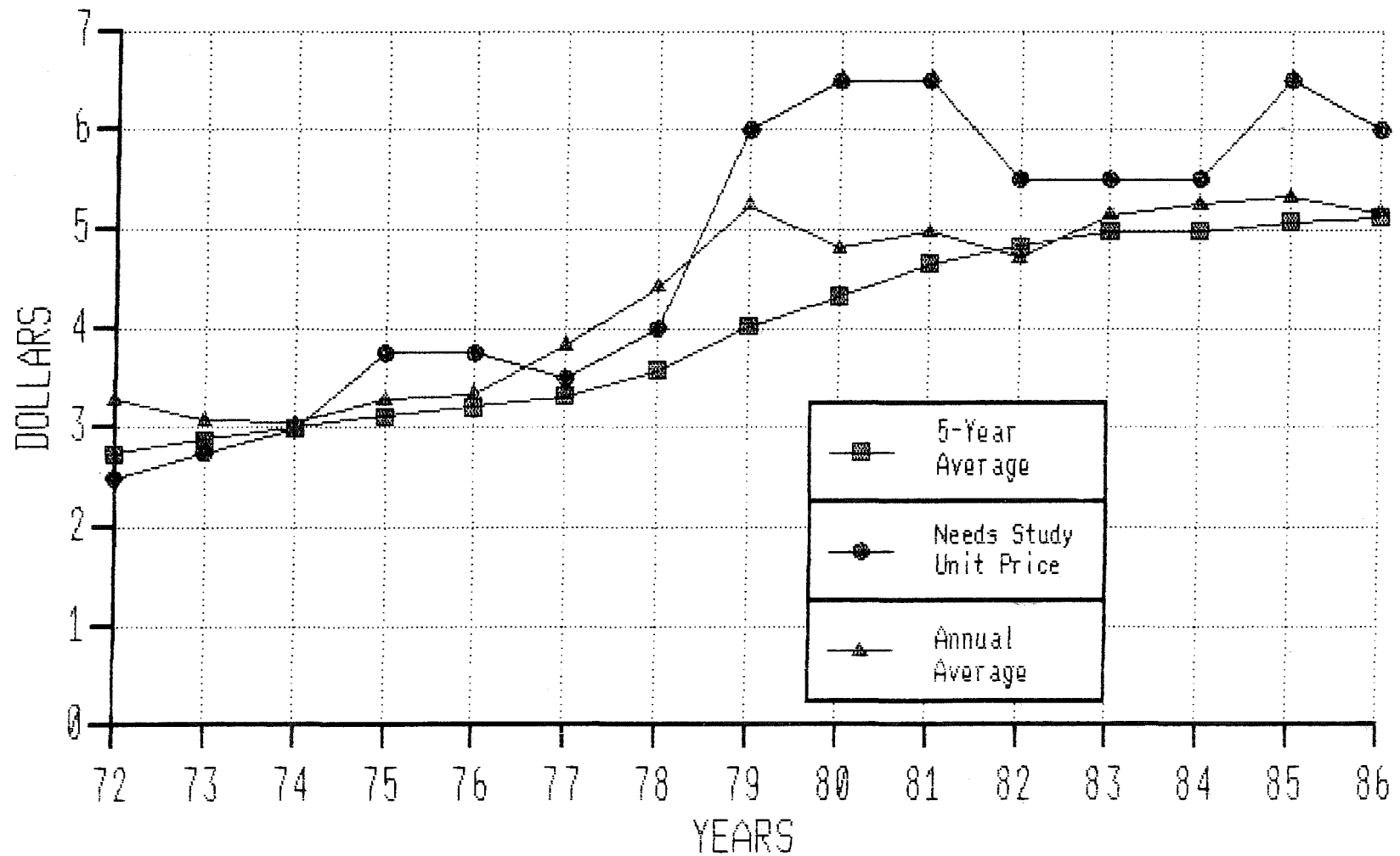
BITUMINOUS SURFACE #2351 & 2361

Year	No. of Cities	Quantity	Cost	Cost Per Ton	5-Year Average	Needs Study Unit Price
-----	-----	-----	-----	-----	-----	-----
1966	4	13,958	\$136,537	\$9.78	\$ --	\$ --
1967	3	10,532	101,892	9.67	--	--
1968	6	15,890	165,736	10.43	--	--
1969	3	5,603	67,839	12.11	--	--
1970	5	7,500	91,604	12.21	10.84	--
1971	7	43,399	395,433	9.11	10.71	--
1972	11	25,950	361,721	13.94	11.56	10.50
1973	9	25,777	369,207	14.32	12.34	11.55
1974	9	18,308	327,581	17.89	13.49	11.55
1975	9	22,256	481,927	21.65	15.38	17.00
1976	10	18,759	371,123	19.78	17.52	18.00
1977	10	13,038	259,918	19.94	18.72	20.00
1978	14	14,080	277,452	19.71	19.79	20.50
1979	19	20,158	548,208	27.20	21.66	21.50
1980	16	17,695	469,842	26.55	22.64	27.00
1981	17	24,336	780,247	32.06	25.09	27.00
1982	18	26,628	725,878	27.26	26.56	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

Subcommittee recommended price for 1987 Needs Study \$_____

Based upon 1986 construction costs.

M.S.A.S. UNIT PRICE STUDY CURB & GUTTER CONST. #2531



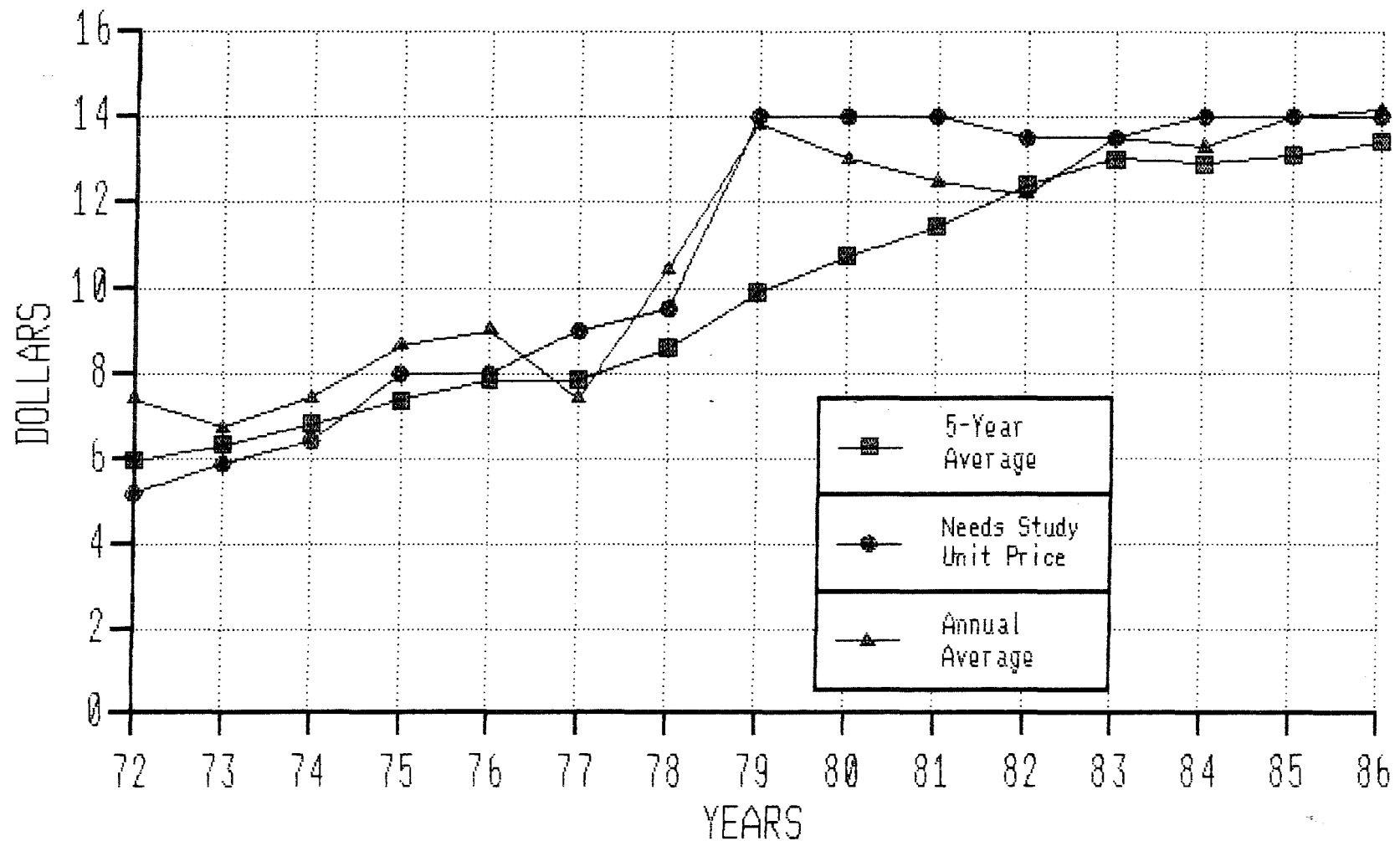
M. S. A. S. UNIT PRICE STUDY

CURB & GUTTER CONSTRUCTION #2531

Year	No. of Cities	Quantity	Cost	Cost Per. Lin. Ft.	5-Year Average	Needs Study Unit Price
1966	32	193,479	\$449,022	\$2.32	\$ --	\$ --
1967	32	257,915	580,506	2.25	--	--
1968	33	340,092	801,016	2.36	--	--
1969	22	137,210	338,159	2.46	--	--
1970	48	611,958	1,641,158	2.68	2.41	--
1971	21	156,083	454,436	2.91	2.53	--
1972	29	235,760	773,022	3.28	2.74	2.50
1973	42	605,809	1,866,455	3.08	2.88	2.75
1974	43	454,315	1,387,797	3.05	3.00	2.98
1975	40	328,669	1,078,802	3.28	3.12	3.75
1976	39	314,645	1,050,777	3.34	3.21	3.75
1977	33	178,206	681,953	3.83	3.32	3.50
1978	41	298,122	1,317,943	4.42	3.58	4.00
1979	42	336,428	1,764,138	5.24	4.02	6.00
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

Subcommittee recommended price for 1987 Needs Study \$ _____
Based upon 1986 construction costs.

M.S.A.S. UNIT PRICE STUDY SIDEWALK CONSTRUCTION #2521



M. S. A. S. UNIT PRICE STUDY

SIDEWALK CONSTRUCTION #2521

Year	No. of Cities	Quantity	Cost	Cost Per Sq. Yd.	5-Year Average	Needs Study Unit Price
1966	22	35,725	\$161,851	\$4.53	\$ --	\$ --
1967	26	41,798	199,193	4.77	--	--
1968	38	58,058	278,247	4.79	--	--
1969	17	18,871	95,808	5.08	--	--
1970	38	113,416	662,759	5.84	5.00	--
1971	8	9,548	64,052	6.71	5.44	--
1972	27	43,194	321,089	7.43	5.97	5.20
1973	33	85,944	579,410	6.74	6.36	5.90
1974	29	46,901	350,067	7.46	6.84	6.44
1975	32	46,139	399,470	8.66	7.40	8.00
1976	27	48,343	436,681	9.03	7.86	8.00
1977	24	42,666	317,200	7.43	7.86	9.00
1978	23	37,875	395,539	10.44	8.60	9.50
1979	26	43,738	604,904	13.83	9.88	14.00
1980	32	71,946	937,803	13.03	10.75	14.00
1981	31	46,222	577,293	12.49	11.44	14.00
1982	44	91,266	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	13.10	14.00
1986	51	79,756	1,126,616	14.13	13.42	14.00


Subcommittee recommended price for 1987 Needs Study \$ _____
Based upon 1986 construction costs.

DEPARTMENT Mn/DOT - Design Services
Room 718

Office Memorandum

TO: Ken Straus
Office of State Aid

DATE: March 19, 1987


FROM: D. V. Halvorson
Hydraulics Engineer

PHONE: 296-0824

SUBJECT: State Aid storm Sewer Construction Costs for 1987

We have analyzed the State Aid storm sewer construction costs for 1987 and find that, for planning purposes, a figure of \$196,000 per mile could be used. For storm sewer adjustments, we suggest \$62,000 per mile. These figures have held firm since 1983.

If we can be of further assistance, please feel free to call.

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

DVH/ms
(EHA)

STATE OF MINNESOTA

DEPARTMENT Mn/DOT - OFFICE OF BRIDGES AND
ROOM 610 STRUCTURES*Office Memorandum*TO : Kenneth Straus
Needs Unit - Room 420

DATE: March 3, 1987

FROM : ^{W.I.I.}Walter I. Immel
Bridge Estimates Engineer

PHONE: 296-0816

SUBJECT: 1986 Structures Costs

The structures costs for County and Municipal State Aid projects in calendar year 1986 that you requested are as follows:

<u>Length of Structure</u>	<u>Structures</u>	<u>1986 Av. Cost/S.F.</u>
0 - 149	41	\$38
150 - 499	7	\$34
500 - Greater	1	\$54
Widening*	1	\$132

*Care should be exercised when widening cost estimates are computed due to the variety of widening concepts available.

cc: G. M. Fay
L. G. Hegland

BRIDGE COSTS

Price per sq. ft.

Bridge & Structures price averages					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					87

COSTS FOR 1986 BRIDGE CONSTRUCTION

Bridges 0-149 Feet

NUMBER BRIDGE	DATE LETTING	AREA DECK	BR COST	COST Sq. Ft.	LENGTH
51521	04-Feb-86	3,120	102,288.98	32.78	104.00
25540	04-Mar-86	3,051	124,670.24	40.86	85.67
25552	04-Mar-86	2,446	88,219.95	36.07	92.00
45521	18-Mar-86	3,818	161,027.00	42.18	119.00
32535	24-Mar-86	2,573	91,249.92	35.46	56.00
42536	01-Apr-86	4,962	150,425.80	30.32	114.50
46557	15-Apr-86	2,160	73,886.83	34.21	72.00
33515	15-Apr-86	5,294	176,816.15	33.40	134.58
36516	15-Apr-86	2,964	124,352.00	41.95	77.28
54534	22-Apr-86	3,815	169,750.93	44.50	108.00
20537	28-Apr-86	2559	97,473.21	38.09	72.00
72528	29-Apr-86	1,860	72,425.40	38.94	62.00
14519	06-May-86	4290	151,257.34	35.26	96.00
79534	06-May-86	4,719	190,687.00	40.41	46.00
49531	13-May-86	4,352	141,254.00	32.46	128.00
07558	13-May-86	4558	168,266.19	36.92	130.21
02534	19-May-86	2,448	99,184.00	40.52	72.00
22570	20-May-86	2,100	78,301.32	37.29	70.00
01515	20-May-86	2,153	91,851.40	42.66	61.50
22572	20-May-86	3,104	116,001.16	37.37	97.00
65539	27-May-86	3,536	103,398.06	29.24	104.00
18511	03-Jun-86	1,920	83,885.26	43.69	60.00
17527	04-Jun-86	3,480	128,323.36	36.87	118.00
39511	10-Jun-86	2,060	102,294.36	49.66	75.37
35523	01-Jul-86	3,610	146,577.00	40.60	84.00
49530	08-Jul-86	4,817	99,827.68	20.72	96.00
83522	15-Jul-86	2,700	108,808.80	40.30	90.00
23539	15-Jul-86	4,817	187,921.81	39.01	136.33
53530	05-Aug-86	3,238	108,582.65	33.53	96.00
12540	20-Aug-86	3,086	105,219.15	34.10	126.00
44509	20-Aug-86	3,032	107,197.99	35.36	94.75
85528	12-Aug-86	4,487	143,513.45	31.98	124.00
25556	16-Sep-86	4,256	141,048.00	33.14	133.00
77523	16-Sep-86	4,968	165,071.00	33.23	124.19
39509	23-Sep-86	6,060	125,478.71	20.71	102.00
54535	16-Oct-86	4,041	163,352.49	40.42	126.24
83521	18-Nov-86	4,906	164,586.91	33.55	140.17
59516	06-Nov-86	3,328	99,050.00	29.76	104.00
36518	17-Nov-86	2,666	121,175.00	45.45	103.83
87567	23-Oct-86	2,880	96,303.00	33.44	96.00
27666	04-Dec-86	4,860	310,499.80	63.89	90.00
Total		145,094	5,281,503.31	\$36.40	Average

Bridges 150-499 Feet

NUMBER BRIDGE	DATE LETTING	AREA DECK	BR COST	COST Sq. Ft.	LENGTH
04513	15-Apr-86	13,245	527,268.67	39.81	305.67
51517	06-May-86	6230	195,956.69	31.45	177.00
76511	03-Jun-86	5,559	200,502.63	36.07	160.00
08530	12-Aug-86	6,153	204,826.73	33.29	190.31
73538	13-Aug-86	8,030	367,298.00	45.74	204.19
22579	25-Sep-86	10,682	483,339.36	45.25	246.50
Total		49,899	1,979,192.08	\$39.66	Average

Bridges 500 Feet and Over

NUMBER BRIDGE	DATE LETTING	AREA DECK	BR COST	COST Sq. Ft.	LENGTH
09513	10-Sep-86	29,800	1,612,846.67	\$54.12	532.28

Bridge widening


NUMBER BRIDGE	DATE LETTING	AREA DECK	BR COST	COST SF OR LF	LENGTH
6390	15-Oct-86	1,597	186,329.00	\$116.67	181.00

DEPARTMENT Mn/DOT - Railroads and Waterways
Room 810

Office Memorandum

TO: Ken Straus
Highway Needs Unit

DATE: March 19, 1987

FROM: Robert G. Swanson
Director, Railroad Administration 

PHONE: 6-2472

SUBJECT: Projected Railroad Grade Crossing
Improvements - Cost for 1987

We have projected 1987 costs for railroad-highway at grade crossing improvements. They are expected to be as follows:

Railroad Grade Crossings

Signals (Single Track - Low Speed)¹ Unit \$65,000.00 (Average Price)

Signals and Gates²
(Multiple Track - High & Low Speed) Unit \$95,000.00 (Average Price)

Signs Only Unit \$ 300.00

¹ Modern signals with motion sensors - signals are activated when train enters electrical circuit - deactivated if train stops before reaching crossing.

² Modern signals with grade crossing predictors - has capabilities in 1 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.

cc: Gordon M. Fay
R. F. Mattson

1986 C.S.A.H. UNIT PRICE STUDY

1986 Projects

	Unit	Quantity	Cost	Cost Per Unit	Item
2211	Ton	801,779	\$2,904,511	\$3.62	Subbase
2211	Ton	2,298,971	8,783,496	3.82	Base
2221	Ton	1,097,504	4,415,374	4.02	Gravel Shoulder
2301	Sq. Yd.	119,936	1,322,824	11.03	Concrete Surface
2331	Ton	2,556,567	43,039,573	16.83	Bituminous Surface
2341	Ton	258,737	4,976,856	19.24	Bituminous Surface
2351	Ton	22,169	667,138	30.09	Bituminous Surface

1987 MUNICIPAL SCREENING BOARD DATA
UNIT PRICE RECOMMENDATION TO THE 1987 SCREENING BOARD

		Pay Item	1986 Prices	Subcommittee Suggested Prices For 1987	Screening Board Recommended Prices For 1987
Right of Way		Mile	\$ 10000.00	\$ 10,000	-----
Grading		Cu. Yd.	\$ 3.00	\$ 3.00	-----
Removal Items					-----
Curb and Gutter		Lin. Ft.	\$ 1.50	\$ 1.75	-----
Sidewalk		Sq. Yd.	\$ 4.00	\$ 4.00	-----
Concrete Pavement		Sq. Yd.	\$ 3.75	\$ 4.00	-----
Tree Removal		Unit	\$ 90.00	\$ 100.00	-----
Base					-----
Class 4 Spec. #2211		Ton	\$ 5.00	\$ 5.00	-----
Class 5 Spec. #2211		Ton	\$ 5.25	\$ 6.00	-----
Bituminous Spec. #2331		Ton	\$ 22.00	\$ 22.00	-----
Surface					-----
Bituminous Spec. #2331		Ton	\$ 22.00	\$ 22.00	-----
Bituminous Spec. #2341		Ton	\$ 25.00	\$ 25.00	-----
Bituminous Spec. #2361		Ton	\$ 35.50	\$ 35.50	-----
Shoulders					-----
Gravel Spec. #2221		Ton	\$ 4.25	\$ 4.25	-----
Miscellaneous					-----
Storm Sewer Adjustment		Mi.	\$ 62,000.00	\$ 62,000	-----
Traffic Signals		Mi.	\$ 10,000.00	\$ 12,000	-----
Street Lighting		Mi.	\$ 2,000.00	\$ 2,000	-----
Curb and Gutter		Lin. Ft.	\$ 6.00	\$ 6.00	-----
Sidewalk		Sq. Yd.	\$ 14.00	\$ 14.50	-----
Structures					-----
Bridges 0 to 149 Ft.		Sq. Ft.	\$ 49.00	\$ 37.00	-----
Bridges 150 to 499 Ft.		Sq. Ft.	\$ 51.00	\$ 40.00	-----
Bridges 500 and over		Sq. Ft.	\$ 55.00	\$ 54.00	-----
Bridge Widening		Sq. Ft.	\$ 65.00	\$ 100.00	-----
Railroad over Highway					-----
Number of Tracks - 1		Lin. Ft.	\$ 2,250.00	\$ 2,250	-----
Additional Track (each)		Lin. Ft.	\$ 1,750.00	\$ 1,750	-----
Railroad Grade Crossing					-----
Signals (Single Track- Low Speed)		Unit	\$ 65,000.00	\$ 65,000	-----
Signals and Gate (Multiple Track - High & Low Speed)		Unit	\$ 95,000.00	\$ 95,000	-----
Signs Only		Unit	\$ 300.00	\$ 300	-----

EXCAVATION CU. YD.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	15,555	23,568	4,643	7,035	3.35	.66
DULUTH	TOT	249,955	52,957	39,280	8,322	6.36	4.72
DISTRICT 1	TOT	265,510	49,351	43,923	8,164	6.04	5.38
BEMIDJI	TOT	51,213	44,924	24,225	21,250	2.11	1.14
EAST GRAND FORKS	TOT	12,220	16,514	3,800	5,135	3.22	.74
DISTRICT 2	TOT	63,433	33,741	28,025	14,907	2.26	1.88
BRAINERD	TOT	11,121	12,357	5,632	6,258	1.97	.90
ST CLOUD	TOT	43,871	66,471	9,749	14,771	4.50	.66
SAUK RAPIDS	TOT	19,485	69,589	4,340	15,500	4.49	.28
DISTRICT 3	TOT	74,477	40,477	19,721	10,718	3.78	1.84
ALEXANDRIA	TOT	17,550	67,500	3,900	15,000	4.50	.26
DETROIT LAKES	TOT	8,304	29,657	2,768	9,886	3.00	.28
MOORHEAD	TOT	527	13,175	85	2,125	6.20	.04
DISTRICT 4	TOT	26,381	45,484	6,753	11,643	3.91	.58
BLAINE	TOT	37,500	22,059	12,500	7,353	3.00	1.70
BLOOMINGTON	TOT	38,740		58,225		.67	
BROOKLYN CENTER	TOT	4,661	4,615	680	673	6.85	1.01
COLUMBIA HEIGHTS	TOT	20,588	52,790	4,650	11,923	4.43	.39
CRYSTAL	TOT	9,595	68,536	1,919	13,707	5.00	.14
EDINA	TOT	78,951	93,989	40,587	48,318	1.95	.84
FRIDLEY	TOT	15,580	19,722	7,100	8,987	2.19	.79
GOLDEN VALLEY	TOT	33,360	81,366	13,867	33,822	2.41	.41
MINNEAPOLIS	TOT	120,351	101,992	12,237	10,370	9.84	1.18
MINNETONKA	TOT	54,737	58,231	16,842	17,917	3.25	.94
MOUND	TOT	16,690	12,094	4,165	3,018	4.01	1.38
PLYMOUTH	TOT	5,957	74,463	1,083	13,538	5.50	.08
RICHFIELD	TOT	9,304	16,614	1,883	3,363	4.94	.56
ST ANTHONY	TOT	34,410	90,553	9,300	24,474	3.70	.38
SPRING LAKE PARK	TOT	18,960	28,727	5,050	7,652	3.75	.66
MAPLE GROVE	TOT	8,070	32,280	1,645	6,580	4.91	.25
CHANHASSEN	TOT	68,902	146,600	58,757	125,015	1.17	.47
CHASKA	TOT	62,528	83,371	9,847	13,129	6.35	.75
RAMSEY	TOT	34,850	36,684	20,500	21,579	1.70	.95
EAST BETHEL	TOT	10,000	8,000	5,000	4,000	2.00	1.25
LINO LAKES	TOT	71,321	69,923	25,935	25,426	2.75	1.02
DISTRICT 5	TOT	755,055	49,839	311,772	20,579	2.42	15.15
ALBERT LEA	TOT	23,125	59,295	4,825	12,372	4.79	.39
AUSTIN	TOT	3,735	8,893	1,660	3,952	2.25	.42
FARIBAULT	TOT	44,263	55,329	9,836	12,295	4.50	.80
NORTHFIELD	TOT	33,307	277,558	7,402	61,683	4.50	.12
OWATONNA	TOT	15,102	43,149	4,132	11,806	3.65	.35
ROCHESTER	TOT	59,924	47,559	53,907	42,783	1.11	1.26
WINONA	TOT	21,379	20,960	11,479	11,254	1.86	1.02
DISTRICT 6	TOT	200,835	46,063	93,241	21,386	2.15	4.36
FAIRMONT	TOT	536	7,657	238	3,400	2.25	.07
NORTH MANKATO	TOT	52,032	50,517	25,753	25,003	2.02	1.03

M.S.A.S. UNIT PRICE STUDY

PAGE 8

EXCAVATION CU. YD.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
WASECA	TOT	14,880	36,293	4,960	12,098	3.00	.41
WORTHINGTON	TOT	6,601	36,672	1,886	10,478	3.50	.18
DISTRICT 7	TOT	74,049	43,816	32,837	19,430	2.26	1.69
HUTCHINSON	TOT	17,992	48,627	5,553	15,008	3.24	.37
MARSHALL	TOT	22,918	65,480	7,552	21,577	3.03	.35
MONTEVIDEO	TOT	8,959	34,458	2,108	8,108	4.25	.26
WILLMAR	TOT	8,400	14,483	2,100	3,621	4.00	.58
DISTRICT 8	TOT	58,269	37,352	17,313	11,098	3.37	1.56
FALCON HEIGHTS	TOT	14,180	101,286	3,928	28,057	3.61	.14
HASTINGS	TOT	9,970	24,317	4,985	12,159	2.00	.41
MOUNDS VIEW	TOT	11,025	27,563	6,300	15,750	1.75	.40
NEW BRIGHTON	TOT	27,329	31,056	7,768	8,827	3.52	.88
ROSEVILLE	TOT	38,118	43,316	13,287	15,099	2.87	.88
ST PAUL	TOT	84,405	53,085	26,540	16,692	3.18	1.59
SOUTH ST PAUL	TOT	43,524	52,439	10,992	13,243	3.96	.83
WEST ST PAUL	TOT	18,819	34,850	6,170	11,426	3.05	.54
WHITE BEAR LAKE	TOT	64,518	50,802	33,086	26,052	1.95	1.27
BURNSVILLE	TOT	30,008	38,971	27,450	35,649	1.09	.77
COTTAGE GROVE	TOT	11,840	11,960	14,300	14,444	.83	.99
OAKDALE	TOT	40,248	82,440	20,480	45,511	1.97	.45
ARDEN HILLS	TOT	141,688	164,753	41,673	48,457	3.40	.86
LAKEVILLE	TOT	14,280	47,600	5,600	18,667	2.55	.30
WOODBURY	TOT	2,724	6,644	1,760	4,293	1.55	.41
EAGAN	TOT	43,015	24,864	18,582	10,741	2.31	1.73
DISTRICT 9	TOT	595,691	47,847	242,901	19,510	2.45	12.45
STATE TOTAL		2,113,700	47,086	796,486	17,743	2.65	44.89

EXCAVATION CU. YD.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	265,510	49,351	43,923	8,164	6.04	5.38
DISTRICT 2	TOT	63,433	33,741	28,025	14,907	2.26	1.88
DISTRICT 3	TOT	74,477	40,477	19,721	10,718	3.78	1.84
DISTRICT 4	TOT	26,381	45,484	6,753	11,643	3.91	.58
DISTRICT 5	TOT	755,055	49,839	311,772	20,579	2.42	15.15
DISTRICT 6	TOT	200,835	46,063	93,241	21,386	2.15	4.36
DISTRICT 7	TOT	74,049	43,816	32,837	19,430	2.26	1.69
DISTRICT 8	TOT	58,269	37,352	17,313	11,098	3.37	1.56
DISTRICT 9	TOT	595,691	47,847	242,901	19,510	2.45	12.45
STATE TOTAL		2,113,700	47,086	796,486	17,743	2.65	44.89

M.S.A.S. UNIT PRICE STUDY

PAGE 116

CURB & GUTTER REM. LIN. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	1,506	2,429	1,205	1,944	1.25	.62
DULUTH	TOT	94,428	52,460	25,958	14,421	3.64	1.80
EVELETH	TOT	4,684	7,435	4,684	7,435	1.00	.63
DISTRICT 1	TOT	100,618	32,990	31,847	10,442	3.16	3.05
BEMIDJI	TOT	1,169	1,025	777	682	1.50	1.14
EAST GRAND FORKS	TOT	1,281	3,558	4,004	11,122	.32	.36
THIEF RIVER FALLS	TOT	520	486	260	243	2.00	1.07
DISTRICT 2	TOT	2,970	1,156	5,041	1,961	.59	2.57
BRAINERD	TOT	2,504	5,110	2,122	4,331	1.18	.49
SAUK RAPIDS	TOT	2,870	10,250	2,609	9,318	1.10	.28
DISTRICT 3	TOT	5,374	6,979	4,731	6,144	1.14	.77
ALEXANDRIA	TOT	2,921	11,235	2,921	11,235	1.00	.26
DISTRICT 4	TOT	2,921	11,235	2,921	11,235	1.00	.26
BLOOMINGTON	TOT	3,112		1,917		1.62	
COLUMBIA HEIGHTS	TOT	6,688	17,149	4,180	10,718	1.60	.39
COON RAPIDS	TOT	580	574	290	287	2.00	1.01
CRYSTAL	TOT	799	5,707	706	5,043	1.13	.14
EDINA	TOT	4,800	34,286	1,600	11,429	3.00	.14
FRIDLEY	TOT	1,240	1,570	620	785	2.00	.79
GOLDEN VALLEY	TOT	281	2,007	461	3,293	.61	.14
MINNEAPOLIS	TOT	4,550	10,111	2,618	5,818	1.74	.45
PLYMOUTH	TOT	1,440	18,000	480	6,000	3.00	.08
RICHFIELD	TOT	464	829	500	893	.93	.56
ST ANTHONY	TOT	7,040	18,526	4,000	10,526	1.76	.38
SPRING LAKE PARK	TOT	750	1,136	250	379	3.00	.66
CHANHASSEN	TOT	375	798	250	532	1.50	.47
CHASKA	TOT	180	240	90	120	2.00	.75
DISTRICT 5	TOT	32,299	5,419	17,962	3,014	1.80	5.96
ALBERT LEA	TOT	4,604	11,805	3,039	7,792	1.51	.39
AUSTIN	TOT	2,100	5,000	4,335	10,321	.48	.42
FARIBAULT	TOT	1,724	2,155	1,149	1,436	1.50	.80
ROCHESTER	TOT	154	440	77	220	2.00	.35
WINONA	TOT	2,725	2,672	7,579	7,430	.36	1.02
DISTRICT 6	TOT	11,307	3,794	16,179	5,429	.70	2.98
FAIRMONT	TOT	98	1,400	49	700	2.00	.07
DISTRICT 7	TOT	98	1,400	49	700	2.00	.07
HUTCHINSON	TOT	5,312	14,357	2,656	7,178	2.00	.37
MARSHALL	TOT	5,171	14,774	3,574	10,211	1.45	.35
MONTEVIDEO	TOT	3,837	14,758	2,558	9,838	1.50	.26
WILLMAR	TOT	925	10,278	925	10,278	1.00	.09
DISTRICT 8	TOT	15,245	14,248	9,713	9,078	1.57	1.07
FALCON HEIGHTS	TOT	673	4,807	813	5,807	.83	.14
HASTINGS	TOT	5,807	14,163	1,936	4,722	3.00	.41
MENDOTA HEIGHTS	TOT	2,809	4,531	6,530	10,532	.43	.62

CURB & GUTTER REM. LIN. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
NEW BRIGHTON	TOT	6,420	7,295	4,280	4,864	1.50	.88
ROSEVILLE	TOT	5,891	6,694	3,357	3,815	1.75	.88
ST PAUL	TOT	5,527	7,676	5,640	7,833	.98	.72
SOUTH ST PAUL	TOT	16,170	19,482	7,778	9,371	2.08	.83
WEST ST PAUL	TOT	1,056	1,956	528	978	2.00	.54
INVER GROVE HEIGHTS	TOT	60	188	30	94	2.00	.32
BURNSVILLE	TOT	684	888	283	368	2.42	.77
COTTAGE GROVE	TOT	93	94	62	63	1.50	.99
ARDEN HILLS	TOT	426	495	213	248	2.00	.86
EAGAN	TOT	200	556	20	56	10.00	.36
DISTRICT 9	TOT	45,816	5,507	31,470	3,782	1.46	8.32
STATE TOTAL		216,648	8,649	119,913	4,787	1.81	25.05

M.S.A.S. UNIT PRICE STUDY
CURB & GUTTER REM. LIN. FT.

PAGE 118

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	100,618	32,990	31,847	10,442	3.16	3.05
DISTRICT 2	TOT	2,970	1,156	5,041	1,961	.59	2.57
DISTRICT 3	TOT	5,374	6,979	4,731	6,144	1.14	.77
DISTRICT 4	TOT	2,921	11,235	2,921	11,235	1.00	.26
DISTRICT 5	TOT	32,299	5,419	17,962	3,014	1.80	5.96
DISTRICT 6	TOT	11,307	3,794	16,179	5,429	.70	2.98
DISTRICT 7	TOT	98	1,400	49	700	2.00	.07
DISTRICT 8	TOT	15,245	14,248	9,713	9,078	1.57	1.07
DISTRICT 9	TOT	45,816	5,507	31,470	3,782	1.46	8.32
STATE TOTAL		216,648	8,649	119,913	4,787	1.81	25.05

SIDEWALK REMOVAL SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	14,480	21,939	48,267	73,132	.30	.66
DULUTH	TOT	83,042	23,931	198,714	57,266	.42	3.47
EVELETH	TOT	1,346	2,137	5,385	8,548	.25	.63
DISTRICT 1	TOT	98,868	20,771	252,366	53,018	.39	4.76
BEMIDJI	TOT	1,188	1,042	2,118	1,858	.56	1.14
EAST GRAND FORKS	TOT	3,420	9,500	13,680	38,000	.25	.36
DISTRICT 2	TOT	4,608	3,072	15,798	10,532	.29	1.50
BRAINERD	TOT	2,432	4,963	6,573	13,414	.37	.49
SAUK RAPIDS	TOT	126	450	160	571	.79	.28
DISTRICT 3	TOT	2,558	3,322	6,733	8,744	.38	.77
ALEXANDRIA	TOT	3,176	12,215	14,292	54,969	.22	.26
MOORHEAD	TOT	850	21,250	4,250	106,250	.20	.04
DISTRICT 4	TOT	4,026	13,420	18,542	61,807	.22	.30
BLOOMINGTON	TOT	1,326		2,210		.60	
COLUMBIA HEIGHTS	TOT	305	782	610	1,564	.50	.39
COON RAPIDS	TOT	137	136	390	386	.35	1.01
CRYSTAL	TOT	257	1,836	642	4,586	.40	.14
EDINA	TOT	854	6,100	1,708	12,200	.50	.14
GOLDEN VALLEY	TOT	50	357	50	357	1.00	.14
MINNEAPOLIS	TOT	3,421	7,602	5,845	12,989	.59	.45
RICHFIELD	TOT	336	600	1,679	2,998	.20	.56
ST ANTHONY	TOT	600	1,579	500	1,316	1.20	.38
MAPLE GROVE	TOT	50	179	200	714	.25	.28
DISTRICT 5	TOT	7,336	2,102	13,834	3,964	.53	3.49
ALBERT LEA	TOT	4,428	13,024	6,642	19,535	.67	.34
AUSTIN	TOT	320	762	915	2,179	.35	.42
FARIBAULT	TOT	384	480	5,345	6,681	.07	.80
NORTHFIELD	TOT	1,480	12,333	5,919	49,325	.25	.12
ROCHESTER	TOT	38	109	75	214	.51	.35
WINONA	TOT	6,809	9,590	24,318	34,251	.28	.71
DISTRICT 6	TOT	13,459	4,912	43,214	15,772	.31	2.74
FAIRMONT	TOT	3,861	55,157	3,357	47,957	1.15	.07
WORTHINGTON	TOT	1,289	7,161	1,983	11,017	.65	.18
DISTRICT 7	TOT	5,150	20,600	5,340	21,360	.96	.25
HUTCHINSON	TOT	2,365	6,392	6,755	18,257	.35	.37
MARSHALL	TOT	5,264	15,040	13,536	38,674	.39	.35
MONTEVIDEO	TOT	1,031	3,965	1,375	5,288	.75	.26
DISTRICT 8	TOT	8,660	8,837	21,666	22,108	.40	.98
FALCON HEIGHTS	TOT	1,284	9,171	1,976	14,114	.65	.14
HASTINGS	TOT	318	776	635	1,549	.50	.41
MENDOTA HEIGHTS	TOT	80	129	100	161	.80	.62
NEW BRIGHTON	TOT	2,100	2,386	2,700	3,068	.78	.88
ST PAUL	TOT	2,575	3,576	3,526	4,897	.73	.72
SOUTH ST PAUL	TOT	7,815	9,416	15,317	18,454	.51	.83

M.S.A.S. UNIT PRICE STUDY

PAGE 124

SIDEWALK REMOVAL SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
COTTAGE GROVE	TOT	450	455	450	455	1.00	.99
EAGAN	TOT	60	167	54	150	1.11	.36
DISTRICT 9	TOT	14,682	2,966	24,758	5,002	.59	4.95
STATE TOTAL		159,347	8,072	402,251	20,377	.40	19.74

SIDEWALK REMOVAL SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	98,868	20,771	252,366	53,018	.39	4.76
DISTRICT 2	TOT	4,608	3,072	15,798	10,532	.29	1.50
DISTRICT 3	TOT	2,558	3,322	6,733	8,744	.38	.77
DISTRICT 4	TOT	4,026	13,420	18,542	61,807	.22	.30
DISTRICT 5	TOT	7,336	2,102	13,834	3,964	.53	3.49
DISTRICT 6	TOT	13,459	4,912	43,214	15,772	.31	2.74
DISTRICT 7	TOT	5,150	20,600	5,340	21,360	.96	.25
DISTRICT 8	TOT	8,660	8,837	21,666	22,108	.40	.98
DISTRICT 9	TOT	14,682	2,966	24,758	5,002	.59	4.95
STATE TOTAL		159,347	8,072	402,251	20,377	.40	19.74

M.S.A.S. UNIT PRICE STUDY

PAGE 125

CONC. PAVEM. REM. SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	36,722	85,400	94,428	219,600	.39	.43
DULUTH	TOT	146,892	48,801	476,951	158,455	.31	3.01
DISTRICT 1	TOT	183,614	53,376	571,379	166,099	.32	3.44
EAST GRAND FORKS	TOT	27,692	37,422	88,200	119,189	.31	.74
DISTRICT 2	TOT	27,692	37,422	88,200	119,189	.31	.74
BRAINERD	TOT	9,534	19,457	30,537	62,320	.31	.49
SAUK RAPIDS	TOT	14,780	52,786	28,917	103,275	.51	.28
DISTRICT 3	TOT	24,314	31,577	59,454	77,213	.41	.77
MOORHEAD	TOT	3,150	78,750	11,340	283,500	.28	.04
DISTRICT 4	TOT	3,150	78,750	11,340	283,500	.28	.04
BLOOMINGTON	TOT	4,795		3,846		1.25	
CRYSTAL	TOT	2,680	19,143	4,824	34,457	.56	.14
MINNEAPOLIS	TOT	69,019	153,376	96,066	213,480	.72	.45
ST ANTHONY	TOT	45,000	118,421	67,500	177,632	.67	.38
DISTRICT 5	TOT	121,494	125,252	172,236	177,563	.71	.97
AUSTIN	TOT	27,942	66,529	102,645	244,393	.27	.42
DISTRICT 6	TOT	27,942	66,529	102,645	244,393	.27	.42
FAIRMONT	TOT	12,786	182,657	19,179	273,986	.67	.07
WORTHINGTON	TOT	21,215	117,861	118,683	659,350	.18	.18
DISTRICT 7	TOT	34,001	136,004	137,862	551,448	.25	.25
MARSHALL	TOT	17,670	50,486	45,513	130,037	.39	.35
DISTRICT 8	TOT	17,670	50,486	45,513	130,037	.39	.35
WHITE BEAR LAKE	TOT	838	660	3,015	2,374	.28	1.27
DISTRICT 9	TOT	838	660	3,015	2,374	.28	1.27
STATE TOTAL		440,715	53,420	1,191,644	144,442	.37	8.25

CONC. PAVEM. REM. SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	183,614	53,376	571,379	166,099	.32	3.44
DISTRICT 2	TOT	27,692	37,422	88,200	119,189	.31	.74
DISTRICT 3	TOT	24,314	31,577	59,454	77,213	.41	.77
DISTRICT 4	TOT	3,150	78,750	11,340	283,500	.28	.04
DISTRICT 5	TOT	121,494	125,252	172,236	177,563	.71	.97
DISTRICT 6	TOT	27,942	66,529	102,645	244,393	.27	.42
DISTRICT 7	TOT	34,001	136,004	137,862	551,448	.25	.25
DISTRICT 8	TOT	17,670	50,486	45,513	130,037	.39	.35
DISTRICT 9	TOT	838	660	3,015	2,374	.28	1.27
STATE TOTAL		440,715	53,420	1,191,644	144,442	.37	8.25

M.S.A.S. UNIT PRICE STUDY

PAGE 110

TREE REMOVAL 2101 NUMBER

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	2,100	4,884	14	33	150.00	.43
DULUTH	TOT	10,388	4,011	71	27	146.31	2.59
EVELETH	TOT	4,200	6,667	21	33	200.00	.63
DISTRICT 1	TOT	16,688	4,572	106	29	157.43	3.65
EAST GRAND FORKS	TOT	3,771	10,475	11	31	342.82	.36
DISTRICT 2	TOT	3,771	10,475	11	31	342.82	.36
BRAINERD	TOT	6,182	12,616	64	131	96.59	.49
ST CLOUD	TOT	925	1,814	15	29	61.67	.51
SAUK RAPIDS	TOT	900	3,214	5	18	180.00	.28
DISTRICT 3	TOT	8,007	6,255	84	66	95.32	1.28
EDINA	TOT	2,310	16,500	6	43	385.00	.14
MINNEAPOLIS	TOT	360	1,636	8	36	45.00	.22
MINNETONKA	TOT	2,370	2,521	24	26	98.75	.94
EAST BETHEL	TOT	1,050	840	7	6	150.00	1.25
DISTRICT 5	TOT	6,090	2,388	45	18	135.33	2.55
ALBERT LEA	TOT	3,000	8,824	20	59	150.00	.34
FARIBAULT	TOT	1,000	3,333	4	13	250.00	.30
ROCHESTER	TOT	1,500	4,286	15	43	100.00	.35
WINONA	TOT	1,340	1,887	13	18	103.08	.71
DISTRICT 6	TOT	6,840	4,024	52	31	131.54	1.70
HUTCHINSON	TOT	600	8,571	4	57	150.00	.07
DISTRICT 8	TOT	600	8,571	4	57	150.00	.07
HASTINGS	TOT	114	278	6	15	19.00	.41
ST PAUL	TOT	255	354	3	4	85.00	.72
DISTRICT 9	TOT	369	327	9	8	41.00	1.13
STATE TOTAL		42,365	3,945	311	29	136.22	10.74

TREE REMOVAL 2101 NUMBER

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	16,688	4,572	106	29	157.43	3.65
DISTRICT 2	TOT	3,771	10,475	11	31	342.82	.36
DISTRICT 3	TOT	8,007	6,255	84	66	95.32	1.28
DISTRICT 5	TOT	6,090	2,388	45	18	135.33	2.55
DISTRICT 6	TOT	6,840	4,024	52	31	131.54	1.70
DISTRICT 8	TOT	600	8,571	4	57	150.00	.07
DISTRICT 9	TOT	369	327	9	8	41.00	1.13
STATE TOTAL		42,365	3,945	311	29	136.22	10.74

M.S.A.S. UNIT PRICE STUDY

PAGE 20

GRAVEL SUBBASE 2214

TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CHASKA	TOT	6,000	33,333	1,000	5,556	6.00	.18
DISTRICT 5	TOT	6,000	33,333	1,000	5,556	6.00	.18
ROCHESTER	TOT	54,400	54,949	16,585	16,753	3.28	.99
DISTRICT 6	TOT	54,400	54,949	16,585	16,753	3.28	.99
NORTH MANKATO	TOT	158,335	153,723	30,625	29,733	5.17	1.03
DISTRICT 7	TOT	158,335	153,723	30,625	29,733	5.17	1.03
FALCON HEIGHTS	TOT	3,278	23,414	683	4,879	4.80	.14
ROSEVILLE	TOT	24,000	63,158	3,000	7,895	8.00	.38
WOODBURY	TOT	2,925	7,134	750	1,829	3.90	.41
DISTRICT 9	TOT	30,203	32,476	4,433	4,767	6.81	.93
STATE TOTAL		248,938	79,533	52,643	16,819	4.73	3.13

M.S.A.S. UNIT PRICE STUDY

PAGE 21

GRAVEL SUBBASE 2214

TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 5	TOT	6,000	33,333	1,000	5,556	6.00	.18
DISTRICT 6	TOT	54,400	54,949	16,585	16,753	3.28	.99
DISTRICT 7	TOT	158,335	153,723	30,625	29,733	5.17	1.03
DISTRICT 9	TOT	30,203	32,476	4,433	4,767	6.81	.93
STATE TOTAL		248,938	79,533	52,643	16,819	4.73	3.13

M.S.A.S. UNIT PRICE STUDY

PAGE 27

GRAVEL BASE 2215 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	46,200	70,000	10,592	16,048	4.36	.66
DULUTH	TOT	404,132	83,671	60,327	12,490	6.70	4.83
EVELETH	TOT	6,345	10,071	799	1,268	7.94	.63
HIBBING	TOT	35,025	8,756	5,350	1,338	6.55	4.00
DISTRICT 1	TOT	491,702	48,587	77,068	7,615	6.38	10.12
BEMIDJI	TOT	99,483	87,266	21,091	18,501	4.72	1.14
EAST GRAND FORKS	TOT	1,998	5,550	300	833	6.66	.36
DISTRICT 2	TOT	101,481	67,654	21,391	14,261	4.74	1.50
BRAINERD	TOT	28,035	31,150	5,076	5,640	5.52	.90
ST CLOUD	TOT	36,433	55,202	3,756	5,691	9.70	.66
SAUK RAPIDS	TOT	10,320	36,857	2,800	10,000	3.69	.28
DISTRICT 3	TOT	74,788	40,646	11,632	6,322	6.43	1.84
ALEXANDRIA	TOT	19,975	76,827	4,700	18,077	4.25	.26
DETROIT LAKES	TOT	4,208	15,029	935	3,339	4.50	.28
DISTRICT 4	TOT	24,183	44,783	5,635	10,435	4.29	.54
BLAINE	TOT	98,886	58,168	14,870	8,747	6.65	1.70
BLOOMINGTON	TOT	2,039		329		6.20	
BROOKLYN CENTER	TOT	4,287	2,112	475	234	9.03	2.03
COLUMBIA HEIGHTS	TOT	2,124	5,446	310	795	6.85	.39
COON RAPIDS	TOT	66,900	66,238	11,150	11,040	6.00	1.01
CRYSTAL	TOT	11,138	79,557	743	5,307	14.99	.14
EDINA	TOT	114,175	135,923	16,311	19,418	7.00	.84
FRIDLEY	TOT	42,600	76,071	6,400	11,429	6.66	.56
GOLDEN VALLEY	TOT	2,603	18,593	317	2,264	8.21	.14
MINNEAPOLIS	TOT	6,134	27,882	288	1,309	21.30	.22
MOUND	TOT	31,470	34,582	3,955	4,346	7.96	.91
PLYMOUTH	TOT	10,401	130,013	1,485	18,563	7.00	.08
MAPLE GROVE	TOT	52,490	99,038	7,296	13,766	7.19	.53
CHANHASSEN	TOT	144,590	307,638	23,917	50,887	6.05	.47
CHASKA	TOT	32,655	35,113	5,235	5,629	6.24	.93
RAMSEY	TOT	24,970	23,120	4,800	4,444	5.20	1.08
EAST BETHEL	TOT	45,360	36,288	8,400	6,720	5.40	1.25
LINO LAKES	TOT	53,525	52,475	9,100	8,922	5.88	1.02
DISTRICT 5	TOT	746,347	56,116	115,381	8,675	6.47	13.30
ALBERT LEA	TOT	560	1,647	70	206	8.00	.34
AUSTIN	TOT	11,642	27,719	2,772	6,600	4.20	.42
FARIBAULT	TOT	59,610	74,513	7,465	9,331	7.99	.80
NORTHFIELD	TOT	6,139	51,158	767	6,392	8.00	.12
OWATONNA	TOT	14,674	41,926	2,392	6,834	6.13	.35
ROCHESTER	TOT	33,144	20,586	7,457	4,632	4.44	1.61
WINONA	TOT	62,402	61,178	12,273	12,032	5.08	1.02
DISTRICT 6	TOT	188,171	40,380	33,196	7,124	5.67	4.66
FAIRMONT	TOT	1,810	25,857	342	4,886	5.29	.07
WASECA	TOT	15,468	37,727	2,690	6,561	5.75	.41
WORTHINGTON	TOT	8,275	45,972	1,227	6,817	6.74	.18
DISTRICT 7	TOT	25,553	38,717	4,259	6,453	6.00	.66

GRAVEL BASE 2215 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
HUTCHINSON	TOT	48,319	73,211	9,018	13,664	5.36	.66
MARSHALL	TOT	1,450	4,143	200	571	7.25	.35
MONTEVIDEO	TOT	975	3,750	150	577	6.50	.26
WILLMAR	TOT	42,500	73,276	8,500	14,655	5.00	.58
DISTRICT 8	TOT	93,244	50,402	17,868	9,658	5.22	1.85
FALCON HEIGHTS	TOT	8,789	62,779	1,753	12,521	5.01	.14
HASTINGS	TOT	29,541	72,051	7,205	17,573	4.10	.41
MENDOTA HEIGHTS	TOT	4,151	3,459	657	548	6.32	1.20
MOUNDS VIEW	TOT	2,025	5,063	300	750	6.75	.40
NEW BRIGHTON	TOT	35,520	40,364	6,400	7,273	5.55	.88
ROSEVILLE	TOT	100,940	114,705	13,750	15,625	7.34	.88
ST PAUL	TOT	55,305	34,783	6,738	4,238	8.21	1.59
SOUTH ST PAUL	TOT	58,981	83,072	10,850	15,282	5.44	.71
WEST ST PAUL	TOT	47,996	88,881	7,350	13,611	6.53	.54
WHITE BEAR LAKE	TOT	250,000	196,850	34,060	26,819	7.34	1.27
INVER GROVE HEIGHTS	TOT	25,500	79,688	5,100	15,938	5.00	.32
BURNSVILLE	TOT	50,184	65,174	10,515	13,656	4.77	.77
COTTAGE GROVE	TOT	31,355	31,672	6,265	6,328	5.00	.99
OAKDALE	TOT	29,872	66,382	3,800	8,444	7.86	.45
ARDEN HILLS	TOT	78,415	91,180	9,926	11,542	7.90	.86
LAKEVILLE	TOT	18,480	61,600	2,800	9,333	6.60	.30
WOODBURY	TOT	7,700	18,780	1,100	2,683	7.00	.41
EAGAN	TOT	188,215	101,191	40,260	21,645	4.67	1.86
DISTRICT 9	TOT	1,022,969	73,174	168,829	12,076	6.06	13.98
STATE TOTAL		2,768,438	57,140	455,259	9,396	6.08	48.45

M.S.A.S. UNIT PRICE STUDY

PAGE 29

GRAVEL BASE 2215 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	491,702	48,587	77,068	7,615	6.38	10.12
DISTRICT 2	TOT	101,481	67,654	21,391	14,261	4.74	1.50
DISTRICT 3	TOT	74,788	40,646	11,632	6,322	6.43	1.84
DISTRICT 4	TOT	24,183	44,783	5,635	10,435	4.29	.54
DISTRICT 5	TOT	746,347	56,116	115,381	8,675	6.47	13.30
DISTRICT 6	TOT	188,171	40,380	33,196	7,124	5.67	4.66
DISTRICT 7	TOT	25,553	38,717	4,259	6,453	6.00	.66
DISTRICT 8	TOT	93,244	50,402	17,868	9,658	5.22	1.85
DISTRICT 9	TOT	1,022,969	73,174	168,829	12,076	6.06	13.98
STATE TOTAL		2,768,438	57,140	455,259	9,396	6.08	48.45

BIT. SURF. 2331 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	30,917	46,844	1,336	2,024	23.14	.66
DULUTH	TOT	316,162	86,858	14,642	4,023	21.59	3.64
EVELETH	TOT	13,010	20,651	1,235	1,960	10.53	.63
HIBBING	TOT	166,440	41,610	9,414	2,354	17.68	4.00
DISTRICT 1	TOT	526,529	58,962	26,627	2,982	19.77	8.93
BEMIDJI	TOT	52,194	45,784	2,939	2,578	17.76	1.14
THIEF RIVER FALLS	TOT	60,790	56,813	2,718	2,540	22.37	1.07
DISTRICT 2	TOT	112,984	51,124	5,657	2,560	19.97	2.21
BRAINERD	TOT	52,080	57,867	2,495	2,772	20.87	.90
ST CLOUD	TOT	37,244	56,430	2,758	4,179	13.50	.66
SAUK RAPIDS	TOT	16,404	58,586	960	3,429	17.09	.28
DISTRICT 3	TOT	105,728	57,461	6,213	3,377	17.02	1.84
ALEXANDRIA	TOT	24,825	95,481	1,320	5,077	18.81	.26
DETROIT LAKES	TOT	25,731	91,896	1,005	3,589	25.60	.28
MOORHEAD	TOT	14,178	354,450	682	17,050	20.79	.04
MORRIS	TOT	37,825	157,604	1,615	6,729	23.42	.24
DISTRICT 4	TOT	102,559	125,072	4,622	5,637	22.19	.82
BLAINE	TOT	100,217	58,951	5,020	2,953	19.96	1.70
BLOOMINGTON	TOT	78,804		4,089		19.27	
BROOKLYN CENTER	TOT	28,303	13,942	1,608	792	17.60	2.03
COLUMBIA HEIGHTS	TOT	49,707	127,454	2,535	6,500	19.61	.39
COON RAPIDS	TOT	67,700	67,030	3,314	3,281	20.43	1.01
CRYSTAL	TOT	2,293	16,379	80	571	28.66	.14
EDINA	TOT	201,857	240,306	10,607	12,627	19.03	.84
GOLDEN VALLEY	TOT	64,795	158,037	3,713	9,056	17.45	.41
MINNEAPOLIS	TOT	541,274	563,827	27,521	28,668	19.67	.96
MINNETONKA	TOT	119,131	126,735	5,239	5,573	22.74	.94
MOUND	TOT	20,369	14,760	910	659	22.38	1.38
PLYMOUTH	TOT	7,770	97,125	360	4,500	21.58	.08
RICHFIELD	TOT	12,024	21,471	666	1,189	18.05	.56
ST ANTHONY	TOT	29,213	76,876	1,250	3,289	23.37	.38
SPRING LAKE PARK	TOT	51,429	77,923	2,475	3,750	20.78	.66
MAPLE GROVE	TOT	77,738	146,675	3,638	6,864	21.37	.53
CHANHASSEN	TOT	126,709	269,594	7,435	15,819	17.04	.47
CHASKA	TOT	63,802	85,069	3,929	5,239	16.24	.75
RAMSEY	TOT	39,444	36,522	2,135	1,977	18.47	1.08
EAST BETHEL	TOT	56,700	45,360	2,700	2,160	21.00	1.25
LINO LAKES	TOT	93,585	91,750	5,100	5,000	18.35	1.02
DISTRICT 5	TOT	1,832,864	110,547	94,324	5,689	19.43	16.58
ALBERT LEA	TOT	138,692	223,697	5,571	8,985	24.90	.62
FARIBAULT	TOT	102,337	127,921	3,926	4,908	26.07	.80
OWATONNA	TOT	33,507	239,336	921	6,579	36.38	.14
ROCHESTER	TOT	208,210	129,323	10,753	6,679	19.36	1.61
WINONA	TOT	143,942	141,120	5,118	5,018	28.12	1.02
DISTRICT 6	TOT	626,688	149,568	26,289	6,274	23.84	4.19
FAIRMONT	TOT	442	6,314	12	171	36.83	.07

M.S.A.S. UNIT PRICE STUDY

PAGE 37

BIT. SURF. 2331 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
NORTH MANKATO	TOT	88,284	85,713	4,930	4,786	17.91	1.03
WASECA	TOT	78,393	191,202	3,922	9,566	19.99	.41
DISTRICT 7	TOT	167,119	110,675	8,864	5,870	18.85	1.51
HUTCHINSON	TOT	155,863	152,807	6,163	6,042	25.29	1.02
MARSHALL	TOT	78,871	225,346	4,087	11,677	19.30	.35
MONTEVIDEO	TOT	61,362	236,008	2,975	11,442	20.63	.26
WILLMAR	TOT	58,700	101,207	2,800	4,828	20.96	.58
DISTRICT 8	TOT	354,796	160,541	16,025	7,251	22.14	2.21
FALCON HEIGHTS	TOT	8,970	64,071	444	3,171	20.20	.14
HASTINGS	TOT	20,704	50,498	1,105	2,695	18.74	.41
MENDOTA HEIGHTS	TOT	78,730	65,608	3,496	2,913	22.52	1.20
MOUNDS VIEW	TOT	64,229	160,573	3,370	8,425	19.06	.40
NEW BRIGHTON	TOT	37,630	42,761	2,120	2,409	17.75	.88
ROSEVILLE	TOT	91,849	104,374	4,920	5,591	18.67	.88
ST PAUL	TOT	92,867	58,407	5,752	3,618	16.15	1.59
SOUTH ST PAUL	TOT	58,282	70,219	3,297	3,972	17.68	.83
WEST ST PAUL	TOT	60,560	112,148	3,320	6,148	18.24	.54
WHITE BEAR LAKE	TOT	204,051	160,670	13,110	10,323	15.56	1.27
INVER GROVE HEIGHTS	TOT	33,424	104,450	1,960	6,125	17.05	.32
BURNSVILLE	TOT	71,365	92,682	4,201	5,456	16.99	.77
COTTAGE GROVE	TOT	46,741	47,213	2,690	2,717	17.38	.99
OAKDALE	TOT	24,178	53,729	1,250	2,778	19.34	.45
ARDEN HILLS	TOT	125,217	145,601	6,857	7,973	18.26	.86
LAKEVILLE	TOT	16,967	56,557	940	3,133	18.05	.30
WOODBURY	TOT	48,503	118,300	2,050	5,000	23.66	.41
EAGAN	TOT	217,018	92,348	11,540	4,911	18.81	2.35
DISTRICT 9	TOT	1,301,285	89,190	72,422	4,964	17.97	14.59
STATE TOTAL		5,130,552	97,023	261,043	4,937	19.65	52.88

BIT. SURF. 2331 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	526,529	58,962	26,627	2,982	19.77	8.93
DISTRICT 2	TOT	112,984	51,124	5,657	2,560	19.97	2.21
DISTRICT 3	TOT	105,728	57,461	6,213	3,377	17.02	1.84
DISTRICT 4	TOT	102,559	125,072	4,622	5,637	22.19	.82
DISTRICT 5	TOT	1,832,864	110,547	94,324	5,689	19.43	16.58
DISTRICT 6	TOT	626,688	149,568	26,289	6,274	23.84	4.19
DISTRICT 7	TOT	167,119	110,675	8,864	5,870	18.85	1.51
DISTRICT 8	TOT	354,796	160,541	16,025	7,251	22.14	2.21
DISTRICT 9	TOT	1,301,285	89,190	72,422	4,964	17.97	14.59
STATE TOTAL		5,130,552	97,023	261,043	4,937	19.65	52.88

M.S.A.S. UNIT PRICE STUDY

PAGE 44

BIT. SURF. 2341 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	30,584	48,546	1,156	1,835	26.46	.63
DULUTH	TOT	371,573	88,470	14,191	3,379	26.18	4.20
DISTRICT 1	TOT	402,157	83,262	15,347	3,177	26.20	4.83
BEMIDJI	TOT	56,114	54,480	2,793	2,712	20.09	1.03
DISTRICT 2	TOT	56,114	54,480	2,793	2,712	20.09	1.03
BRAINERD	TOT	36,882	40,980	1,871	2,079	19.71	.90
ST CLOUD	TOT	45,097	68,329	2,408	3,648	18.73	.66
SAUK RAPIDS	TOT	12,930	46,179	800	2,857	16.16	.28
DISTRICT 3	TOT	94,909	51,581	5,079	2,760	18.69	1.84
MOORHEAD	TOT	2,533	63,325	100	2,500	25.33	.04
DISTRICT 4	TOT	2,533	63,325	100	2,500	25.33	.04
BLAINE	TOT	105,361	61,977	5,020	2,953	20.99	1.70
BLOOMINGTON	TOT	25,695		971		26.46	
COLUMBIA HEIGHTS	TOT	32,705	83,859	1,200	3,077	27.25	.39
COON RAPIDS	TOT	83,411	82,585	3,382	3,349	24.66	1.01
CRYSTAL	TOT	869	6,207	17	121	51.12	.14
EDINA	TOT	127,766	152,102	4,752	5,657	26.89	.84
FRIDLEY	TOT	172,233	218,016	8,060	10,203	21.37	.79
GOLDEN VALLEY	TOT	43,181	47,452	2,042	2,244	21.15	.91
MINNEAPOLIS	TOT	43,762	65,316	1,541	2,300	28.40	.67
MINNETONKA	TOT	95,745	38,921	4,726	1,921	20.26	2.46
MOUND	TOT	16,275	11,793	570	413	28.55	1.38
PLYMOUTH	TOT	10,025	125,313	425	5,313	23.59	.08
RICHFIELD	TOT	6,626	11,832	208	371	31.86	.56
ST ANTHONY	TOT	33,789	88,918	1,660	4,368	20.35	.38
SPRING LAKE PARK	TOT	65,825	99,735	2,500	3,788	26.33	.66
MAPLE GROVE	TOT	15,299	54,639	559	1,996	27.37	.28
CHANHASSEN	TOT	95,421	203,023	4,590	9,766	20.79	.47
CHASKA	TOT	11,797	12,685	294	316	40.13	.93
RAMSEY	TOT	34,368	31,822	1,555	1,440	22.10	1.08
LINO LAKES	TOT	50,780	49,784	1,640	1,608	30.96	1.02
DISTRICT 5	TOT	1,070,933	67,996	45,712	2,902	23.43	15.75
ALBERT LEA	TOT	19,850	58,382	660	1,941	30.08	.34
FARIBAULT	TOT	46,062	57,578	1,574	1,968	29.26	.80
NORTHFIELD	TOT	3,434	28,617	46	383	74.65	.12
OWATONNA	TOT	9,494	27,126	323	923	29.39	.35
ROCHESTER	TOT	32,929	28,387	1,555	1,341	21.18	1.16
DISTRICT 6	TOT	111,769	40,350	4,158	1,501	26.88	2.77
NORTH MANKATO	TOT	73,111	70,982	2,145	2,083	34.08	1.03
WORTHINGTON	TOT	1,704	9,467	35	194	48.69	.18
DISTRICT 7	TOT	74,815	61,831	2,180	1,802	34.32	1.21
HUTCHINSON	TOT	61,606	60,398	2,198	2,155	28.03	1.02
MARSHALL	TOT	19,286	55,103	801	2,289	24.08	.35
MONTEVIDEO	TOT	15,753	60,588	595	2,288	26.48	.26
WILLMAR	TOT	20,328	35,048	1,400	2,414	14.52	.58

BIT. SURF. 2341 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 8	TOT	116,973	52,929	4,994	2,260	23.42	2.21
HASTINGS	TOT	26,451	64,515	1,105	2,695	23.94	.41
MENDOTA HEIGHTS	TOT	47,819	39,849	1,792	1,493	26.68	1.20
MOUNDS VIEW	TOT	21,447	53,618	920	2,300	23.31	.40
NEW BRIGHTON	TOT	32,147	36,531	1,515	1,722	21.22	.88
ROSEVILLE	TOT	65,125	74,006	2,705	3,074	24.08	.88
ST PAUL	TOT	77,503	48,744	3,282	2,064	23.61	1.59
SOUTH ST PAUL	TOT	50,479	60,818	2,189	2,637	23.06	.83
WEST ST PAUL	TOT	29,586	54,789	1,451	2,687	20.39	.54
WHITE BEAR LAKE	TOT	2,513	1,979	80	63	31.41	1.27
INVER GROVE HEIGHTS	TOT	22,524	70,388	980	3,063	22.98	.32
BURNSVILLE	TOT	82,520	107,169	5,565	7,227	14.83	.77
COTTAGE GROVE	TOT	128,367	129,664	6,015	6,076	21.34	.99
OAKDALE	TOT	30,067	66,816	1,290	2,867	23.31	.45
ARDEN HILLS	TOT	45,415	52,808	2,095	2,436	21.68	.86
LAKEVILLE	TOT	14,807	49,357	764	2,547	19.38	.30
WOODBURY	TOT	18,400	44,878	660	1,610	27.88	.41
EAGAN	TOT	225,662	96,026	9,930	4,226	22.73	2.35
DISTRICT 9	TOT	920,832	63,725	42,338	2,930	21.75	14.45

STATE TOTAL		2,851,035	64,605	122,701	2,780	23.24	44.13
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M.S.A.S. UNIT PRICE STUDY

PAGE 46

BIT. SURF. 2341 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	402,157	83,262	15,347	3,177	26.20	4.83
DISTRICT 2	TOT	56,114	54,480	2,793	2,712	20.09	1.03
DISTRICT 3	TOT	94,909	51,581	5,079	2,760	18.69	1.84
DISTRICT 4	TOT	2,533	63,325	100	2,500	25.33	.04
DISTRICT 5	TOT	1,070,933	67,996	45,712	2,902	23.43	15.75
DISTRICT 6	TOT	111,769	40,350	4,158	1,501	26.88	2.77
DISTRICT 7	TOT	74,815	61,831	2,180	1,802	34.32	1.21
DISTRICT 8	TOT	116,973	52,929	4,994	2,260	23.42	2.21
DISTRICT 9	TOT	920,832	63,725	42,338	2,930	21.75	14.45
STATE TOTAL		2,851,035	64,605	122,701	2,780	23.24	44.13

BIT. SURF. 2361 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DULUTH	TOT	136,273	30,901	4,130	937	33.00	4.41
EVELETH	TOT	17,850	28,333	600	952	29.75	.63
HIBBING	TOT	56,450	14,113	2,275	569	24.81	4.00
DISTRICT 1	TOT	210,573	23,293	7,005	775	30.06	9.04
ST CLOUD	TOT	44,589	39,459	1,847	1,635	24.14	1.13
DISTRICT 3	TOT	44,589	39,459	1,847	1,635	24.14	1.13
BROOKLYN CENTER	TOT	160,685	79,155	4,365	2,150	36.81	2.03
MINNEAPOLIS	TOT	80,000	200,000	2,051	5,128	39.01	.40
MINNETONKA	TOT	25,194	26,802	789	839	31.93	.94
RICHFIELD	TOT	4,811	8,591	178	318	27.03	.56
DISTRICT 5	TOT	270,690	68,878	7,383	1,879	36.66	3.93
ALBERT LEA	TOT	9,606	41,765	225	978	42.69	.23
ROCHESTER	TOT	37,507	83,349	956	2,124	39.23	.45
DISTRICT 6	TOT	47,113	69,284	1,181	1,737	39.89	.68
FALCON HEIGHTS	TOT	2,749	19,636	78	557	35.24	.14
ST PAUL	TOT	23,813	33,074	650	903	36.64	.72
WHITE BEAR LAKE	TOT	62,013	48,829	1,870	1,472	33.16	1.27
DISTRICT 9	TOT	88,575	41,585	2,598	1,220	34.09	2.13
STATE TOTAL		661,540	39,121	20,014	1,184	33.05	16.91

M.S.A.S. UNIT PRICE STUDY

PAGE 53

BIT. SURF. 2361 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	210,573	23,293	7,005	775	30.06	9.04
DISTRICT 3	TOT	44,589	39,459	1,847	1,635	24.14	1.13
DISTRICT 5	TOT	270,690	68,878	7,383	1,879	36.66	3.93
DISTRICT 6	TOT	47,113	69,284	1,181	1,737	39.89	.68
DISTRICT 9	TOT	88,575	41,585	2,598	1,220	34.09	2.13
STATE TOTAL		661,540	39,121	20,014	1,184	33.05	16.91

AGG. SHLD. 2221 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
BLOOMINGTON	TOT	3,219		460		7.00	
CHASKA	TOT	3,738	4,984	575	767	6.50	.75
DISTRICT 5	TOT	6,957	9,276	1,035	1,380	6.72	.75
OWATONNA	TOT	1,380	9,857	184	1,314	7.50	.14
ROCHESTER	TOT	100	286	28	80	3.57	.35
DISTRICT 6	TOT	1,480	3,020	212	433	6.98	.49
STATE TOTAL		8,437	6,804	1,247	1,006	6.77	1.24

M.S.A.S. UNIT PRICE STUDY

PAGE 92

AGG. SHLD. 2221 TONS

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 5	TOT	6,957	9,276	1,035	1,380	6.72	.75
DISTRICT 6	TOT	1,480	3,020	212	433	6.98	.49
STATE TOTAL		8,437	6,804	1,247	1,006	6.77	1.24

		CURB & GUTTER 2531		LIN. FT.			
TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	43,814	66,385	6,889	10,438	6.36	.66
DULUTH	TOT	239,148	66,801	36,207	10,114	6.61	3.58
EVELETH	TOT	30,940	49,111	5,244	8,324	5.90	.63
DISTRICT 1	TOT	313,902	64,456	48,340	9,926	6.49	4.87
BEMIDJI	TOT	64,190	56,307	12,394	10,872	5.18	1.14
EAST GRAND FORKS	TOT	50,053	58,886	7,854	9,240	6.37	.85
THIEF RIVER FALLS	TOT	3,739	3,494	600	561	6.23	1.07
DISTRICT 2	TOT	117,982	38,556	20,848	6,813	5.66	3.06
BRAINERD	TOT	47,617	52,908	9,486	10,540	5.02	.90
ST CLOUD	TOT	29,489	44,680	6,380	9,667	4.62	.66
SAUK RAPIDS	TOT	13,217	47,204	2,670	9,536	4.95	.28
DISTRICT 3	TOT	90,323	49,089	18,536	10,074	4.87	1.84
ALEXANDRIA	TOT	14,700	56,538	2,940	11,308	5.00	.26
DETROIT LAKES	TOT	9,971	35,611	1,734	6,193	5.75	.28
MOORHEAD	TOT	3,510	87,750	390	9,750	9.00	.04
MORRIS	TOT	11,376	47,400	2,400	10,000	4.74	.24
DISTRICT 4	TOT	39,557	48,240	7,464	9,102	5.30	.82
BLAINE	TOT	78,581	46,224	18,190	10,700	4.32	1.70
BLOOMINGTON	TOT	46,068		11,137		4.14	
BROOKLYN CENTER	TOT	25,684	25,430	2,660	2,634	9.66	1.01
COLUMBIA HEIGHTS	TOT	22,843	58,572	4,310	11,051	5.30	.39
COON RAPIDS	TOT	56,180	55,624	12,213	12,092	4.60	1.01
CRYSTAL	TOT	20,353	145,379	2,648	18,914	7.69	.14
EDINA	TOT	63,242	75,288	12,500	14,881	5.06	.84
FRIDLEY	TOT	27,632	34,977	6,280	7,949	4.40	.79
GOLDEN VALLEY	TOT	21,974	53,595	3,392	8,273	6.48	.41
MINNEAPOLIS	TOT	43,433	55,683	5,918	7,587	7.34	.78
MINNETONKA	TOT	38,900	41,383	7,955	8,463	4.89	.94
MOUND	TOT	12,394	82,627	1,858	12,387	6.67	.15
PLYMOUTH	TOT	5,025	62,813	690	8,625	7.28	.08
RICHFIELD	TOT	6,339	11,320	985	1,759	6.44	.56
ST ANTHONY	TOT	18,000	47,368	4,000	10,526	4.50	.38
SHAKOPEE	TOT	9,867		2,060		4.79	
SPRING LAKE PARK	TOT	30,240	45,818	7,000	10,606	4.32	.66
MAPLE GROVE	TOT	21,791	41,115	5,330	10,057	4.09	.53
CHANHASSEN	TOT	24,125	51,330	4,825	10,266	5.00	.47
CHASKA	TOT	14,680	19,573	2,387	3,183	6.15	.75
RAMSEY	TOT	48,303	44,725	11,354	10,513	4.25	1.08
LINO LAKES	TOT	18,536	18,173	3,310	3,245	5.60	1.02
DISTRICT 5	TOT	654,190	47,786	131,002	9,569	4.99	13.69
ALBERT LEA	TOT	21,405	54,885	3,825	9,808	5.60	.39
AUSTIN	TOT	4,905	11,679	4,505	10,726	1.09	.42
FARIBAULT	TOT	48,921	61,151	8,222	10,278	5.95	.80
NORTHFIELD	TOT	6,410	53,417	986	8,217	6.50	.12
OWATONNA	TOT	4,050	28,929	675	4,821	6.00	.14
ROCHESTER	TOT	75,854	52,676	13,165	9,142	5.76	1.44
WINONA	TOT	68,420	67,078	10,724	10,514	6.38	1.02

M.S.A.S. UNIT PRICE STUDY

PAGE 61

		CURB & GUTTER 2531		LIN. FT.				
TOTALS		TOTAL	COST	TOTAL	QUANTITY	UNIT	LENGTH	
DISTRICT 6		TOT	COST	PER MILE	PER MILE	PRICE		
			229,965	53,110	42,102	9,723	5.46	4.33
FAIRMONT	TOT	5,287	75,529	622	8,886	8.50	.07	
NORTH MANKATO	TOT	68,601	66,603	11,315	10,985	6.06	1.03	
WORTHINGTON	TOT	4,828	26,822	1,931	10,728	2.50	.18	
DISTRICT 7	TOT	78,716	61,497	13,868	10,834	5.68	1.28	
HUTCHINSON	TOT	35,644	54,006	6,754	10,233	5.28	.66	
MARSHALL	TOT	18,860	53,886	3,280	9,371	5.75	.35	
MONTEVIDEO	TOT	15,246	58,638	2,558	9,838	5.96	.26	
WILLMAR	TOT	6,248	10,772	1,225	2,112	5.10	.58	
DISTRICT 8	TOT	75,998	41,080	13,817	7,469	5.50	1.85	
FALCON HEIGHTS	TOT	9,531	68,079	1,765	12,607	5.40	.14	
HASTINGS	TOT	17,282	42,151	4,215	10,280	4.10	.41	
MENDOTA HEIGHTS	TOT	27,008	43,561	6,400	10,323	4.22	.62	
MOUNDS VIEW	TOT	22,689	56,723	4,720	11,800	4.81	.40	
NEW BRIGHTON	TOT	45,684	51,914	9,720	11,045	4.70	.88	
ROSEVILLE	TOT	63,534	72,198	10,865	12,347	5.85	.88	
ST PAUL	TOT	89,035	55,997	16,959	10,666	5.25	1.59	
SOUTH ST PAUL	TOT	9,787	65,247	1,478	9,853	6.62	.15	
WEST ST PAUL	TOT	23,914	44,285	5,435	10,065	4.40	.54	
WHITE BEAR LAKE	TOT	56,803	44,727	13,210	10,402	4.30	1.27	
INVER GROVE HEIGHTS	TOT	13,398	41,869	3,080	9,625	4.35	.32	
BURNSVILLE	TOT	24,920	50,857	5,600	11,429	4.45	.49	
COTTAGE GROVE	TOT	43,451	43,890	10,470	10,576	4.15	.99	
OAKDALE	TOT	22,838	50,751	4,800	10,667	4.76	.45	
ARDEN HILLS	TOT	37,380	43,465	8,400	9,767	4.45	.86	
LAKEVILLE	TOT	13,983	46,610	2,950	9,833	4.74	.30	
WOODBURY	TOT	14,016	34,185	3,200	7,805	4.38	.41	
EAGAN	TOT	107,612	45,792	24,880	10,587	4.33	2.35	
DISTRICT 9	TOT	642,865	49,262	138,147	10,586	4.65	13.05	
STATE TOTAL		2,243,498	50,089	434,124	9,692	5.17	44.79	

		CURB & GUTTER 2531		LIN. FT.			
TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	313,902	64,456	48,340	9,926	6.49	4.87
DISTRICT 2	TOT	117,982	38,556	20,848	6,813	5.66	3.06
DISTRICT 3	TOT	90,323	49,089	18,536	10,074	4.87	1.84
DISTRICT 4	TOT	39,557	48,240	7,464	9,102	5.30	.82
DISTRICT 5	TOT	654,190	47,786	131,002	9,569	4.99	13.69
DISTRICT 6	TOT	229,965	53,110	42,102	9,723	5.46	4.33
DISTRICT 7	TOT	78,716	61,497	13,868	10,834	5.68	1.28
DISTRICT 8	TOT	75,998	41,080	13,817	7,469	5.50	1.85
DISTRICT 9	TOT	642,865	49,262	138,147	10,586	4.65	13.05
STATE TOTAL		2,243,498	50,089	434,124	9,692	5.17	44.79

M.S.A.S. UNIT PRICE STUDY

PAGE 135

SIDEWALK CONSTR. SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
CLOQUET	TOT	84,680	128,303	42,340	64,152	2.00	.66
DULUTH	TOT	300,363	64,873	165,019	35,641	1.82	4.63
EVELETH	TOT	8,818	13,997	4,899	7,776	1.80	.63
DISTRICT 1	TOT	393,861	66,531	212,258	35,854	1.86	5.92
BEMIDJI	TOT	49,814	43,696	33,209	29,131	1.50	1.14
EAST GRAND FORKS	TOT	22,286	61,906	13,187	36,631	1.69	.36
THIEF RIVER FALLS	TOT	90	281	50	156	1.80	.32
DISTRICT 2	TOT	72,190	39,665	46,446	25,520	1.55	1.82
BRAINERD	TOT	23,527	48,014	16,900	34,490	1.39	.49
ST CLOUD	TOT	52,031	78,835	45,244	68,552	1.15	.66
SAUK RAPIDS	TOT	138	493	81	289	1.70	.28
DISTRICT 3	TOT	75,696	52,934	62,225	43,514	1.22	1.43
ALEXANDRIA	TOT	8,776	33,754	5,485	21,096	1.60	.26
DETROIT LAKES	TOT	8,478	30,279	5,138	18,350	1.65	.28
MOORHEAD	TOT	7,254	181,350	3,720	93,000	1.95	.04
DISTRICT 4	TOT	24,508	42,255	14,343	24,729	1.71	.58
BLAINE	TOT	50,836	29,904	42,780	25,165	1.19	1.70
BLOOMINGTON	TOT	10,196		5,765		1.77	
COLUMBIA HEIGHTS	TOT	621	1,592	365	936	1.70	.39
COON RAPIDS	TOT	34,484	34,143	29,986	29,689	1.15	1.01
CRYSTAL	TOT	3,156	22,543	1,434	10,243	2.20	.14
EDINA	TOT	25,875	64,688	20,440	51,100	1.27	.40
GOLDEN VALLEY	TOT	2,426	17,329	1,540	11,000	1.58	.14
MINNEAPOLIS	TOT	18,380	27,433	7,763	11,587	2.37	.67
MOUND	TOT	4,531		2,025		2.24	
RICHFIELD	TOT	1,640	2,929	1,171	2,091	1.40	.56
ST ANTHONY	TOT	1,200	3,158	500	1,316	2.40	.38
SHAKOPEE	TOT	36,262		20,840		1.74	
MAPLE GROVE	TOT	400	1,429	200	714	2.00	.28
CHANHASSEN	TOT	18,000	38,298	12,000	25,532	1.50	.47
CHASKA	TOT	3,600	4,800	4,800	6,400	.75	.75
DISTRICT 5	TOT	211,607	30,712	151,609	22,004	1.40	6.89
ALBERT LEA	TOT	15,809	46,497	11,710	34,441	1.35	.34
AUSTIN	TOT	1,601	3,812	915	2,179	1.75	.42
FARIBAULT	TOT	11,151	19,913	6,462	11,539	1.73	.56
NORTHFIELD	TOT	11,204	93,367	5,603	46,692	2.00	.12
ROCHESTER	TOT	20,938	59,823	14,440	41,257	1.45	.35
WINONA	TOT	48,955	68,951	28,062	39,524	1.74	.71
DISTRICT 6	TOT	109,658	43,863	67,192	26,877	1.63	2.50
FAIRMONT	TOT	6,109	87,271	3,394	48,486	1.80	.07
WORTHINGTON	TOT	3,230	17,944	1,615	8,972	2.00	.18
DISTRICT 7	TOT	9,339	37,356	5,009	20,036	1.86	.25
HUTCHINSON	TOT	13,367	36,127	7,863	21,251	1.70	.37
MARSHALL	TOT	25,541	72,974	16,630	47,514	1.54	.35
MONTEVIDEO	TOT	2,063	7,935	1,373	5,281	1.50	.26

SIDEWALK CONSTR. SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 8	TOT	40,971	41,807	25,866	26,394	1.58	.98
FALCON HEIGHTS	TOT	3,942	28,157	2,319	16,564	1.70	.14
HASTINGS	TOT	15,914	38,815	10,532	25,688	1.51	.41
MENDOTA HEIGHTS	TOT	130	210	100	161	1.30	.62
MOUNDS VIEW	TOT	666	1,665	450	1,125	1.48	.40
NEW BRIGHTON	TOT	398	452	210	239	1.90	.88
ROSEVILLE	TOT	4,920	5,591	2,250	2,557	2.19	.88
ST PAUL	TOT	8,654	12,019	4,780	6,639	1.81	.72
SOUTH ST PAUL	TOT	639	4,260	240	1,600	2.66	.15
INVER GROVE HEIGHTS	TOT	12,430	38,844	7,970	24,906	1.56	.32
BURNSVILLE	TOT	35,100	71,633	26,000	53,061	1.35	.49
COTTAGE GROVE	TOT	1,125	1,136	450	455	2.50	.99
ARDEN HILLS	TOT	29,859	34,720	21,795	25,343	1.37	.86
EAGAN	TOT	72,925	33,606	54,883	25,292	1.33	2.17
DISTRICT 9	TOT	186,702	20,676	131,979	14,616	1.41	9.03
STATE TOTAL		1,124,532	38,249	716,927	24,385	1.57	29.40

M.S.A.S. UNIT PRICE STUDY

PAGE 137

SIDEWALK CONSTR. SQ. FT.

TOTALS		TOTAL COST	COST PER MILE	TOTAL QUANTITY	QUANTITY PER MILE	UNIT PRICE	LENGTH
DISTRICT 1	TOT	393,861	66,531	212,258	35,854	1.86	5.92
DISTRICT 2	TOT	72,190	39,665	46,446	25,520	1.55	1.82
DISTRICT 3	TOT	75,696	52,934	62,225	43,514	1.22	1.43
DISTRICT 4	TOT	24,508	42,255	14,343	24,729	1.71	.58
DISTRICT 5	TOT	211,607	30,712	151,609	22,004	1.40	6.89
DISTRICT 6	TOT	109,658	43,863	67,192	26,877	1.63	2.50
DISTRICT 7	TOT	9,339	37,356	5,009	20,036	1.86	.25
DISTRICT 8	TOT	40,971	41,807	25,866	26,394	1.58	.98
DISTRICT 9	TOT	186,702	20,676	131,979	14,616	1.41	9.03
STATE TOTAL		1,124,532	38,249	716,927	24,385	1.57	29.40

1987 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 1987-1988 cycle.

2. Out-State Municipalities

The out-state cities will be counted on a four-year cycle instead of the previous six-year counting cycle.

A. Municipalities that have a count annually

Duluth counts 1/4 of the city each year.

B. Traffic to be counted in 1987 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

C. Traffic to be counted in 1988 by state forces

Detroit Lakes International Falls Montevideo

D. Traffic to be counted in 1989 by state forces

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

E. Traffic to be counted in 1990 by state forces

Alexandria	Willmar
Cloquet	Worthington

F. Traffic to be counted in 1990 by individual municipalities

Austin	Rochester
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Minnesota Department of Transportation

Transportation Building, St. Paul, MN 55155

Phone 612-296-1662

In reply refer to:
Status of Construction Fund Balance

Dear Mr.

The present Screening Directive states that whenever a municipality's construction fund balance available as of June 30th of the current year, not including the current years 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.

Our records show that as of April 20, 1987 you have \$ available for construction, not including the 1987 allotment.

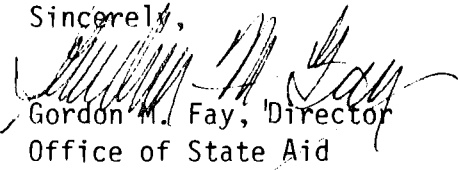
Your city should reduce this amount by \$ to a balance of \$ to avoid a possible adjustment recommendation by the Unencumbered Construction Fund Subcommittee.

If the balance is not reduced by June 30, each city will be asked to supply the subcommittee a status report of the progress made toward awarding a construction project covering the following items and dates which these accomplishments occurred.

1. Has a 429 feasibility hearing been held by the City Council and the project ordered in?
2. Project submitted to the District State Aid Engineer?
3. Plan approval by City Council and the District State Aid Engineer?
4. Does project have a letting date or been let?
5. State Aid Construction funds requested?

Should you have any questions regarding your construction fund balance, contact Kenneth Straus at (612)296-1662.

Sincerely,


Gordon M. Fay, Director
Office of State Aid

An Equal Opportunity Employer

1987 MUNICIPAL STATE AID STREET SCREENING BOARD DATA

UNENCUMBERED CONSTRUCTION FUNDS
SUMMARY OF THE THIRTY-ONE CITIES WHICH EXCEED THE LIMITATIONS
OF THE SCREENING COMMITTEE DIRECTIVES

Municipality	Balance As Of 4-21-87	A ----- 1987 Construction Allotment	B ----- Amount Available 4-21-87	C ----- Allowable Balance	D ----- Excess Balance	Column B ----- Column A
		-----	-----	-----	-----	-----
Albert Lea	1,336,379	331,367	1,005,012	662,734 (2X)	342,278	3.03
Bemidji	750,394	202,116	548,278	404,232 (2X)	144,046	2.71
Brooklyn Center	1,846,780	529,684	1,317,096	1,059,368 (2X)	257,728	2.49
Chaska	661,377	183,234	478,143	366,468 (2X)	111,675	2.61
Edina	2,279,595	605,979	1,673,616	1,211,958 (2X)	461,658	2.76
Fergus Falls	731,164	210,549	520,615	421,098 (2X)	99,517	2.47
Fridley	1,488,160	336,161	1,151,999	672,322 (2X)	479,677	3.43
Golden Valley	1,801,037	492,561	1,308,476	985,122 (2X)	323,354	2.66
Grand Rapids	582,913	161,655	421,258	323,310 (2X)	97,948	2.61
Hermantown	901,431	222,014	679,417	444,028 (2X)	235,389	3.06
Hopkins	1,058,435	201,031	857,404	402,062 (2X)	455,342	4.27
International Falls	509,022	136,494	372,528	300,000 *	72,528	2.73
Lake Elmo	518,864	135,925	382,939	300,000 *	82,939	2.82
Little Falls	601,429	121,942	479,487	300,000 *	179,487	3.93
Maplewood	2,519,983	552,857	1,967,126	1,105,714 (2X)	861,412	3.56
Morris	496,758	131,018	365,740	300,000 *	65,740	2.79
New Brighton	1,276,100	306,682	969,418	613,364 (2X)	356,054	3.16
New Hope	1,067,073	226,568	840,505	453,136 (2X)	387,369	3.71
New Ulm	1,229,549	249,271	980,278	498,542 (2X)	481,736	3.93
Northfield	912,013	235,690	676,323	471,380 (2X)	204,943	2.87
North St. Paul	710,666	195,868	514,798	391,736 (2X)	123,062	2.63
Prior Lake	691,294	205,090	486,204	410,180 (2X)	76,024	2.37
Richfield	1,490,461	388,103	1,102,358	776,206 (2X)	326,152	2.84
Robbinsdale	641,340	168,693	472,647	337,386 (2X)	135,261	2.80
Rosemount	886,068	221,986	664,082	443,972 (2X)	220,110	2.99
Shakopee	986,805	328,033	658,772	656,066 (2X)	2,706	2.01
Shoreview	865,014	249,079	615,935	498,158 (2X)	117,777	2.47
Stillwater	1,312,284	235,187	1,077,097	470,374 (2X)	606,723	4.58
Thief River Falls	581,553	173,724	407,829	347,448 (2X)	60,381	2.35
West St. Paul	1,215,032	178,073	1,036,959	356,146 (2X)	680,813	5.82
Worthington	584,290	175,683	408,607	351,366 (2X)	57,241	2.33

* Includes allowable \$300,000

CITIES W/ REMAINING BALANCES IN MAINTENANCE ACCOUNT AS OF 3/3/87

 These cities received more than the minimum amount for maintenance allocation and agreed to file a detailed annual expenditure report at the end of the year. Reports for the following have not been filed.

City ----	Year ----	Amount -----
Crystal	1984	6,316.00
	1985	7,356.90
	1986	14,133.80
Duluth	1986	48,596.67
Elk River	1984	7,349.30
Ely	1983	742.50
Falcon Heights	1985	1,461.42
Fridley	1984	10,062.10
Little Falls	1986	5,120.00
Maple Grove	1986	12,032.00
Marshall	1985	1,444.52
Minneapolis	1986	225,088.10
Mounds View	1985	4,398.90
North Mankato	1985	3,360.00
Oakdale	1986	6,165.10
Richfield	1986	14,992.20
Roseville	1986	1,684.31
So. St. Paul	1986	8,967.90
Spring Lake Park	1983	959.60
	1984	1,773.40
	1985	2,245.90
New Hope	1978	1,441.50
	1979	1,824.00
	1980	1,849.50
	1981	5,378.50
	1982	6,375.50
	1983	6,923.50
	1984	7,264.30
	1985	8,417.60
Orono	1980	916.42
	1981	1,188.65
	1982	1,692.85
	1983	2,451.00
	1984	2,859.95
	1985	3,924.72

FEDERAL AID URBAN FUND TRANSFERS

The cities listed have transferred their Federal Aid Urban funds to Mn/DOT. These funds are used by Mn/DOT to fund their projects. It was indicated that by transferring their F.A.U. funds the cities are not making improvements on some of their Municipal State Aid Streets and should have a needs adjustment. The Subcommittee recommended that there be no needs adjustment.

FEDERAL AID F.A.U. FUNDS TRANSFERED TO MN/DOT

CITY	S.P.	FED NO.	LENGTH	LETTING DATE	TRANSFER AMOUNT	CONTRACT AMOUNT	TYPE OF FUNDING	TYPE OF WORK	LOCATION
ELK RIVER	7101-49	0032-58	2.989	7-27-84	122,630.48	1,681,366.95	P	Gr, Bit, Channelization & St Sewer	T.H. 10 from Jct 201 to a pt. 1.53 Mi. E.
FARIBAULT	6607-31	T.H. 60	1.078	6-6-86	30,000.00	181,363.50	S.F.	Repair & Resurf.	T.H. 60 from Jct T.H. 21 to Central Ave in Faribault
FERGUS FALLS	5614-28			5-22-87	93,573.00		P	St Sewer, Pumping Station	T.H. 59
	5614-28	0223-53	2.153	3-22-85	130,258.97	1,989,161.63		Gr, Bit, Lighting, Traffic Sig.	T.H. 59 Jct 210 @ Fergus Falls
HUTCHINSON	4304-31	F015-2(45)		7-24-87	230,000.00			Reconstruction	S. limits to 5th Ave S.
LITCHFIELD	4709-19 135-104-01	ST. F.	0.923	4-23-85	134,509.48	1,508,614.66	S.F.	G, Conc, C & G, St Sewer	T.H. 22 from .12 Mi. S of pleasure Dr. to W. Darwin St. in Litchfield
MONTEVIDEO	1212-18	F012-1(42)	0.732	11-18-83	107,614.00	729,105.32	P	G, Bit, C & G, Traf. Sig.	T.H. 212 near Jct T.H. 29 in Montevideo
MOORHEAD	1406-38	F006-3(59)	1.089	6-28-85	208,849.00	1,749,201.95	P	G, Bit, Lighting	T.H. 75 N Jct CR 76 with 30th Ave S
	1411-26	ST. F.		4-24-87	243,051.12		S.F.	Bit Surf & Misc.	T.H. 75 to I 94
NORTHFIELD	149-010-01	1011-06		7-9-76	65,000.00		S.F.	R/R Sig.	T.H. 19
RED WING	2514-69 156-101-02*	F3388	0.9441		579,000.00	2,261,132.64	P	G, Bit, Utilities	T.H. 61 from .5 Mi W Jct T.H. 19 to Cannon R. Dr. in Red Wing
	2513-64	ST. F.	0.277	6-27-86	161,154.00	177,923.50	S.F.	G, Bit	From Br. 9449 to .28 Mi. east in Red Wing
REDWOOD FALLS	6403-26	ST. F.	2.263	4-25-86	117,913.00	1,536,893.47	S.F.	G, Bit, Misc	T.H. 19 from W. limits Redwood Falls to 3.45 Mi E. Jct T.H. 71
THIEF RIVER FALLS	5705-36	0224-41	33.89	6-24-83	219,930.52	3,819,079.00	P	G, Bit	T.H. 59 Thief R. Falls to Erskine
	5705-37	0224-43	1.098	2-22-85	82,563.42	590,363.07	P	G, Bit	T.H. 59 from 1st to Jct CR 62 in Thief River Falls
WASECA	8101-37	T.H. 13	0.5716	1-24-86	150,000.00	982,676.65	S.F.	Bit, walk, C & G, Water Main Sig, Pave Re, Lighting	T.H. 13 from 10th Ave SW to 10th Ave NW in Waseca
WINONA	8503-25*	0421-35	0.18	2-27-81	80,000.00	2,021,173.74	P	G, B, Bit	T.H. 43 from .3 Mi N Jct T.H. 90 at Wilson to .2 Mi N T.H. 61 in Winona
	8503-27	0421-31	0.3	5-28-76	396,337.00	167,565.77	P	G, Bit, C & G	T.H. 43 & 61 in Winona
	8503-28*	S.F.	0.37	4-23-82	366,000.00	341,179.25	P	G, Bit, C & G, Sig.	T.H. 43 Winona St to Broadway in Winona
WORTHINGTON	5304-23*	0171-35	0.914	3-25-83	262,000.00	730,344.68	P	Widening, Resurf, Channelization, Revise Sig.	T.H. 59 in Worthington
	5311-10*	5546-01	0.4	2-22-80	245,000.00	522,848.05	FAU	Bit overlay, Widening C & G Channelization	T.H. 266(Oxford St) from McMillan St to Smith Ave in Worthington

1987 MUNICIPAL SCREENING BOARD DATA

Grading Costs and Variations -----

The following listing includes segments from the needs study which require grading but differs from the design quantity table. At the present time, the grading costs per mile must be estimated on all proposed rural and suburban design roadways and on urban designs that are different than the design quantity charts.

When a comparison between the various widths, designs and costs no logical pattern can be established as to how the costs were computed. It is apparent that many costs should be changed to correctly reflect the true needs costs.

A proposed suggestion is to indicate the cubic yardage on all segments that differ from the design quantity charts so that the dollar amount would be automatically computed and updated by the computer using the unit price set by the screening committee.

GRADING COSTS & VARIATIONS

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
101	129	010	15,000	38	44	U
102	123	010	30,000	--	44	U
103	122	060	30,000	--	44	U
103	122	070	30,000	--	44	U
105	120	010	20,000	28	44	U
106	102	010	30,000	30	44	U
106	107	080	30,000	--	44	U
106	107	090	30,000	--	44	U
106	109	060	30,000	26	44	U
106	109	070	30,000	--	44-60	R
106	115	005	40,000	30	44	U
106	118	030	30,000	--	44-60	R
106	123	010	30,000	--	44	U
106	123	020	30,000	--	44-60	R
106	124	020	30,000	--	36	U
106	124	030	30,000	--	36	U
106	124	040	30,000	--	36	U
106	124	050	30,000	--	36	U
106	127	010	30,000	--	44-60	R
106	128	010	30,000	--	44	U
107	131	011	30,000	--	52	U
107	441	030	30,000	--	72	U
107	441	040	30,000	--	72	U
107	443	020	30,000	40	52	U
108	123	010	30,000	30	44	U
108	128	010	20,000	--	24-44	SUB
109	106	030	13,800	30	44	U
109	106	040	13,800	30	44	U
109	114	020	25,000	36	44	U
109	115	010	13,800	30	44	U
109	125	010	30,000	36	52	U
109	125	020	30,000	36	44	U
109	125	030	30,000	36	44	U
109	125	050	30,000	--	44	U
110	102	011	20,000	28	44	U
110	106	010	25,000	--	44	U
110	107	020	20,000	32	44	U
110	113	010	30,000	24	44	U
110	113	020	30,000	--	44	U
110	115	015	30,000	--	44	U
110	115	020	15,000	33	44	U
110	121	010	30,000	--	44	U
110	125	010	30,000	--	44	U
110	128	010	30,000	25	44	U
110	129	010	30,000	26	44	U
111	233	020	15,000	24	44	U
111	233	030	15,000	24	44	U
112	115	010	8,500	30	44	U
112	116	010	25,500	22	44	U
112	121	010	15,000	30	44	U
112	123	052	30,000	--	44	U
112	129	010	30,000	22	24-36	R
112	131	010	30,000	20	24-36	R
112	131	020	35,000	20	24-36	R

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
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113	117	020	56,000	29	44	U
114	102	010	15,000	28	44	U
114	108	010	30,000	--	46	U
114	119	040	30,000	--	44	U
114	128	020	30,000	--	44	U
115	118	060	15,000	--	24-44	SUB
115	135	060	20,000	30	44	U
115	137	010	15,000	24	44	U
115	140	010	44,000	24	44	U
116	312	030	16,900	--	24-44	SUB
116	321	037	63,333	--	44	U
116	516	010	30,000	40	52	U
116	516	050	30,000	40	52	U
117	104	030	14,400	40	44	U
117	116	010	20,000	24	44	U
117	116	020	30,000	44	44	U
118	104	020	63,111	28	44	U
118	109	091	117,532	44	44	U
118	113	010	91,700	28	24-44	R
118	113	020	91,700	30	24-44	SUB
118	113	030	72,300	36	44	U
118	113	040	87,500	28	36	U
118	115	050	70,300	24	44	U
118	115	060	115,400	28	44	U
118	119	020	20,000	--	56	U
118	129	050	41,650	44	48	U
118	148	090	30,000	--	44	U
118	176	010	20,000	30	24-44	SUB
118	177	010	15,000	--	24-44	SUB
118	177	020	64,000	--	24-44	SUB
118	179	010	30,000	28	28	U
118	179	012	20,000	28	34	U
118	181	020	30,000	28	44	U
118	181	030	30,000	40	44	U
118	181	031	20,000	40	44	U
119	111	030	15,000	42	44	U
119	116	010	30,000	--	44	U
119	118	020	30,000	--	44	U
119	118	030	30,000	--	44	U
120	137	020	15,000	30	44	U
120	137	030	30,000	30	44	U
120	151	060	101,362	26	44	U
120	157	010	30,000	30	44	U
120	167	010	114,396	30	36	U
120	171	010	30,000	--	52	U
120	171	020	30,000	--	52	U
120	171	030	30,000	--	52	U
122	225	050	15,000	30	44	U
123	104	050	15,000	--	44	U
123	106	030	10,000	30	44	U
123	107	010	30,000	32	44	U
123	108	020	20,000	32	44	U
125	110	030	71,300	53	44	U
125	113	030	20,000	34	42	U
125	118	010	6,250	50	52	U

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
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125	125	040	37,100	36	46	U
125	126	010	21,000	36	40	U
125	128	010	37,100	36	44	U
125	128	020	11,000	36	44	U
125	129	030	30,000	24	44	U
127	302	015	30,000	24	44	U
127	309	020	20,000	--	44	U
127	310	010	11,200	--	24-40	SUB
127	310	020	60,600	--	24-40	SUB
127	310	030	66,100	--	24-40	SUB
127	323	030	30,000	--	44	U
127	331	030	1,583	36	44	U
127	336	010	20,000	24	44	U
127	341	010	30,000	--	46	U
128	330	010	30,000	--	36	U
128	330	013	30,000	--	36	U
128	330	017	30,000	--	44	U
128	332	040	30,000	30	44	U
128	387	050	30,000	30	44	U
128	387	075	30,000	--	44	U
128	387	080	30,000	28	44	U
128	404	010	30,000	24	44	U
128	406	030	30,000	--	44	U
128	407	010	30,000	--	44	U
128	419	005	30,000	--	44	U
128	419	020	30,000	--	44	U
129	125	010	20,000	35	44	U
129	125	020	20,000	--	44	U
130	124	040	30,000	--	40	U
130	127	010	30,000	30	40	U
130	132	030	15,000	--	36	U
131	175	010	120,000	30	44	U
131	177	060	89,969	--	44	U
131	183	060	30,000	32	44	U
131	186	010	89,969	32	24-44	R
131	186	020	89,969	--	24-44	R
131	186	030	89,969	32	24-44	R
131	186	040	89,969	32	24-44	R
131	186	050	89,969	32	44	U
131	193	010	150,000	--	44	U
131	196	030	25,000	36	44	U
131	198	010	89,969	--	44	U
131	199	070	90,000	32	24-36	R
131	201	020	89,969	--	44	U
131	201	030	89,969	32	44	U
131	201	040	25,000	34	44	U
131	206	010	89,969	32	24-32	R
131	206	020	90,000	32	24-36	R
131	207	010	89,969	32	24-32	R
131	209	010	89,969	36	24-36	R
131	211	010	89,969	36	24-32	R
131	212	010	89,969	36	24-36	R
131	212	020	89,969	36	24-32	R
131	212	030	89,969	36	24-32	R

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
131	213	020	89,969	36	24-44	R
131	213	030	89,969	36	24-44	R
131	214	010	89,969	36	24-36	R
131	215	010	89,969	32	44	U
131	216	015	89,969	32	24-36	R
131	216	020	89,969	32	44	U
131	217	010	89,969	32	44	U
131	219	010	89,969	32	24-40	R
131	219	020	89,969	32	24-44	R
131	219	030	89,969	38	24-44	R
131	220	010	65,000	--	36	U
131	222	010	105,000	--	36	U
133	116	010	23,250	30	44	U
133	121	010	30,000	44	39	U
135	110	020	26,400	36	44	U
135	115	010	30,000	30	44	U
137	115	020	12,000	44	44	U
138	103	010	30,000	--	44	U
138	103	011	30,000	28	44	U
138	104	070	30,000	--	68	U
138	110	020	30,000	--	68	U
138	112	020	30,000	34	44	U
138	112	030	30,000	36	44	U
138	112	040	30,000	36	44	U
138	114	010	30,000	42	68	U
138	115	020	30,000	--	52	U
138	117	010	30,000	--	44	U
138	119	020	30,000	--	44	U
139	108	020	30,000	24	44	U
140	104	010	30,000	--	40	U
140	106	010	30,000	32	44	U
140	107	010	15,000	28	44	U
142	116	010	15,800	18	44	U
142	117	011	30,000	18	44	U
142	117	050	77,000	24	44	U
142	118	030	20,300	20	44	U
142	119	010	17,100	16	44	U
142	119	020	63,700	--	24-44	R
142	119	030	15,800	18	44	U
142	120	041	15,800	20	44	U
142	124	010	15,800	18	44	U
142	125	010	26,100	20	44	U
142	125	030	16,500	18	44	U
142	127	010	81,200	20	44	U
142	127	020	30,000	--	44	U
142	127	030	35,900	20	44	U
142	127	040	33,200	--	44	U
142	127	050	33,200	20	44	U
142	128	010	30,000	--	44	U
142	131	030	16,500	18	44	U
142	132	010	15,800	20	44	U
142	133	010	17,100	20	44	U
142	133	020	15,000	34	44	U
142	133	030	15,000	34	44	U
142	133	040	15,000	34	44	U
142	134	010	16,100	20	44	U

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
142	135	010	21,000	20	44	U
142	135	020	43,800	--	26-44	SUB
142	136	020	18,200	20	44	U
142	137	010	16,200	18	44	U
142	138	010	23,100	--	24-44	SUB
142	141	010	19,500	24	44	U
142	141	030	40,000	--	44	U
142	142	010	15,700	18	44	U
142	143	010	20,100	44	44	U
142	143	030	3,000	44	44	U
142	143	040	3,000	44	44	U
142	143	050	3,000	44	44	U
142	144	030	21,600	--	24-40	SUB
142	145	010	30,900	18	44	U
142	145	020	19,800	20	44	U
142	146	010	30,000	20	44	U
142	147	011	31,900	20	44	U
142	147	020	27,100	20	44	U
142	150	010	195,867	--	44	U
142	150	020	162,941	--	44	U
142	150	030	241,810	--	44	U
142	154	010	30,000	--	36	U
142	154	015	15,000	36	36	U
142	154	020	12,000	36	36	U
142	154	040	30,000	--	36	U
142	155	010	60,000	--	44	U
142	156	010	100,000	--	44	U
143	102	010	20,700	30	44	U
143	113	010	30,000	40	44	U
144	112	040	23,400	--	24-40	SUB
144	132	010	24,000	28	40	U
145	109	010	20,000	24	44	U
145	109	020	20,000	12	44	U
145	109	040	30,000	--	44	U
146	228	050	3,000	44	44	U
146	228	060	3,000	44	44	U
146	233	010	3,000	34	44	U
147	101	050	15,000	--	24-44	SUB
147	101	060	15,000	--	24-44	SUB
147	101	070	15,000	--	24-44	SUB
147	102	005	15,000	32	36	U
147	103	070	18,984	--	24-44	SUB
147	104	040	30,000	--	44	U
147	108	020	15,000	--	44	U
147	118	010	30,000	34	44	U
147	119	010	15,000	--	24-36	SUB
148	109	020	30,000	28	40	U
149	115	010	30,000	--	44	U
149	115	020	30,000	20	44	U
149	116	010	20,000	24	44	U
149	117	005	30,000	--	44	U
150	116	030	45,000	60	48	U
150	116	040	45,000	45	48	U
150	116	050	70,000	45	48	U

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
151	251	010	15,000	--	24-44	SUB
151	256	010	20,000	--	52	U
151	257	010	30,000	44	44	U
151	258	020	20,000	--	44	U
152	101	060	30,000	28	24-40	R
152	105	010	30,000	30	24-44	R
153	101	040	20,700	--	24-44	SUB
153	127	030	15,000	24	44	U
153	128	010	30,000	--	44	U
155	157	030	25,300	18	24-44	SUB
155	158	010	20,100	24	44	U
155	160	010	20,100	--	44	U
155	160	020	20,100	--	44	U
155	161	010	30,000	22	44	U
155	164	050	30,000	--	44	U
155	165	001	30,000	--	52	U
155	165	003	30,000	--	52	U
155	165	005	30,000	--	52	U
155	165	010	30,000	--	24-44	SUB
155	165	032	30,000	--	24-44	SUB
155	169	020	30,000	--	48	U
155	170	010	30,000	--	44	U
156	125	020	30,000	20	24-44	R
156	125	040	30,000	20	24-44	R
156	125	050	15,000	26	44	U
156	125	060	30,000	28	44	U
156	125	070	30,000	--	44	U
156	125	080	30,000	28	44	U
156	125	090	30,000	28	44	U
156	126	010	20,000	--	44	U
156	126	020	20,000	--	44	U
156	131	010	30,000	32	44	U
157	106	020	12,000	--	24-40	SUB
159	114	020	30,000	--	72	U
159	114	030	30,000	--	52	U
159	120	010	20,000	--	24-44	SUB
159	124	011	20,000	20	44	U
159	127	050	30,000	--	46	U
159	128	010	30,000	--	24-40	SUB
159	128	020	30,000	--	24-40	SUB
159	128	030	30,000	--	44	U
159	130	020	30,000	30	26-34	R
159	130	030	30,000	--	36	U
159	131	020	30,000	--	26-34	R
159	131	030	30,000	30	26-34	R
159	132	010	30,000	26	24-40	R
159	132	020	30,000	30	24-40	R
160	216	082	30,000	--	36	U
160	227	030	20,700	--	44	U
160	234	030	30,000	--	44	U

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
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162	108	020	30,000	--	48	U
162	125	060	30,000	32	52	U
162	136	010	20,000	--	52	U
162	140	010	30,000	42	54	U
162	140	020	30,000	42	40	U
162	141	010	30,000	--	52	U
163	276	032	30,000	--	74	U
163	276	033	30,000	--	74	U
163	277	030	30,690	--	48	U
163	277	031	30,690	25	48	U
163	280	020	51,500	--	44	U
163	280	120	121,800	--	44	U
163	280	140	63,100	--	44	U
163	280	160	100,000	--	44	U
163	284	031	20,000	--	44	U
163	285	010	30,000	--	36	U
163	286	030	75,100	--	44	U
163	286	051	30,000	--	44	U
163	294	010	15,000	34	44	U
163	294	011	15,000	34	44	U
164	125	030	15,000	44	44	U
164	163	030	20,000	--	44	U
164	205	020	20,000	32	44	U
164	213	020	20,000	40	44	U
164	213	030	20,000	--	44	U
164	220	010	5,000	44	44	U
164	234	010	20,000	24	36	U
164	235	010	45,000	56	68	U
164	235	030	45,000	40	55	U
164	238	020	44,022	40	44	U
166	108	010	243,500	32	24-40	U
166	112	010	25,000	--	44	U
166	113	010	13,500	28	24-40	U
166	115	010	13,500	28	24-44	U
166	115	020	13,500	--	24-44	U
167	234	010	70,000	--	44	U
167	236	010	14,900	--	24-40	U
167	246	010	70,000	--	44	U
167	252	010	60,000	--	44	U
167	255	010	100,000	30	44	U
167	256	050	30,000	--	36	U
167	257	010	80,000	--	36	U
168	105	020	20,000	32	44	U
168	151	010	30,000	--	44	U
169	106	041	36,000	36	44	U
169	112	010	30,000	--	52	U
169	113	010	30,000	--	32	U
169	116	010	40,000	26	36	U
169	116	020	40,000	32	36	U
170	105	040	20,000	--	44	U
170	105	050	20,000	28	44	U
170	112	050	30,000	24	44	U
170	115	020	15,000	--	44	U
170	115	030	15,000	30	44	U

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
170	115	040	20,000	--	44	U
170	115	050	20,000	30	44	U
170	116	010	30,000	30	44	U
170	117	020	30,000	38	44	U
171	214	010	15,000	24	44	U
173	123	040	20,000	46	44	U
173	123	050	20,000	46	44	U
174	103	030	30,000	--	44	U
174	106	010	30,000	39	44	U
174	107	020	20,000	32	44	U
174	108	010	30,000	--	44	U
174	108	020	30,000	--	44	U
176	103	010	22,600	40	44	U
176	129	010	549,000	--	46	U
176	130	010	549,000	--	46	U
177	101	020	6,000	30	44	U
177	102	040	6,000	30	44	U
177	105	020	89,000	30	44	U
177	106	010	2,600	30	44	U
177	108	010	3,000	34	44	U
177	113	010	17,500	40	44	U
177	114	010	17,500	40	44	U
177	114	020	30,000	20	44	U
178	102	005	30,000	--	44	U
178	102	010	24,600	--	44	U
178	102	017	24,600	--	44	U
178	104	010	24,600	--	44	U
178	104	020	24,600	30	44	U
178	104	030	30,000	--	44	U
178	106	005	24,600	30	44	U
178	107	010	30,000	36	44	U
179	101	030	30,000	15	56	U
179	101	060	40,000	24	44	U
179	102	011	40,000	30	56	U
179	102	020	35,000	30	56	U
179	102	100	30,000	--	46	U
179	103	033	30,000	45	44	U
179	103	035	30,000	--	44	U
179	103	060	30,000	--	44	U
179	119	030	30,000	32	52	U
179	122	010	30,000	--	60	U
179	123	010	30,000	--	44	U
180	101	040	30,000	30	44	U
180	101	050	30,000	30	44	U
180	102	080	45,000	30	24-40	SUB
180	102	090	45,000	24	24-40	SUB
180	103	030	30,000	26	44	U
180	104	010	30,000	32	24-40	R
180	105	010	45,000	24	24-44	SUB
180	105	020	45,000	24	24-44	SUB
180	106	010	45,000	24	24-44	SUB
180	106	020	45,000	24	24-44	SUB
180	107	010	45,000	24	24-44	SUB
180	107	020	30,000	24	44	U
180	107	030	30,000	24	44	U

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
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180	107	031	30,000	24	44	U
180	107	040	30,000	36	44	U
180	107	050	30,000	36	44	U
180	107	060	30,000	36	44	U
180	108	010	30,000	24	44	U
180	108	020	30,000	24	44	U
180	108	030	30,000	24	44	U
180	110	040	15,000	40	56	U
181	103	010	30,000	20	44	U
181	104	020	30,000	--	44	U
181	105	010	30,000	--	44	U
181	105	020	16,000	23	44	U
181	108	010	30,000	--	44	U
181	108	040	30,000	--	44	U
181	113	010	30,000	--	44	U
181	113	030	30,000	--	44	U
181	116	020	30,000	--	44	U
181	116	040	30,000	--	44	U
182	107	060	3,000	44	44	U
182	107	070	3,000	44	44	U
182	110	080	63,333	--	44	U
185	111	010	5,200	32	36	U
185	121	010	9,000	28	52	U
185	121	035	20,000	26	44	U
185	121	041	5,000	36	44	U
185	121	047	75,000	28	44	U
185	121	060	30,000	--	44	U
185	121	070	50,000	24	44	U
185	231	010	20,000	28	44	U
186	231	011	20,000	28	44	U
186	101	010	30,000	24	44	U
186	102	005	30,000	--	52	U
186	103	010	20,000	--	44	U
186	106	010	30,000	--	44	U
186	107	010	30,000	--	44	U
187	109	010	30,000	--	50	U
187	102	030	30,000	--	44	U
188	104	010	10,000	38	44	U
188	101	040	30,000	24	44	U
188	101	050	30,000	24	44	U
188	102	020	30,000	--	52	U
188	103	010	30,000	24	44	U
188	103	020	20,000	24	44	U
188	105	010	30,000	24	44	U
188	106	010	30,000	24	44	U
188	106	020	30,000	24	44	U
188	110	020	30,000	--	44	U
188	110	030	30,000	--	44	U
188	112	010	30,000	24	44	U
188	114	010	30,000	24	44	U
188	118	010	30,000	--	44	U
189	119	010	30,000	30	36	U
189	107	070	30,000	32	44	U
189	110	020	30,000	--	44	U
189	111	010	30,000	24	44	U
189	118	015	85,890	28	72	U
189	119	010	30,000	--	44	U
189	119	020	30,000	30	44	U

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
---	---	---	---	---	---	---
190	107	070	30,000	--	44	U
190	109	010	20,000	37	44	U
191	102	060	900,000	--	44	U
191	102	070	30,000	--	44	U
192	102	010	30,000	--	52	U
192	102	030	30,000	--	50	U
192	104	020	30,000	24	44	U
192	105	010	30,000	26	44	U
192	105	030	30,000	48	52	U
192	108	040	30,000	--	44	U
192	109	010	30,000	26	44	U
192	110	010	30,000	36	52	U
192	111	010	30,000	--	54	U
192	111	020	15,000	48	72	U
193	103	010	20,000	30	44	U
193	103	020	20,000	30	44	U
193	106	030	30,000	--	44	U
193	109	010	30,000	--	36	U
193	111	010	30,000	--	37	U
194	101	010	35,000	--	24-40	SUB
194	101	020	33,000	28	24-44	SUB
194	102	010	33,000	--	24-44	SUB
194	104	010	40,000	24	24-44	SUB
194	104	020	40,000	24	24-44	SUB
194	106	010	17,500	30	24-44	R
194	107	010	106,000	--	44	U
194	108	010	90,000	--	44	U
194	109	010	88,000	--	44	U
194	110	050	30,000	--	44	U
195	101	020	9,400	36	44	U
195	103	020	4,000	40	44	U
195	109	050	30,000	--	44	U
195	111	040	30,000	40	44	U
195	112	010	30,000	40	52	U
195	117	010	30,000	--	44	U
195	117	012	30,000	--	44	U
195	117	020	30,000	--	44	U
195	118	020	30,000	--	44	U
195	120	010	30,000	36	52	U
196	102	010	20,000	30	44	U
196	104	040	30,000	36	44	U
196	108	010	2,000	44	44	U
196	109	010	30,000	36	44	U
197	104	020	30,000	25	24-40	R
197	104	030	30,000	30	24-40	R
197	104	040	30,000	--	24-40	R
197	104	050	30,000	22	24-40	R
197	104	060	30,000	25	24-40	R
197	104	070	30,000	22	24-40	R
197	105	010	30,000	25	24-40	R
197	105	020	30,000	--	24-40	R
197	106	010	30,000	27	24-40	R
197	108	010	30,000	30	24-40	R
197	109	010	30,000	28	24-40	R
197	110	010	45,000	28	24-40	R
197	111	010	30,000	28	24-40	R
197	114	010	45,000	28	24-40	R

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
198	101	060	15,000	24	24-40	R
198	103	010	41,000	22	24-40	R
198	104	010	60,000	--	24-40	R
198	105	050	300,000	30	24-28	R
198	107	010	41,000	22	40	U
198	107	020	55,000	--	44	U
198	107	030	41,000	22	44	U
198	107	040	55,000	--	44	U
198	109	010	30,000	--	40	U
198	110	010	30,000	--	24-40	R
198	110	020	30,000	26	24-40	R
198	113	010	30,000	28	24-40	R
198	113	020	30,000	--	24-40	R
198	113	030	30,000	--	24-40	R
198	114	010	45,000	28	24-40	R
198	115	010	160,000	--	24-40	R
198	116	010	160,000	--	24-40	R
199	101	010	44,000	20	24-44	R
199	101	030	110,000	--	24-44	R
199	101	040	58,000	--	24-44	R
199	101	070	30,000	28	24-44	R
199	101	080	58,000	--	24-44	R
199	102	010	150,000	--	24-44	R
199	102	020	44,000	26	24-44	R
199	104	010	150,000	--	24-44	R
199	104	020	58,000	--	24-44	R
199	104	035	83,000	--	24-44	R
199	104	040	58,000	24	24-44	R
199	104	050	58,000	--	24-44	R
199	104	060	58,000	24	24-44	R
199	105	060	10,000	30	44	U
199	107	020	58,000	--	24-44	R
199	107	030	30,000	26	24-44	R
199	107	040	58,000	--	24-44	R
199	108	010	5,000	41	44	U
199	108	020	5,000	41	44	U
199	108	030	30,000	--	44	U
199	108	040	30,000	29	29	U
199	108	050	15,000	26	44	U
199	109	010	30,000	--	44	U
199	109	020	30,000	--	44	U
199	109	030	15,000	32	44	U
199	109	040	30,000	--	44	U
199	109	050	30,000	--	44	U
199	110	020	30,000	--	44	U
200	106	010	108,000	--	44	U
200	106	030	108,000	--	44	U
201	101	030	30,000	28	32	U
201	102	010	30,000	--	44	U
201	104	005	30,000	--	24-44	R
201	106	010	30,000	--	24-44	R
201	106	020	30,000	15	24-44	R
201	106	030	300,000	--	24-44	SUB
201	108	010	30,000	--	24-44	R
201	108	020	30,000	--	24-44	R
201	108	030	30,000	--	24-44	R

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
201	108	040	30,000	--	24-44	R
201	108	050	30,000	--	24-44	R
201	108	060	30,000	15	44	U
201	109	010	30,000	30	44	U
201	109	020	30,000	--	24-44	R
201	109	040	30,000	40	44	U
201	110	010	30,000	28	24-44	R
201	112	010	30,000	--	24-44	R
202	101	010	110,000	28	24-44	SUB
202	103	010	125,000	24	24-44	SUB
202	103	020	120,000	32	44	U
202	103	030	135,000	32	44	U
202	103	035	135,000	32	44	U
202	103	040	140,000	32	24-44	SUB
202	104	010	24,000	38	24-44	SUB
202	104	020	100,000	38	24-44	SUB
202	104	030	30,000	29	44	U
202	104	050	30,000	31	44	U
202	104	060	120,000	30	44	U
202	104	070	120,000	30	44	U
203	101	005	45,000	28	24-44	R
203	101	010	45,000	28	24-44	SUB
203	101	020	45,000	28	24-44	SUB
203	101	030	45,000	28	24-44	SUB
203	101	050	45,000	--	24-44	SUB
203	101	060	45,000	--	24-44	SUB
203	101	070	45,000	28	24-44	SUB
203	102	010	45,000	--	24-44	SUB
203	102	020	45,000	28	24-44	SUB
203	103	010	45,000	28	24-44	SUB
203	104	010	45,000	30	24-44	SUB
203	104	020	45,000	30	24-44	SUB
203	104	030	45,000	28	24-44	SUB
203	105	010	45,000	30	24-44	SUB
203	106	010	45,000	28	24-44	R
203	107	010	45,000	28	24-44	R
203	107	020	45,000	28	24-44	R
204	110	010	30,000	--	44	U
204	111	010	30,000	21	24-44	R
204	111	020	30,000	21	24-44	R
204	111	030	30,000	21	24-44	R
204	113	010	30,000	30	44	U
204	113	020	30,000	30	44	U
204	113	030	30,000	35	44	U
204	114	010	30,000	21	24-44	R
204	114	020	30,000	24	24-44	R
204	114	030	30,000	--	24-44	R
204	115	010	5,000	24	44	U
204	118	020	30,000	--	24-44	R
204	123	010	30,000	26	24-32	R
206	101	010	30,000	26	36	U
206	101	020	30,000	26	36	U
206	102	010	30,000	26	44	U
206	103	010	30,000	26	24-40	R
206	104	010	30,000	26	24-40	R
206	104	031	30,000	30	24-40	R

MUN NO	CONT SECT	SEG	GRADING COST	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED DESIGN
206	104	040	30,000	30	24-40	R
206	104	050	30,000	30	24-40	R
206	106	020	30,000	30	44	U
206	107	010	30,000	32	24-40	R
206	108	010	30,000	32	24-44	R
206	109	010	30,000	32	24-40	R
207	105	010	30,000	30	44	U
207	106	020	30,000	--	44	U
208	103	010	10,000	34	24-44	R
208	103	020	10,000	34	24-44	R
208	103	060	15,000	34	24-44	R
208	103	070	15,000	34	24-44	R
208	104	010	30,000	--	44	U
208	104	020	30,000	--	44	U
208	104	030	30,000	--	44	U
208	105	010	30,000	28	44	U
208	106	010	30,000	--	44	U
208	106	020	30,000	--	44	U
208	106	030	30,000	--	44	U
208	106	040	30,000	--	44	U
208	107	010	30,000	24	44	U
208	108	010	30,000	30	24-44	R
208	108	020	30,000	30	24-44	R
208	110	030	30,000	--	52	U
209	102	010	30,000	--	36	U
209	103	010	15,000	24	24-44	R
209	104	020	30,000	--	36	U
209	105	020	30,000	--	44	U
210	101	030	74,000	--	46	U
210	101	040	74,000	--	46	U
210	102	010	64,500	22	24-40	SUB
210	102	020	64,500	--	24-40	SUB
210	103	010	74,000	28	44	U
210	103	020	74,000	28	44	U
210	103	030	74,000	28	44	U
210	109	010	64,500	24	24-40	SUB
210	109	020	64,500	22	24-40	SUB
210	109	030	64,500	22	24-40	SUB
210	109	040	64,500	22	24-40	SUB
210	110	010	64,500	20	24-40	SUB
210	110	020	64,500	--	24-40	SUB
210	110	030	64,500	--	24-40	SUB
210	110	040	64,500	30	24-40	SUB
210	111	030	64,500	--	24-40	SUB

CURRENT RESOLUTIONS
OF THE
MUNICIPAL SCREENING BOARD

OCTOBER 1986

BE IT RESOLVED:

ADMINISTRATION

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.

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.

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.

Appointment to Unencumbered 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 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.

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.

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.

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. 1965 (Revised June 1986)

That when a Municipal State Aid Street is constructed to State Aid standards with State Aid funds, said construction shall be considered to be 100 percent accomplishment of total needs with the exception of additional surfacing. 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 are permitted in subsequent needs.

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 or bridge cost that is eligible for State

Aid reimbursement for a 15-year period (except for preliminary engineering). This cost to exclude any federal or State Aid grants and to be effective on all reconstruction projects awarded after January 1, 1983.

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

That in order to be consistent with the previous resolution, the Office of State of State Aid is instructed to remove all needs except additional surface for streets that have been improved with the use of State Aid funds or are reported adequate.

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.

Construction Cut Off Date - 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.

COST

Construction Item Unit Prices - (Revised Annually)

Right of Way:			\$ 10,000.00 Mile
Grading:			\$ 3.00 Cu. Yd.
Base:	Class 4	Spec. #2211	\$ 5.00 Ton
	Class 5	Spec. #2212	\$ 5.25 Ton
	Bituminous	Spec. #2331	22.00 Ton
Surface:	Bituminous	Spec. #2331	\$ 22.00 Ton
	Bituminous	Spec. #2341	25.00 Ton
	Bituminous	Spec. #2361	35.50 Ton
Shoulders:			
	Gravel	Spec. #2221	\$ 4.25 Ton

Miscellaneous:

Storm Sewer Construction	0	Mile
Storm Sewer Adjustment	\$ 62,000.00	Mile
Traffic Signals	10,000.00	Mile
Street Lighting	2,000.00	Mile
Curb & Gutter	6.00	Lin. Ft.
Sidewalk	14.00	Sq. Yd.

Removal Items:

Curb & Gutter	\$	1.50	Lin. Ft.
Sidewalk		4.00	Sq. Yd.
Concrete Pavement		3.75	Sq. Yd.
Tree Removal		90.00	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.	\$49.00	Sq. Ft.
Bridges 150 to 499 Ft.	\$51.00	Sq. Ft.
Bridges 500 & Over	\$55.00	Sq. Ft.
Bridge Widening	\$65.00	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.

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

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.

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.

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.

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 1962)

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.

(Revised 1975)

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.

(Revised June 1979)

"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."

Construction Fund Balance - 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.

(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.

(Revised Oct. 1986)

Whenever a municipality's construction fund balance available as of June 30th of the current year, not including the current year's 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 be evaluated by the Subcommittee and a recommendation shall be made to the Screening Board prior to making adjustment. The

sub-committee's recommendations will be based on the guidelines that should an adjustment be necessary, twice the city's unencumbered construction fund balance, less the current year's construction allotment, will be deducted from the city's 25-year needs prior to the succeeding year's 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 deduction previously defined.

SOILS

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.

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.

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.

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

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. This would be a one-year adjustment to the 25-year needs.

TRAFFIC - June 1971

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

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 six years, or may elect to continue the present procedure of taking their own counts and preparing their own traffic maps at five year intervals.
3. Some deviations from the present five-year counting cycle shall be permitted during the interim period of conversion to counting by State forces in the outstate area.